

European Patent Academy

# Intellectual property

Course design manual



## Foreword

Innovation and originality have great potential value. Whatever line of activity you are engaged in, future success depends on them.

The last few years have seen **intellectual property rights** become an issue of general interest: the smartphone “patent wars”, the introduction of digital rights management (DRM) and the rise of generic pharmaceuticals and open-source software are just some examples that have been in the public eye.

Protecting your intellectual rights appropriately should be a top priority. Yet too many people embark on their chosen professions without even a basic awareness of intellectual property.

This is where the universities come into play. Students, who are tending more and more to select a university course on the basis of how it enhances their future employability, now want exposure to content on intellectual property rights. But setting up such a course module, or even an entire course, can be daunting. How detailed should it be? With curricula already crowded, how much time should be devoted to it? And how about training materials?

This **IP Course Design Manual** has been produced by the European Patent Academy to help answer these and many other questions. It offers a wide range of modules designed to cover all aspects of intellectual property that could be of interest to students across all faculties and academic levels, and explains how the modules can be delivered and linked.

When designing a new course, suitable elements should be taken, combined, modified and – crucially – tailored to the students' level, background and likely interest.

The **European Patent Academy** in Munich is an institution of the European Patent Organisation dedicated to supporting patent-related intellectual property training across Europe. The IP Course Design Manual it has produced is an important tool for academic institutions wishing to introduce or offer more in-depth intellectual property education.

I would be pleased to hear of your experience with this manual, and welcome any feedback.

I wish you every success in the important endeavour of bringing intellectual property into mainstream university teaching.



Richard Flammer  
Executive Director  
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# Introduction

The interdisciplinary IP course design manual has been put together to enable university lecturers and course planners to incorporate the teaching of intellectual property into a broad array of disciplines - including engineering, science, business, economics, law, social sciences and the arts - across a range of levels, from undergraduate to postgraduate and beyond.

The manual consists of a total of twenty-two modules grouped into five sections, which lecturers can mix and match according to their requirements.

## **Section 1: Introductory modules**

The three modules in this section provide an introduction to IP, IP law and the history of IP law.

## **Section 2: IP management and commercialisation**

These eight modules should be of particular interest to postgraduate students who plan to work in public or private R&D, innovation management or business management, including marketing and commercialisation of technology, as well as to students from other disciplines seeking to deepen their cross-disciplinary knowledge and skills. For those students who have not completed module 1A or 1B, they can be combined with the ancillary module, "IPRs in a nutshell".

## **Section 3: IP law**

These four modules - "IP contracts", "IP and competition law", "International IP law" and "IP litigation" - cover topics which are of interest to

law students in general, as well as those wishing to specialise in IP. They require a knowledge of IP equivalent to module 1B.

## **Section 4: IP law and management for specific disciplines**

This section includes one self-standing module each for computer scientists, biotech specialists, students of music and the arts, and industrial designers. The modules look at the IP laws relevant to each field, as well as the management and commercialisation of IP.

## **Section 5: Student projects**

Using the modules in section 5, students and researchers at postgraduate/advanced level are encouraged to apply what they have learnt to a practical research project on the topic of "IP and environmentally sound technologies".

Each module in this manual starts with an overview of the main topics included, as well as the learning objectives, target audience, prior knowledge required, related modules, teacher profile and suggested duration. A detailed topic guide follows. The manual does not deliver the teaching material itself, but provides a full list of suggested topics, along with comments, references and links to related information.

The manual also includes a list of the main legal texts referred to and the acronyms and abbreviations used, information about IP courses, training and source material worldwide, and a handy table showing all the modules at a glance.

For the sake of simplicity, intellectual property is referred to as "IP" throughout the manual.



# Modules at a glance

## Section 1: Introductory modules

- A. Introduction to IP
- B. Introduction to IP law
- C. History of IP

## Section 2: IP management and commercialisation

- A. Financing and IP
- B. The commercialisation of IP
- C. IP licensing agreements and negotiations
- D. IP, R&D and knowledge transfer (with special reference to universities and public research)
- E. Using patent information
- F. IP valuation (with optional IP accounting section)
- G. Defending IP assets: IP infringement and breach of confidentiality (for non-lawyers)
- H. IP and due diligence

## Section 3: IP law

- A. IP contracts
- B. IP and competition law
- C. International IP law
- D. IP litigation

## Section 4: IP law and management for specific disciplines

- A. IP for computer scientists and software engineers
- B. IP for biotechnologists
- C. IP and the creative industries
- D. IP for designers

## Section 5: Student projects

- A. Project 1: Using patent information for R&D in environmentally sound technologies (EST)
- B. Project 2: Initiating an EST-based start-up/ spin-off
- C. Project 3: The effects of international IP law on EST



# Modules in detail



# 1A Introduction to IP

Contents	Minimum duration (20 hours in total)
I. Introduction	1-2 hrs
II. Protecting technical innovation/using patents and patent information for R&D and business	6 hrs
III. Copyright protection for creative works: literature, art, music, computer programs, databases	3 hrs
IV. Trade marks: IP protection for company reputation and the benefit of consumers	3 hrs
V. Designs: protecting the aesthetic appearance of products	2 hrs
VI. IP issues in the work environment: ownership, employers and employees, researchers, confidentiality	1 hr
VII. Using IP to generate revenue/defending valuable IP assets/IP management and commercialisation/IPR enforcement	3 hrs

Overview	Learning objectives
<p>This module is designed to provide students with a basic introduction to intellectual property (IP). Taking an interdisciplinary approach, it deals with the different types and systems of IP protection and the various mechanisms by which IP can be used to generate revenue. The module also allows students to learn how IP enhances competitiveness, and provides guidance on how to incorporate IP-based considerations into business strategies and how to defend strategic IP assets.</p> <p>The module contains the following suggested lecture topics:</p> <ul style="list-style-type: none"> <li>– Fundamental issues: the economics of IP</li> <li>– Protecting technical innovation through IP (patents, utility models)</li> <li>– The protection of confidential information and trade secrets</li> <li>– Patent information and its technical and business applications</li> <li>– Protecting creative works (copyright)</li> <li>– IP and computer programs</li> <li>– Protecting brands and reputation (trade marks) Design protection</li> <li>– IP ownership (collaborative works, employee works, etc.)</li> <li>– IP management and commercialisation</li> </ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>– Explain the importance of IP in the knowledge economy and the main social and economic goals of IP laws</li> <li>– Differentiate between the various categories of IP protection and identify the most appropriate option for the innovation process or product concerned</li> <li>– Take initial steps towards obtaining protection for IP</li> <li>– Find patent information and understand its value as a source of technical and strategic information</li> <li>– Identify different forms in which IP may provide revenue</li> <li>– Understand the importance of licences in facilitating IP transactions (technology, trade marks, copyright)</li> <li>– Identify different transactions and partnerships which are enabled by licences</li> <li>– Recognise the value of IP as a strategic tool for business and identify different applications of IP which may provide a competitive edge</li> <li>– Anticipate some of the issues which they may come across in their future career or future research projects, such as assessing IP, ownership of IP, the effect of publication on patenting, etc.</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Students of engineering, science, medicine, business, economics, social sciences at undergraduate level	No previous knowledge of IP required
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturers in engineering, science or economics with a knowledge of IP law. Assistance from experienced IP lecturers, staff of technology transfer offices (TTOs), IP managers or IP attorneys recommended.	2A-2H; 4A-4D; 5A and 5B
<b>Student assessment</b>	<b>Related modules</b>
Quizzes, tests and practical exercises	2A-2H; 4A-4D; 5A and 5B

## I. Introduction (1-2 hrs)

### 1. What is intellectual property?

- Define intellectual property and intellectual property rights.
- Describe the main characteristics of intellectual creations. Provide an explanation from the perspective of the "economics of knowledge" and the non-rival and non-excludable nature of knowledge and information.
- Explain how the "public good" characteristics of knowledge may lead to a sub-optimal level of investment in R&D and how IPRs are developed to correct such market failures.
- Describe the different types of IPR and their core characteristics (suggestion: provide a table with essential information, including name of IPR, subject-matter, objective, validity requirements, main rights granted, duration, how it is obtained and the legal instrument concerned).
- Show examples of different forms of IP found in products used in everyday life (e.g. in a mobile phone).

**See also:**

Patent Teaching Kit, 18-19 (European Patent Office 2009)

### 2. Why is IP increasingly important for society?

- Highlight the growing significance of intangible assets and IP in the world economy.
- Draw a parallel with the evolution of society towards a service economy.

Suggested resources:

- Statistics and information on the growth of the relative importance of intangibles in a company's value
- Statistics on the increased use of the IP system (e.g. from WIPO, EPO, OHIM), showing evolution of registered patents, trade marks, etc.
- Newspaper articles on the economic value of IP (e.g. "100 top brands"/Interbrand)

Optional: Illustrate the specific importance of IP for business success using familiar examples of value based on IP (e.g. Coca-Cola, Apple iPod, Harry Potter, Polaroid instant cameras, DNA copying process) or of successful businesses built on IP and consistent IP strategies (IBM, Dolby, Sandvik, Nokia, NEC, etc.).

**See also:**

Patent Teaching Kit, 20-27

### 3. Objectives of IP protection

(a) The promotion of innovation and creativity

(b) The protection of market integrity and market positioning

Show how different IP is used to achieve socio-economic goals. There are two main functions:

#### (a) IP and the promotion of innovation and creativity

- The economics of knowledge and innovation (describe knowledge as a public good and give examples of the "market failures" which favour public intervention through regulations, in order to promote the investment of time and money in R&D and innovation) (see Nelson (1959), Coase (1960), Arrow (1966) and Calabresi and Melamed (1997)).
- Main theories justifying patents and copyright (and basic economics):
  - incentive theory
  - reward theory
  - disclosure theory
  - prospect theory
  - natural rights theory

Optional: Base your comments on a "taxonomy" of justifications for IP, such as that formulated by Mazzoleni and Nelson (1998), or refer directly to the texts of authors who established the fundamental theories (e.g. Nordhaus (1969), Scherer (1972), Kitch (1977) and Landes and Posner (2004)).

- Give a brief overview of the IP rights which promote innovation and creativity:
  - Patents (and utility models)
  - Copyright
  - Designs
  - Other forms of protection for innovation (trade secrets, lead starts, design complexity, technical measures)

#### (b) IP and the protection of market integrity and product positioning

- Describe the economic function of trade marks and distinctive signs and the theoretical background (refer to fundamental texts, including Landes and Posner (ibid), Economides (1988)).
- Give a brief overview of IP tools which ensure market integrity:
  - Trade marks
  - GIs
  - Trade names
  - Other laws
    - Unfair competition laws

## II. Protecting technical innovation/using patents and patent information for R&D and business (6 hrs)

### 1. What is a patent and what can be patented?

(a) What is a patent? What is the patent system?

(b) Patentable inventions

(c) What cannot be patented?

Explain the following basic aspects:

#### (a) What is a patent? What is the patent system?

- Origins of the patent system (the system of "privileges" during the Renaissance, the Senate of Venice, the Statute of Monopolies)
- The nature of the modern patent system: the "contract" between the inventor and society (exclusive rights to inventions in exchange for disclosure).

#### (b) Patentable inventions

- Inventions: technical solutions to problems
- Products, processes, new uses for a product
- Give examples of technical solutions coming from different fields (mechanical, chemistry, electronics). Provide examples (e.g. cases brought before the EPO boards of appeal) (Case Law of the Boards of Appeal of the European Patent Office, 6th edition, 2006). Provide examples of new uses (e.g. second medical use).
- Refer to Art. 27.1 TRIPS and Art. 52(1) EPC.

#### (c) What cannot be patented?

- Mental processes or steps which lack a technical application:
- Discoveries, scientific theories, mathematical methods, business methods, aesthetic creations, computer programs **as such**
- Technical applications or practical implementations involving the former may be subject to a patent (e.g. applications of the Hall effect - a discovery - for different purposes, such as magnetic card reading).
- Other exceptions and exclusions:
  - New species of plants (protectable through specific IPRs for plant varieties) and animals
  - The human body and non-separated parts
  - Medical, surgical, therapeutic and diagnostic methods (but products, compounds, substances used in such methods may be patented)

#### See also:

Patent Teaching Kit, 29-42

Arts. 52, 53 EPC; Art. 27 TRIPS

## 2. Why are patents important for students in all fields?

(a) Engineering, science and medicine

(b) Economics, business and management

### (a) Engineering, science and medicine

- Patents ensure that innovation efforts are rewarded (relate to reward theory above).
- Patents - and IP strategies in general - are key to successful R&D processes.
- Patents are an invaluable source of technical information (see point 7 for more details).

### (b) Economics, business and management

- Patents help companies secure competitive positions in the marketplace based on their technology.
- They may be used as a strategic tool, providing means to establish business partnerships.
- They are subject to transactions which may provide new sources of revenue (e.g. through licensing and assignments).

## 3. What conditions must an invention fulfil to earn patent protection?

(a) Requirements

(i) Novelty

(ii) Inventive step

(iii) Industrial applicability

(iv) Disclosure

(b) Registration

### (a) Requirements

(i) Novelty

- Novelty is judged in relation to the prior art
- Absolute (worldwide) novelty
- Breaking the novelty requirement (prejudicial and non-prejudicial disclosures)

(ii) Inventive step

- Non-obviousness
- "Person skilled in the art"
- Give examples of obvious and non-obvious inventions.
- Provide a brief explanation of utility models and other patents requiring national rather than absolute novelty or a weaker level of inventive step and indicate when they may be of use.

(iii) Industrial applicability

- The possibility of being made or used in any kind of industry, including agriculture (wide interpretation of industrial applicability in force)

(iv) Disclosure of the invention

- Sufficiency and clarity of the description (no 'best mode' requirement in Europe)

## (b) Registration

It is important to establish clearly that an application for a patent must be filed in order for patent rights to arise.

- First-to-file system
  - The importance of the filing date (priority)
  - Refer to the US "first to invent" system by way of comparison

### See also:

Patent Teaching Kit, 52, 53

Arts. 52-57, 83 EPC; Art. 27 TRIPS

## 4. The rights of the patent-holder: what are they, where are they effective, and how long do they last?

Explain that, generally speaking, the owner of a patent may prevent others from producing, using, selling, offering for sale, working and importing the patented invention without authorisation. Mention the different acts which need the patent-holder's authorisation under national law.

- Geographical scope
  - Patents are valid in the country where they are registered (relate this to the principle of territoriality).
- Term of protection of 20 years
  - Mention the possibility of extension of the term to compensate for pre-marketing regulatory approval.

### See also:

Patent Teaching Kit, 44, 45

Art. 63 EPC; Arts. 28, 33 TRIPS

## 5. Which uses of a patented invention are allowed?

(a) Uses authorised by the patent owner

(b) Exceptions

(c) Exhaustion of patent rights

(d) Non-voluntary licences

### (a) Uses authorised by the patent owner

Give a brief introduction to licensing (topic to be dealt with in more detail later on).

- What is a licence and what types of licence are there (exclusive and non-exclusive)?

### (b) Exceptions

- Example: use for experimental purposes

### (c) Exhaustion of patent rights

Explain the principle of exhaustion, i.e. the termination of rights occurring after the first unrestricted sale of the patented item.

Explain how it is applied in international transactions (international and national exhaustion).

Mention the principle applied in the EU - exhaustion in the EEA.

### (d) Non-voluntary licences

Explain the conditions under which they are normally granted in Europe (refer to the national legislation, as provisions vary from country to country). In particular, mention their use in avoiding situations where a patent-holder does not exploit or license his patented invention in the presence of a demonstrable domestic demand for the invention.

## 6. Group discussions: "Patents in the university environment"

Divide the class into groups to discuss topics on the general theme of "Patents in the university environment".

### Suggested topics

- (a) Are patents necessary as an incentive to innovate? Refer to theoretical frameworks and examples.
- (b) "Patenting vs publication of research results" - advantages and disadvantages from the point of view of academic careers, exploitation, public interest, consequences. Are they compatible?
- (c) University research culture and business innovation culture.

## 7. Obtaining a patent

(a) Who's who in the patent procedure

(b) Filing for a patent - overview of the procedure

### (a) Who's who in the patent procedure

- The inventor and the applicant
- The patent agent/attorney
  - The importance of obtaining professional assistance
  - What information should be given to the patent agent? (Engineers and scientists: taking lab notes.)
- The patent office (national, EPO)
- University technology transfer offices (TTOs). also known as knowledge transfer offices (KTOs). For more details see section VII.4.

## **(b) Filing an application for a patent - overview of the procedure**

Mention the aspects most relevant to the particular group of students. Highlight at least some of the most important milestones and administrative acts.

Examples

- The importance of the filing date
- The search report
- Publication
- Grant
- Delays in obtaining a patent

**See also:**

Patent Teaching Kit. 58

## **8. Obtaining a patent in more than one country**

(a) The concepts of "right of priority" and "territoriality"

(b) Filing routes: national, EPO, PCT

(c) Strategic issues involved in obtaining global protection

### **(a) The concepts of "territoriality" and "right of priority"**

Explain how the two principles are related and how the right of priority is applied.

### **(b) Filing routes: national, EPO, PCT**

Provide a general explanation on the use of different alternatives/routes - national, European, PCT - to obtain international patent protection. Show the differences, advantages and disadvantages of each route.

### **(c) Strategic issues**

Show that planning where and how to protect an invention is often part of the "business plan" (locus of production, commercialisation, investment, cost of obtaining and maintaining rights, etc.)

**See also:**

National patent law

Arts. 4 and 4bis Paris Convention

European Patent Convention (EPC)

Patent Cooperation Treaty (PCT)

## 8(a) The European patent procedure at the EPO

If a more detailed view of the patent grant procedure is required, go through some of the phases in the life of a patent application at the EPO:

- Formalities examination and search report preparation
- Substantive examination
- Grant
- Opposition/limitation proceedings
- Revocation or limitation proceedings
- Appeal proceedings
- Validation of the patent in designated countries

### See also:

Patent Teaching Kit, 58

"The European patent grant procedure" in How to get a European patent: Guide for Applicants

<http://documents.epo.org/projects/babylon/eponet.nsf>

[/0/8266ED0366190630C12575E10051F40E/](#)

[\\$File/guide\\_for\\_applicants\\_part1\\_05\\_10\\_en.pdf](#)

Arts. 75-112 EPC

## 9. Cost of obtaining a patent

Provide information on the cost of a national application in your country, a European application, and two or three hypothetical international applications with several designations.

### See also:

Patent Teaching Kit, 62-65

## 10. Trade secrets

(a) What is a trade secret?

**(a) What is a trade secret?**

Define trade secrets and/or confidential information under national and international law (TRIPS)

(b) When is a trade secret protectable?

**(b) When is a trade secret protectable?**

(c) Patents or trade secrets?

- Conditions: the existence of secrecy, commercial value, efforts to keep secrecy (under most legal systems)
- Types of information which can be protected
- Including technical information
- Protection afforded

### (c) Patents or trade secrets?

- Compare the protection afforded to technological innovation by patents and trade secrets.
- Advantages and disadvantages (examine situations where non-disclosure of the invention is desirable, as well as other aspects such as the "vulnerability" of protection vis-à-vis acts such as re-engineering).
- See how trade secrets and patents can be used in complementary ways for the protection of innovations (e.g. protecting an invention as well as associated know-how).

**See also:**

Patent Teaching Kit, 66-69

Art. 39.2 TRIPS

## 11. Other IPRs protecting inventions (optional)

### (a) Plant variety protection

### (b) Protection of the topographies of integrated circuits

### (a) Plant variety protection

Students of biology, biochemistry, genetics, bio-engineering, agriculture, etc. may be interested in plant variety protection, including:

- Plant breeding; definition of a plant variety and conditions for protection:
  - distinct
  - uniform
  - stable
  - novel
- Scope of protection
  - protection afforded
  - uniform Community protection
- Duration
- Obtaining protection
  - Community Plant Variety Office
- Alternative national protection
- Plant variety protection and patents

### (b) Protection of the topographies of integrated circuits

Students of electronic engineering, informatics, computer engineering, physics, etc. may be interested in the protection of the topographies of integrated circuits.

**See also:**

Regulation on Community Plant Variety Rights (CPVR)

International Convention for the Protection of New Varieties of Plants (UPOV)

Arts. 35-28 TRIPS

Directive on the legal protection of semi-conductor products

## 12. Patents as a source of technical information

(a) A look at a patent document

(b) Uses of patent information (options)

(i) Technical applications

(ii) Business applications

(iii) Legal applications

### (a) A look at a patent document

- The title page
- Description
- Claims
  - The importance of the claims in determining the subject-matter and scope of protection
  - Categories (entity and action claims; product and process claims)
  - Types of claim (dependent and independent)
- Drawings

### (b) Uses of patent information (options)

#### (i) Technical applications

Examples

- Patent information as a source of technical solutions
- Clearing before starting research (patentability searches)
- Patent family searches (plus applications such as searches for translations of a patent)
- How to carry out technology searches (search criteria, how to use classification symbols, keywords)

#### (ii) Business applications

Examples

- Obtaining information on competitors (patenting activity, strategic technologies - what they are protecting, clusters - technological interests and evolution of patent trends)
- Market trends and benchmarking (including technical trends, time trends, geographical trends)
- Searching for partners for licensing or collaboration, for example in complementary technologies
- Head-hunting
- Interpreting data, analysing statistics

### **(iii) Legal applications (optional)**

- Legal status of patents (is a patent in force?)
- Freedom-to-operate searches. Searching to find areas to operate without risk of liability, i.e. outside the protected scope (including patent family searches)
- Searches in the context of legal conflicts (oppositions, nullity searches, searches for prior art to "knock off" a rival patent, etc.)

Illustrate using practical examples.

Databases: Espacenet, national patent office databases, other private and public databases.

**See also:**

Patent Teaching Kit, 46-48, 82-93

### **13. Performing a simple patent search**

Using Espacenet, perform one or more (assisted) patent searches for any of the purposes specified in (12). A patent documentation expert should be invited to conduct this session. A basic guide to simple searches can be found in sub-module A of the Patent Teaching Kit.

**See also:**

Patent Teaching Kit, 175-189

### III. Copyright protection for creative works: literature, art, music, computer programs and databases (3 hrs)

#### 1. What is copyright and what does it cover?

(a) What is copyright?

##### (a) What is copyright?

Give simple definitions (for example "a right given to a person who has created/expressed something original").

(b) What can be copyrighted?

Make it clear that this does not include ideas, facts or straightforward information.

(c) Requirement of originality (the author's own intellectual creation)

##### (b) What can be copyrighted?

Give traditional examples: creative/artistic works (art, literature, scientific works, etc.), but also refer to computer programs, databases and technical guides. Compare and discuss neighbouring rights.

##### (c) Requirement of originality

Explain what "originality" means and that the standard of originality required is not high.

Examine the ECJ's Infopaq decision (C-5/08 Infopaq International A/S v Danske Dagblades Forening) and discuss the harmonisation of this concept resulting from this decision.

##### See also:

Berne Convention

Rome Convention

EU directives on rental rights, software and databases

#### 2. What rights does the copyright holder have?

(a) Exclusive rights

##### (a) Exclusive rights

Explain what exclusive rights are.

(b) Economic rights

##### (b) Economic rights/(c) Moral rights

Explain what these rights are.

(c) Moral rights

Point out that moral rights are not assignable.

(d) Uses of copyrighted works which do not need the authorisation of the right-holder/exceptions/ limitations

Contrast the "Continental" approach to moral rights with the Anglo-Saxon approach to copyright (for more details see section 5), corresponding to the exploitation of copyrights.

##### (d) Uses of copyrighted works which do not need the authorisation of the right-holder/exceptions/ limitations

Give examples relevant to academic activity, e.g. research and private study, citations, reporting of current events, etc.. Explain the restrictions which apply to the limitations.

**See also:**

National copyright law  
Information Society Directive  
Rental and Lending Rights Directive  
Resale Right Directive  
Berne Convention  
WIPO Copyright Treaties  
TRIPS

**3. How is copyright obtained and how long does it last?**

(a) Absence of formalities

(b) Duration

**(a) Absence of formalities**

- Using the © symbol, copyright notices and "registering" copyright
- Why are they useful for the copyright owner?

**(b) Duration**

- Refer to the different terms of protection set in the international treaties and in the Term of Protection Directive.
- Explain the difference between copyright and neighbouring rights.

**See also:**

National copyright law  
Information Society Directive  
Term of Protection Directive  
Berne Convention

**4. International copyright protection**

Briefly outline and explain the main features of the Berne Convention, TRIPS, WIPO Copyright Treaties, Universal Copyright Convention.

**See also:**

Berne Convention  
TRIPS  
WIPO Copyright Treaties  
Universal Copyright Convention

## 5. How is copyright exploited?

(a) Reproduction and communication of copyrighted works

(b) Licences

### (a) Reproduction and communication of copyrighted works

- Copies (reproduction) and communication of creative content, distribution, making the work available online, etc.
- The owner's exclusive right to authorise different uses or forms of exploiting the work

### (b) Licences

- Exclusive and non-exclusive licences
- Collective management of copyrights. Mention problems relating to collective licensing in Europe, involving more than one territory (see Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services available on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005H0737:EN:HTML>).

## 6. Copyright protection for computer programs

(a) Why are computer programs protected through copyright?

(b) Protection for original programs

(c) Uses which need authorisation

(d) Allowed uses (specific limitations)

(e) What is free/libre/open-source software (FLOSS)?

### (a) Why are computer programs protected through copyright?

Explain the problems which exist when placing software under the protection of a single category of IPRs.

- The "hybrid" nature of software: a written "expression" - the source code - which provides a function.
- As background mention the recommendations of the Commission of New Technological Uses of Copyright Works (CONTU) (in the US). Point out that the decision of the US Congress to adopt the CONTU recommendations in 1980, and the latter assimilation of the protection of software to "literary works", as spelled out in the TRIPS agreement (Art.10), the WIPO Copyright Treaty and the EC Software Directive (Art. 1) still causes controversy to this day.

### (b) Protection for original programs

- Protection for the codes (the expression of the program). Differentiate between source code and object code for the purposes of copyright protection.
- No protection for underlying ideas or functions which the software is supposed to carry out.
- The originality requirement vis-à-vis computer programs.

### (c) Uses which need authorisation

- Production, temporary and permanent copies, alterations of the program, distribution (including rental), licensing
- Uses under the terms of a licence
  - Practical example: click-wrap and shrink-wrap agreements

### (d) Allowed uses (specific limitations)

- Necessary copies and alteration; decompilation/measures aimed at ensuring inter-operability; private copies.

### (e) What is free/libre/open-source software (FLOSS)?

- FLOSS and copyright
- Examine the general conditions established by the General Public Licence (GPL) and compare them with those included in other forms of software licensing.

#### **See also:**

Berne Convention  
TRIPs  
WIPO Copyright Treaty  
Software Directive

### **6(a) Protecting computer-implemented inventions via patents**

(a) Why patents for software?

(b) Patentable inventions

(c) The requirement of "technicality" in an invention

### (a) Why patents for software?

- The protection of functional aspects vs the expression

### (b) Patentable inventions

- Computer programs "as such" are excluded, but programs which fulfill the requirement of technical character are patentable.

### (c) The requirement of "technicality" in an invention

- Provide examples of technical attributes vs examples of attributes devoid of technical character (e.g. an invention which performs an aesthetic function; an invention which solves a financial/marketing problem).
- Provide case studies or examples of decisions by the EPO boards of appeal.

#### **See also:**

Arts. 52 and 53 EPC

## 7. Database protection

- (a) Copyright protection
- (b) Sui generis protection

Explain the dual system: copyright and sui generis protection.

### (a) Copyright protection

- Mention that it is available for original selection and arrangement of contents (limited protection).
- Outline core characteristics where different from general copyright regime.

### (b) Sui generis protection

- Available for substantial investment against substantial taking
- The concept of substantial investment
- Outline the core characteristics (e.g. exclusive rights of extraction and reutilisation, duration).

#### See also:

Databases Directive

## 8. Group discussion I: "Protecting computer programs: patents or copyright?"

Suggested themes:

(a) "The primary source of value in a program is its behavior, not its text" (Samuelson et al., 1994). Discuss, showing the implications of this statement in terms of IP protection. In particular, concentrate on which aspects of the program are protected by patents and copyright.

(b) Article 2 of the WIPO copyright treaty states: "Copyright protection extends to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such". Discuss how patent protection may be used to override this ban.

(c) Consider and discuss the possible effects of copyright and patents on:

- the interoperability of computer programs
- technical standards
- innovation in this field

## 8(a) Group discussion II: "Copyright and the internet"

Suggested themes:

- Network economies and IP: an analysis of the effects of IP protection on technology networks
- Using innovative licensing systems (FLOSS, Creative Commons) to create revenue: "new" business models

## IV. Trade marks: IP protection for company reputation and the benefit of consumers (3 hrs)

### 1. What are trade marks and why are they necessary?

(a) Signs that distinguish specific products and services

(b) Signs that serve as trade marks

(c) Basic economics of trade marks

#### (a) Signs that distinguish specific products and services

Explain that the function of a trade mark is to identify products and services by their source of production and to distinguish them on the market.

#### (b) Signs that serve as trade marks

- Words
- Graphic marks
- Slogans
- Other signs with potential for distinguishing products:
  - Shapes, sounds, smells, single or simple colour combinations

#### (c) Basic economics of trade marks

The "economics of information" perspective:

- Benefits for firms: exploiting the reputation built around the trade mark
  - Brand equity
- Benefits for consumers: differentiating products and receiving information on quality
  - Reducing information asymmetries
- Other perspectives on the benefits of trade marks (e.g. the informative function of trade marks and advertising)

### 2. What requirements must a trade mark fulfil in order to receive IP protection?

(a) Registration

(b) Distinctive capacity as a basic requirement for trade mark protection/signs that do not qualify for protection

(c) Other signs that may not become protected trade marks

#### (a) Registration

Explain that the rights to a trade mark are acquired through registration.

Main topics to be addressed:

- First to file
- The graphic representation requirement (in Europe, generally)
  - Consequences for smell marks and sound marks
- Non-registered trade marks: explain that in some countries it is possible to acquire the rights to a trade mark through use.

## **(b) Distinctive capacity as a basic requirement for trade mark protection/signs that do not qualify for protection**

Explain the basic rule that a trade mark must provide distinctiveness to the product or service it refers to.

- No protection is offered for generic or descriptive terms
  - Provide examples of generic and descriptive terms.
  - For the sake of comparison, provide examples of names and symbols that are close to being considered descriptive. ("suggestive" marks, e.g. Newsweek magazine).
  - Give examples of arbitrary names or marks (e.g. Apple computers).
  - Mention the exception of generic/descriptive trade marks which, having acquired distinctive power through use (i.e. a "secondary meaning"), may be afforded trade mark protection.
- Signs which are likely to be confused with other earlier signs, for the same kind of product, cannot coexist in markets.
  - Explain the concept of likelihood of confusion (LoC).
  - Examine some situations involving assessment in relation to earlier rights (signs):
    - Identical signs for identical products and services
    - Identical or similar signs for similar products and services
    - Similar signs for identical, or similar, products and services
- "Dilution" of trade marks with a reputation
- Special protection for well-known trade marks (Art. 6bis Paris Convention)

## **(c) Other signs that may not become protected trade marks**

- Certain three-dimensional shapes
  - For example, if the shape is typical of the goods or has a technical function, or a function which gives substantial value to the goods (e.g. performs an aesthetic function)
- Specially protected emblems
- Signs which are offensive or contrary to the law
- Deceptive signs

### **See also:**

Arts. 7 and 8 Community Trade Marks Regulation

Arts. 2-4 Trade Marks Directive

Art. 6bis Paris Convention

## **2(a) Short quiz**

Set a short quiz based on examples taken from the case law of the European Courts (ECJ and General Court of the EU. Discuss the decisions reached by the courts, in particular the factors considered by the courts in their assessment of LoC.

### 3. The rights of the trade mark owner: what are they, where are they effective and how long do they last?

(a) Exclusive right to use of the sign

(b) Geographical scope

(c) Allowed uses of a protected trade mark

(d) Duration

#### (a) Exclusive right to use of the sign

Explain that the owner of a trade mark may prevent unauthorised use of:

- identical signs for identical goods/services
- confusingly similar signs for similar products and services

Point out that the protection for trade marks with a reputation goes beyond the "principle of speciality", i.e. it extends the scope of trade mark protection beyond the same or similar products.

#### (b) Geographical scope

- Trade marks are valid in the country where they were registered (territoriality principle).
  - Point out the special status accorded to well-known trade marks.
- Mention that EU-wide protection is available in the form of the Community Trade Mark (CTM).

#### (c) Allowed uses of a protected trade mark

- Uses which are authorised by the owner of the trade mark
  - Briefly introduce the concept of licensing. Give an outline of trade mark transactions involving trade mark licences, e.g. franchises, event merchandising and sponsorship of events.
- Use of names, indications, etc. which are necessary in common trade practice (indications of quality, intended purpose, proper names, value, etc. used in accordance with honest practices)
- Trade-marked goods once they have been put on the EU market (Community exhaustion)
- Names or signs which have been used in the market for more than five years and have been known by the legitimate owner (acquiescence)

#### (d) Duration

Not limited in principle, but ...

Stress that there is an obligation to use the trade mark, as well as a requirement to renew the trade mark every five years (make students aware that renewal fees are due in order to keep the trade mark in force).

#### See also:

Arts. 5-9 Trade Marks Directive

Arts. 9-13 Community Trade Marks Regulation (CTMR)

## 4. How is trade mark protection obtained?

### (a) Trade mark registration

### (b) Unregistered trade marks (optional)

### (c) Obtaining protection in more than one country

### (a) Trade mark registration

- Filing an application with the patent and trade mark office
- Who's who in the registration process
  - Applicant, trade mark agents, PTO
- Explain the importance of performing trade mark searches (mention some of the free databases, such as those kept by the national offices and the OHIM).

### (b) Unregistered trade marks (optional)

- For some countries: protection for unregistered trade marks that are well-known by the relevant public
- Protection through passing-off (in the UK)

### (c) Obtaining protection in more than one country

- Go over the principle of territoriality of IPRs.
- Priority right for trade marks: explain what it is and when a "priority" is established.
- The Community Trade Mark (CTM)
  - Registration of a trade mark with the OHIM (Community Trade Mark and Design Register) in Alicante gives access to protection which is valid for the whole territory of the EU.
- The Madrid system (Madrid system of international registration of marks)

#### See also:

Arts. 36-45 Community Trade Mark Regulation (for an example of procedure concerning the CTM, see the OHIM website: <http://oami.europa.eu/ows/rw/pages/CTM/regProcess/regProcess.en.do>)  
Concerning the Madrid system, see the WIPO website [www.wipo.int/madrid/en/](http://www.wipo.int/madrid/en/)

### 4(a) Practical exercise

Select different filing alternatives depending on business strategy.

- Consider and compare advantages and disadvantages, e.g. single filings and administrative processes vs multiple national filings/dependence on basic application for international registrations/vulnerability of the CTM vis-à-vis rights held at national level/geographical scope of protection, etc. Include consideration of costs.

## 5. Other distinctive signs

Depending on the target audience, give a general description of one or more of the following distinctive signs:

- Trade names (e.g. for business management students)
- Geographical indications (e.g. for agriculture students)
- Domain names (relevant to most studies)
- Collective and certification marks (may be relevant in different contexts)

### **See also:**

Arts. 1, 4.d., 10.3. & 15 Trade Mark Directive

Arts. 64-77 CTMR

Geographical Indications Regulation

## 6. Discussion: Naming, branding and the implications for IP protection

### **Naming, branding and the implications for IP protection**

Examine the implications of choosing "memorable" names for products, e.g. coined names, common words, surnames and first names, telescoped or alpha-numeric names, deviant spellings, acronyms and abbreviations, geographical names, prestige names.

Discuss the advantages of using "suggestive" and "inherently distinctive" trade marks:

- from the commercial point of view
- from the point of view of likelihood of obtaining IP protection

Discuss the advantages/disadvantages of adopting an umbrella strategy (e.g. Unilever) as opposed to a multibrand strategy (e.g. Philips).

## V. Designs: protecting the aesthetic appearance of products (2 hrs)

### 1. What is a design?

(a) The function of designs

(b) IP protection for designs

#### (a) The function of designs

- Designs enhance the attractiveness and value of products.
- A design's value is not related to its technical functionality. It is important to distinguish designs from functional shapes which may be protected by utility models and patents.
- Designs are not legally related to the concept of distinctiveness (but: a design is an important element enhancing corporate image/brand equity). Contrast the function of designs with that of trade marks.

#### (b) IP protection for designs

- Show examples of different protected elements from different industries.
- Draw a parallel with US design patents.

#### See also:

Designs Directive

Community Designs Regulation (CDR)

### 2. How are design rights obtained?

(a) Registered and unregistered designs

(b) What requirements must a design meet in order to be granted protection?

#### (a) Registered and unregistered designs

- Registration with the national PTO (or with OHIM for Community designs)
- Unregistered (Community) designs - no formalities - compare the process of acquisition of rights with that of copyright.
- Discuss when it is advisable to register and when not (textiles and clothes, shoes and fashion articles in general). Show the advantages and disadvantages of each option in relation to elements such as duration of protection, cost, etc.

#### (b) What requirements must a design meet in order to be granted protection?

- Novelty
  - Assessed in relation to identical designs made available to the public (in the territory of the EU for the CD).

- Individual character
  - Assessed in relation to the *overall impression* that the design has on the informed user
  - Example: metal rappers (see the decision by the General Court, case T-9/07 – Grupo Promer Mon Graphic SA v OHIM and PepsiCo Inc, "Metal Rappers").

**See also:**

Arts. 1-6 Designs Directive

Arts. 4-6 CDR

**3. The rights of the owner: what are they, where are they valid, and how long do they last?**

(a) Exclusive right

(b) Where are the rights valid?

**(a) Exclusive right**

- Registered designs: exclusive right over designs with the same overall appearance
- (Community) unregistered designs: prevention against the use of identical designs

**(b) Where are the rights valid?**

- In the European Union: national protection and Community-wide protection (CD) available
- In other countries: international registration system

**(c) Duration**

Registered: 25 years

Unregistered: 3 years

**See also:**

Paris Convention

Arts. 9, 10 Design Directive

Arts. 10, 11 CDR

## VI. IP issues in the work environment: ownership/employers and employees/ researchers/confidentiality (1.5 hrs)

### 1. Ownership of IP created in the course of employment

(a) Ownership of inventions made by employees

(b) University inventions

(c) Other issues (copyright and ownership)

#### (a) Ownership of inventions made by employees

- Inventions made in the course an employee's duties falling within the scope of the employer's activity
- Works created outside of the employment relationship
- Other issues:
  - Reasonable compensation for employees
  - Considerations in relation to contract with employer

#### (b) University inventions

- Rules for university inventions: "professor's privilege" vs institutional ownership (see 2D)

#### (c) Other issues

- Joint ownership/collective works
- Copyright under an employment relationship, including
  - Ownership of computer programs and databases
  - Commissioned works
- Adaptations and derived works

### 2. Employees and undisclosed information

Relevant issues (treatment varies between countries):

- When does an obligation to maintain confidentiality arise?
- Concerning which type of information?
- Employees
- Former employees
- Fiduciary relationships

#### See also:

Corresponding national laws of your country

## VII. Using IP to generate revenue/defending valuable IP assets/IP management and commercialisation/IPR enforcement (3 hrs)

### 1. Assessing IP

- IP on the company balance sheet
- IP valuation (include a definition of valuation, valuation methods and criteria used to select such methods)
- Taxation of IP

### 2. Exploiting IP

#### (a) IP transactions

#### (a) IP transactions

- Licensing and assignments
- Outline of specific transactions and partnerships used to develop and exploit IP

#### (b) Using IP as a financial asset

#### (b) Using IP as a financial asset

- As collateral, securitisation
- As a way to attract investment (e.g. venture capital)

### 3. Using IP strategically

#### (a) Defensive and offensive uses of IP

#### (a) Defensive and offensive uses of IP

- How not to squander IP/basics of defensive IP protection
- Using IP to enter innovation networks and to gain access to complementary assets
- Cross-licences
- Patent pools
- Brand strategies

#### (b) IP and modern innovation processes

#### (b) IP and modern innovation processes

- Collaborative exploitation, "open innovation" frameworks and IP

### 4. Transferring knowledge from universities

#### (a) What is knowledge transfer and what role does IP play in the process?

#### (a) What is knowledge transfer and what role does IP play in the process?

Relevant issues:

- Knowledge transfer mechanisms
- Licensing university innovation
- Spin-offs and start-ups based on IP
- The responsibilities of KTOs (TTOs)

## 5. Defending valuable IP assets

(a) What is infringement?

(b) What happens when an IPR is infringed?

(c) Piracy and counterfeiting

(d) Where to get help

**(a) What is infringement?**

Define infringement in terms of the exclusive rights explained in II.4, III.2, IV.3 and V.3.

**(b) What happens when an IPR is infringed?**

- Possible legal actions (injunctive relief)
- Remedies (including damages)
- Defences

**(c) Piracy and counterfeiting**

Define criminal violation of IP and distinguish it from other IP infringements.

**(d) Where to get help**

IP lawyers/patent and trade mark attorneys

**See also:**

Enforcement Directive

TRIPS (Part III)

## 6. Practical exercise: Managing and exploiting IP

Get students to prepare simple strategies aimed at:

- (1) Using IP protection for defensive purposes
- (2) Using IP to secure superiority vis-à-vis competitors
- (3) Using IP as an integrated business strategy
  - IP as a source of profit (licensing)
  - Portfolio management
  - IP as a source of finance



# 1B Introduction to IP law (for students of law)

Contents	Minimum duration (20 hours in total)
I. Introduction/sources of law	1-2 hrs
II. Protecting technical innovation: patents and trade secrets	6 hrs
III. Copyright law	5 hrs
IV. Trade marks and other distinctive signs	3 hrs
V. Designs	2 hrs
VI. Enforcement of IP rights	3 hrs

Overview	Learning objectives
<p>This module covers the main areas of IP law - patents, copyright, trade marks and designs - as well as related laws such as the protection of trade secrets, and unfair competition laws. It introduces students to each category, exploring common ground and differences between different systems of IP protection. The module can also be taken by non-specialists. It has a European IP law perspective, but includes principles and concepts of IP law which are universally valid.</p> <p><b>Main topics</b></p> <ul style="list-style-type: none"> <li>- Basic theories</li> <li>- Sources of law</li> <li>- Legal aspects of the protection and exploitation of IPRs: <ul style="list-style-type: none"> <li>▪ Patents and trade secrets</li> <li>▪ Copyright</li> <li>▪ Trade marks</li> <li>▪ Designs</li> </ul> </li> <li>- European and international protection of IP</li> <li>- How to obtain protection in more than one country</li> <li>- IP enforcement</li> </ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>- Identify the principal sources of IP law</li> <li>- Justify IP rights based on the established legal theories relating to property and immaterial rights as well as utilitarian theories</li> <li>- Understand the common characteristics of the different IPR categories and differentiate between them according to subject-matter, function and scope of protection</li> <li>- Explain how rights on patents, trade marks, copyright, designs and trade secrets arise and describe the legal and administrative procedures for obtaining protection for them</li> <li>- Ascertain the territorial nature of IP and choose the appropriate legal instruments in order to obtain protection in more than one country</li> <li>- Establish the scope of protection of different IP and distinguish illegal acts from legally permitted uses of protected IP</li> <li>- Identify the legal instruments used to permit transactions involving IP (<b>licences, assignments, etc.</b>)</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Law students at undergraduate level	No previous knowledge of IP required
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturers in law with a knowledge of IP law	3A-3D; 4A-4D; 5C
<b>Student assessment</b>	<b>Related modules</b>
Assessment based on a test on each section + final examination	Advanced IP law modules 3A-3D and 5C

## I. Introduction/sources of law (1-2 hrs)

### 1. What is intellectual property/the foundations of IP law

(a) Characteristics, definitions and examples from everyday life

(b) Philosophical foundations

(c) Exclusive rights

**(a) Characteristics, definitions and examples from everyday life**

- Characteristics of intellectual creations
- Intellectual property (holistic definition, including quasi-IP rights), intellectual property (restrictive definition), industrial property, etc.
- Examples of IP to be found in everyday items such as mobile phones

**(b) Philosophical foundations**

- Natural rights theory
- Personality rights theory
- Immaterial rights theory
- Utilitarian theories
- Reward, incentive, disclosure

**(c) Exclusive rights**

- Nature of the exclusive right
- EU: exception to the freedom of movement of goods within the internal market

**See also:**

Patent Teaching Kit, 108

### 2. Why IP law has become increasingly important in recent decades

- Refer to the growing importance of intangible property in the knowledge economy and give statistics and information on the growth of intangibles and the growth of IP.
- Provide statistics and media information on the economic value of examples of IP.
- Mention the globalisation of IP law.

### 3. Two functions of IP protection

(a) Promoting innovation and creativity

(b) Protecting market integrity

#### (a) Promoting innovation and creativity

The economics of patents

Brief survey of IPRs which promote innovation and creativity:

- Patents (and utility models)
- Copyright
- Designs
- Other laws which protect innovation
  - Plant variety protection
  - Protection of topographic layouts
  - Trade secrets

#### (b) Protecting market integrity

The economic function of trade marks and distinctive signs

- Trade marks (distinctive signs) and "economics of information and reputation" theory

Overview of IP rights which ensure market integrity:

- Trade marks
- Geographical indications
- Commercial laws, laws regulating business practices (unfair competition, right of publicity, passing-off)

### 4. Sources of IP law

(a) National sources

(b) European Union sources

(c) International conventions

(d) Courts

(e) Secondary sources

#### (a) National sources

National laws and jurisprudence

#### (b) European Union sources

- General
- IP and the Treaty on the Functioning of the European Union TFEU: Art. 118; Art. 352 (ex Art. 308 TEC); 114 (ex Art. 95 EC)
- Political declarations (e.g. Art. 17.2 EU Charter of Fundamental Rights declaring IP a fundamental right)
- EU regulations and directives (see "Main legal texts referred to")

### **(c) International conventions**

- Territoriality and treaties of mutual recognition of rights (in particular the Paris Convention, Berne Convention and the TRIPS Agreement)
- National applicability of international treaties

### **(d) Courts**

- National courts
- General Court of the European Union
- Court of Justice of the European Union
- Administrative instances: OHIM (for trade marks, designs), EPO (for patents)

### **(e) Secondary sources**

The secondary sources will depend on the lecturer's geographical perspective and preferences, but should include basic background reading and legal encyclopedias. Such reading will provide general discussions of IP law and references to primary sources such as case law, as well as references to secondary sources such as treatises and law review articles.

## Links to European and international sources of IP law

### Patents

Biotechnology (EU)

[http://ec.europa.eu/internal\\_market/indprop/invent/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/invent/index_en.htm)

Unitary patent (EU)

<http://www.epo.org/law-practice/legislative-initiatives/eu-patent.html>

[http://ec.europa.eu/internal\\_market/indprop/patent/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/patent/index_en.htm)

Computer-implemented inventions (EU Proposed Directive)

[http://ec.europa.eu/internal\\_market/indprop/comp/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/comp/index_en.htm)

Utility models (EU)

[http://ec.europa.eu/internal\\_market/indprop/model/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/model/index_en.htm)

European Patent Convention (EPC 2000) (EPO)

<http://www.epo.org/law-practice/legal-texts/html/epc/2000/e/ma1.html>

European Patent Convention 1973 (Pre-EPC 2000) (EPO)

<http://www.epo.org/law-practice/legal-texts/html/epc/1973/e/ma1.html>

Protocol on Article 69 of the European Patent Convention (EPO)

<http://www.epo.org/law-practice/legal-texts/html/epc/2000/e/ma2a.html>

Directive 2004/27/EC of the European Parliament and of the Council of 31 March 2004 amending Directive 2001/83/EC on the Community code relating to medicinal products for human use (text with EEA relevance), Official Journal L 136 , 30/04/2004 P. 0034 - 0057, in particular Article 1, paragraph 8) (EU)

[http://ec.europa.eu/health/files/eudralex/vol-1/dir\\_2004\\_27/dir\\_2004\\_27\\_en.pdf](http://ec.europa.eu/health/files/eudralex/vol-1/dir_2004_27/dir_2004_27_en.pdf)

## Copyright

Legislative measures taken by the EU on copyright (directives)

[http://ec.europa.eu/internal\\_market/copyright/documents/documents\\_en.htm#directives](http://ec.europa.eu/internal_market/copyright/documents/documents_en.htm#directives)

Collection of national copyright laws (UNESCO)

[http://portal.unesco.org/culture/en/ev.php-URL\\_ID=14991&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=-471.html](http://portal.unesco.org/culture/en/ev.php-URL_ID=14991&URL_DO=DO_TOPIC&URL_SECTION=-471.html)

Trade marks, including Community Trade Marks (CTM) in the EU

[http://ec.europa.eu/internal\\_market/indprop/tm/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/tm/index_en.htm)

Designs (including the Community design)

[http://ec.europa.eu/internal\\_market/indprop/design/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/design/index_en.htm)

Enforcement (including the Enforcement Directive)

[http://ec.europa.eu/internal\\_market/iprenforcement/index\\_en.htm](http://ec.europa.eu/internal_market/iprenforcement/index_en.htm)

National industrial property laws of EU countries and other member states of the EPO available on national PTO websites - *complete list*. (EPO)

<http://www.epo.org/service-support/useful-links/national-offices.html> |

Collection of laws for electronic access (CLEA - WIPO)

<http://www.wipo.int/wipolex/en/>

TRIPS - WTO

[www.wto.org/english/tratop\\_E/trips\\_e/trips\\_e.htm](http://www.wto.org/english/tratop_E/trips_e/trips_e.htm)

WIPO-administered treaties

[www.wipo.int/treaties/en/](http://www.wipo.int/treaties/en/)

## II. Protecting technical innovation: patents and trade secrets (6 hrs)

### 1. What is a patent?

(a) The concept of the "technical invention"

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Inventions/exclusive rights to inventions

(b) Justification for patents

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Immaterial rights. Incentive/reward and disclosure theories: the "contract" between inventor and society (see section I)

(c) Examples

(c) Examples

Give a practical example. Show a patent document.

**See also:**

Patent Teaching Kit, 46-48

### 2. Patentable inventions (subject-matter)

(a) No explicit legal definition in European law

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But...

Inventions may be defined as "technical solutions to problems", including:

(b) What cannot be patented (exceptions and exclusions)

- products, processes, new uses for a product
- examples of technical solutions from different fields (mechanics, chemistry, electronics)

(b) What cannot be patented (exceptions and exclusions)

- Mental processes or steps which lack a technical application
- Discoveries, scientific theories, mathematical methods, business methods, aesthetic creations, computer programs
- To be considered only when taken "as such", in accordance with the EPC (explain the difference between "pure" discoveries or abstractions and technical applications)
- Other excluded subject-matter:
  - New species of plants and animals
  - Inventions contrary to morality and public order
  - The human body and non-separate parts
  - Medical, surgical, therapeutic and diagnostic methods
  - But: products, compounds, substances of medical use can be patented

**See also:**

Patent Teaching Kit, 112, 113, 118-128

Arts. 52, 53 EPC

Art. 27 TRIPS

### 3. What conditions must an invention fulfill in order to qualify for a patent (requirements for validity)?

(a) Patentable subject-matter

(b) Novelty

(c) Inventive step

(d) Industrial applicability

(e) Enabling disclosure

(f) Protection for inventions with inferior requirements (utility models, etc.)/contrast with patents

**(a) Patentable subject-matter**

See II.2: "Patentable inventions"

**(b) Novelty**

- Prior art
- Absolute (worldwide) novelty

**(c) Inventive step**

- Non-obviousness
- Person skilled in the art
- Examples of obvious and non-obvious inventions

**(d) Industrial applicability**

Possibility of being made or used in any kind of industry, including agriculture (wide interpretation of industrial applicability in force)

**(e) Enabling disclosure**

Sufficiency and clarity of the description (no "best mode" requirement in Europe)

**(f) Protection for inventions with inferior requirements (utility models, etc.)/contrast with patents**

Give a brief explanation of utility models and other patents with "minor" requirements (compare with normal patents).

**See also:**

Patent Teaching Kit, 112-114

Arts. 52-57, 83 EPC

Art. 27 TRIPS

## 4. Obtaining a patent

(a) Obtaining a patent

(b) Procedures for obtaining patents in other countries

### (a) Obtaining a patent

- National jurisdiction/your national patent and trade mark office (PTO)
- Who is entitled to a patent:
  - Inventor
  - Assignee (employer)
- Filing for a patent
  - What a patent document must disclose
  - Importance of the filing date
  - Priority
  - Unity of invention
  - Formal examination
  - Search report

### (b) Procedures for obtaining patents in other countries

- European patents
- International patents (PCT)
- EPO oppositions/post-grant objections on validity at the PTO
- Compare national, EPO and PCT procedures, including time limits and ranges for validly establishing priority, formalities and cost.

#### **See also:**

Patent Teaching Kit, 132, 136, 140-143, 148-152

## 5. The patent holder's rights: what are they, where are they valid, and how long are they valid for?

(a) Exclusive right

(b) Geographical scope and duration of protection

### (a) Exclusive right

The exclusive right to prevent others from producing, selling, working, using, importing or possessing patented inventions.

### (b) Geographical scope and duration of protection

- The principle of territoriality
- Duration: 20 years (maintained by payment of renewal fees)
- The special case of pharmaceutical products (possibility of extension of the term for a "product or a process for manufacturing a product or a use of a product which has to undergo an administrative authorisation procedure required by law before it can be put on the market in that State") (see, for example, Art. 63(2)(b) EPC)

#### **See also:**

Patent Teaching Kit

Art. 63 EPC

Arts. 28, 33 TRIPS

## 6. Patent infringement

(a) Scope of claims/scope of monopoly

(b) Acts

(c) Allowed uses (defences)

(d) Exhaustion

(e) Uses authorised by the right-holder

(f) Patent litigation and issues concerning jurisdiction

### (a) Scope of claims/scope of monopoly

Literal and non-literal interpretation of the claims in infringement cases

### (b) Acts

- Unauthorised use, fabrication/manufacture or sale
- Disposing of, offering to dispose of, importing, keeping for disposal
- Direct infringement and contributory infringement (where applicable)

### (c) Allowed uses (defences)

Private use, research or experimental use, conducting necessary studies, tests and trials on medicinal products to obtain market authorisation for a generic product (for pharmaceutical products), use on transport (e.g. on board vessels) temporarily entering waters or territory of the state (valid among members of the Paris Convention)

### (d) Exhaustion

Explain in simple terms the principle of exhaustion, i.e. the termination of rights occurring after the first unrestricted sale of the patented item.

Describe how it originates in wider principles of free competition and free circulation of goods in the EU.

Explain how it is applied in international transactions (international and national exhaustion)/mention the principle applied in the EU - exhaustion in the EEA.

### (e) Uses authorised by the right-holder

- Licences: explain that they are the principal means by which the use of patents is authorised (see following section for licensing and assignments).
- Non-voluntary licences: explain the conditions under which they are normally granted in Europe (refer to the national legislation, as provisions vary from country to country). In particular, mention their use in avoiding situations where a patent-holder does not exploit or license his patented invention in the presence of a demonstrable domestic demand for the invention.
- Draw attention to the fact that abuses of the patent system may have an effect on competition.

## (f) Patent litigation and issues concerning jurisdiction

Jurisdiction in the EU is in principle a matter for national law. However many cases involving infringement and/or validity of a patent may involve acts, parties and courts from more than one country. At the EU level, jurisdiction is regulated by the Brussels Regulation (CE N° 44/2001).

For cases of infringement the applicable rules are:

- The competent court is that of the domicile of the defendant (if there are many defendants the plaintiff may choose among different courts and eventually sue all of the defendants in that court).
- The competent court may also be that in whose territory the infringement has taken place (if there has been an infringement in more than one country, again there will be the possibility for the plaintiff to choose among different jurisdictions).

Concerning the validity of patents there is an exclusive competence of the courts of the state where the registration has taken place.

### **See also:**

Patent Teaching Kit, 156-159, 164  
Arts. 28.1. and 31.k TRIPS  
Art. 69(1) EPC  
Protocol of Interpretation of Art. 69  
Art. 22 Community Patent Convention  
Brussels (1) Regulation

## 7. Exploitation of patents/licences and assignments

(a) Patent licensing

(b) Selling patent rights (assignments)

### (a) Patent licensing

- The nature of the licensing contract
- Main elements (parties, subject-matter, scope, royalties and warranties)

### (b) Selling patent rights (assignments)

The irrevocable nature of patent assignments (an assignment involves the sale and permanent transfer of ownership of the patent by the assignor to the assignee)

### **See also:**

Patent Teaching Kit, 168, 170  
Art. 63 EPC  
Arts. 28, 33 TRIPS

## 8. Trade secrets and confidential information

(a) What is a trade secret?

(b) When is a trade secret protectable?

(c) Protection afforded

### (a) What is a trade secret?

- Concepts: trade secrets, confidential information, know-how
- Explain the concept (e.g. confidential business information which gives an enterprise a competitive edge).
- Make it clear that trade secrets are not properly IP rights and thus do not receive protection as such.
- Note that trade secrets may be protected by different sets of laws, such as unfair competition laws, regulations intended to protect confidential information or labour laws.

### (b) When is a trade secret protectable?

- General requirements: secrecy, commercial value, efforts made (measures taken) to keep secret information secret
- Types of information which can be protected

### (c) Protection afforded

Varies between countries. In many countries - including France, Italy, Spain and Portugal - criminal sanctions (fines and/or imprisonment) are applied to acts such as the theft of manufacturing trade secrets. Most European countries also provide for civil remedies, which in some cases may include damages or monetary relief, against acts such as disclosure, unfair acquisition or other unfair use of trade secrets.

Examine the availability of damages and criminal sanctions under national laws.

## 9. Group discussion. Patents or trade secrets?

Compare the protection afforded to technological innovation by patents and trade secrets.

Advantages and disadvantages of both (examine situations where non-disclosure of the invention is desirable, as well as other aspects such as the "vulnerability" of protection vis-à-vis acts such as re-engineering).

Show how trade secrets and patents may be used in complementary ways for the protection of innovations (e.g. protecting an invention and associated know-how).

## 10. Other IPRs protecting inventions (optional)

(a) Plant variety protection (PVP)

(b) Protection of the topographies of integrated circuits

### (a) Plant variety protection (PVP)

Give a brief description (subject-matter, main requirements, scope of protection, duration, relation/co-existence with other IPRs).

### (b) Protection of the topographies of integrated circuits

Again, give a brief description as for (a).

#### **See also:**

Regulation on Community Plant Variety Rights (CPVR)

International Convention for the Protection of New Varieties of Plants (UPOV)

Arts. 35-38 TRIPS

Directive on the legal protection of semi-conductor products

### III. Copyright law (5 hrs)

#### 1. What is copyright?

(a) Approaches to copyright: copyright and authors' rights

(b) Subsistence of copyright

(c) Types of work protected

#### (a) Approaches to copyright: copyright and authors' rights

Conceptual differences, historical origin, scope

#### (b) Subsistence of copyright

Protection for original expressions of a creative nature (not ideas, facts or information)

#### (c) Types of work protected

- Copyright and copyright works
- What can be copyrighted?
- Artistic works, literary works, dramatic works, musical works
- Sound recordings, films, broadcasts, published editions
- Computer programs (as literary works)
- Databases

#### 2. Authorship

(a) Authorship

(b) Co-authorship, collaborative and collective works

(c) Authorship and ownership

#### (a) Authorship

First ownership of copyright

#### (b) Co-authorship, collaborative and collective works

- Joint authorship
- Collective authorship
- Collaborative authorship
- The difference between collective and collaborative authorship

#### (c) Authorship and ownership

Explain authorship and ownership with reference to the national laws of your country.

#### 3. Rights afforded to the copyright holder

(a) Economic rights

(b) Moral rights

(c) Neighbouring rights

#### (a) Economic rights

- Explain that the right to enjoy the economic benefits of a work belongs to the right-holder.
- Modes of exploitation: "independence" of the economic rights over each mode:
  - Reproduction (distribution)
  - Communication
  - Transformation, translation, adaptation

### **(b) Moral rights**

- Nature: belonging solely to the author (may be neither transferred nor divided)
- Right to be recognised as author
- Right to object to derogatory treatment of the work (refusal to supply the original, correction or withdrawal after publication, completion of a work as designed by the author, prevention of destruction of the work, etc.). Mention that in some countries (e.g. the United Kingdom) such rights are less extensive.
- Right of access

### **(c) Neighbouring rights**

- Relation to authors' rights
- Performers' rights
- Phonogram producers' rights
- Broadcasting organisations' rights
- Film producers' rights

#### **See also:**

National copyright law  
Information Society Directive  
Rental and Lending Rights Directive  
Resale Right Directive  
Berne Convention  
Rome Convention  
WIPO Copyright Treaties  
TRIPS

## 4. Obtaining copyright protection/duration of copyright protection

(a) Absence of formalities

(b) Duration of protection

### (a) Absence of formalities

- Embodiment, expression in tangible form
- Copyright registers/copyright notices/legal effect

### (b) Duration of protection

- Literary, musical, artistic
- Anonymous works
- Films
- Neighbouring rights
- Databases

#### **See also:**

National copyright law  
Information Society Directive  
Term of Protection Directive  
Berne Convention

## 5. Copyright infringement

(a) Initial considerations and concepts

(b) Infringement of reproduction rights

(c) Infringement of communication rights

(d) Infringement of moral rights

(e) Defences

(f) Copyright infringement on the internet

(g) Piracy

### (a) Initial considerations and concepts

- Copies and copying
- Originality/causal connection

A substantially similar work, but created independently (i.e. original works), does not qualify as an infringement. The owner of the original work must show that the similarity of the infringed work is not fortuitous (e.g. elements which may be an indication of the connection include the date of creation and the probability that the infringer has accessed - seen or heard - the original work).

Other situations for discussion include subconscious copying, indirect copying and plagiarism.

- Exact reproductions and non-exact reproductions

Explain that non-exact reproductions or copies of parts of works may still constitute an infringement of copyright. The determination of whether there is an infringement or not will depend on the question of whether the "taking" was important enough or substantial. Remind students that copyright protects expression and not ideas and give examples. Point out, however, that there are no uniform criteria for the whole of the EU, and national laws and jurisprudence should be consulted.

- Point out that ownership of the content does not imply ownership of the embodiment.

### **(b) Reproduction rights**

- Primary infringements: copying, issuing copies, rental, lending and other types of distribution
- Indirect infringements/secondary liability: dealing with copies

### **(c) Communication rights**

- Primary infringement: communication to the public (performances, making the work available, including on the internet)
- Secondary infringement: providing means for communication to take place (premises, apparatus, etc.), e.g. "dance hall" cases.

### **(d) Infringement of moral rights**

- Paternity/attribution
- Integrity

Point out that moral rights are not harmonised and that classification thus depends on the individual country.

### **(e) Defences (exceptions and limitations)**

- Independent works (claiming the "originality" of the work alleged to be infringing)
- Taking the idea but not its expression
- Allowed uses
- Restrictive interpretation of exceptions and limitations: copyright limitations and exceptions are subject to minimal harmonisation in the European Union. With respect to national legislation, mention some "allowed uses" which exist to permit a necessary flow of knowledge and information, whilst still seeking to provide a balance between these needs and the author's rights.

Mention the three-step test. (exceptions (a) confined to special cases; (b) must not conflict with the normal exploitation of the work; (c) must not unreasonably prejudice the legitimate interest of the owner) (Art. 5, Information Society Directive).

Discuss the possible exceptions and limitations listed in Articles 5.2 and 5.3 of the Information Society Directive as incorporated in your national legislation. Interesting exceptions include use for the sole purpose of illustration for teaching or scientific research, reproduction by the press, making available of published articles on current events, etc. (see Art. 5.2. of the Information Society Directive).

Explain that all national legislations must also provide an exception for temporary acts of reproduction which are an integral and essential part of a technological process and whose sole purpose is to enable a transmission in a network as well as any "lawful use" of subject-matter having no independent economic significance. (Art. 5.1. of the Information Society Directive).

**(f) Copyright infringement on the internet**

- Liability of service providers on the internet (include mention of "safe harbours" applied under certain conditions).
  - Online intermediaries (network operators, access providers, search engines, host service providers)
  - Explain that in Europe, under the Electronic Commerce Directive, there is no general liability regime applicable to ISPs. Instead, the Directive provides for a system of specific exemptions for activities such as mere conduit, caching and hosting,
- The application of digital rights management (DRM) (including protection of access control and rights control technical protection measures (TPMs))/exceptions/ interface with public interest

**See also:**

National law in your country

Information Society Directive (in particular Arts. 2-7)

Arts. 12-14 Electronic Commerce Directive

Arts. 6, 8, 10, 11 and 12 WIPO Copyright Treaty

## 6. Exploitation of copyright (dealings)

### (a) Licences and assignments

(b) Main types of contract used in the course of transactions corresponding to the different industries

### (c) Collective collecting societies

### (a) Licences and assignments

- Review the licencing and assignment of IPRs and contrast with their application to copyright, in particular in relation to:
  - Non-assignment of moral rights
  - Limitations applicable to assignments of economic rights
- Point out the lack of harmonisation in this area at European level (e.g. in Germany copyrights are not assigned at all).
- Types of licence and "typical" applications (e.g. licensing through agencies, catalogue licensing, exclusive licences conceded for publishers, non-exclusive conceded for performances, computer programs, etc.).

### (b) Main dealings per industry

- Examine briefly the main transactions in relevant sectors and point out the contracts which may be regulated by the national law in your country.
- Publishing (e.g. publishing contracts)
- Music (publishing, distribution, performance contracts)
- Cinema, TV (film production contracts)
- Artistic works

### (c) Collective collecting societies (CCS)

- Explain the origin of and rationale for the outsourcing of copyright management.
- Describe the contractual system of fully fledged collective management:
  - "Upstream" (mandate given by author or owner)
  - Bilateral representation contracts between CCSs
  - "Downstream" (licences from the CCS to users)
- Mention problems relating to collective licensing in Europe and involving more than one territory (see Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services available on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005H0737:EN:HTML>).

## IV. Trade marks and other distinctive signs (3 hrs)

### 1. What is a trade mark? What does it do?

(a) Definitions

#### (a) Definitions

- For example, a sign that distinguishes the source of specific products and services

(b) Historical background

#### (b) Historical background

- The use of "marks" by goldsmiths in Medieval Europe/laws protecting trade signs under the common law tradition.

(c) The functions of the trade mark in legal doctrine

#### (c) The functions of the trade mark in legal doctrine

- Origin function
- Quality function (guarantee)
- Advertising function (investment)

### 2. Signs that serve as trade marks

- Words
- Graphic marks
- Slogans
- Shapes (three-dimensional trade marks)
- Other signs with potential for distinguishing products:
  - Sounds, smells, single or simple colour combinations, other non-traditional marks
- See the "graphical representation" requirement

#### See also:

Art. 2 Trade Mark Directive

Art. 4 Community Trade Mark Regulation

### 3. Validity (grounds for refusal or invalidity of the trade mark)

#### (a) Absolute grounds

#### (b) Relative grounds

#### (a) Absolute grounds

- Graphic representation requirement
- "Distinctiveness" as a requirement for protection
- Invalidity of generic or descriptive terms
  - Examples of generic and descriptive terms
  - Examples of names and symbols that are nearly descriptive (suggestive terms)
  - Examples of arbitrary names or marks
- Invalidity of certain three-dimensional shapes if the shape is typical of the goods or has a technical or aesthetic function
- Validity of generic/descriptive trade marks having acquired distinctive power through use (secondary meaning)
- Specially protected emblems
- Invalidity of signs offensive or contrary to the law
- Deceptive trade marks

#### (b) Relative grounds

- Personal names
- Preceding trade marks - introduce the concept of "likelihood of confusion" (examined in more detail in section 6 below)
- Preceding IP rights
- Other signs used in commerce

#### **See also:**

National laws of your country

Arts. 2-4 Trade Marks Directive

Arts. 7 and 8 Community Trade Marks Regulation

#### 4. Obtaining protection (the registration procedure and protection for unregistered trade marks)

(a) Registration procedure

(b) Unregistered trade marks

(c) European Union-wide protection/ Community Trade Mark (CTM)

(d) International registration/the Madrid system

##### (a) Registration procedure

- Application for registration/priority
- Classification of trade marks
- Examination of the application
- Publication, opposition proceedings and observations
- Withdrawal, restriction or amendment of an application
- Registration

Explain which requirements are dealt with at each phase of the procedure ("absolute grounds" during the initial examination, "relative grounds" during the opposition).

##### (b) Unregistered trade marks

- Protection for unregistered trade marks that are well-known to the relevant public (some countries)
- Protection through "passing-off" (UK)

##### (c) European Union-wide protection/Community Trade Mark

- The Office for the Harmonization of the Internal Market (OHIM): Community Trade Mark and Designs Register
- The Community trade mark

##### (d) International registration/the Madrid system

WIPO and the Madrid International Registration System

##### **See also:**

Arts. 36-45 Community Trade Mark Regulation (for procedure relating to the CTM).

See also the OHIM website at

<http://oami.europa.eu/ows/rw/pages/CTM/regProcess/regProcess.en.d>

o

## 5. What rights does the owner of a trade mark have?

(a) Exclusive right

(b) Geographical scope/territoriality/priority

(c) Duration

### (a) Exclusive right

- Prevent unauthorised use of the same or confusingly similar signs for similar products and services (explain the "principle of specialty")
- Protection for trade marks with a reputation goes beyond the "principle of specialty"

### (b) Geographical scope/territoriality/priority

- National validity: trade marks are valid in the country where they were registered
- CTM (validity in the EU)
- Co-existence of national trade marks and the CTM

### (c) Duration

- Ten years; renewal
- Explain the obligation to use the trade mark and the consequences of non-use (See also IV.7 - Cancellation)

#### See also:

National laws of your country

Arts. 10, 11 Trade Mark Directive

Arts. 1, 2, 46, 47 Community Trade Mark Regulation

Art. 19 TRIPS

Art. 6 Paris Convention

## 6. Infringement of trade marks

(a) Infringing acts

(b) Factors considered when establishing infringement (likelihood of confusion)

(c) Infringement of marks with a reputation

(d) Limitations and allowed uses

### (a) Infringing acts

Provide examples of commercial use, such as offering for sale or advertising, of goods or services of a certain type or category, bearing a sign identical or confusingly similar to a registered mark.

Relate to the "relative grounds of refusal" above, in particular with regard to preceding trade marks.

### (b) Factors considered when establishing infringement (likelihood of confusion)

- Similarity of goods and services
- Similarity of signs
- Establishing likelihood of confusion (LoC)
- Examples taken from EU case law - see also General Courts (GC formerly CFI), European Court of Justice (ECJ)

### (c) Infringement of marks with a reputation

- Provide examples concerning marks with a reputation, where the goods concerned may be dissimilar and where there is an unfair advantage or detrimental use of the trade mark.
- Concepts to be studied: dilution, blurring and tarnishment
- Use examples taken from EU case law (GC and ECJ).

### (d) Limitations and allowed uses

- Use of own name, kind, quality, quantity, intended purpose, value, geographical origin, time of production of the goods or of the rendering of the service, etc. (relate to "absolute grounds" of refusal)
- Licences
- Acquiescence
- Exhaustion

#### **See also:**

National laws

Arts. 5-9 Trade Marks Directive

Arts. 9-13 Community Trade Marks Regulation (CTMR)

European Union trade mark case law: judgements of the Court of Justice and the General Court of the European Union (available on the OHIM website

<http://oami.europa.eu/ows/rw/pages/CTM/caseLaw/judgementsECJ.en.do>)

## **7. Cancellation of a trade mark**

(a) Revocation

(b) Invalidity

### (a) Revocation

- Causes: lack of use, mis-use, acquired genericity

### (b) Invalidity

- Causes - refer to relative and absolute grounds [section 4]

#### **See also:**

National laws in your country

Arts. 3, 4, 12 Trade Marks Directive

Arts. 50, 51 and 52 CTMR

## **8. Protection of distinctive signs through the rules of unfair competition and passing-off (optional)**

Provide an overview of the protection of distinctive signs (and other IP rights) by the laws of unfair competition.

#### **See also:**

National laws in your country

Art. 10bis Paris Convention

## 9. Exploitation of trade marks

(a) Licensing

(b) Assignments (transfers)

(c) Trade marks as an object of property in other undertakings

(d) Other specific contractual forms

### (a) Licensing

See module 3A, "IP contracts", section V, for more details.

### (b) Assignments (transfers)

Point out that a trade mark may be transferred separately from the undertaking.

### (c) Trade marks as an object of property in other undertakings

- Rights in rem
- Levy of execution
- TM in insolvency proceedings

### (d) Other specific contractual forms

Explain the essential role of trade marks and trade mark licences within the context of franchising agreements.

#### **See also:**

National laws

Art. 8 Trade Marks Directive

Arts. 16-23 Community Trade Mark Regulation

## 10. Other distinctive signs (optional)

Depending on the specific audience, an overview of the provisions of one or more of the following may be useful:

- Trade names (for business management students)
- Geographical indications (for students of agriculture, rural development, etc. )
- Domain names (relevant to most studies)
- Collective and certification marks (relevant in different contexts)

#### **See also:**

National laws in your country

Arts. 1, 4.d., 10.3. and 15 Trade Marks Directive

Arts. 64-77 CTMR

Reg. 510/2006 (PDOs and PGIs)

## V. Designs (2 hrs)

### 1. What is a design?

Explain that designs are used to enhance the attractiveness and value of products, but that there is no legal requirement for a design to be attractive in order for it to be protectable.

Important points:

- Concept is not related to technical functionality: contrast with utility models and patents
- Not legally related to the concept of distinctiveness (but design is an important activity used to enhance corporate image/brand equity – contrast with trade mark)

### 2. What aspects of a design can be protected?

Explain that protection is available for the visible appearance of parts or the whole of a product (e.g. composed by lines, contours, colours, shapes, texture, ornamentation, etc.).

Provide examples of different protected products coming from different industries (e.g. cars, footwear, textiles, furniture). Explain what "complex" products are.

#### **See also:**

Art. 3 Community Design Regulation

Art. 1 Designs Directive

### 3. How design rights are obtained

(a) Registered and unregistered designs

(b) Requirements

(c) Registration/obtaining protection in more than one country

#### **(a) Registered and unregistered designs**

Explain that designs are IP rights which are obtained through registration. Mention the existence of unregistered designs at EU level – the Unregistered Community Design (UCD) – and indicate that the right applies to designs first made available to the public after 6 March 2002. Explain why the UCD was introduced, in particular in relation to short life-cycle products (textiles, clothing etc.).

#### **(b) Requirements**

- Novelty. A design is considered to be new if no identical design has been made available to the public.
  - Registered design: before the date of filing of the application for registration of the design or the date of priority
  - UCD: before the date on which the design for which protection is claimed was first made available to the public

- Individual character (i.e. when the "overall impression" it produces on the informed user differs from the overall impression produced on such a user by any preceding design which has been made available to the public)
- Disclosures
- Exclusions (designs dictated by their technical function, interconnections, designs against public morality)
- Examples

### (c) Registration/obtaining protection in more than one country

- Refer to the main phases of the registration procedure.
- Explain that at Community level designs are not examined.
- Provide an overview of the different alternatives for obtaining protection in more than one country.
  - National PTOs (national routes)
  - OHIM and the Community design
  - WIPO and the international registration system

#### See also:

For an example of a registration procedure (in this case for Community designs):

<http://oami.europa.eu/ows/rw/pages/RCD/regProcess/regProcess.en.do>

National laws in your country

Arts. 3-8 Designs Directive

Arts. 4-7, 35-50 Community Designs Regulation

The Hague Agreement (WIPO)

## 4. What rights does the right-holder have? Where are they valid and for how long?

(a) Exclusive right

(b) Territoriality

(c) Duration

### (a) Exclusive right

- Exclusive right over a registered design with the same "overall appearance" (include an explanation on the limitations of the right).
- Explain the influence of the "degree of freedom" of the designer which is used to assess the scope of protection.
- In the case of UCD the owner has the right to prevent unauthorised copying of the design throughout the European Union. In this case, only if a third party produces an article by copying is the design right infringed.

## **(b) Territoriality**

- Valid in the country of registration or protection
- European Union: national protection and EU-wide protection (CD) co-exist

## **(c) Duration**

RCD: 25 years

UCD: 3 years

### **See also:**

National laws in your country

Arts. 9 and 10 Designs Directive

Arts. 11, 12, 19, 20 Community Designs Regulation

Art. 26 TRIPS

## **5. Infringement of designs**

(a) What is an infringement?

### **(a) What is an infringement?**

Any prohibited act involving a product in which the design has been applied

(b) Prohibited acts

### **(b) Prohibited acts**

Making, offering for sale, putting on the market, importing, exporting, stocking

(c) Unregistered designs

### **(c) Unregistered designs**

Similar to (b), but it must be shown that the design has been copied.

(d) Excepted (allowed) uses

### **(d) Excepted (allowed) uses**

- Non-infringement (private acts, research and experimental use, academic citation)
- "Must-fit" pieces (component parts that must be reproduced in their exact form and dimensions in order to be mechanically connected to the product or allow the product to perform its function, e.g. a car exhaust pipe), with the exception of parts of modular systems - "Lego exemption".
- Designs falling under other exceptions recognised by some national legislations. For example, "must-match" items (parts of complex products which have special features that must correspond to the appearance of the whole product so precisely that their replacement entails using a part that is identical to the original, e.g. a car chassis, a car door, etc.), subject to the conditions established in the corresponding law.

- For Community designs, the part of a complex product used in repairs of a complex product in order to restore it to its original form.
- Invalidity of the claimant's design (grounds for counterclaims): not a design according to legal definition, not novel, no individual character, conflict with prior rights.
- Exhaustion

**See also:**

National laws in your country

Designs Directive

Community Designs Regulation

Arts. 25 and 26 TRIPS

## 6. Group discussion. IP interfaces

### IP interfaces

Aesthetic function, technical function and distinctiveness: provide examples of shapes or figures that could perform more than one of these functions at a time and discuss which would be the appropriate IP category under which to protect them (designs, trade marks, patents, utility models or petty inventions). The exercise should allow students to develop an understanding of the function (purpose) of different rights, the different requirements for protection which exist under separate IP laws and the scope of protection which derives from applying a particular law.

## VI. Enforcement of IP rights (3 hrs)

### Infringement and defences (a) and (b)

(a) Infringement

Briefly explain that infringement and defences are defined in each specific IP law (refer to the preceding sections).

(b) Defences

### (c) Counterclaims

(c) Counterclaims

Explain what a counterclaim is. Stress that counterclaims are a "defensive attack" by defendants which seek to "knock down" the IPRs upon which the claim is based (for instance, by trying to prove that a patent is invalid because of lack of novelty or inventive step, or that a trade mark should be cancelled because unduly registered).

Explain using the Enforcement Directive [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004)] or your country's national laws as a guide.



# 1C History of IP

Contents	Minimum duration (10 hours in total)
I. Introduction	1-2 hrs
II. Early history and development of IP law	2.5-3 hrs
III. The internationalisation of IPRs	2.5-3 hrs
IV. Co-operation and harmonisation of IPRs in Europe	2.5-3 hrs
V. Workshop: Using primary sources to research IP history	1.5-3 hrs

Overview	Learning objectives
<p>This module will be of particular value to students interested in finding out more about the historical development of IP law and gaining an understanding of the economic and social issues involved. Students will also have the opportunity to apply historical research methods to IP in a practical workshop, where they will be taught how to work with primary IP sources.</p> <p>Topics include:</p> <ul style="list-style-type: none"> <li>– The beginnings of IP and the award of privileges in the mercantilist period</li> <li>– The early development of national IP laws in Europe and the United States</li> <li>– The internationalisation of IP law</li> <li>– The development of co-operation and harmonisation of IP rights in Europe</li> </ul>	<p>On completion of this module students will be able to apply a critical and historical perspective to:</p> <ul style="list-style-type: none"> <li>– The relationship between patent protection, technological progress and technological diffusion</li> <li>– Evolving concepts of IP ownership and authorship</li> <li>– The boundaries drawn between IP and the intellectual "commons" in different historic periods</li> <li>– The formation of national and international IP laws and the influence of economic and social interest groups</li> </ul> <p>Students will also be better able to:</p> <ul style="list-style-type: none"> <li>– Assess evidence (public documents, patent files, laws, political statements)</li> <li>– Evaluate conflicting interpretations</li> <li>– Assess change, by looking at past examples of transformation (technological changes of the 19th century, the concept of intellectual creation from the Ancien Régime to Revolutionary France, etc.)</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Undergraduate and postgraduate students of law, political science, economics, social sciences, and history students with an interest in IP law	No previous knowledge of IP required
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturers in IP law history, history of technology, international IP law	Module 3C
<b>Student assessment</b>	<b>Related modules</b>
Test on each section + final examination	Introduction to IP (1A; 1B) Advanced module on international IP law (3C)

## **I. Introduction (1-2 hrs)**

### **1. What is intellectual property?**

- Definition
- Purpose

### **2. Philosophical foundations**

- Natural rights theory
- Personality rights theory
- Immaterial rights theory
- Utilitarian theories
- Reward, incentive, disclosure

### **3. Modern characteristics of IP rights**

- Main categories: patents and utility models, copyright, designs, trade marks, topographic designs, plant variety protection (function, objective, requirements, duration)
- The patent and trade mark offices
- Overview of the international system:
  - The globalised nature of IP laws
  - Harmonisation of IP in Europe

## II. Early history and development of IP law (2.5-3 hrs)

### 1. The beginnings/the award of privileges in the mercantilist period

Monopolies for technical inventions

- Venetian Patent Law of 1473
- Statute of Monopolies of 1623 (England)
- Incentives for inventors during the "siècle des lumières" in France

Printing privileges

- 15th & 16th-century printing privileges in Italy, France, Great Britain and Germany

The origins of trade marks

- Guilds and merchant marks, production marks, police marks, responsibility mark

### 2. The early development of national IP laws in Europe and the United States (I): Patents during the Industrial Revolution

- Great Britain
  - From the Statute of Monopolies to the 1852 Patent Laws
  - The 1883 Acts -modernisation of the patent system
  - Characteristics of the system up to 1919
- France
  - The patent system in Revolutionary France - the laws of 1791 (amended in 1800)
  - The Law of 1844
  - Modifications up to World War I
- Germany
  - Patent laws in the German states prior to German Unification
  - The 1877 Patent Law
  - The patent system between 1877 and World War I - the introduction of the utility model (*Gebrauchsmuster*)
- United States
  - The US Constitution and the 1790 Patent Statute
  - The 1836 Patent Law and the creation of the Patent Office
  - Developments in the second half of the 19th Century - Act of 1861 and the availability of patent rights to foreign citizens
- The development of patent law in your country
- Other countries: Japan, etc.

Issues to be examined include:

- The concept of the invention
- The requirements for protection
- The creation of patent offices
- The requirements of disclosure and publication
- The protection of overseas inventions
- The protection of chemical and pharmaceutical products in Germany and Britain

### **3. The development of IP laws in Europe and the United States (II): Copyright and *droit d'auteur***

- France
  - 1777 decrees and the grant of rights to authors in perpetuity
  - French Revolutionary Decrees of 1791 and 1793
  - Beginning of the 19<sup>th</sup> Century and the incorporation of moral rights in Droit d'Auteur laws
  - 1852 Decree –Protection of foreign works and authors
  - The origins of collective copyright management: Société des Auteurs Dramatiques, Société d'Auteurs, Compositeurs et Editeurs de Musique, Société des Gens des Lettres
- Britain
  - The Act of Queen Anne of 1709
  - The Acts between 1735 and 1875 - expansion of copyright to sheet music, maps, charts, sculptures, paintings, photographs, dramatic works and songs sung in a dramatic fashion, and lectures outside of educational institutions
- Germany
  - The municipal ordinances, acts and laws preceding unification, and treaties on reciprocal protection between Prussia and the various German states
  - 1870 Copyright Law for the German Empire
- United States
  - The 1790 Copyright Act
  - The expansion of copyright to encompass musical compositions, plays, engravings, sculptures and photographs
  - Origins of the "fair use" doctrine
  - The Chace Act of 1891 on the protection of foreign residents
- The development of copyright law in your country

Issues to be examined include:

- The protection of authors and publishers
- The expansion of copyright law from literary to other artistic forms
- Duration
- Limits
- Protection of foreign works

#### **4. The development of IP laws in Europe and the United States (III): Trade mark law**

- Britain
  - Protection through passing-off
  - The Merchandise Marks Act 1862
  - The Trade Mark Registrations Act of 1875
  - The 1905 Act
  - The 1938 Act
- France
  - The criminal laws of the beginning of the 19th century
  - Manufacture and Goods Mark Act of 1857
- Germany
  - The trade mark protection laws of 1874 and 1894 - introduction of a registration system
  - 1936 amendment
- The United States
  - Common law protection
  - The Federal Trade Mark Act of 1870 and the USSC abolition of 1879
  - The Federal Trade Mark Act of 1881- based on Federal competence over interstate commerce
  - The 1905 amendment
- The development of trade mark law in your country

Issues to be examined include:

- The passage from use-based protection to registration-based systems
- The existence (or otherwise) of the right to oppose a registration
- The PTO's obligation to publish

### III. The internationalisation of IPRs (2.5-3 hrs)

#### 1. The internationalisation of trade and the limits of the "territoriality" of IP

Discuss bilateralism in the 19th century (in copyright: the issue of reciprocity; in trade marks: the issue of national treatment).

Explain the perceived need for international protection for authors (and the International Literary Association).

Explain the perceived need for international protection for inventions and other industrial property rights (the World Fairs of London 1858 and Vienna 1873 - Congress for Patent Reform)

Provide a general description of the international system. Issues include:

- agreement on certain foundational principles (e.g. national treatment) but sovereign discretion over IP standard-setting (e.g. first to file system vs first to invent)
- patenting of chemical compounds
- differences in the recognition of the doctrine of moral rights for authors
- differences in standards for trade mark registration
- differences in the level of protection against unfair competition

#### 2. Multilateralism (I): IP rights

- The Paris Convention of 1883 (scope, principles - national treatment, priority)
- International co-operation in IP, industrial property and developing countries:
  - Patents: Patent Cooperation Treaty(1970)
  - Patent issues relating to developing countries, e.g. Technology transfer and compulsory licences
  - Trade marks: the Madrid Agreement for the International registration of Marks (1891) and the Madrid Protocol (1989)

#### 3. Multilateralism (II): Copyright

- The entry of the United States into the international system and the Universal Copyright Convention (1948)
- The developing countries and the revisions of the Berne Convention in Stockholm (1968) and Paris (1971)
- The protection of performers, recorders and broadcasters and the Rome Convention (1958)

#### **4. Multilateralism (III): Other agreements/the international organisations**

- Examples of other areas that became the subject of international agreements:
  - Trade marks (Indication of Source, 1891)
  - Designations of origin (Lisbon Agreement)
  - Designs (Hague Agreement, 1925)
  - Plant varieties (International Convention for the Protection of New Varieties of Plants, Acts of 1961 and 1991)
  - Semiconductor chips (Treaty on Intellectual Property in Respect of Integrated Circuits, 1989)
- The role of international institutions: BIRPI and the World Intellectual Property Organization

#### **5. Multilateralism (IV): The link between IP and trade and the beginnings of the globalisation of IP**

- The insertion of IP in the Uruguay Round Negotiations
- The TRIPS Agreement and WTO

## IV. Co-operation and harmonisation of IPRs in Europe (2.5-3 hrs)

### 1. Co-operation and harmonisation of IPRs in Europe

- The EEC, IP and intra-Community trade
- Harmonisation and co-operation in patents:
  - The Strasbourg Convention on the Unification of Certain Points of Substantive Patent Law (1963)
  - The European Patent Convention (1973) and the European Patent Office
  - The planned Regulations related to the Unitary patent
- Harmonisation of trade marks and designs and the "unified systems" (the Community Trade Mark Regulation and the Community Design Regulation; the Community Plant Variety Protection Regulation; Protected Designations of Origin and Protected Geographical Indications)
- Community action for the harmonisation of copyright law

## V. Workshop: Using primary sources to research IP history (1.5-3 hrs)

### 1. Using primary source documents in the research and interpretation of IP history

Sources (examples):

Primary Sources in Copyright (1450-1900)/CIPIL

[www.copyrighthistory.org/](http://www.copyrighthistory.org/)

Patent and Trademark Depository Library

[www.ptdla.org/history](http://www.ptdla.org/history)

## 2A Financing and IP

Contents	Minimum duration (10-12 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. IP as a financial asset	10 hrs

Overview	Learning objectives
<p>This module is designed to give students an understanding of how IP functions as a financial asset. Economists have long since established that there is substantial under-investment in R&amp;D due to the un-appropriable nature of its main intangible "product": knowledge. However, in these times of competitiveness, a firm's value is often based on precisely such intangibles rather than on "bricks and mortar".</p> <p>IPRs make the exploitation of knowledge appropriable. IP assets - patents, know-how, copyright, trade marks, etc. - are a substantial component of the value of contemporary businesses. Because of this, financial institutions are gradually adopting a new approach towards IP-based investments.</p> <p>In it students will cover the following subjects:</p> <ul style="list-style-type: none"> <li>- Liquidity constraints for innovation-related investments and how economists explain them</li> <li>- The role of IP in facilitating investments in R&amp;D</li> <li>- The financial sources and alternatives available to innovation and IP-based firms</li> <li>- The strategic choices facing entrepreneurs in relation to financing IP</li> <li>- Tools which make it easier to attract and incorporate venture capital for innovative projects based on IP (practical workshop)</li> </ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>- Understand the importance of protecting IP as a way of capturing the value of knowledge</li> <li>- Use IP as a financial asset to attract investments</li> <li>- Distinguish between the relevant financial institutions and their roles and expectations when making investments</li> <li>- Recognise the implications of opting between debt and equity capital</li> <li>- Opt between financial instruments available to innovation-based firms, according to the different stages of development</li> <li>- Benefit from practical knowledge on how to produce and use business tools (such as making a business plan, how to perform due diligence on IP, understanding the proper legal set-up for receiving venture capital) to provide assurance and accurate information to investors and facilitate investment in an IP start-up while securing IPRs</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Primarily students of business, economics, engineering, science and medicine, but also applicable to students of law and social sciences.	Basic IP knowledge is recommended (Modules 1A; 1B). The "IPRs in a nutshell" module can be included depending on student's general background.
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturer in economics and/or financial management with a knowledge of or familiarity with IPRs	Module 5B
<b>Student assessment</b>	<b>Related modules</b>
Examination + assessment of participation in workshops	Modules 2B-2F; 2H, 3A

## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include this option if your students have no background in IP. Ideally, students should have a basic knowledge equivalent to introductory modules 1A and 1B. **See "IPRs in a nutshell" module.**

## II. IP as a financial asset (10 hrs)

### 1. Innovation and liquidity constraints

(a) Under-investment in R&D in economic theory

(b) Innovation and liquidity constraints

(c) Characteristics of R&D investments

(d) The role of intellectual property rights

For economic theories on under-investment in R&D see Arrow (1966) and Nelson (1959). On the role of IPRs to undercut under-investment in R&D see López (2009).

#### (a) Under-investment in R&D in economic theory

- The non-rival, non-excludable nature of knowledge

#### (b) Innovation and liquidity constraints

- Empirical evidence

#### (c) Characteristics of R&D investments

- Nature: investments in human capital, knowledge and effects on R&D spending
- Uncertainty of outcome
- Variability of information and risks over time: effects on investment decision-making (e.g. "real-option" decision processes)
- Difference between the external and internal investment costs of capital (factors: information asymmetries, moral hazard, government intervention)

#### (d) The role of IPRs

- The role of IP as an appropriability mechanism
- Other mechanisms
  - Lead starts, moving down the learning curve, the use of complementary manufacturing capabilities, secrecy

### 2. Financial sources

(a) Internal financing

(b) Financial markets: debt, equity and quasi-equity

(c) Public sources of finance

(a) to (c)

Give an overview of alternative sources for financing research and other innovation development projects.

### 3. Debt capital and IP

- (a) Banks and IP
- (b) IP as collateral for loans
- (c) IP-backed securitisation

For a summary of these topics see, for example, OECD (2006).

Explain the difference between debt and equity capital. Initiate a discussion on the advantages and disadvantages of each one as a source of finance (e.g. debt capital represents higher risks for the business doing the borrowing, while venture capital represents a high risk for the investor).

#### (a) Banks and IP

Explain that lending money and keeping IP assets as collateral is a recent phenomenon and that commercial loans and bank financing by granting a security interest in IP are becoming more and more common (see, for example, [http://www.wipo.int/sme/en/ip\\_business/finance/ip\\_assets\\_financing.htm](http://www.wipo.int/sme/en/ip_business/finance/ip_assets_financing.htm)).

#### (b) IP as collateral for loans

- Limitations of IP as collateral.  
Using a practical perspective, based on observation of market reality, explain the limitations of using IP as collateral, in particular since IP cannot be readily turned into cash (for instance, through auctions).
- Cite positive examples of government programmes supporting the use of IP as collateral backing up credit.

#### (c) IP-backed securitisation

- Securitisation in a nutshell
- Level of development of IP securitisation and examples

A classic example is provided by the famous "Bowie bonds", a securitisation based on the royalty returns for copyright on the David Bowie repertoire (for more information, see <http://financial-dictionary.thefreedictionary.com/Bowie+Bonds>).

### 4. Equity capital, quasi-equity and IP

- (a) Sources of private equity
- (b) Importance of protecting and reporting IP to investors
- (c) Private equity funds
- (d) Quasi-equity

#### (a) Sources of private equity

- Seed capital
  - Entrepreneur
  - Equity based on personal trust
  - Informal investors
- Venture capital
  - Participation in equity
  - Risk-bearing and expected return
  - Venture capitalists
    - Private investors
    - Fund management companies

### **(b) Importance of protecting and reporting IP to investors**

- The importance of making a business plan
- IP due diligence

### **(c) Private equity funds**

- Independent funds
- Captive funds

### **(d) Quasi-equity**

- Definition
- Justification/benefits
- Instruments

## **5. Innovation cycles and financial needs**

(a) From early development to the exit stage

(b) Financing a technology-based start-up: debt or equity?  
(Discussion)

### **(a) From early development to the exit stage**

Explain that IP-based entrepreneurial projects require substantial investment in the initial phases. Then, if the start-up is successful, further investments in R&D, plant, equipment and inventory are needed.

Explain the different financial needs at the different stages of the innovation cycle, integrating the various sources of finance available.

### **(b) Financing a technology-based start-up: debt or equity? (Discussion)**

European retail banks and other funding institutions are not always particularly comfortable investing in, or lending to, businesses where the prime focus is the commercialisation of IP. Although there has been some shift in this attitude, and some examples of IP-backed credit are to be found, these are still exceptional, and are rarely recommended as sources of credit for a start-up.

Discuss the risks and disadvantages of debt financing (e.g. difficulties in obtaining credit, risk of running out of cash flow to repay debt finance in accordance with a repayment plan, requirement of personal guarantees and/or collateral security over real estate from owners or responsible heads of the firm in order to secure the debt, etc.).

Contrast with the option of seeking venture capital.

## **6. Workshops and practical exercises**

Depending on time constraints, students may opt to do one or two workshops, including a practical exercise.

### **6(a) Workshop 1: Making a business plan**

Exercise 1: Draw up a business plan incorporating an IP strategy (students will require prior knowledge of writing business plans).

### **6(b) Workshop 2: IP due diligence basics**

Exercise 2: Perform a simple IP due diligence

The workshop may be divided into two parts. In the first part, students are given an introduction to the basics of IP due diligence (see module 2H). In the second part they perform a simple IP due diligence, discussing the main aspects that a search must focus on (IP protection, contacts, etc.).

### **6(c) Workshop 3: Structuring an investment vehicle/the joint venture**

Exercise 3: Draft a heads of agreement for a joint venture

The workshop may be divided in two parts. In the first part, students are given an introduction to the main characteristics of a joint venture, including the principal issues:

- Legal issues: discuss which legal structures are most advantageous and which are less so.
- Issues relating to shareholder agreements aimed at the exploitation of IP, including its capacity to serve as an equity investment vehicle.
- Allocation of tradable shares or units
- IP ownership issues: resolve issues such as those relating to ownership of the IP by the entity (trust or company) which receives the capital investment
- Forms: private companies, unit trusts (in UK) etc.
- Functioning (shareholder structures, licensing agreements for exploitation of IP, etc.)
- Forming the joint venture
  - Scope of the venture
  - Ensuring and defining contributions
  - Ensuring proper administration
  - Assignment and licensing of IPRs
  - Exit mechanisms
  - Tax issues
- Restrictions upon termination

The second part of the exercise consists of drafting the heads of agreement of a joint venture, including one or more investors. This will allow students to apply the knowledge acquired in the first section.



## 2B The commercialisation of IP

Contents	Minimum duration (10-12 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. Integrating IP into business	2 hrs
III. IP commercialisation through agreements and partnerships	6-8 hrs
III.1 IP- related agreements	2 hrs
III.2 Licensing	2-4 hrs
III.3 IP entrepreneurship: company models for commercialising IP	2 hr
IV. Workshops and practical exercises	2-4 hrs

Overview	Learning objectives
<p>This module deals with the commercialisation of IP rights and the different modalities and tools used in IP-related transactions and legal agreements (licensing contracts, assignments, distribution agreements, etc.). It also focuses on some common modes of association and collaboration with the aim of exploiting IP, with special attention being paid to start-ups, spin-offs and joint ventures.</p> <p>The module includes the following topics:</p> <ul style="list-style-type: none"> <li>– Overview of the main IPR categories (patents, copyright, trade marks, designs, etc.) and their function</li> <li>– The relevance of different IPRs in the life cycle of a product</li> <li>– Different ways in which IP may be used to generate revenue</li> <li>– The importance of integrating IP-related considerations into business planning</li> <li>– Common contracts and agreements used to exploit IP (e.g. licensing agreements)</li> <li>– Modalities of exploiting IP, including different forms of business set-ups and forms of association (e.g. start-ups, spin-offs, joint ventures)</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>– Identify different forms of IP and decide what IP to protect at each stage of the innovation cycle</li> <li>– Explain the importance of conducting a proper IP due diligence and IP valuation process, and what they consist of, before initiating an IP transaction</li> <li>– Indicate different ways of generating revenue using IP, including different business models for exploiting IP</li> <li>– Incorporate IP into business planning</li> <li>– Summarise the principal issues/decisions arising during the licensing process, in particular in relation to: <ul style="list-style-type: none"> <li>▪ the scope of the agreement (exclusivity, territory, duration)</li> <li>▪ economic considerations (royalties)</li> <li>▪ obligations of the licensor and licensee concerning the IPRs which are being licensed</li> </ul> </li> <li>– Draft a heads of agreement relating to a simple IP transaction</li> <li>– Give examples of situations where putting IP to work is optimised through: <ul style="list-style-type: none"> <li>▪ forming a start-up</li> <li>▪ setting up a spin-off</li> <li>▪ forming a joint venture</li> <li>▪ licensing IP</li> <li>▪ assigning IP</li> </ul> </li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Primarily students of business, economics, engineering, science and medicine, but also students of law and social sciences	No previous knowledge required, although a basic knowledge of IP knowledge is recommended (modules 1A and 1B or equivalent)
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturer or professional technology/business/IP manager (e.g. university TTO staff member) with experience in IP commercialisation	Module 5B
<b>Student assessment</b>	<b>Related modules</b>
<ul style="list-style-type: none"> <li>- Multiple choice tests or short exams</li> <li>- Performance in workshops and practical exercises</li> </ul>	2A, 2C-2H, 3A

## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include this module in the programme if your students have no background in IP. Ideally, students should have a basic knowledge equivalent to introductory modules 1A and 1B for maximum benefit.

**See the "IPRs in a nutshell" module.**

## II. Integrating IP into business (2 hrs)

### 1. IP as a source of revenue

- (a) Buying and selling IP
- (b) Licensing
- (c) Other ways of generating revenue with IP
  - (i) IP as a source of finance
  - (ii) IP and tax opportunities
- (d) Cost of IP

#### (a) & (b) Buying, selling and licensing

Define IP commercialisation (to be developed in sections II.2 and III.2).

#### (c) Other ways of generating revenue with IP

##### (i) IP as a source of finance

Explain about obtaining debt and equity capital through IP

##### (ii) IP and tax opportunities

Taking proper account of IP enables entities to implement more tax-effective structures. With adequate knowledge and planning, there are opportunities to maximise the returns available from IP and to protect the value of these important assets from unnecessary exposure to income tax.

However, as tax regulations differ greatly from country to country - including the treatment of costs incurred in creating or acquiring IP assets as well as the implications of exploiting existing IP assets through licensing, sale and use - such issues must be examined from the point of view of the relevant national law.

#### (d) Cost of IP

Provide information about the cost of obtaining, maintaining and defending patents, trade marks, etc.

### 2. Models for innovation and IP commercialisation

- (a) New models of innovation
- (b) Specific commercialisation schemes/arrangements

#### (a) New models of innovation

Explain the shift from closed models of exploitation to more "open" models of innovation (open innovation) (see, for example, Chesbrough (2006) and OECD (2006)).

#### (b) Specific commercialisation schemes/arrangements

- Developing and selling own products
- Start-ups/spin-offs
- Co-operation/joint ventures
- Licensing IP
- Assignments (selling IP)
- Selling the business with the IP

### **3. The importance of integrating IP into business planning**

Give a brief outline of the importance and advantages of integrating IP into a business plan.

(a) Functions of business planning

(b) Main elements of a business plan

(c) How to integrate IP into business planning

### **4. Identifying and knowing the value of IP**

#### **(a) What is IP due diligence?**

Define due diligence. Emphasise the importance of IP due diligence. Give the main elements of due diligence:

(a) What is IP due diligence?

- evaluating the management team
- auditing the financial accounts
- evaluating IP in the process of commercialisation

(b) How is IP valued?

#### **(b) How is IP valued?**

Provide an overview of the main approaches (cost-based, market-based, income-based, option pricing-based).

### III. IP commercialisation through agreements and partnerships (5-6 hrs)

#### III.1 IP related agreements (2 hrs)

##### 1. Introduction: co-operation, collaboration and partnerships

(a) and (b)

Explain that almost every form of exploitation requires a legal agreement with one or more parties.

(a) Different partnerships; different legal arrangements

(b) The importance of procuring legal advice

##### 2. Common agreements used in IP-related transactions

For each type of agreement explain the purpose of the agreement, "typical" parties involved, categories of IP concerned, IP-related aspects (present ownership, ownership of future developments or improvements, ownership of IP resulting from R&D, the moment in the innovation cycle where each agreement is likely to appear, business situations typically associated with the agreement) and the scope.

Provide examples.

(a) Confidentiality and non-disclosure agreements

(b) Research agreements

(c) Research collaboration agreements (sponsorship agreements)

(d) Licensing (see next section)

(e) IP assignments

(f) Distribution contracts

(g) Employee and researcher contracts

(h) IP agreements and anti-competitive practices

## III.2 Licensing (2-4 hrs)

### 1. Licensing basics

(a) What is a licence?

(a) What is a licence?

Business objectives reflected and contractual nature

(b) What can licences be used for?

(b) What can licences be used for?

(c) Licensor and licensee

Technology, trade marks, merchandising, entertainment and publishing, franchising, software

(d) Licensing-in/licensing-out

(c) Licensor and licensee

Who can enter into a licence agreement/legal capacity? Examine the case for affiliates in group companies.

(d) Licensing-in/licensing-out

Licensing is a suitable mechanism for transferring technology between licensors (who license out), who want to leverage their technological assets and licensees (who license in), who want to complement their internal technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

### 2. Purpose of licences/application of licences in business

Mention different purposes (financial and strategic):

- Obtaining revenues
- Gaining access to complementary assets (e.g. by licensing technology to a party that may further develop and/or distribute the product, or by cross-licensing essential technologies in order to gain freedom to operate)
- Developing efficient partnerships

### 3 The process of negotiation and the elements of the licensing agreement

(a) Preparing to enter an agreement

(b) An overview of (some) of the main elements of licensing agreements

#### (a) Preparing to enter an agreement

- Identifying and evaluating IP for licensing
- Memorandum of understanding (MOU)/letter of intent
- Confidentiality issues

#### (b) An overview of (some) of the main elements of licensing agreements

- Parties
- What is being licensed (subject-matter)
- Scope of the licence
- Field of use
- Exclusive, sole and non-exclusive licences (advantages and disadvantages of exclusivity for the licensor and the licensee)
- Territory
- Other issues (sub-licences; arrangements concerning improvements to inventions [for technology licences])
- Economic arrangements (see section III.2(5) for more details)
- Other clauses (representations and warranties, liabilities, termination)

Point out that clauses found to be 'anti-competitive' in terms of EU Competition Law are not permitted and are deemed to be void (see also: Art. 101 TFEU).

### 4. Main economic considerations

(a) Forms of paying for licensed IP

(b) How is the value of a royalty established?

#### (a) Forms of paying for licensed IP

- Lump sums
- Royalties
  - Royalty basis
  - Royalty rates
  - Commercial objectives and royalty variables
- Combination of lump sums and royalties

Explain the advantages and disadvantages of each.

#### (b) How is the value of a royalty established?

Explain that it is calculated on the basis of profits or sales. Define these terms in relation to market practices in specific sectors.

**5. Practical exercise:  
Overview of common  
clauses and specific  
matters relating to different  
licensing arrangements**

Use templates or examples of licensing agreements to discuss common clauses such as those studied earlier, as well as specific issues relating to some or all of the following:

- Technology licences
- Trade mark licences
- Software licences (e.g. end-user agreements)
- Know-how licences

### III.3 IP entrepreneurship: company models for commercialising IP (2 hrs)

#### 1. IP law and company law

Explain how IP law and company law do not go always hand in hand.

Describe how different forms of IP agreement may be employed in a single venture or project between partners.

Account for the interplay between IP ownership issues, taxation and property issues, etc.

#### 2. Start-up companies

(a) What is a start-up company?

##### (a) What is a start-up company?

- Define "start-up" (e.g. a company with a limited operating history)
- List the differences over other closely related or similar concepts (e.g. "spin-offs")
- Describe the phases of a start-up

(b) Functions and main characteristics

##### (b) Functions and main characteristics

Consider the following factors:

- The degree to which they are innovation-based
- The added value of products
- The qualifications of employees
- Flexibility
- Degree of specialisation

(c) Who's who in the start-up process

##### (c) Who's who in the start-up process

Provide a description of the main actors who usually take part in any start-up process (partners, investors, employees, "founder equity", etc.).

(d) Transferring IPRs to a start-up (licences and assignments)

##### (d) Transferring IPRs to a start-up (licences and assignments)

Compare the advantages and disadvantages of licensing and assigning IPRs from the point of view of the inventor.

Compare the terms under which inventors seek to license technology to the terms desired by the venture capitalists (Who will cover patent costs? Will the licence be exclusive or non-exclusive? What is the field of use?).

(e) Preventive arrangements to avoid IPR ownership issues

##### (e) Preventive arrangements to avoid IPR ownership issues

Talk about the arrangements which separate the holding of IP and its commercialisation (exploitation) into different entities.

(f) Assessment of the start-up as a vehicle to commercialise IP

### (f) Assessing a start-up

Consider the following factors: risk, return and implications or possible changes, from the point of view of the rightholder, regarding control over the IP.

### 3. Spin-offs (in particular university spin-offs)

- (a) Functions and main characteristics
- (b) Universities/other partners and investors
- (c) Transfer of IPRs to spin-offs (licences)
- (d) Assessment of the spin-off model

#### (a) Functions and main characteristics

Explain the following elements:

- The extent to which they are innovation-based
- The added value of products
- The qualifications of employees (university researchers)
- The degree of flexibility and specialisation

#### (b) and (c)

Examine the aspects referred to in 2(d) and 2(e).

#### (d) Assessment of the spin-off model

Explain parameters (who is in control of the IP after the creation of a company), returns of the venture, and risk.

Engage students in an assessment (advantages and disadvantages) of the spin-off model from the university's point of view.

### 4. Discussion: Spin-off vs start-up

- (a) Discuss the advantages and disadvantages of both models for transactions involving university-generated IP.

Is commercialisation of the "products" of university research compatible with the nature of the university and its principal aims? How does the creation of start-ups and spin-offs fit in with the general policies of the university?

(Suggestion: discuss the issue in relation to your university's mission statement and the mission statements of other leading centres, e.g. "Mission Statement: University of Oxford", Oxford University Gazette, September 1998, [http://www.ox.ac.uk/gazette/1998-9/supps/2\\_4484.htm](http://www.ox.ac.uk/gazette/1998-9/supps/2_4484.htm))

Specific issues to be discussed or studied:

- Control of the company and control of the IP transferred to the company
- Flexibility
- Risks and potential returns
- Capacity to obtain the optimum level of exploitation
- Employment (e.g. the problem of employee "drainage" in the spin-off, where researchers must find compatibility with their university obligations)

**See also:**

IP Handbook of Best Practices

[www.iphandbook.org/handbook/ch13/p05/index.html](http://www.iphandbook.org/handbook/ch13/p05/index.html)

Amiram Porath, "Spin-off versus licensing, the Academy Dilemma", IPR-Helpdesk Bulletin, March-April 2006

## 5. The joint venture

(a) Function and characteristics of the joint venture

Explain that joint ventures are defined by their purpose (sharing risks and profit in an entrepreneurial project), but that they may adopt different legal forms (corporation, limited liability companies, partnership, etc.).

(b) Specific issues

### (b) Specific issues

(c) Forming a joint venture

For example, long-term arrangements, IPR ownership and assignment of rights

### (c) Forming a joint venture

Enable students to identify the issues which must be defined before entering into a joint venture:

- Scope of the venture
- Ensuring and defining contributions
- Ensuring proper administration
- Defining rights among parties (including assignment of IPRs)
- Exit mechanisms
- Restrictions upon termination

## 6. Franchises (optional)

(a) Function and characteristics

### (a) Function and characteristics

- Franchises as a business model
- Main elements of a franchise agreement

(b) IP typically included in franchise agreements

### (b) IP typically included in franchise agreements

- Trade marks
- Know-how
- Patents
- Other rights

(c) Examples of franchises

### (c) Examples of franchises

## 7. Selling IPRs

Focus here on any mandatory national rules, especially formal requirements (e.g. deed vs contract for assigning IP rights).

(a) Assigning IPRs

(b) Selling IP with the business

## IV. Workshops and practical exercises (2-4 hrs)

### 1. Workshops and practical exercises

Students may opt to do one or two workshops, including a practical exercise.

#### 1(a) Workshop 1 - Making a business plan and integrating IP

The workshop may be divided in two parts. In the first part, students are introduced to the basics of how to prepare a business plan. In the second part they are asked to draft an outline of a business plan for a given project, highlighting how IP is incorporated into the business strategy.

Exercise 1: Draw up a business plan incorporating an IP strategy

#### 1(b) Workshop 2 - IP due diligence basics

The workshop may be divided in two parts. In the first part, students are introduced to the basics of IP due diligence (see module 2H). In the second part they perform a simple IP due diligence and discuss the main aspects that a search must focus on (IP protection, contracts, etc.).

Exercise 2: Perform a simple IP due diligence

### **1(c) Workshop 3 - Structuring an investment vehicle: the joint venture**

Exercise 3: Draft a heads of agreement for a joint venture

The workshop may be divided in two parts. In the first part, students are introduced to the main characteristics and issues relating to joint ventures, e.g.:

- Legal issues: discuss which legal structures are advantageous, and which are not
- Issues relating to shareholder agreements aimed at the exploitation of IP, such as the capacity to serve as an equity investment vehicle
- Allocation of tradable shares or units
- IP ownership issues/resolve exclusive ownership of the IP by the entity (trust or company) which receives the capital investment
- Forms: private companies, unit trusts (in UK), etc.
- Functioning: shareholder structures, licensing agreements for exploitation of IP, etc.
- Forming the joint venture
  - Scope of the venture
  - Ensuring and defining contributions
  - Ensuring proper administration
  - Assignment and licensing of IPRs
  - Exit mechanisms
  - Tax issues
- Restrictions upon termination

The second part of the exercise consists of drafting the heads of agreement of a joint venture, including one or more investors. This exercise should allow students to apply the knowledge they acquired in the first section.



## 2C IP licensing agreements and negotiations

Contents	Minimum duration (10-12 hours in total)
I. IPRs in a nutshell + Introduction to contract law and licensing	2.5-4 hrs
II. The agreement: preparatory steps and contents	2 hrs
III. Economic considerations	2 hrs
IV. Types of agreement	1-4 hrs
V. Conducting licensing negotiations	2 hrs
VI. Follow-up to the agreement	1 hr
VII. Practical exercises	2 hrs

Overview	Learning objectives
<p>Licensing is an essential tool for leasing IP assets and for establishing efficient partnerships aimed at exploiting IP. This module provides students interested in the commercialisation of IP (researchers and developers, prospective IP owners, business and technology managers, etc.) with an in-depth understanding of licensing agreements and negotiations.</p> <p>The module contains:</p> <ul style="list-style-type: none"> <li>– An overview and preliminary assessment of options for exploiting IP: in-house, assignments, licensing</li> <li>– Basic concepts and the business applications of licensing</li> <li>– Preparatory steps to be taken as part of a licensing negotiation strategy</li> <li>– An examination of the contents of an agreement, including: <ul style="list-style-type: none"> <li>▪ the extent of the rights assigned (what is licensed and where)</li> <li>▪ economic considerations (royalties)</li> </ul> </li> <li>– Identification of the important related issues and negotiation skills</li> <li>– An overview of what happens after the licensing deal has been made (management of rights and obligations arising from licensing agreements)</li> </ul>	<p>On completion of this module students should have acquired knowledge of:</p> <ul style="list-style-type: none"> <li>– Alternative ways of exploiting IP: in-house, assignments, licensing</li> <li>– The business applications of licensing</li> <li>– Preparatory steps in licensing negotiation strategy</li> <li>– The essential elements of an agreement</li> <li>– The extent of the rights assigned (what is licensed and where)</li> <li>– How to calculate royalties and other economic considerations</li> <li>– Common aspects and differences in licences for different types of IP (technology, trade marks, copyright)</li> </ul> <p>They will also be able to:</p> <ul style="list-style-type: none"> <li>– Draft a heads of agreement containing the main elements of the licensing deal</li> <li>– Carry out licensing negotiations, with skills developed through specific exercises</li> <li>– Prepare a strategy for the management of rights and obligations arising from licensing agreements</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Students of engineering, science, medicine, business and economics	Basic IP knowledge required. Students with no previous knowledge should take introductory modules 1A and 1B. Module 2B (Commercialisation of IP) is recommended.
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Licensing specialist/technology transfer or IP expert with experience in licensing (including university technology transfer office staff)	
<b>Student assessment</b>	<b>Related modules</b>
Tests (written or multiple-choice) in combination with an assessment of performance in the practical exercises and workshops	Other modules relating to the exploitation of IP (2A, 2B, 2D-2F, 2H , 5B)

## **I. IPRs in a nutshell/Introduction to contract law and licensing (2.5-4 hrs)**

### **I.1 IPRs in a nutshell. (1.5-2 hrs)**

#### **IPRs in a nutshell**

Include this option if students have no background in IP. Ideally, a basic knowledge of IP equivalent to introductory modules 1A and 1B is recommended. **See the "IPRs in a nutshell" module.**

## I.2 Introduction to contract law and licensing (1-2 hrs)

### 1. Contract law basics

Introduce students to the concepts of form, structure, terms, breach of contract, void contracts, damages, etc.

### 2. Licensing basics

(a) Understanding the nature of licensing agreements

#### (a) Understanding the nature of licensing agreements

- Business objectives reflected
- Contractual nature

(b) Main concepts and terminology: definition and classification of licences

#### (b) Main concepts and terminology: definition and classification of licences

- What is a licence?
- What can licences be used for?
  - Technology, trade marks, merchandising, entertainment and publishing
  - Other forms (franchising, software licensing)
- Licensor, licensee
- Licensing-in/licensing-out
- Exclusive, sole and non-exclusive licences

(c) Why license? Applications of licensing in business

#### (c) Why license? Applications of licensing in business

Discuss different reasons, including:

- Obtaining revenues
- Gaining access to complementary assets
- Increasing distribution of product
- Scarcity of resources
- Developing efficient partnerships
- Obtaining funds for research
- Transferring knowledge from universities to the community
- Strategic decisions involved in licensing

## II. The agreement: preparatory steps and contents (2 hrs)

### 1. Preparatory steps

(a) Identifying and evaluating IP for licensing

#### (a) Identifying and evaluating IP for licensing

- IP due diligence
- Using patent information to evaluate a transaction
- Establishing the value of IP (for valuation see section III, "Economic considerations")

(b) Partner relationship development

#### (b) Partner relationship development

- Memorandum of understanding/letter of intent

(c) Confidentiality

#### (c) Confidentiality

Define confidentiality in the preparatory stage and mention possible exceptions to this requirement.

### 2. Contents of the agreement

(a) Parties involved

#### (a) Parties involved

Explain who or what (persons/firms) may be a "licensor" or "licensee" (e.g. affiliates, co-owners, etc).

(b) Subject-matter of licence

#### (b) Subject-matter of licence

Stress the importance of

(c) Scope of the licence

- including all the relevant IP rights
- properly indicating the IPRs subject to the licence

(d) Competition law and licences in the EU

#### (c) Scope of the licence

Explain what it covers (scope) and where it applies (territoriality).

(e) Royalties

(f) Financial administration

#### (d) Competition law and licences in the EU

Give a brief overview of permitted and non-permitted clauses, using examples. In particular, explain what might be considered restrictive practice within the meaning of Article 101 (ex Art. 81) TFEU. Mention the allowed exceptions to this provision (cases where the restrictions lead to economic benefits, improved production, technological progress, etc.). Refer to "block exemptions".

(g) Risks/warranties and representation/indemnification

(h) Commencement and expiry/termination

Mention "white lists" vs "black lists".

(i) Other issues

#### (e) Royalties

Explain that they are a fundamental element of a licensing agreement and that they will be dealt with in more detail in section III.

#### **(f) Financial administration**

- For example, obligations on the licensee to keep accounts and records, report results and pay royalties.

#### **(g) Risks/warranties and representation/indemnification**

- Describe the potential risks for licensor and licensee.
- Refer to the link between warranties and consideration.
- Warranties: implied vs expressed warranties
- Indemnification: see the section on contract law basics

#### **(h) Commencement and expiry/termination**

- Licensing agreements must incorporate clauses relating to the effective date of commencement and termination of the contract. Effective date: the start of the licence must be stipulated. In some specific cases, for instance when government approvals are required for a license agreement, a condition providing that the license will not come into effect until it has been approved in the form agreed between the parties should be included.
- Expiry/termination: mention the factors which might lead to termination of the licence and which need to be detailed in the contract (upon a fixed date, upon an event - for example, on expiry of the licenced IP or on the IP becoming invalid - or termination by one party).

#### **(i) Other issues**

- Confidentiality clauses and exceptions
- Applicable law, dispute resolution clause/choice of forum
- Prosecution and defence of IP rights (and obligations of the parties in the event of infringement of the IP)
- Grant backs
- Validity clauses
- Change of control clauses

### III. Economic considerations (2 hrs)

#### 1. Knowing the value of IP (IP valuation)

(a) Valuing IP in the context of licensing agreements

(b) Main approaches/methods

#### (a) Valuing IP in the context of licensing agreements

- When and why does the valuation process take place?
- Valuing the technology to be licensed:
  - Valuation performed by the licensee
  - Valuation performed by the licensor

#### (b) Main approaches/methods

- Cost-based
- Market-based
- Income-based
- Option pricing-based

#### 2. Modalities of paying for licensed IP

- Lump sums
- Royalties
- Running royalties vs minimum royalties
  - Royalty basis
  - Royalty rates
  - Commercial objectives and royalty variables
- Lump sum + royalties

Include a short discussion on the advantages and disadvantages of each method.

#### IV. Types of agreement (choose one to four options, 1 hr each)

**1. Technology licensing (optional)**

Select one or more options to suit the target audience.

**2. Trade mark licensing (optional)**

Highlight the purpose of the agreement in each case (e.g. in technology licensing, the use of a technology by the licensee; in trade mark licensing, the commercialisation of a trade-marked product, etc.).

**3. Copyright licensing (optional)**

Examine the specific clauses included in each agreement, taking account of motivation and intended purpose (e.g. explicit product quality-control clauses in trade mark licences are derived from the licensor's desire to preserve the good name of the brand. Specific clauses on the ownership of improvements to a patented or otherwise protected and licensed technology are typical of technology licensing, etc.).

**4. Software licences (optional)**

## V. Conducting licensing negotiations (2 hrs)

### 1. Overview of the negotiation phases

Refer to preparatory steps/discussions/ bargaining/drafting the agreement.

### 2. Preparation for negotiations

#### (a) Preparation

#### (a) Preparation

- Definition of goals
- Designation of lead negotiator and negotiating team
- Heads of agreement

#### (b) Discussions and bargaining

#### (b) Discussions and bargaining

#### (c) Drafting the agreement

- Discuss the following topics:
  - Review of information by the licensee
  - Negotiating the price of the licence
  - Bargaining tips

#### (c) Drafting the agreement

Give a brief description of what the lawyer does and of the interaction between client and lawyer.

## VI. Follow-up to the agreement (1 hrs)

### 1. Contract management

#### (a) Contract management in general

(a) Contract management in general

Examine specific post-agreement contract management issues, including:

(b) Managing licensing agreements

- Service delivery management
- Relationship management
- Governance
- Change management

#### (b) Managing licensing agreements

Some issues in managing the relationship in a licensing agreement:

- Technical assistance
- Charges and billing on tangible items
- Reporting by the licensee
- Auditing

### 2. Dispute resolution

- Interpretation of the contract
- Cease and desist letters
- Choice of forum and law
- Courts, mediation and arbitration

## VII. Practical exercises (2 hrs)

### **1 Drafting the heads of agreement of a licence**

Guide students throughout a session in which they are asked to draft a heads of agreement based on a practical case. Provide sufficient information about the case (details of the firms, technology or other innovation involved, market values of the technology or IP to be licensed, market conditions and competitors, including any other licensees). The exercise should allow students to anticipate and weigh up the different elements that need to be taken into consideration during the licensing process.

### **2. Negotiating a licensing agreement**

Conduct a moot session in which students are guided through negotiations for a licensing agreement.



## 2D IP, R&D and knowledge transfer (with special reference to universities and public research)

Contents	Minimum duration (10-12 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. University researchers and IP	
II.1 Research results, copyright and patents: the "publish or patent" dilemma	3-4 hrs
II.2 Incorporating IP issues into research planning and establishing collaborative projects	3-4 hrs
III. Knowledge transfer from university to industry: IP-related aspects	4-7 hrs

Overview	Learning objectives
<p>Universities are dedicating more and more of their efforts to exploiting the results of their research. This process involves the researchers themselves, university knowledge/technology transfer offices (KTO/TTO), sponsors (public and private), other universities, industry and government authorities for scientific research.</p> <p>This module gives PhD students and researchers information about the IP issues which affect them, such as copyright in scientific publications, the "publish or patent" dilemma and the ownership of IP developed by academic staff. It also gives them an understanding of how to incorporate IP into their everyday activities. This includes knowledge of the role of the KTO/TTO in facilitating successful knowledge transfer processes, including technology transfer.</p> <p>Topics:</p> <ul style="list-style-type: none"> <li>– IPRs in a nutshell</li> <li>– IP and research results/copyright and patents</li> <li>– The "publish or patent" dilemma</li> <li>– Other categories of IP</li> <li>– IP planning and university research</li> <li>– IP-related agreements and collaborations</li> <li>– IP-related aspects of knowledge/technology transfer between universities and industry</li> <li>– The role of the knowledge/technology transfer office (KTO/TTO).</li> <li>– Partnerships and networking for the exploitation of IP</li> <li>– University research and entrepreneurship: creating a university start-up or spin-off (practical exercise)</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>– Establish an initial objective for a research project, incorporating IP strategies into the research plan (e.g. publication/exploitation)</li> <li>– Negotiate an agreement (research agreement, collaborative agreement) taking particular account of IP issues</li> <li>– Understand and describe the role and services of knowledge/technology transfer offices (KTO/TTO)</li> <li>– Understand and anticipate the implications of collaborative ventures and partnerships for the exploitation of IP, in particular in relation to IP ownership, control over IP, financial risk and other factors</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Researchers and PhD students in all scientific and engineering disciplines. KTO/TTO staff	Modules 1A or 1B or equivalent knowledge base recommended
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Expert from university KTO-TTO with sufficient experience (five years or more) and an in-depth knowledge of IP management	Not applicable
<b>Student assessment</b>	<b>Related modules</b>
Tests + assessment of student performance in practical exercises	Suggested continuation: 5B Related modules: 2A-2C; 2E-2F, 2H; 3A; 5B

## I. IPRs in a nutshell (1.5–2 hrs)

### IPRs in a nutshell

Include the "IPRs in a nutshell" module if your students do not have any background in IP. Ideally, students should have a basic knowledge equivalent to introductory modules 1A and 1B. **See the "IPRs in a nutshell" module.**

## II. University researchers and IP

### II.1 Research results, copyright and patents: the "publish or patent" dilemma (3-4 hrs)

#### 1. Publications and copyright over scientific publications

(a) Publishing and researchers' careers

##### (a) Publishing and researchers' careers

Explain that, in universities, publishing the results of academic research in scientific journals is vital to a career in academia and related technical fields and often has priority over protecting these results through patents.

(b) Obtaining IP protection for publications/scope of copyright protection

##### (b) Obtaining IP protection for publications/scope of copyright protection

Explain that scientific articles are protected by copyright, which consists of several different rights.

(c) Publishing contracts/transferring rights to the publisher

Talk about rights (to reproduce, distribute, translate and modify the article; to decide whether and when the article is published; to claim authorship; to integrity of the article).

(d) Other models available for publishing university research: open access

Scope

##### (c) Publishing contracts/transferring rights to the publisher

Observance of the contract and obligations vis-à-vis the university

- Licensing or selling?
- Rights and obligations

Suggestion: show students standard copyright forms and contracts used by publishers.

##### (d) Other models available for publishing university research: open access

Explain that, under open access policies, authors published in research publications grant free internet access to their scientific contributions, as well as the possibility to use them, subject to proper attribution of authorship.

Mention the fact that public institutions (see, for example, the EC pilot project at

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1262>) increasingly prefer open-access arrangements (OA) which guarantee that the results of research funded by taxpayers' money will afterwards be disseminated as broadly as possible - and for free - to other interested researchers and the public at large.

Refer to university experience in implementing OA, such as the MIT OpenCourseWare

(<http://ocw.mit.edu/OcwWeb/web/home/home/index.htm>)

## 2. Patents and university inventions

(a) Why are patents important/patents as a form of protection for technical inventions and a source of information

(b) Patent requirements (patentable subject-matter/novelty/inventive step/industrial applicability)

(c) Scope of protection (exclusive right, geographical scope, etc.)

(d) Regulations for university inventions

(e) University inventions and researcher/academic careers

### (a) Why are patents important/patents as a form of protection for technical inventions and a source of information

- What is a patent?
  - Exclusive right, the patent "contract" - protection in exchange for information.
- Why and when are patents applied for?
  - To generate revenue, attract investors, "block" competitors, etc.
- What sort of (technical) information is found in patent documents?

### (b) and (c) Patent requirements (patentable subject-matter/novelty/inventive step/industrial applicability)

Expand on the introduction to patents in section (I) using examples to distinguish what may be considered as an invention from what may not (e.g. "discoveries" or "scientific methods").

Explain, using examples, what inventions constitute exceptions and may thus not be patented, mainly for reasons of public policy (e.g. methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body).

Finally, using a similar methodology, provide examples of inventions which fulfil the patentability requirements (novelty, inventive step and industrial applicability) and examples of inventions which do not. The examples should match the technical background of the audience.

Referring to the scope of protection, address the following main issues:

- The importance of the claims, which define the scope of protection
- The nature of the exclusive right
- The territoriality of patent rights
- Duration
- Limitations (e.g. uses for experimental purposes)

### (d) Regulations concerning university inventions

Explain that, as with employee inventions, national laws vary in relation to the ownership of inventions made by university lecturers and researchers. Two models prevail: the "professor's privilege" concept, in which the results of publicly funded research are owned by the researcher (professor) and not the research institution where the research was carried out, and the concept in which the results of publicly funded research are owned by the institution where the researcher works and not the researcher personally.

Explain IP ownership rules (pre-emption, automatic institutional ownership), and answer questions on the rules concerning remuneration of inventors.

### (e) University inventions and researcher/academic careers

Talk about the renewed social and economic interest being shown in scientific knowledge produced in universities which is susceptible of being patented and used commercially.

Examine the issues under the framework of current European scientific and technological policy.

Examine national regulations and your own university's rules and assess how patenting is considered, in terms of its contribution to the careers of academic researchers (e.g. what incentives are there for academics to patent an invention?).

Compare it with "publishing".

### 3. Publish or patent?

(a) Factors to be taken into account when deciding whether to publish or to patent

#### (a) Factors to be taken into account when deciding whether to publish or to patent

- Is the knowledge susceptible of being exploited (applied research and basic research)?
- Are the conditions for obtaining a patent favourable? In particular, emphasise the fact that previous publications on an invention by the researcher may constitute anticipatory documents, which might prevent the invention being protected due to lack of novelty. Note that, unlike the US, there is no "grace period" for disclosures made by the inventor himself in Europe.

Examine strategies in which publication and patenting may be complementary (e.g. delaying publication until the patent application has been filed).

- Is there a possibility of commercial exploitation of the knowledge which is to be patented or published? If so, how?
- Costs
- What form of dissemination is expected or desired? Discuss the quality of the knowledge disclosed in scientific publications vs the quality of information disclosed in patents.

### 4. Patent information

What is patent information?

Give a brief overview of the sort of information that can be found in patent documents (for details see module 2E, "Using patents and technical information").

Show the students a patent document.

Explain the uses of patent information (see 2E for details).

Outline the limitations of patent information (absence of scientific screening of the patent document).

## II.2 Incorporating IP issues into research planning/establishing collaborative projects (3-4 hrs)

### 1. Incorporating IP issues into research planning

(a) Using patent information to plan research

#### (a) Using patent information to plan research

Explain its importance (e.g. setting aims, avoiding duplication of research, etc.).

(b) Freedom to operate (FTO)

#### (b) What is FTO?

As defined on the BiOS website at

<http://www.patentlens.net/daisy/bios/2768.html>

(c) Choosing the form of protection and obtaining IP protection

'Freedom to operate' (FTO) is usually used to mean determining whether a particular action, such as testing or commercialising a product, can be done without infringing valid third-party IP rights.

(d) Keeping lab notes to prove the act of invention

FTO and patents/FTO and other IP rights (plant variety protection, trade marks, etc.)

(e) Using other people's IP/options for dealing with existing patents

#### (c) Choosing the form of protection and obtaining IP protection

Research results may be protected through different sorts of IP mechanisms (patents, copyrights, trade marks, trade secrets), even at the early stages of R&D. Protecting research results at an early stage is considered to be critically important. It is crucial for establishing research partnerships because the sharing of information is key, not only to the initial formation of the partnership, but also to the ability to complete the research successfully.

Research institutions may have different options available to them regarding the way they approach the issue of IPRs. While patents are most frequently used, it is often necessary to rely upon other forms of protection to protect employees' know-how, especially in the early stages. Such protection may include confidentiality agreements, non-disclosure agreements, non-compete agreements, etc. At an early stage, these are perhaps even more effective than patents.

Another issue is understanding how protection is obtained. This will vary according to the mechanism chosen for protection. Hence, while patents, designs and trade marks are obtained through registration at the patent/trade mark/IP office, copyrights exist from the moment of "creation".

#### (d) Keeping lab notes to prove the act of invention

Explain that it is important to keep lab notes about different applications as they will help the patent attorney draft the patent application. Also, rigorous and detailed lab notes are essential for proving inventorship in patent applications filed in the US.

## **(e) Using other people's IP/options for dealing with existing patents**

- Patentability exceptions relating to IP protection and research
- Using complementary technology in the research phase (licensing-in, licensing-out)
- "Inventing around"

## **2. IP agreements (overview)**

(a) Forms of agreement

(b) Negotiating agreements

(c) Sponsorship

(d) Collaboration within public funding programmes (special reference to EC-sponsored Framework Programmes)

(e) IP and collaboration within public funding programmes in the United States (optional)

### **(a) Forms of agreement**

- Research agreements
- Collaboration agreements
- Licensing
- Assignments
- Other agreements (see module 3A)

### **(b) Negotiating agreements**

See module 2C, "IP licensing agreements and negotiations" for details of topics and exercises.

### **(c) Sponsorship**

Examine the issues relating to ownership of IP vis-à-vis sponsors and partners/conditions for exploitation/conditions for publishing the results.

### **(d) and (e)**

These two sections introduce students to issues relating to the management of IP within the framework of publicly funded programmes. For resources on the programmes funded by the European Commission (Competitive and Innovation Framework Programme and EU Research Framework Programmes) see the IPR-Helpdesk website at <http://www.iprhelpdesk.eu/>.

For the United States, see the Bayh-Dole Act or University and Small Business Patent Procedures Act, which is the legislation dealing with IP arising from federal government-funded research, adopted in 1980 (Bayh-Dole Act; 35 U.S.C. § 200-212).

### **III. Knowledge transfer from university to industry: IP-related aspects (5-7 hrs)**

#### **1. Different forms of transferring knowledge**

Give an overview of the different forms of transferring knowledge, including teaching, consultancy services, and agreements for knowledge and technology transfer and for the exploitation of IP, etc.

#### **2. Benefits of transferring knowledge**

Examine the benefits referred to in (a) to (d) and provide examples relating to your university.

(a) Income (for financing research/recruitment)

(b) Publicity

(c) Favouring local synergy

(d) For the researcher: incentives and credits (where available)

#### **3. The importance of knowledge transfer/technology transfer offices**

This section requires the participation of a representative from a KTO/TTO (from your own or another university).

(a) General role: skills of the KTO/TTO

(b) Identifying IP/relationship with research departments/methodologies

(c) Ensuring proper, economically sound and effective protection

(d) Valuing IP

(e) Monitoring performance

#### 4. Partnerships designed to exploit IP

(a) Collaboration between universities

(b) Collaboration with other organisations

(c) Collaboration with industry

(d) University spin-offs and start-ups

#### (a) to (c)

The successful exploitation of IP requires high levels of skills and resources. This implies that there may be scope for collaboration in IP management, in order to share expertise and overheads.

#### (a) Collaboration between universities

- Shared best practice and information
- Active joint management of portfolios

#### (b) Collaboration with other organisations

- Public agencies
- IP management services

#### (c) Collaboration with industry

Examine which factors are important to ensure effective knowledge transfer from university to industry (e.g. social connectedness, trust, knowledge transfer, IP policies, etc.).

#### (d) University spin-offs and start-ups

What is a spin-off? What is a start-up?

Compare the alternatives of spinning a company out of the university or starting one from scratch.

Consider the following factors: risk, university control over IP, human resources (e.g. problems with the allocation of working hours of university research staff employed in the spin-off), work "drainage" by the spin-off.

#### 5. Workshop: Setting up a university spin-off

Organise the students into groups assisted by the tutor(s). Based on a hypothetical case in a technical field relating to their core studies, ask them the following questions:

- At what stage of R&D should researchers consider the possibility of a spin-off?
- In which context is a spin-off to be recommended/not recommended?
- How does the process work and what kind of instruments can be used (agreements, legal forms, etc.)?
- What financial support is available to researchers and where can they get advice and information (KTO, lawyers, consultants, etc.)?

## 2E Using patent information

Contents	Minimum duration (10 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. How to read a patent document	2-3 hrs
III. Technical, business and legal applications of patent information	2-3 hrs
IV. Performing patent searches	2-4 hrs

Overview	Learning objectives
<p>Patent documents are one of the most important sources of technical information available to the public and constitute an essential resource for students involved in technological research.</p> <p>Patents are also an important source of strategic information for technology-based businesses, as they provide information on technology trends, "spaces" in which to innovate, and insight into the activities of competitors and potential collaborators.</p> <p>This module teaches students how to read patent documents and how to search for patent information, and explores the technical, strategic and legal applications of the information obtained.</p> <p>Topics include:</p> <ul style="list-style-type: none"><li>– Intellectual property rights and patents in a nutshell</li><li>– Reading patent documents</li><li>– Technical, business and legal applications of patent information</li><li>– Performing a patent search</li></ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"><li>– Read a patent document</li><li>– Perform patent searches targeting specific technical, business or legal objectives</li><li>– Make a preliminary analysis of the information retrieved and use it for different purposes:<ul style="list-style-type: none"><li>▪ technical (e.g. for further research)</li><li>▪ business (e.g. assessment of technological trends, determining freedom to operate)</li><li>▪ legal (e.g. in patent infringement cases, to determine the validity of a patent)</li></ul></li></ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Students of engineering, science, business and economics	No previous knowledge required, although a basic knowledge equivalent to modules 1A and 1B is recommended
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Patent information specialist (technical information specialist from PTO/patent agent), IP management consultant.	Module 5A
<b>Student assessment</b>	<b>Related modules</b>
Multiple-choice tests Assessment of performance in patent search exercise	2A-2D, 2F-2H

## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include the "IPRs in a nutshell" module if your students do not have a background in IP. Ideally, a basic knowledge equivalent to introductory modules 1A and 1B is recommended. **See the "IPRs in a nutshell" module.**

## II. How to read a patent document (2-3 hrs)

### 1. Introduction

(a) Content and structure of patent documents

#### (a) Nature of the patent document

Describe the content and structure, including legal and technical information.

(b) Patent applications and patent specifications

#### (b) Patent applications and patent specifications

Explain the difference between A and B documents.

### 2. Structure of patent documents

- Mandatory elements (title page, description, claims and drawings)
- "Size" of patent documents

### 3. Where are the different elements of a patent document located and what do they mean?

- Title page plus elements (significance for databases): title, bibliographic data, abstract, drawing
- INID codes and bibliographic data
- Publication number
- Classification – International Patent Classification system
- Priority
- Inventor and applicant
- Description
- Drawings
- Claims

### 4. The information contained in patent documents

- What is published and when (patent applications, patent specifications and utility models and gazettes)?
- 18-month examination document (at grant)
- Technical and legal nature of patent documents
  - Disclosure of technical knowledge
  - Legal information (bibliographic data, claims)
  - Patent language as an intersection of legal and technical requirements
- Patent classification (purpose, utility, IPC sections and divisions, ECLA classification)
- Pay particular attention to:
  - Patent families (patent family databases)
  - Claims (and patent infringement)

## **5. Other sources of information**

Non-patent literature

## **6. Advantages and disadvantages of patents as a source of technical information**

- Availability and storage, geographic coverage, "currency"
- Structured, classified, and organised source of detailed information
- Language issues
  - Patent languages (national patents, EPO procedural languages)
  - Solving language issues (using patent families or machine translation systems)

### III. Technical, business and legal applications of patent information (2-3 hrs)

#### 1. Introduction to the applications of patent information

- Information contained (technology advances, connections, ownership, etc.) and technical, business and legal applications

#### 2. Technical applications

- Technology searches and patentability searches (applications)
- Patent family searches (and applications, for example using patent family searches to find translations of a patent)
- How to use patent family databases (e.g. INPADOC)
- How to carry out technology searches (search criteria, classification symbols, key words)
- Examples

#### 3. Business applications

- Information on competitors (e.g. patenting activity, strategic technologies, what they are protecting, clusters, technological interests, patent trends)
- Interpreting the data (overview of the market) (preceded by a technological search); statistical analysis, benchmarking by analysing innovative firms in a market and ranking them, patent strategies, time trends, geographical areas where patenting is most frequent, geographical trends; search for partners for licensing or collaboration, e.g. complementary technologies.
- Practical search tips
- Other uses, including headhunting of inventors
- Examples

#### 4. Legal applications

- Legal status of patents (is a patent in force?)/warnings on unavailability of information in certain countries
- Freedom-to-operate (FTO) searches (see module 2D, II.2. for definition): searching for areas to operate without risk of liability (including patent family searches)
- Finding conflicting patents
- Opposition and nullity searches (searches for prior art to "knock off" a rival patent)
- Examples

## 5. Sources of patent information

### (a) Espacenet

### (a) Espacenet

More than 60 million patent documents - most of them patent applications rather than granted patents - from around the world can be accessed at <http://www.epo.org/searching/free/espacenet.html>

### (b) Other sources

### (b) Other sources

- Free of charge
  - The United States Patent and Trademark Office (USPTO)
  - Google Patents (covers US patents only)
  - Patent Lens
  - Other search services include Patents.com, Boliven Patent Search, FreePatentsOnline search service, WikiPatents, TechXtra Patents and Standards Search, and Scirus Advanced Search, which includes a filter for patent searching.
  - Patent Pal has a toolbar containing over 30 unique patent-related searches and other features.
- Sources requiring payment

## 6. Patent information and patent assessment

- Using "backward" and "forward" citations to evaluate patent quality
- Combining patent information with specific market information (computer-generated methods) to find out the economic value of patents
- Using patent information for quantitative and qualitative patent assessment
- Quantitative methods: cost-based, market-based, income-based
- IPscore: patent evaluation software which can be used to improve innovation management and increase the efficiency of patent portfolio management. It consists of 40 assessment factors and predefined scales that guide user responses. It can be used to get a quick estimate of the monetary value (at net present value) of a patent and perform risk/opportunity assessments of whole portfolios.

### See also:

<http://www.epo.org/searching/free/ipscore.html>

## IV. Performing patent searches (2–4 hrs)

### 1. How to use Espacenet

- What is Espacenet?
- Access to Espacenet
- A walk through the major functions
- Patent families
- Limitations
- Online help

**See also:**

e-learning

<http://www.epo.org/learning-events/e-learning.html>

### 2. Practical exercise: Assisted searches

Students should carry out a range of assisted patent searches aimed at:

- Finding technical solutions
- Finding the published documents of an applicant
- Searching for descriptions of specific ECLA symbols and for ECLA symbols corresponding to specific descriptions
- Searching for inventions made by a particular inventor and ...
- Limiting the scope of the previous search to a specific time period or date
- Using keywords

## 2F IP valuation (including optional IP accounting module)

Contents	Minimum duration (11.5 + 2 optional hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. Introduction: The value of IP in the knowledge economy	0.5-1 hr
III. IP accounting under current standards	2 hrs
IV. Introduction to IP valuation	1-1.5 hrs
V. Valuation approaches and methods	8-11.5 hrs
V.1 Introduction	1 hr
V.2 The cost-based approach	1-1.5 hrs
V.3 The market-based approach	1.5-2 hrs
V.4 The income-based approach	3-5 hrs
V.5 The option pricing-based approach	1.5-2 hrs
VI. Practical exercises	1.5-2 hrs

Overview	Learning objectives
<p>IP rights are one of a company's most valuable assets. There are a number of different approaches to quantifying its value. However, the procedure is not straightforward, as IP assets and transactions tend to be unique, and their assessment requires the careful selection of a method or methods, depending on the specific situation.</p> <p>This module introduces students to the advantages and disadvantages of the existing methods and shows them how and when each one can be applied.</p> <p>It includes the following topics:</p> <ul style="list-style-type: none"> <li>– The importance of intangible assets in the knowledge economy</li> <li>– The place of IP among these assets</li> </ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>– Identify the various categories of IP protection and differentiate between registered and non-registered rights (including the life span of each right)</li> <li>– Explain the importance of performing IP assessments in the current economic environment</li> <li>– Select and apply the appropriate valuation method according to the IPR concerned</li> <li>– Justify their selection (internal assessment, licensing, etc.)</li> <li>– Perform a simple valuation exercise</li> <li>– Establish a list of sources of information about industry standards and transactions for use in assessment</li> </ul>

<ul style="list-style-type: none"> <li>- Measuring IP using current accounting standards (optional)</li> </ul>	(Accounting: optional)
<ul style="list-style-type: none"> <li>- What is IP assessment and why it is important</li> <li>- Common difficulties in assessing IP</li> <li>- Assessment contexts</li> <li>- Assessment approaches and methods (cost-based, market-based, income-based, option pricing-based)</li> </ul>	<ul style="list-style-type: none"> <li>- Measure internally developed R&amp;D and IP and acquired IP according to the relevant accounting principles</li> <li>- Compare and contrast the treatment of IP under standards applicable in EU countries, the IFRS and national GAAP, with special reference to the US</li> <li>- Apply the requirements for recognition and activation of internally developed IP</li> <li>- Establish alternative reporting strategies and draw up basic financial reports incorporating the value of IP</li> <li>- For more information, see the "IP accounting" module.</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
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Students of engineering, science, medicine, business and economics in general. In particular: students of economics, finance, financial accounting, business administration and innovation/knowledge management.	Students should have a basic knowledge of economics/finance or accounting. Basic IP knowledge (module 1A or equivalent) is recommended.
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<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
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Lecturer in accounting, finance or economics with a knowledge of corporate, asset or IP valuation	Not applicable
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<b>Student assessment</b>	<b>Related modules</b>
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Assessment of student performance in practical exercises	Modules 2A-2E; 2H; 5B
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## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include the "IPRs in a nutshell" module if your students do not have any background in IP. Ideally, they should have a basic knowledge equivalent to introductory modules 1A and 1B. **See the "IPRs in a nutshell" module.**

## II. Introduction to the value of IP in the knowledge economy (0.5-1 hr)

### 1. The knowledge economy and the growing importance of intangible assets

(a) What is the knowledge economy?

**(a) What is the knowledge economy?**

Define the knowledge economy (knowledge and technology as key factors of production/knowledge as a product).

Mention characteristics (knowledge intensity, globalisation, etc.)

(b) What is new about the knowledge economy?

**(b) What is new about the knowledge economy?**

Highlight the competitive importance of knowledge-related factors (technology/innovation/human skills/ training/know-how/education, etc.) in today's economy.

(c) How is the shift towards knowledge as a key productive asset reflected on company balance sheets?

**(c) How is the shift towards knowledge as a key productive asset reflected on company balance sheets?**

Provide figures illustrating the evolution of the tangible/intangible asset value rate and showing the increasing importance of intangibles on the balance sheet. Refer to institutional statements and initiatives that recognise and underline the importance conferred by governments to this new reality.

### 2. Asset portfolios

(a) Definition of assets

**(a) and (b)**

What is an asset? List essential characteristics.

(b) Classification of assets

- The asset portfolio:
  - Net current assets (i.e. current assets such as cash, inventories, prepayments, etc., less current liabilities)
  - Tangible assets (such as land, equipment, buildings/"bricks and mortar")
  - Intangible assets (i.e. assets with no physical substance, defined either as the remaining value once the other assets have been identified or more specifically categorised as rights, relationships, unidentified intangibles and IP).
- Competitive and legal assets

### 3. IP as an intangible asset (a) Identifying IP

(a) Identifying IP

Explain that "intellectual property" is a term which embraces different **legal** categories of rights which in turn protect different sorts of creations from being used and exploited by others. This is a unique aspect of these assets. Mention aspects which may affect the identification, accounting and/or valuation of these assets. For example, what is the object of protection, are the rights registered or not, what is their duration, etc.

(b) Related concepts

- Patents and registered "minor" inventions, e.g. utility models
- Trade marks and domain names
- Registered designs
- Software (however protected)
- Trade secrets
- Copyright
- Unregistered trade marks
- Unregistered designs

#### (b) Related concepts

"Intellectual capital", "knowledge management" and "intellectual assets"

Knowledge is increasingly being perceived as the driving factor in today's economy. This has given rise to some new conceptual frameworks for accounting and working with such assets.

Intellectual assets include IP, together with elements such as technical information, contracts, certifications and internal training.

Intellectual capital can include

- the skills and knowledge that a company has developed with regard to how to make its goods or services
- individual employees or groups of employees whose knowledge is deemed critical to the company's continued success
- the aggregation of documents about processes, customers, research results and other information that might have value for a competitor and that is not common knowledge

Together with relational capital, human capital and other forms of organisational capital, IP is part of a company's knowledge capital.

### III. IP accounting under current standards (2 hrs)

**Optional:** This section may be offered to students of economics, finance, financial accounting or business management students and any others with a specific interest in IP valuation for accounting purposes. For other students, go straight to section IV (Introduction to IP valuation).

#### 1. Reporting standards and accounting principles

(a) International Accounting Standards (IAS)

(b) International Financial Reporting Standards (IFRS)

##### (a) International Accounting Standards (IAS)

Give a brief overview of IAS.

##### (b) International Financial Reporting Standards (IFRS)

- Scope
- EU endorsement of IFRS

#### 2. IP as an intangible under international standards

(a) International Accounting Standards Board (IASB) adopted rules and IAS 38

(b) Requirements for recognition

##### (a) International Accounting Standards Board (IASB) adopted rules and IAS 38

What are the International Accounting Standards?

What are the objectives of the IAS 38 standards for intangible assets?

##### (b) Requirements for recognition

- Purchased intangibles
- Difficulties in apportioning IP in company acquisitions
- Internally developed intangibles
- Non-recognition
- Unfinished investment
- Activation

#### 3. Measurement after initial recognition

(a) Depreciation and IP

(b) Valuation of IP for accounting purposes

##### (a) Depreciation and IP

- Depreciation for internal reporting and for tax
- Depreciation and asset life expectancy  
e.g. trade marks and brands  
e.g. patents

##### (b) Valuation of IP for accounting purposes

- Accepted methods
- Historic cost
- Earnings method

#### **4. US GAAP**

FAS 141/142 - differences in recognition of IP compared with international standards

#### **5. Shortcomings of current reporting standards for IP and their effects**

- Effects on increase in cost of capital, e.g. uncertainty and risks perceived by creditors due to inadequate reporting
- Effects on management, e.g. the effects of the lack of visibility of intangible assets compared with tangibles
- Effects on government statistics and measurements

## IV. Introduction to IP valuation (1-1.5 hrs)

### 1. What is IP valuation and why is it important?

(a) The scientific value of valuation/ knowledge vs certainty

(b) Utility of IP valuations

#### (a) The scientific value of valuation/ knowledge vs certainty

Explain that, because IP deals are about unique assets (brands, technologies, etc.) and have to incorporate specific profiles of economic actors ("sellers", "buyers", "investors"), encompass different purposes (book-keeping, licensing) and forecast future events, IP valuation relies to a great extent on method-based judgement as to the best way to conduct the process.

#### (b) Utility of IP valuations

Give an insight into the application of IP valuations in different business contexts, highlighting why valuation is important in each case:

- Reflecting better business value on the balance sheet > better management
- Corporate valuation for stakeholders
- Taxation benefits
- Pricing
- Securitisation
- Back-up for lending
- Fundraising and attracting investment
- Initial public offering
- Licensing
- IP transactions
- Mergers and acquisitions
- Public company privatisation

### 2. Common difficulties in valuing IP

(a) Difficulties in identifying and distinguishing IP

(b) Specific problems in valuing groups of assets with more than one type of IP

(c) Lack of comparable transactions

#### (a) Difficulties in identifying and distinguishing IP

Can IP be identified and distinguished from other material and immaterial assets? In theory, each IP asset should be valued individually, but in practice this is not an easy task. There may be complications such as the interdependence of patented technologies, or products protected through more than one type of IP (e.g. patents and trade marks). The last of these leads to the problems outlined in (b)

#### (b) Specific problems in valuing groups of assets with more than one type of IP

There may be problems arising from different rates of depreciation, for instance in the case of trade marks and patents.

### (c) Lack of comparable transactions

There may also be problems relating to specific technologies where there is a lack of information on IP transaction markets. This represents a major obstacle to the application of market-based methods in particular.

## 3. Assessment contexts

(a) Determining the purpose of IP assessment

(b) Transaction-based valuation

(c) Assessment for internal management purposes

### (a) Determining the purpose of IP assessment

Explain that IP assessment is determined by the purpose of the valuation. The context is an essential criterion for identifying the true value of IP. This fundamentally distinguishes IP from many tangible assets, which are much easier to interchange and are usable in various contexts. The two main reasons for valuation are transactions and internal management. Examples may include:

### (b) Transaction-based valuation

- Licence agreements (determining fees, up-front payments, royalty rates)
- M&A (price allocation, exchange ratio, premium)
- Technology divestiture (spin-out or spin-off sale)
- Joint ventures, alliances (in-kind contribution value)
- Venture investment (angel investors, venture capitalists, private equity)
- IP brokerage (purchase/sale of IP or technology)
- Collateralisation and securitisation of IP
- Inter-affiliate transfers - transfer pricing issues

### (c) Assessment for internal management purposes

- Efficient company management (valuing and reporting)
- Strategic decisions in purchasing (acquisition, exclusive/non-exclusive licensing)
- IP portfolio management
- R&D investment decisions: in-house development vs licensing-in/return on investments (ROI)
- Enforcement and litigation of IP rights
- Damages ("reasonable royalties")
- Settlements
- Taxes

## V. Valuation approaches and methods

### V.1 Introduction (1 hr)

#### **1. Introduction to the three basic approaches: cost-based, market-based and income-based**

Give a general description, including the basic differences between the approaches.

Mention the combined use of methods extracted from different approaches.

## V.2 The cost-based approach (1-1.5 hrs)

### 1. Cost-based approach

(a) General description

#### (a) General description

The cost-based approach is based on the principle of substitution, i.e. the value of an asset is estimated on the basis of the cost of constructing a similar asset at current prices.

(b) Premises and assumptions

#### (b) Premises and assumptions

It considers that the cost of making particular IP is equivalent to the value derived from the same and that no party -in an 'arm's-length' transaction - is willing to pay more than the equivalent of the costs necessary to develop the IP. The IP assets can be bought or be developed internally.

(c) Common contexts in which it might be applied

#### (c) Common contexts in which it might be applied

This approach is often applied in combination with or as a supplement to income valuation methods.

### 2. Cost-based methods

(a) Historical cost-based method

#### (a) Historical cost-based method

This is the actual cost of creating and developing IP, including money costs.

(b) Replacement cost method

#### (b) Replacement cost method

This method estimates the time and resources needed to develop an asset that could replace the asset being valued.

(c) Replication cost method

#### (c) Replication cost method

This method estimates the time and resources needed to replicate similar IP (including "failed" research).

(d) Assessment of the cost-based approach

#### (d) Assessment of the cost-based approach

The cost-based method is disconnected from future revenues of the IP, which is its major weakness.

(e) Example

#### (e) Example

Use a simple, practical example of cost-based assessment applied to a minor improvement.

## V.3 The market-based approach (1.5-2 hrs)

### 1. Market-based approach (a) General description

(a) General description According to this method, the price of comparable assets, in comparable transactions, in an active market, determines the price of the IP.

(b) Assumptions

(c) Usual context where it may be applied

#### (b) Assumptions

The method assumes the existence of a market for transactions of comparable assets.

Factors which may serve to establish comparability include the nature of the asset, similarity of products, industry, market size, barriers to entry, etc.

#### (c) Usual context where it may be applied

When a market with comparable transactions exists, it may be used to calculate rates and data which will be used as inputs in subsequent assessments, using income-based methods. For assets such as trade marks and copyright, where "norms" are more easily established, methods such as "paradigm licensing" (see below) may be easier to apply.

### 2. Methods

(a) Comparable royalty rates method

#### (a) Comparable royalty rates method

This is the most frequently used market-based method. It relies on the royalty rates used in licensing similar assets. Information on industry average rates (industry standards) is sometimes available and used.

(b) IP auctions

#### (b) IP auctions

They require good market conditions and information. They also presume a certain bargaining power on the part of the seller and that potential buyers can reasonably apprehend the opportunity without complex due diligence.

(c) Related methods and sub-methods

(d) Sources of data on industry standards

(e) Assessment of market-based methods

(f) Example

### **(c) Related methods and sub-methods**

- Paradigm licensing
- Ranking/rating method

Paradigm licensing is the use of widely accepted standard rates and terms. In trade mark licensing, for instance, transactions may be valued within widely accepted ranges.

"Rating/ranking" is a systematic method of making comparisons of the subject valuation which is used when the singularity and dissimilarity of individual licensing agreements calls for a reasoned estimate of value.

### **(d) Sources of data on industry standards**

Available from large IP owners, consultants, surveys, published agreements, proprietary databases, court cases, norms, etc.

### **(e) Assessment of market-based methods**

Use of the comparable royalty rates method is more widespread, due to the availability of industry information. In general, however, the chances of accurate comparability are low due to the uniqueness of each transaction.

In the case of auctions, the issue is that, to make a valid assessment, a process has to be created which attracts a sufficient number of prospective buyers. When they succeed, they provide concrete evidence of market value.

### **(f) Example**

Give a practical example using sources of information (databases) of "industry standards" (technology market information, comparable royalties, etc.).

## V.4 The income-based approach (3-5 hrs)

### 1. General description

The approach relies on the potential of the IP to generate future benefits. Most related methods are efforts to pin down the net present value (NPV) of expected future income streams. In general, such methods take account of factors such as time value of money and risk. The principal method combines methodologies to apportion profits attributable to IP and to calculate risk.

### 2. The discount cash flow method (DCFM)

(a) Description

#### (a) Description

A calculation, made at the present time, of all future cash flows from earnings (net of expenses). Net Present Value (NPV).

(b) Parameters to be quantified: annual income stream/ timing and duration/ risk

#### (b) Parameters to be quantified: annual income stream/timing and duration/risk

- Annual income stream
  - Sales base (e.g. market size, segmentations, market shares, growth rate, etc.) and profitability
  - Methods for apportioning the profit attributable to IP. For example:
    - excess earnings
    - residual income
    - rules of thumb (25% rule)
    - comparable IP royalties
    - examples using each method

(c) General assessment of the approach

Explain that these methods serve to determine what part of the profit generated by the sale of the product embodying the IP is attributable to IP. Also, some apportioning methods are often presented as assessment methods per se, which are used in combination with DCFM to achieve the NPV of the IP.

- Timing and duration of the stream
  - (i) Introduction onto the market
  - (ii) Life cycle and adoption
  - (iii) Useful life

In this section consider elements such as, for (i), the development of manufacturing capacity and promotion; for (ii), the life cycle and adoption rate of technologies, which vary greatly from market to market, and for (iii), the legal life of the IP, technological lifespan, market life and economic life of a product.

- Risk
  - Risk-free rates
  - Discounting cash flows to present value (time value of money and risk)
  - Importance of accounting for risk
  - Methods for discounting cash flows to present value
    - Weighted average cost of capital (WACC\*) - give examples
    - Hurdle rates\* (company-acknowledged rates of return) - give examples

Other systems: the venture capitalist's rate of return, technology factors, etc.

Examples

**\*WACC** as defined in economics and finance textbooks. However, it is sometimes held that this method does not reflect all of the risks associated with IP.

**\*Hurdle rates** are generally standard rates applied across projects. They may not be appropriate if the project is unique.

### (c) General assessment of the approach

- A valuable exercise "per se", and overall the most rigorous, since it accounts for time, value for money and risk, and is conceptually robust.
- With the required input from the firm's financial statements and market information, users can identify and/or forecast particular cash flows. However, it requires an income stream, either from product sales or licensing of the IP, reliable information on which to base estimates of the duration of the IP's useful life, and above all an understanding of IP-specific risk factors and a valid discount rate. It can be difficult to implement in high-uncertainty environments.
- Uncertain and distant cash flows and the discount rate have to be estimated, which can be difficult when there is no base or experience to calculate market potential (as in early-stage IP developments). Some risk adjustment methods lump all risks together.

### 3. Advanced methods of IP valuation

- (a) Monte Carlo method
- (b) Real options method
- (c) Other methods

#### (a) Monte Carlo method

- General description
- Comparison with DCFM
- Distribution expressions
- Use in Monte Carlo analysis
- Example using the Monte Carlo analysis in licensing
- Calculations, adjustments of results and interpretation of NPV distributions
- Assessment of the Monte Carlo method
- Pros and cons
- Contexts where it may be applied

#### (b) Real options method

Explain that real option valuation methods treats the development and commercialisation of IP as a series of options. In the process of R&D, many decisions must be made and the information needed to make these decisions is often not available at the time of valuation. The real options method, using the Black-Scholes model, takes into account the flexibility of these future decisions.

Discuss real options as an alternative to the discount cash flow method (assessment and contexts)

Discuss the convenience of using the method in situations of high uncertainty, when decisions about investment timing - e.g. when to patent, abandonment, direction of research, etc. - are still pending.

#### (c) Other methods

- Probability trees
- Risk-adjusted net present value

If included in the programme, these methods may be explained before the real options method.

### 4. Practical exercise: Learning to read a report based on the Monte Carlo analysis

For advanced students.

Requires appropriate information communication technology.

## **5. Qualitative approaches providing value indicators for patents**

(a) Standardised patent information

(b) IPscore

### **(a) Standardised patent information**

Explain that references to prior patents and citations allow us to perform a qualitative assessment of the scientific value of a patent. They allow us to construct so-called citation networks, which are a useful tool for indicating the value of a patent.

### **(b) IPscore**

Explain that the IPscore software is used to evaluate patent portfolios and technology in-house, for management purposes. Patents are rated according to indicators (legal, technology, market and strategy), producing a picture of their strengths and weaknesses and the relative risks and opportunities.

## **6. Assessment of qualitative methods**

Qualitative methods are generally applicable to all lines of business and can easily be used to assess the risks and potential embodied in patents and development projects.

## V.5 The option pricing-based approach (1.5-2 hrs)

### 1. Option pricing-based approach

(a) Description

#### (a) Description

This approach relies on the market value of share options. It is a more marginal method due to its complexity, but is being increasingly used.

(b) General assessment of the approach

#### (b) General assessment of the approach

Real option valuation is useful when there is great uncertainty about the future and management's ability to respond to changes.

Real options can capture the value of managerial flexibility by incorporating exit strategies and decision capabilities into the model. It captures management's ability to choose between options and indicates how long a company should stay in business before exiting, and when to re-enter.

## VI. Exercises (1.5–2 hrs)

### Exercises

Using one or more examples, ask students to:

- Select the best method of calculating the value of a particular type of IP.
- Estimate the value of the IP concerned.



# 2G Defending IP assets: IP infringement and breach of confidentiality

Contents	Minimum duration (15 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. The importance of enforcing IP rights	1 hr
III. Infringement of IP rights	3-5 hrs
IV. Fundamental issues and decisions relating to enforcement from the IP owner's perspective	3-5 hrs
V. IP infringement seen from the other side: the defendant's perspective	2-3 hrs
VI. Defending valuable know-how: trade secrets and breach of confidentiality	2 hrs
VII. Alternative and complementary ways of defending IP	2 hrs
VIII. Incorporating IP infringement into business strategy	2 hrs

Overview	Learning objectives
<p>Protecting intellectual property (IP) allows companies to recoup their investment in R&amp;D. However, the power of IPRs to constrain others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right- holders must take a proactive role in the defence of their IP.</p> <p>It is therefore vital that business managers, project leaders and other people involved in the innovation process know what to do when faced with conflicts involving IP and are aware of the need to incorporate enforcement and infringement strategies into general business strategies.</p> <p>The main topics in this module are:</p> <ul style="list-style-type: none"> <li>– The importance of enforcing IPRs</li> <li>– Infringement of IP rights (patents, trade marks, designs and copyright)</li> <li>– Strategic considerations relating to IP litigation, including: <ul style="list-style-type: none"> <li>▪ Factors to be considered by businesses and right-holders before entering into litigation</li> <li>▪ What can be obtained through successful litigation (remedies)</li> </ul> </li> </ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>– Select from the different alternatives available to defend a company's IP assets</li> <li>– Identify and differentiate between acts of infringement relating to the principal categories of IPRs</li> <li>– Assess whether or not to go to court, based on considerations of cost, opportunity and risk</li> <li>– Follow the initial steps involved in infringement disputes</li> <li>– Defend a position against infringement claims, based on legal exceptions and defences existing in different IP laws</li> <li>– Consider alternative solutions to civil litigation</li> <li>– Take the necessary steps to ensure that company know-how is safeguarded</li> <li>– Describe the threat to business, consumers and society in general that piracy and counterfeiting represent, based on statistics and data</li> <li>– Differentiate between civil and criminal liabilities relating to IP infringements</li> <li>– Incorporate considerations relating to IP infringement into general business management and strategies</li> </ul>

- Taking action: important decisions and steps
  - Obtaining evidence and proving the infringement
  - Criminal/civil enforcement
  - IP infringement seen from "the other side": exceptions and defences
- Defending valuable know-how: trade secrets and breach of confidentiality
  - Complementary and alternative ways of dealing with infringement: administrative action, customs action and alternative dispute resolution (ADR)
  - Incorporating IP infringement in business management considerations

<b>Target audience</b>	<b>Prior knowledge</b>
Students in any field, including engineering, science, medicine, business and economics. Law students should choose module 3D (IP litigation).	Basic knowledge of IP equivalent to module 1A (Introduction to IP)
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
IP law lecturer with experience in teaching multi-disciplinary audiences, ideally with the assistance of an experienced company IP litigation specialist.	Not applicable
<b>Student assessment</b>	<b>Related modules</b>
Examination plus evaluation of student performance in practical exercises/workshops	2H, 3D

## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include the "IPRs in a nutshell" module if your students do not have any background in IP. Ideally, they should have a basic knowledge equivalent to introductory modules 1A and 1B. **See the "IPRs in a nutshell" module.**

## II. The importance of enforcing intellectual property rights (1 hr)

### 1. Conflicts over intellectual property rights

(a) Protecting fundamental business assets

#### (a) Protecting fundamental business assets

Provide an overview of the issues relating to the value and strategic importance of IP for business.

(b) Conflicts are common

#### (b) Conflicts are common

Explain that characteristics which make IPRs particularly subject to conflict include the value of IP, the intangible, non-excludable nature of intellectual creations, economic incentives for competitors to copy or imitate, technological (patent) races and trends conducive to overlapping innovation. Provide examples from the media relating to different forms of IP, including technology (inventions), content, art, trade marks, designs and trade secrets. Mention that disagreement or conflict over IPRs may occur among people or companies with different types of relationship (competitors, partners/collaborators, employees/employers).

(c) Possession of exclusive rights (protection) vs enforcement of IPRs

#### (c) Possession of exclusive rights (protection) vs enforcement of IPRs

Explain that the power of IPRs to prevent others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right-holders must take a proactive role in the defence of their IP.

This topic can be explained with the aid of a timeline showing the different phases of the product cycle, including the point at which it is necessary to protect IPRs and when enforcement becomes necessary (see section 5 of the "IPRs in a nutshell" ancillary module).

### 2. Organised forms of (criminal) infringement/piracy and counterfeiting

Describe the threat to businesses and consumers. Provide statistics, e.g. from official reports such as "The economic impact of counterfeiting and piracy" (OECD, 2008).

Use the opportunity to introduce students to the notions of civil and criminal action.

### 3. Situations where a company or right-holder will want to enforce their rights

- (a) Infringement of IPRs by third parties
- (b) Attempts by a third parties to register conflicting IP
- (c) Unlawful dissemination of trade secrets and company know-how
- (d) Other sources of conflict

### 4. The main institutions dealing with IP enforcement

#### (a) Infringement of IPRs by third parties

Explain that the provisions governing infringements are contained in the law covering the IPR concerned (patents, copyright, trade marks, designs etc.). Owners will seek to defend their rights in the legally competent institutions (courts/patent and trade mark offices).

#### (b) Attempts by third parties to register conflicting IP

Explain that owners can attempt to prevent the registration of IPRs which they regard as part of their exclusive rights by opposing registration at the relevant office.

#### (c) Unlawful dissemination of trade secrets and company know-how

Explain that, strictly speaking, breach of confidence is not an infringement of IP. However, under certain conditions, different sets of laws - contract law, unfair competition law, etc. - protect company know-how and industrial secrets.

#### (d) Other sources of conflict

Refer to unauthorised use by licensees (uses beyond the scope of the licence).

Briefly explain the role of each institution in relation to IP enforcement.

- Patent and trade mark office (national and supranational)
- Police
- Customs
- Courts

### III. Infringement of IP rights (3-5 hrs)

#### 1. What constitutes an infringement?

(a) Common traits

(b) Particular acts referred to by the specific IP laws (use, make, sell, import)

(a) and (b)

The laws relating to each category of IP define the nature of the exclusive right in terms of content and business activity.

For example, an invention covered by a patent is defined by the claims. Unauthorised use, making or selling of the invention within that scope constitutes an infringement.

In another example, a person who copies a copyrighted image for a commercial purpose, or any person who distributes the copies, infringes copyright in that image and is liable for that act.

#### 2. Infringement of patents

(a) Infringement within the scope of the claims

(b) Literal and non-literal interpretation of the claims in infringement cases

(c) Infringing acts

(a) and (b)

The infringement of a patent must always be interpreted as relating to acts occurring within the scope of the claims. One problematic issue to be considered is the literal and non-literal approach to interpretation of the claims. Contrast examples of infringement under a strict interpretation with situations where a broader interpretation has been applied (doctrine of equivalents).

(c) Infringing acts

Unauthorised use, manufacture or sale, disposing of, offering to dispose of, importing, keeping for disposal (refer to your national laws).

#### 3. Infringement of trade marks

(a) Infringing acts

(b) Likelihood of confusion (LoC)

(c) Marks with a reputation

(a) Infringing acts

Commercial uses, such as offering for sale or advertising, of goods or services of a certain type or category, bearing a sign identical or confusingly similar to a registered mark.

(b) Likelihood of confusion (LoC)

Give a brief summary of the relevant factors for establishing a judgement on LoC. Include similarity of goods and services, similarity of signs (phonetic, written, conceptual), overlapping sales, distinctive power of the TM, etc.

(c) Marks with a reputation

Provide examples of marks with a reputation, where the goods concerned may be dissimilar and where there is an unfair advantage or detrimental use.

**Optional:** To be included in some countries: infringement of non-registered trade marks/passing-off

## 4. Infringement of designs

(a) Definition

### (a) Definition

Application of a design to a product which would produce the same overall impression as a protected design.

(b) Prohibited acts

### (b) Prohibited acts

Making, offering for sale, putting on the market, importing, exporting, stocking.

(c) Proof of copying to be provided for unregistered designs

### (c) Proof of copying to be provided for unregistered designs

Explain that it must be shown that the design has been copied.

## 5. Infringement of copyright

(a) Copies

### (a) Copies

Introduce essential concepts and legal terms. Define copying and copies (provide examples relating to different types of work - literary, artistic, musical)/copies in the digital age/piracy, etc.

(b) Originality/causal connection

### (b) Originality/causal connection

Explain that a substantially similar work, if created independently (i.e. if it is original work) does not represent an infringement. The copyright holder of the original work must show that the similarity of the works is not fortuitous. Elements which may indicate a connection include the date of creation and access by the infringer to the original work.

(c) Exact and non-exact reproductions

Mention other considerations: subconscious copying, indirect copying.

(d) Reproduction rights

### (c) Exact and non-exact reproductions

Explain that copying of part of a work may still constitute an infringement of copyright. Determining whether or not there is an infringement depends on whether the "taking" was important enough or regarded as substantial. In relation to the scope of protection, remind students that copyright protects expression and not ideas. Give examples to illustrate the question.

(e) Communication rights

### (d) Reproduction rights

- Primary infringements: copying, issuing copies; rental and lending
- Secondary infringements: dealing with copies

### (e) Communication rights

- Primary infringements: communication to the public (performances, broadcasting through different media, the internet)
- Secondary infringements: providing means for communication to take place (premises, apparatus, etc.)

## IV. Fundamental issues and decisions relating to enforcement from the IP owner's perspective (3-5 hrs)

### 1. Countering IP infringements - options available

(a) Litigation

(b) Alternatives to litigation

#### (a) Litigation

- Civil proceedings
- Criminal proceedings

#### (b) Alternatives to litigation

- ADR, administrative measures

### 2. Who can take action in the event of an IP infringement?

Who can take action?

- The right-holder
- Exclusive licensee/other licensees
- Collective licensing societies

All European countries are obliged to recognise right-holders, licensees, collective management societies and professional defence bodies as persons entitled to apply for actions. The applicability of this recognition to the first two must be interpreted in accordance with the provisions of the corresponding national law.

#### **See also:**

Enforcement Directive

### 3. Factors to be considered by businesses and right-holders before entering into litigation

Factors include:

- The need to seek immediate legal advice (discuss the need for legal advice to avoid the consequences/liabilities of acts such as "groundless" threats to sue an alleged infringer).
- The validity and strength of the rights concerned. In the course of infringement proceedings, the validity of the claimant's IP rights may be questioned by the defendant. Discuss the usefulness of keeping a record assessing the status of owned rights. Also, discuss the cost of procuring professional legal opinions on the validity of rights – freedom to operate, validity opinions, etc.
- Proof of infringement, resources available to prove the infringement, likelihood of success (is it possible to prove the infringement?).
- Risk. Assessment of risk should consider three factors in particular: the damage caused by the infringement, the potential remedies, time and cost of litigation).

- Public availability of information. As a consequence of legal proceedings, information contained in evidence and documents given to the courts may become publicly available.
- Contractual limitations. Examination of IP-related contracts to establish whether there are any previous agreements which may affect the freedom to go to court. Some contracts contain dispute resolution clauses, obliging parties to participate in mediation or arbitration before a judicial remedy can be sought.
- Timing (limitations of action/acquiescence). Give examples for each, showing the importance of having an IP infringement strategy.

#### 4. Successful litigation - what remedies are available

List the available remedies with reference to the Enforcement Directive [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004)] or to the national laws in your country:

- Injunctions
- Destruction and delivery-up
- Damages
- Disclosure of information
- Publication of judgement

Calculation of damages. Explain briefly how damages are calculated by the courts. Factors include lost profits, unfair profits and elements other than economic factors (moral prejudice caused to the right-holder by the infringement) and the setting of damages as a lump sum on the basis of elements such as the amount of royalties or fees which would have been due.

See Module 3D, "IP litigation", section III, for more information.

#### 5. Taking action: some important decisions and steps

(a) Defining the goals

##### (a) Defining the goals

What is it you actually want to achieve?

Examples: economic compensation, redressing the damage, restraining of further infringement, or a combination of the above.

(b) Who and where to sue?

##### (b) Who and where to sue?

(c) Cease and desist letters

**Who?** In many cases there is more than one person or company to sue (for example, the director of a company and the company itself).

(d) Measures to obtain evidence

This presents a number of strategic considerations as to who the infringement suit should be directed against. Also, in certain circumstances, indirect infringers (inducers or contributors to the infringement) may also be held liable in an infringement suit.

(e) Urgent relief/precautionary measures

**Where?** Infringement actions are conducted before the competent courts. There may be a number of alternatives to choose from depending on the prevailing laws of jurisdiction and competence, taking into account factors such as the different costs linked to the procedure, judicial celerity, legal security and specialisation, as well as the prevailing rules and policies concerning the award of damages. This practice, known as forum shopping, may be particularly relevant in transnational cases.

### **(c) Cease and desist letters**

Cease and desist letters - or warning letters - are not obligatory in all jurisdictions, but it is standard practice to issue them, as courts will normally expect the alleged infringer to have been notified of the infringement. Failure to send such a letter may have an effect on the amount of damages that may be recouped.

As a minimum, the letter should identify the IP rights allegedly infringed, establish the infringing conduct, set out the legal basis for the allegation, state any required undertakings and notify the recipient that action will be taken if the demands are not met.

One advantage of cease and desist letters is that if the alleged infringers stop the activity as requested there may be no need for litigation. A disadvantage is that it alerts infringers, who may then proceed to destroy evidence of the infringement.

### **(d) Measures used to obtain evidence**

In certain cases, if proof is provided to a judge that an infringement is taking place, that any delay in taking action will cause irreparable harm to the IP right-holder, and that there is a great risk that important evidence may be destroyed or removed, the court may order that measures such as seizure of the infringing merchandise be taken. This can be done without previous notification to the defendant, provided that his economic interests are preserved in the event that the infringement allegation fails (for this, the claimant normally has to lodge a guarantee of compensation).

### **(e) Urgent relief/precautionary measures**

Explain that there are remedies (interlocutory injunctions, interim injunctions and precautionary measures) which are designed to prevent imminent infringement of an IP right or continuation of an alleged infringement.

Injunctions are usually taken out against alleged infringers but may be brought against an intermediary. Actions that may also be ordered are: seizure or delivery up of the goods suspected of infringing an IP right, precautionary seizure to ensure the recovery of damages, requirement of evidence. Here again, there is the possibility of taking measures without the defendant having been heard. However, such action is subject to the lodging of guarantees of compensation in case the provisional measures are revoked.

## 6. Proof or evidence required

(a) Existence of rights

### (a) Existence of rights

Give an explanation of the particular complexities of proving ownership for cases involving unregistered rights (particularly copyright).

(b) Entitlement to bring an infringement action

Introduce students to the advantages of copyright registration.

Copyright registers exist in many countries. While registration does not prove ownership of copyright, it normally provides strong evidence, and even legal presumption, of ownership and validity.

(c) Evidence that there has been an act of infringement that was not authorised by the right-holder

### (b) Entitlement to bring an infringement action

For example, legitimate ownership or being an authorised licensee in the territory where the complaint is brought.

### (c) Evidence that there has been an act of infringement that was not authorised by the right-holder

In copyright cases, proof that the work has been substantially copied must be produced. The same may apply to cases where the object of a dispute is an unregistered Community design.

## 7. Criminal enforcement

(a) When are violations of IPRs criminal acts?

### (a) When are violations of IPRs criminal acts?

- Intention
- Commercial scale

(b) Criminal infringements vs. Civil infringements

Explain that criminal action is preponderantly used in copyright, design and trade mark infringements.

### (b) Criminal infringements vs civil infringements

Explain the difference between "civil infringements" and "criminal infringements".

- Private prosecution (civil) vs public prosecution (criminal)
- Penalties and sanctions

Point out that penalties (fines, imprisonment) do not provide for recovery of damages. This would require combining criminal action with civil action.

## V. IPR infringement from the other side: the defendant's perspective (2-3 hrs)

### 1. IP infringement seen from the other side

(a) Defending IP against an infringement action

(b) Main defences (general overview)

(c) Avoiding infringement

#### (a) Defending IP against an infringement action

In a competitive environment, R&D and innovation occur in closely related areas and frequently target overlapping markets. In these scenarios, IP protection is used not only as a way of locking in technologies, but also in a strategic manner, as a way to gain a competitive edge and as leverage for negotiating agreements with other companies. In such an environment, the same company may be involved in different IP disputes as either the claimant or the defendant (examples of such disputes can be found in the media). Furthermore, infringement of IP does not have to be intentional for a person or company to be liable for the infringing act. Any of the players involved - even if acting in good faith - may be challenged by an IP suit. For instance, it is not necessary that the infringing person or firm be a competitor. For anyone involved, it is just as important to know how to defend a company's assets in the face of infringement claims as it is to secure and enforce IP rights.

#### (b) Main defences (general overview)

When can defences be invoked in cases of alleged infringement of an IPR?

- Non-infringement
- Invalidity of the claim
- Lack of territorial validity of the rights
- Invality of the rights (grounds of invalidity or cancellation counterclaims)
- Alleged infringer authorised to use/exploit the IP
- Acquiescence/limitation of action
- Exhaustion of IPRs (see CEE exhaustion)
- Excepted uses (limitations of the IP rights)

#### (c) Avoiding infringement

Explain how drawing up infringement avoidance strategies can save money on IP litigation and support the actual strength and value of a company's IP assets (see section VIII.1).

## 2. Overview of main defences for different types of IP

(a) Patents

(b) Trade marks

(c) Designs

(d) Copyright

Select examples to match students' interests.

### (a) Patents

- The alleged infringement does not fall within the scope of the claims
- Allowed uses: private use, research or experimental use, conducting necessary studies, tests and trials on medicinal products to obtain market authorisation for a generic product (for pharmaceutical products)
- Invalidity (grounds for a counterclaim)

### (b) Trade marks

- Non-commercial uses, uses other than as an indication of source
- Acquiescence of the defendant's mark over a five-year period
- Nullity of the claimed IP right (grounds for a counterclaim)
- Causes for revocation
- Invalidity
  - Trade marks conflicting with previously registered signs
  - Trade marks registered in bad faith
  - Trade marks deemed to be invalid based on absolute grounds of refusal
  - Trade marks conflicting with other personal or IP rights (use of proper name, right of self-portrayal, copyright, etc.)

### (c) Designs

- Non-infringement (private acts, research and experimental use, academic citation)
- "Must-fit" pieces, e.g. component parts that must be reproduced in their exact form and dimensions in order to be mechanically connected to the product or to allow the product to perform its function, e.g. a car exhaust pipe, with the exception of parts of modular systems ("Lego exemption").
- Designs falling under other exceptions recognised by some national legislations, e.g. "must-match" items (parts of complex products which have special features that must correspond to the appearance of the whole product so precisely that their replacement entails using a part that is identical to the original. E.g. a car chassis, a car door, etc.), subject to the conditions established in the corresponding law.

- For Community designs, the part of a complex product used to repair a complex product in order to restore it to its original form.
- Invalidity of the claimant's design (grounds for counterclaims). Not a design according to legal definition, not novel, no individual character; conflict with prior rights.
- Exhaustion

#### **(d) Copyright**

- Independent works (claiming the originality of the alleged infringing work)
- Non-substantial takings
- Allowed uses (restrictive interpretation of exceptions and limitations)

## VI. Defending valuable know-how: trade secrets and breach of confidentiality (2 hrs)

### 1. What are trade secrets?

Discuss this issue with reference to the national laws of your country. Include the following:

- Laws protecting trade secrets and confidential information are quasi-IP rights rather than "proper" ones.
- Characteristics (requirements in general):
  - confidentiality
  - efforts made to preserve secrecy
  - commercial value
- Types of information protected, e.g.
  - Manufacturing technology
  - Lists of customers
  - Cost and price information
  - Software
  - Prototypes
  - Architectural plans

### 2. Breaches (wrongful acts)

Examine the obligations that exist under certain relations, according to national law:

- Employers and present employees
- Ex-employees
- Fiduciary relations
- Unrelated parties

### 3. Remedies

The availability of remedies will depend on national rules. In many countries (including France, Italy, Spain and Poland), criminal sanctions (fines and/or imprisonment) are provided against acts such as the theft of manufacturing trade secrets. Most European countries also provide for civil remedies, which in some cases may include damages or monetary relief, against acts such as disclosure, unfair acquisition or other unfair use of trade secrets.

## VII. Alternative and complementary ways of defending IP (2 hrs)

### 1. Preventing infringing items from entering the domestic market/ customs measures in the European Union

(a) Objective

Commission Regulation (EC) No. 1891/2004 of 21 October 2004 laid down provisions for the implementation of Council Regulation (EC) No. 1383/2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights.

**(a) Objective**

(b) Subject-matter and scope

Refer to recitals of the Regulation.

(c) Procedure

**(b) Subject-matter and scope**

Discuss definitions of 'counterfeit' and 'pirated' goods and compare with definitions (where available) in the relevant IP laws.

**(c) Procedure**

- Modes of action: 'ex officio' or after the lodging of an application by the right-holder.
- The application
- Seizure of goods
- Deadlines to initiate legal action

**See also:**

Customs Regulation

### 2. Impeding conflicting applications or registrations at the patent and trade mark office

(a) Oppositions and cancellations (trade marks)

Legal grounds: see the acts of infringement (section II)

**(a) Oppositions and cancellations (trade marks)**

Explain when a company or right-holder can "intervene" if another company tries to register a trade mark that conflicts with their own trade mark (opposition) and what they should do if such a mark has already been registered (cancellation). Use the procedure and practice of the OHIM for the Community Trade Mark as an example.

(b) Post-grant oppositions (patents)

**(b) Post-grant oppositions (patents)**

Explain when a company or right-holder can "intervene" if another company applies for a patent that conflicts with their own patent. Use the procedure and practice at the EPO as an example.

### **3. Avoiding costly disputes in court/ alternative dispute resolution (ADR)**

(a) Advantages of not going to court

(b) Negotiation

(c) Mediation

(d) Arbitration

(e) Comparing arbitration and litigation alternatives

(f) Institutions

#### **(a) and (b)**

Present ADR as an efficient and affordable means of resolving IP disputes which may be a reasonable alternative to going through costly and often risky court litigation.

#### **(c) Mediation**

Point out that mediation is based on the interests of the parties, rather than applicable law.

#### **(d) Arbitration**

Mention that awards are not subject to appeal.

#### **(e) Comparing arbitration and litigation alternatives**

Compare the two procedures from the point of view of the number of proceedings involved, the technical expertise of the decision-maker, the length of the procedures, confidentiality, termination of the procedures, and costs.

Among the general advantages mention the single procedure, party autonomy, neutrality, expertise, confidentiality, etc.

#### **(f) Institutions**

- WIPO Mediation and Arbitration Center
- Other resolution centres

## VIII. Incorporating IP infringement into business strategy (2 hrs)

(a) Infringement avoidance strategies

### (a) Infringement avoidance strategies

- Freedom-to-operate strategies (patents)
- Copyright clearance
- Identifying third-party trade marks and other industrial property rights
- Developing corporate IP awareness and education

(b) How to "secure" trade secrets

### (b) How to "secure" trade secrets

- Require employees, contractors, investors, etc. to enter non-disclosure agreements.
- Apply practical measures such as locking facilities, encrypting sensitive data (e.g. personnel data), monitoring visits, etc.

(c) Legal support

### (c) Legal support

Emphasise the need for support from a specialist IP lawyer.

(d) Budgetary considerations

### (d) Budgetary considerations

Explain the need to incorporate possible IP litigation costs into business planning, in particular in sectors where IP is the key asset and to take out IP insurance.

(e) Other considerations

### (e) Other considerations

- Costs of enforcing protection in more than one country
- Weighing costs and risks of going to court and seeking alternatives
- Tips

## 2H IP due diligence

Contents	Minimum duration (5-10 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. Introduction to IP due diligence	0.5-1 hr
III. The IP due diligence process	2.5-5 hrs
IV. Practical exercises	2-4 hrs

Overview	Learning objectives
<p>In an environment where a company's value increasingly resides in its intellectual capital, prospective business managers and financial executives need to be able to accurately identify the IP that they possess, as well as that of their potential partners and competitors. For example, in IP transactions, from the buyer's point of view, disclosures resulting from IP due diligence processes are crucial to determining prices and other key terms of the transaction. Sellers, on the other hand, will need this type of information to draft the agreement in a way that limits their exposure and responsibility.</p> <p>Due diligence is normally done by lawyers. However, the module has been designed to also be of interest to non-law students, in particular students of business administration and financial economics.</p> <p>The module covers issues such as:</p> <ul style="list-style-type: none"><li>– What is IP due diligence?</li><li>– Scope of IP due diligence</li><li>– Sources of information</li><li>– The due diligence process: searches and interpretation of information</li><li>– Practical exercise (performing a simple due diligence)</li></ul>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"><li>– Perform a simple due diligence process in the course of the acquisition/sale of a technology-based start-up</li><li>– Understand the importance of the due diligence process in various situations (purchase, acquisition, joint ventures)</li><li>– Identify the various sources of information that should be examined when performing due diligence and state what they consist of</li><li>– Determine the most important steps to be carried out in a due diligence process</li><li>– Interpret the information obtained from a due diligence process</li><li>– Draft a conclusive report on the process</li></ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Students of economics, finance, financial accounting and business administration, plus students of advanced programmes on innovation/knowledge management and advanced legal studies	Recommended basic knowledge of IP and the commercialisation of IP (modules 1A or 1B + 2B)
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
IP audit expert/lawyer with experience talking to business audiences	Not applicable
<b>Student assessment</b>	<b>Related modules</b>
Examination plus assessment of performance in practical exercises	2A-2G; 3A

## I. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

Include the "IPRs in a nutshell" module if your students do not have any background in IP. Ideally, they should have a basic knowledge equivalent to introductory modules 1A and 1B. **See the "IPRs in a nutshell" module.**

## II. Introduction to IP due diligence (0.5-1 hr)

### 1. What is IP due diligence?

(a) Definition

(b) Applications

#### (a) Definition

- IP due diligence as a means of taking informed decisions
- Equivalent terms (e.g. IP audit)
- Related terms (e.g. clearance of rights)

#### (b) Applications

- Use of the information produced in the IP due diligence
- Purposes of IP due diligence Examples could include application in:
  - Management/identification of IP – creating registers, status and establishing potential of owned IP
  - Purchase or acquisition (company or assets) – IP assets and related liabilities as a component of the overall value of the company
  - Initial public offerings, e.g. to support the preparation of company prospectuses
  - Joint ventures – own IP or venture partner's IP
  - Financing – to support borrower's position when seeking financial resources based on IP (as collateral/security)
  - Licensing
  - IP enforcement, e.g. to avoid infringement actions

### 2. Scope of the due diligence process

The scope is principally defined by the purpose.

Other factors determining the scope:

- Who is performing the due diligence (purchaser or seller of IP, borrower of IP backed-up loans, issuer of IP-backed securities)
- Company size
- Financial capacity (i.e. taking into account the costs to be assumed in the due diligence process)
- Relative importance of IP assets in the transaction
- Time

Examples: extensive due diligence for self-management or asset transactions/narrower IP due diligence for specific licensing or as support in infringement cases

### 3. Sources of information

Provide students with details of the available sources of information.

The WIPO guide to negotiating technology licensing agreements (WIPO, 2005) lists the following sources:

## Sources

- Publicly available information on publicly traded companies
- Online and subscription database services for the relevant markets or products
- Trade publications
- Trade and technology exhibitions, fairs and shows
- Technology licensing offices of research-based universities and publicly funded research and development institutions
- Government ministries, departments and agencies
- Professional and business magazines, journals and publications concerning the relevant products and markets
- Professional and business associations
- Technology exchanges
- Innovation centres
- Patent information services

### III. The IP due diligence process (2.5-5 hrs, depending on level of detail applied in section on searches)

#### 1. Preliminary steps

The first part of the process involves establishing the determinants of the due diligence (available resources, time) and key aspects of the transaction, including key players and people who will be providing information. The need for previous arrangements ensuring the confidentiality of information should also be examined.

- Time
- Type of transaction
- Prima-facie appreciation of the value of IP in the transaction, e.g. purchase of a company that has 50% market share by a competitor. Is it based on brand loyalty? Are product processes exclusive (i.e. protected by patents and/or as trade secrets)?
- Structure of the business involved (and IP ownership): small businesses and personal ownership of IP by the owner, partnerships and ownership of IP by a partner, multinational companies and IP and foreign IP. In general, it will be necessary to locate the ownership and evaluate whether supplementary licences or assignments are called for to ensure the freedom to use the IP assets in question.
- Projected use of the IP: which IP is important/which will be dropped/any new assets to be introduced. For example, trade marks to be abandoned, new brands for an acquired technology, etc.
- The market: competitors and competitors' IP
- Previous consideration of confidentiality: are confidentiality arrangements necessary?
- Transitional issues

#### 2. Searches

(a) IP protection

(b) Contract review

(c) Litigation/infringement risks

(d) Special issues relating to digital technologies

(e) Examination of IP under other relevant regulations

Introduce students to the kind of searches that are carried out in due diligence processes, for example by dividing them into broad categories as follows:

##### (a) IP protection

Identification of protected rights, status of protection (registered rights, validity, strength), pending applications, international protection, chain of title, previous licences (exclusivity afforded, imposed limitations, compulsory licences, where appropriate), international protection (where relevant), competitors' IP, etc.

**Option:** Divide the lecture into sections containing examples corresponding to some or all of the following IPRs (describe or give examples of the searches to be performed as well as the limitations of each search):

- Patents
- Trade marks
- Trade names
- Designs
- Copyright
- Trade secrets
- Other relevant rights (plant variety protection, protection for semiconductors, etc.)

### **(b) Contract review**

Point out that it is important to establish the business relationships that are constructed around IP. Use real contracts and other IP agreements. Draw students' attention to the way in which agreements can restrict further IP transactions.

Refer to confidentiality agreements, licences, assignments, franchise agreements, distribution agreements, joint venture agreements, R&D agreements and employee agreements.

### **(c) Litigation/infringement risks**

Explain that real or potential infringement of IPRs indicates risks in relation to ownership of the IP, thereby affecting transactions. Depending on the interest and effort involved, searches should be undertaken (in courts, interviews with lawyers, etc.) in this domain.

### **(d) Special issues relating to digital technologies**

Explain that, in mergers, acquisitions, company transfers and take-overs, digital technologies will normally be a part of the transaction. IP will usually be embodied in different assets (hardware, software) as well as in resources such as databases, domain names, internet and websites, etc. Issues likely to appear include ownership, liabilities, restrictions on use of technology, etc. The process should include revision of contracts - including employee contracts - and agreements relating to the leasing, licensing and ownership of IP.

### **(e) Examination of IP under other relevant regulations**

Competition law and technology transfer regulations/privacy and personal data/marketing approval (e.g. in the pharmaceutical industries), etc.

### **3. Interpretation of information**

Explain how to interpret and use the information obtained (IP and technology assets, rights and liabilities of the company audited, problems and gaps) to produce a report concentrating on material problems and their solution.

## IV. Practical exercise (2-4 hrs, depending on complexity and scope)

### Practical exercise

- (a) Introduction and presentation
- Ask students to form groups and carry out a guided IP due diligence within the context of the acquisition of a business with a strong technology platform.
- (b) Forming a due diligence team
- Provide them with detailed information about the target firm, the nature of the technology and its business potential, as well as a standard checklist of the items to be examined.
- (c) Carrying out the IP due diligence
- Ask students to propose sources of information and aspects to be examined and to carry out hands-on enquiries, for example using patent information databases.
- Ask them to conclude by providing an interpretation of the information retrieved (e.g. a business owning self-developed business software which the buyer wishes to incorporate) and outlining a due diligence report.



## 3A IP contracts

Contents	Minimum duration (15 hours in total)
I. Introduction: key issues/overview of main IPR contractual forms	2 hrs
II. Preparing to enter a contract agreement	2 hrs
III. Agreements on research and development of new technologies and copyrighted works	2 hrs
IV. Agreements for exploiting protected technology, copyrighted works and trade marks	6 hrs
IV.1 Introduction: assignments and licences	
IV. 2. Licensing agreements	
V. Workshop: Negotiating a licensing agreement	3 hrs

Overview	Learning objectives
<p>This module has been designed to give law students an insight into the legal instruments required in the commercialisation of IP.</p> <p>Starting with an introduction to the main types and characteristics of IP contracts, the module focuses on agreements for exploiting protected IP (e.g. technology, copyrighted works or trade marks), including IP licensing and collaborative agreements between researchers and sponsors.</p> <p>The module also includes information on how to deal with clients and what aspects to consider before and during licensing agreement negotiations.</p>	<p>On completion of this module, students should be able to:</p> <ul style="list-style-type: none"> <li>– Outline the key aspects to be taken into account in contracts covering the exploitation of IP</li> <li>– Distinguish between contractual forms applying to different stages of IP development and commercialisation and different partnerships</li> <li>– Understand the legal and commercial consequences of licensing/assigning IP, as well as the elements to be taken into account when choosing between possible options</li> <li>– Itemise the main issues to be addressed in a licensing agreement and include them in the agreement document (clause formulation)</li> <li>– Demonstrate a knowledge of specific aspects such as technology licences, trade mark licences, software licences, exploitation of copyright, etc.</li> <li>– Show practical knowledge and experience of negotiations involving IP licensing gained from the workshop</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Law students (postgraduate level)	Basic knowledge of IP rights equivalent to module 1B, "Introduction to IP law"
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturer in contract law, ideally specialising in contracts relating to the exploitation of IP and with professional experience of licensing contracts	Module 3B
<b>Student assessment</b>	<b>Related modules</b>
Exams + evaluation of performance at the workshop	2H, 3B  This module also addresses the legal and contractual issues in modules 2A-2D, which are aimed at students not studying law.

## I. Introduction to key issues/overview of main IPR contract forms (2 hrs)

### 1. Legal aspects of IPR contracts

(a) Nature of the subject-matter

#### (a) Nature of the subject-matter

Provide a review of the characteristics of intangible assets (public, semi-public and private goods, economic considerations)

(b) Applicable law

#### (b) Applicable law

– Law applicable to the contract and laws governing the IPRs concerned

(c) Observance

– Some key court decisions

(d) Jurisdiction clauses

#### (c) Observance

– Mandatory/compulsory versus default rules of law; boundaries to principle of freedom of contract

– Observance of some compulsory national contract rules, in particular co-ownership rules, and performing a valid transfer

– Observance of contract rules arising from EC directives (e.g. Arts. 5.2, 5.3 and 9.1 Software Directive)

(e) Competition law compliance

#### (d) Jurisdiction clauses

– Adjudicative jurisdiction: personal and subject-matter criteria

– Mediation or arbitration clauses relating to controversies

– Some key court decisions on choice of forum

(f) Other aspects

#### (e) Competition law compliance

See in particular the Block Exemption Regulations (see module 3B, section III.1)

#### (f) Other aspects

– Special features of IP contracts involving publicly financed innovation results

– The importance of an in-depth knowledge of the relevant technology market

#### See also:

Brussels I Regulation

## 2. IPR contracts: an overview

(a) Types of contract classified according to purpose

(b) Types of contract by subject-matter

General

Explain that contracts relating to IPRs may be loosely classified according to the purpose of the agreement or according to the subject-matter.

### (a) Types of contract by purpose

- Agreements covering research and development of new technologies or copyrighted works
- Agreements covering the exploitation of protected technology, creations and trade marks

### (b) Types of contract by subject-matter

- Contracts relating to innovation and technology (technology transfer agreements)
- Know-how and show-how agreements
- R&D agreements
- Material transfer agreements
- Patent and utility model agreements
- Industrial design
- Plant varieties
- Software agreements
- Technology joint ventures
- Contracts relating to copyrighted works
- Book editor contracts, music publishing contracts, performers contracts, broadcasting contracts, film production and distribution, etc.
- Contracts relating to trade marks and domain names

## II. Preparing to enter a contract agreement (2 hrs)

### 1. Confidentiality (non-disclosure) agreements

(a) Nature of the agreement

(b) Relevant clauses

#### (a) Nature of the agreement

Discuss one-way (unilateral) agreements versus mutual agreements.

Mention related principles of contract law.

#### (b) Relevant clauses

- Describe the aim of the agreement (subject).
- Define the information or know-how (protected or not) that will/will not be disclosed.
- Define methods of classifying as confidential information disclosed in a later stage in the negotiations.
- Define the use of the confidential information and limit access by third persons.
- Designate the persons who will have access to the confidential information.
- Define the information not covered by the obligation of confidentiality.
- Reserve IP rights.
- State the term of the confidentiality clause and the agreement.
- Grant backs
- Consideration
- Penalty clause (optional, subject to national laws)
- Breach of confidentiality agreement

### 2. Practical exercise: Drafting a confidentiality agreement

Show students examples of confidentiality agreements.

Present a case/situation and ask them to draft a simple confidentiality agreement.

### 3. Memorandum of understanding (MOU)/letter of intent

Explain what should be contained in an MOU and discuss the implications of the MOU. For example, discuss whether an MOU is enforceable in the same way as a contract.

### 4. Arrangements to be taken beforehand concerning IP ownership

(a) Employer/employee

(b) Co-inventors, creators and associates

Discuss with reference to your national laws, as these arrangements differ from country to country.

**5. Assessing the protection of the technology, trade marks or other subject-matter of the contract (preparing for IP due diligence)**

Give a brief explanation of IP due diligence (scope, sources of information) (see module 2H, "IP due diligence" for details), including the process involved, searches performed and interpreting the information.

**6. Establishing the value of the technology, creations or trade marks which are the subject-matter of the contract negotiations (valuation/evaluation)**

Talk about the valuation methods which can be used to establish royalty rates (see module 2F, "IP valuation").

### III. Agreements on research and development in new technologies and copyrighted works (2 hrs)

#### 1. Nature of the contract

Explain that these types of contract are collaborative agreements between private companies or between private companies and universities or research institutions.

#### 2. Specific issues arising from publicly financed research and innovation activities

Mention existing restrictions to the freedom of contract, particularly regarding ownership, conditions for the exploitation of the results, and the reserving of rights.

#### 3. Relevant clauses

Describe situations which may arise among collaborators and discuss the need to reach agreement on various specific matters.

Issues and clauses to be considered:

- Defining the expected outcome (protectable results)
- Defining the deliverables of each contractor
- Confidentiality clauses
- Pre-existing know-how (protected or not) brought by each contractor
- Ownership of pre-existing know-how and scope and conditions for allowing access to contractors
- Use of third-party technology to develop the outcome (licensing agreements; material transfer agreements)
- Warranties regarding non-existence of third-party rights to pre-existing know-how
- Grant backs
- Ownership of the results: joint ownership or allocation to one or more contractors
- Protection of the results
- Planned use of the results: exploitation business plan
- Breach of contract
- Remuneration

#### 4. Practical exercise: Examining real-life agreements

Look at a variety of sample contracts.

## **IV. Agreements for exploiting protected technology, copyrighted works and trade marks (6 hrs - at least 50% of which should be spent on licensing)**

### **IV.1 Introduction to assignments and licences**

#### **1. Assignments and licences**

Explain the main differences between licensing and selling IP rights. Give special consideration to the fact that moral rights cannot be assigned.

Explain the alternative of "waivers".

## IV.2. Licensing agreements

### 1. Licensing agreements

#### (a) Nature of the contract

#### (b) Licensing-in/licensing-out

#### (c) Basic forms of licensing agreement (exclusive/sole/non-exclusive)

#### (a) Nature of the contract

- Business objectives reflected and contractual nature
- Subject-matter: Mention, e.g., technology, trade marks and merchandising, copyrighted works (entertainment, publications), software, know-how
- Parties: licensor and licensee
- Consider who can enter into a licence agreement/legal capacity
- Examine the case of affiliates in group companies

#### (b) Licensing-in/licensing-out

Licensing is a suitable mechanism for transferring technology between licensors (who license out) who want to leverage their technological assets and licensees (who license in) who want to complement their in-house technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

#### (c) Basic forms of licensing agreement (exclusive/sole/non-exclusive)

- Advantages and disadvantages of exclusivity for the licensor/licensee
- Advantages and disadvantages of non-exclusive licences for the licensor/licensee

## 2. Main clauses of licensing agreements

(a) Initial considerations/general clauses

(b) Scope of the agreement

(c) Economic considerations

(d) Control/liabilities/representations and warranties/other clauses

### (a) Initial considerations/general clauses

- The parties
- "Whereas" clauses/the importance of proper drafting
- Definitions and interpretation/ importance of defining relevant terms (affiliates, territory, net sales, net profits)

### (b) Scope of the agreement

- The grant clause
- Defining the field of use
  - For patent licences: limiting the grant of rights to specific patent claims, specific patent families or related patent applications
  - For trade mark licences: limiting the grant of rights to specific products, taking into account the classes for which the trade mark has been registered
  - For copyright licences: limiting the use to certain exploitation rights (reproduction, distribution, communication to the public, display, transformation, and so on), subject to restrictions existing under national laws
  - Limiting the territory of use
  - Defining the term of the grant of rights
- Other (optional) clauses reserving rights for educational use and research purposes to the benefit of the licensor/academic/non-profit research institutions
- Exclusive/non-exclusive clauses
  - Exclusive licence or sole licence
  - Most favoured licence clause in the case of non-exclusive licences
- Right to grant sublicences
- Improvement clauses applying to technology licensing (know-how, patents, software). Such clauses refer to conditions for the use of these improvements (allocation of ownership, obligation to provide upgrades).

### (c) Economic considerations

- Payment arrangements
- Lump sums
- Royalties: determining the royalty rate and the royalty base factors taken into account (volume of production, net sales, net profits, number of authorised users, etc.)
  - Minimum royalties
  - Variable royalties

#### **(d) Control/liabilities/representations and warranties/other clauses**

- Reports and audit of accounts
- Right to inspection and obligation to provide technical assistance (know-how and patent licences)
- Right to control the quality of the products in order to avoid damage to the goodwill of the licensed trade mark (trade mark licences)
  - User acceptance testing
  - Reverse engineering clause
  - Liability limitations, e.g. in case of damage to the user's computer or damage or loss of data, or in case of improper use of the software by the licensee

All the above are of particular relevance in cases of software licensing.

- Representations and warranties of the licensor, for instance regarding the non-existence of third-party rights to the licensed IPR, ownership and validity of the licensed IPR
- Maintenance and defence of the licensed IPR
- Confidentiality
- Non-competition clauses
- Breach of contract
- Solidarity clauses

### **6. Specific issues regarding patent licensing and know-how agreements**

(a) Cross-licensing and patent pools

(b) Compulsory licensing

(c) Know-how and non-disclosure agreements

#### **(a) Cross-licensing and patent pools**

Define the nature of cross-licensing agreements (for patents), i.e. when two or more parties grant licences to each other for the exploitation of patents each owns.

Explain their purpose. When patents that each party owns cover different essential aspects of a given commercial product, such agreements may allow a product to be brought to market which would otherwise be blocked by the other party's patent.

Royalties. Explain that when striking a cross-licensing agreement, parties may mutually decide not to charge royalties to each other.

Patent pools. Explain that the practice of cross-licensing may give rise to patent pools, which are consortiums composed by parties which agree to cross-license technology. Give examples of patent pools.

Explain that cross-licences may involve other IP (trade marks, copyright).

### **(b) Compulsory licensing**

Explain that compulsory licensing is a form of countermeasure against potential abuse of the patent system. Its purpose is to prevent the development of situations where a patent-holder is not exploiting (or licensing others to exploit) his patented invention in the presence of a demonstrable domestic demand for the invention.

The TRIPS Agreement has laid down international rules on compulsory licences (Art. 31 TRIPS).

Explain that even though most countries have similar provisions, the laws are not uniform, neither within Europe nor worldwide.

### **(c) Know-how and non-disclosure agreements**

Define the concepts of know-how (including "show-how" and "technical assistance" programmes) and explain the nature, purpose and content of know-how agreements.

Non-disclosure agreements: define and explain the nature, purpose and contents of such agreements.

## **7. Software licensing**

(a) End-user licences

(b) Contracts for custom software development

(c) Software licensing and source codes

(d) Free and open source licensing (FLOSS)

### **(a) End-user licences**

- Use of adhesion contracts in software transactions
- Shrink-wrap licences
- Click-wrap licences

### **(b) Contracts for custom software development**

Agreements for tailor-made software

### **(c) Software licensing and source codes**

See, in particular, source-code escrow agreements.

### **(d) Free and open source licensing (FLOSS)**

Examine the GNU General Public Licence and compare it with other software licences.

## 8. Copyright contracts

- (a) Publishing contracts
- (b) Music contracts
- (c) Other media and entertainment contracts
- (d) Reference to the collective management societies and copyright clearing (collective licensing)
- (e) The Creative Commons licence

### (a) Publishing contracts

- Difference between literary and music publishing
- Compulsory clauses (see national copyright legislation)

### (b) Music contracts

- Performance contracts
- Representation, agency and management contracts
- Publishing and recording contracts

### (c) Other media and entertainment contracts

- Contracts relating to TV programmes and motion pictures
- Imaging, endorsement and marketing agreements

### (e) The Creative Commons licence

- Attribution
- Attribution: share-alike
- Attribution: no derivative works
- Attribution: non-commercial
- Attribution: non-commercial/share-alike
- Attribution: non-commercial/no derivative works

## 9. Other collaborative agreements involving IPRs

Optional

- (a) Manufacturing agreements
- (b) Distribution agreements
- (c) Franchising agreements

## V. Workshop: Negotiating a licensing agreement (3 hrs)

Negotiating a licensing negotiation

### **Preparing for negotiations**

- Identify goals with the client
- Designate the lead negotiator and the negotiating team
- Draft the heads of agreement

### **Discussions**

- Review information from licensee
- Discuss the values involved

### **Bargaining tips**

### **Final exercise and assessment**

- Draft the agreement

## 3B IP and competition law

Contents	Minimum duration (15 hours in total)
I. Introduction to IP law and competition law in the EU	4 hrs
II. IPR and the free movement of products and services in the internal market (Arts. 34, 35 and 36 TFEU)	4-5 hrs
III. IPR and the principle of free competition (Arts. 101 and 102 TFEU)	4-5 hrs
III.1. Agreements and practices restraining competition under Art. 101.1.	
III.2. Authorised practices: block exemption regulations (BER)	
III.3. IPRs and the abuse of a dominant position in the EU	
IV. IPR and competition policy at national level	2 hrs

Overview	Learning objectives
<p>Competition and IP laws are meant to pursue complementary goals. In certain circumstances, however, the existence and exercise of IP rights may have an influence which limits or weakens competition. In such cases, views differ as to the conditions in which competition law may intervene and restrain the use of an IP right to preserve fair market conditions for all players.</p> <p>Competition and IP laws also meet in the context of the European Union and its economic foundations, as IP rules - which are territorial and apply to each country - may conflict with the basic principle of the free movement of goods which is a fundamental part of the architecture of the internal market.</p> <p>This module focuses on the following topics:</p> <ul style="list-style-type: none"> <li>– Anti-competitive behaviours relating to the existence and exploitation of IP rights</li> <li>– IPR and EU competition policy/IPR and the free movement of products and services in the internal market (with reference to Arts. 34, 35 and 36 TFEU)</li> <li>– IPR and EU competition policy/IPR and the principle of free competition (with reference to Arts. 101 and 102 TFEU)</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>– Explain the objectives of IPRs and the European rules of free competition (similarities and differences)</li> <li>– Describe the main issues of interest to specialists in the field</li> <li>– Identify the main situations of anti-competitive behaviour stemming from the exercise of IP rights (e.g. through contractual arrangements) and</li> <li>– the issues relating to competition law which arise from <u>the existence</u> of IP law (such as unilateral restraints based on IPRs)</li> <li>– Identify the institutions dealing with competition policy at European and national level and describe their function</li> <li>– Explain the main traits of EU competition policy to discipline the anti-competitive uses of IPRs and</li> <li>– the most important established case law of the European General Court and the Court of Justice</li> </ul>

<b>Target audience</b>	<b>Prior knowledge</b>
Advanced-level law students with an interest in corporate law, EU economic law, competition law or IP law	Knowledge of modules 1B, "Introduction to IP law", and 3A, "IP contracts", or equivalent required
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Lecturer/expert in IP law and competition law or lecturer/expert in competition law with a knowledge of IP issues	Not applicable
<b>Student assessment</b>	<b>Related modules</b>
Multiple-choice tests/final oral assessment	3C, 2B, 2C

## I. Introduction to IP law and competition law in the EU (4 hrs)

### 1. The balance between exclusive IPRs and the principle of free competition

Examine the goals and scope of both.

- The complementary role of competition and innovation policies
- Product markets and IP markets:
  - the concept of dynamic competition (Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements, OJ EC 2004 No. C 101, p. 2, para. 7)
  - anti-competitive effects on innovation of IP-related competitive restrictions
- The need to strike the right balance between IPRs and the principle of free competition to enable an efficient technology and innovation market

### 2. IPRs and competition: legal framework

(a) EU legal framework

(b) National legal framework

(c) International legal framework (TRIPs Agreement)

#### (a) EU legal framework

- EC Treaty (TFEU):
  - (i) Arts. 34, 35 and 36 (ex Arts. 28, 29 and 30);
  - (ii) Arts. 101 and 102 (ex Arts. 81 and 82)
- Block Exemption Regulations and guidelines
- EU IP law (regulations and directives)

#### (b) National legal framework

- Competition law in your country
- IP laws

#### (c) International legal framework (TRIPs Agreement)

- Arts. 8, 31 and 40 TRIPS

### 3. IP, the free movement of goods and services in the EU and the (lack of) harmonisation of IPRs

Examine the relationship between IP and competition law. Start by introducing the basic principles of free movement of goods and services in the European Union. Explain the inherent conflict with "territorial" IP rights in particular, due to incomplete harmonisation of IPRs in the internal market.

#### **4. IPRs and anti-trust law: an overview of anti-competitive behaviours relating to the existence, enforcement and exploitation of IP rights**

(a) Behaviours relating to IP transfer/transactions/licensing

(b) Other competition issues which may arise as a consequence of the existence and enforcement of IPRs

##### **(a) Behaviours relating to IP transfer/transactions/licensing**

Explain how IPRs may have an effect on competition when subject to contracts relating to their transaction.

Give examples relating to circumstances such as:

- The misuse of exclusivity clauses in IPR licence agreements
- Anti-competitive effects of patent pools (e.g. patent pools imposing discriminatory licensing conditions on non-members)
- Unreasonable and/or discriminatory licencing of standard technologies

##### **(b) Other competition issues which may arise as a consequence of the existence and enforcement of IPRs**

Describe situations or behaviours which may lead to the weakening of competition in the market, such as:

- Unilateral refusal to license IPRs
- Other situations:
  - Defensive uses of IPRs (e.g. the construction of patent thickets)
  - Abusive enforcement of IPRs (e.g. patent trolls or pay-for-delay agreements)
  - Anti-competitive behaviour deriving from the misuse of some sectorial regulations (e.g. the use of data exclusivity to create market barriers in the pharmaceutical sector/the "monopolistic" status of collecting societies in the creative industries sector)

## II. IPR and the free movement of products and services in the internal market (Arts. 34, 35 and 36 TFEU) (4–5 hrs)

### 1. Analysis of the main principles developed by the ECJ case law

(a) Distinction between grant/existence of an IPR and its exercise

#### (a) Distinction between grant/exercise of an IPR and its exercise

Explain the interrelation between Arts. 34, 35 and 36 TFEU and IPRs in the context of the internal market, in view of the fact that the existence and exercise of IPRs may have equivalent effects such as quantitative restrictions on imports and exports, or in relation to goods in transit between member states.

(b) The exhaustion of IPRs

Highlight the relationship between the EU rules pertaining to quantitative restrictions between member states and the TFEU rules of competition (to be analysed in part III of this module)

#### (b) The exhaustion of IPRs

Explain how the principle of exhaustion of IP rights stems from principles of competition law and freedom of goods and services as set out in the TFEU.

Analyse the difference between and consequences of applying national and international principles of exhaustion.

Explain the approach to the exhaustion of IP rights in the EU (Community exhaustion).

### 2. Case studies

- Look at relevant cases relating to II.1(a) and II.1(b) (including an overview of early ECJ cases).

## Case studies

### For II.1(a) see:

ECJ 13-VII-1966, cases C- 56 and 58/64, Grunding-Verkaufs GmbH/Ets. Consten SARL v. Commission (trade marks);

ECJ 18-II-1968, case C-40/70, Sirena Srl v. EDA Srl and others (trade marks);

ECJ 29-II-1968, case C-24/67, Parke, Davis & Co v. Probel, Reese Beintema-Interpharm y Centrafarm (patents);

ECJ 8-VI-1971, case C-78/70, Deutsche Grammophon Gesellschaft mbH v. Metro-SB-Grossmärkte GmbH & Co KG (copyright).

### For II.1(b) see:

ECJ 31-X-1974, case C-15/74, Centrafarm BV and Adriaan de Peijper v. Sterling Drug Inc. (patents);

ECJ 20-I-1981, cases C- 55 y 57/80, Musik- Vertrib membran GmbH and K-tel International v. GEMA (copyright);

ECJ 14-VII-1981, case C-187/80, Merck & Co Inc. v. Stephar BV and Petrus Stephanus Exler (patents); Danzinger v. Ideal Standard GmbH y Wabco Standard GmbH (trade marks);

ECJ 14-IX-1982, case C-144/81, Keurkoop BV v. Nancy Kean Gifts BV (industrial design); ECJ 9-VII-1985, case C-19/84, Pharmon BV v. Hoechst AG (patents);

ECJ 17-X-1990, case C-10/89, SA. CNL – Sucal NV v. Hag GF. AG (Hag II) (trade marks);

ECJ 22-VI 1994, case C-9/93, IHT Internationale Heiztechnik GmbH y Uwe; Silhouette International Schmied GmbH & Co. KG v Hartlauer Handelsgesellschaft mbH, C-355/96 (16 July 1998);

Davidoff, joined cases C-414 to C-416/99.

### III. IPRs and the principle of free competition (Arts. 101 and 102 TFEU) (4-5 hrs)

#### III.1 Agreements and practices restraining competition under Art. 101.1

##### 1. Collusive practices

(a) Prohibited practices

(b) Anti-competitive effects of prohibited practices

##### (a) Prohibited practices

- Restrictive agreements between undertakings
- Concerted practices between undertakings
- Vertical and horizontal agreements or concerted practices

##### (b) Anti-competitive effects of prohibited practices

Generally speaking, any IP-related practice based on uncompetitive practices such as:

- Price fixing
- Mixed bid rigging
- Market sharing
- Customer sharing
- Territorial restrictions

Examine the effects of territorial restriction clauses included in exclusive licence agreements.

##### 2. Case studies relating to section III.1

Relevant cases (early ECJ decisions on this issue):

## Case studies

### For III.1 see, for example:

ECJ 13-VII-1966, cases C-56 and 58/64, Grunding-Verkaufs GmbH/Ets. Consten SARL v. Commission (trade marks);

ECJ 20-VI-1978, case C-28/77, Tepea BV v. Commission (patents);

ECJ 8-VI-1982, case 258/78, LC Nungesser KG and others v. Commission (plant breeder's rights);

ECJ 6-X-1982, case C-262/81, Coditel SA, Compagnie Générale pour la diffusion de la télévision and others v. Ciné-Vog Films SA and others (copyright).

## III.2. Authorised practices: block exemption regulations (BERs)

### 1. Introduction to authorised practices: Art. 101.3 TFEU (ex Art. 81.3. EC Treaty) and the Block Exemption Regulations (BER)

Explain why some practices are not subject to the application of Art. 101.1 EC Treaty.

Mention what type of agreements fall under the exemption.

Discuss the aim of Art. 101, in particular the concept of contributing to "improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit."

### 2. The EU Vertical Agreements BER (Commission Regulation No. 2790/1999) and accompanying guidelines

(a) Type of IPR agreements falling within the scope of this regulation

(b) Forms of vertical agreement

#### (a) Type of IPR agreements falling within the scope of this regulation

- Definition of vertical agreements
- Vertical agreements which fall under the scope of Commission Regulation No. 2790/1999: agreements containing provisions which relate to the assignment to the buyer or use by the buyer of IP rights, provided that those provisions do not constitute the primary object of such agreements and are directly related to the use, sale or resale of goods or services by the buyer or its customers.

#### (b) Forms of vertical agreement

- Exclusive distribution agreements
- Selective distribution agreements
- Exclusive supply agreements
- Franchise agreements

### 3. The EU Research and Development Agreements Block Exemption Regulation (R&D BER) - Commission Regulation No. 2659/2000) and accompanying guidelines (horizontal co-operation agreements)

(a) Type of IPR agreements falling within the scope of this regulation

(b) Examples of agreements falling within and outside the R&D BER

#### (a) Type of IPR agreements falling within the scope of this regulation

R&D agreements may cover the acquisition of know-how, theoretical analyses, studies or experiments relating to products or processes, including experimental production, the establishment of the necessary facilities and the obtaining of the relevant IP rights. Regulation (EC) No. 2659/2000 supplements Regulation (EC) No. 2658/2000 on the application of Article 81(3) of the EC Treaty (now Article 101(3) of the Treaty on the Functioning of the EU - TFEU) with categories of specialisation agreements ('Specialisation BER'). They represent a shift from the previous more formalistic regulatory approach towards a more economic approach in the assessment of horizontal co-operation agreements, the basic aim of which is to allow competitor collaboration where it contributes to economic welfare without creating a risk for competition.

The Regulation exempts not only R&D agreements per se, but also all agreements directly relating to, and necessary for, the implementation of co-operation in R&D.

#### **(b) Examples of agreements falling within and outside the R&D BER**

Examine selected cases relating to collaborative R&D agreements within the framework of EU-financed projects.

#### **4. The EU Specialisation Agreements Block Exemption Regulation (EC No. 2658/2000)**

(a) Description

(b) Type of IPR agreements falling within the scope of this regulation

##### **(a) Description**

Specialisation agreements aim to promote co-operation between firms in the area of specialisation in the production of goods and the provision of services.

##### **(b) Type of IPR agreements falling within the scope of this regulation**

- Unilateral specialisation: one firm gives up the manufacture of certain products or the provision of certain services in favour of another participant
- Reciprocal specialisation: each participant gives up the manufacture of certain products or the provision of certain services in favour of another participant
- Joint production: the participants undertake to manufacture certain products or provide certain services jointly

#### **5. The EU Technology Transfer Block Exemption Regulation (TTBER) (Regulation No. 772/2004)**

(a) Scope and requirements

(b) Restrictions

(c) The TTBER and patent pools

##### **(a) Scope and requirements**

###### **Scope**

Licence agreements relating to patents, software and know-how and copyright agreements relating to DVDs, CDs and books. Non-core IPRs should be included in the licensing package along with the core technology.

###### **Requirements**

- Agreements must be concluded for the purpose of producing contract products
- Deals 'with agreements where the licensor permits the licensee to exploit the contract products', not 'with licensing agreements for the purpose of sub-contracting research and development'.

## **(b) Restrictions**

- Product markets vs technology markets
- Prima-facie restrictions
  - Obligation (on the part of the licensee) to assign or to grant an exclusive licence in respect of improvements to the licensed technology
  - Obligation not to challenge the validity of the IPRs held by the licensor
  - Limits to licensee's ability to exploit its own technology or limits to the ability of any of the parties to the agreement to carry out research and development unless indispensable to prevent the disclosure of the licensed know-how to third parties
- Market-share thresholds
- Hardcore restrictions for competing undertakings
  - e.g. restrictions on pricing

## **(c) The TTBER and patent pools**

- What is a patent pool?
- Pro-competitive and anti-competitive patent pools

### III.3 IPRs and the abuse of a dominant position in the EU

#### 1. Introduction

(a) Situations involving abuse of a dominant position

See: Art. 102 TFEU (ex Art. 82 EC Treaty)

Explain that enjoying a dominant position in the market is not prohibited. What is prohibited is abuse of the dominant position.

(b) Unilateral refusal to voluntarily license IPRs (refusal to deal)/the essential facilities doctrine

Explain that to avoid an anti-competitive dominant position an ex ante merger control is possible. Provide a summary of the EC Merger Regulation.

#### (a) Situations involving abuse of a dominant position

- Imposition of unfair prices
- Imposition of unfair trade conditions
- Limitation of production, markets or technical development to the detriment of consumers
- Application of dissimilar conditions to equivalent transactions
- Making the conclusion of contracts subject to acceptance of supplementary obligations

#### (b) Unilateral refusal to voluntarily license IPRs (refusal to deal)/the essential facilities doctrine

Explain how, in some circumstances, a third party may obtain access to and use the subject-matter protected by IP in order to be able to compete in an otherwise monopolised market. Explain how the refusal to deal may lead to a non-voluntary licence.

Explain how a refusal to give third parties access to an essential facility may constitute an abuse of a dominant position (contrary to Article 102 of the EC Treaty).

#### 2. Case studies

Examine a variety of relevant cases.

## IV. IPRs and competition policy at national level (2 hrs)

### 1. Enforcement of EC competition law at national level

National competition authorities and member state national courts are at the heart of the enforcement of Arts 101 & 102. Decentralised enforcement has extended to competition law after the implementation of the Modernization Regulation.

**See also:**

EC rules, Reg 1/2003

### 2. Application of national patent law: compulsory licences in order to avoid anti-competitive effects of abuse of dominant position

Refer to Art. 31 TRIPS and its implementation at national level.



## 3C International IP law

Contents	Minimum duration (20 hours in total)
I. Introduction to the dynamics of international IP law/sources of international IP law/international IP institutions	2 hrs
II. The TRIPS Agreement and the globalisation of IP law	4 hrs
III. The expansion of IP law and the new challenges: public policies and technological change	14 hrs
III. 1. Introduction	
III.2. International IP and digital technologies	
III.3. International IP and the environment: biotechnology, public health, biodiversity, traditional knowledge and agriculture	
IV. International enforcement, bilateral treaties, FTA and TRIPS-plus provisions	2 hrs

Overview	Learning objectives
<p>The dramatic evolution in the fields of digital technologies and biotechnology has had an irreversible impact on science and society alike, transforming R&amp;D policies, leading to emerging new areas of business, and transforming everyday life for an large part of the world's population. These changes have coincided with a process of globalisation of IP laws following on from the TRIPS Agreement. The convergence of these trends brings immense new challenges for IP, along with a host of topics for discussion which are the particular focus of this module.</p> <p>Topics include:</p> <ul style="list-style-type: none"> <li>– The expansion and growing complexity of IP international law</li> <li>– IP as a trade issue and the globalisation of laws for the protection of IP (copyright and related rights, trade marks, geographical indications, industrial designs, patents, topographies of integrated circuits, trade secrets)</li> <li>– IP and the international transfer of technology and competition law</li> <li>– The challenges for IP law coming from the advent of digital technologies, and international legal responses (e.g. WIPO Copyright Treaty)</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>– Describe the major socio-economic and legal trends relevant to the formation of international IP law and IP policy</li> <li>– Explain the main consequences of the integration of IP into the multilateral trade system of the WTO</li> <li>– Identify different categories of IP rights which receive protection internationally</li> <li>– Demonstrate knowledge of the international laws relating to the acquisition of IP rights, rights afforded, the acts of infringement and the exceptions and limitations for each IP category</li> <li>– Refer to international rules governing technology transfer and licensing and relate them to the restrictions and exceptions which derive from competition law</li> <li>– Link different issues which pose challenges for IP law due to the emergence of digital technologies</li> <li>– Identify the interfaces and tensions between patent rights and other co-existing rights, in particular in relation to access to genetic resources, including plant genetic resources, and local community rights on traditional knowledge</li> </ul>

- "Private" reactions to digital challenges: the implementation of technological measures, new end-user licences and their effect on copyright limitations and consumer rights
- IP and public health policies of developing countries (IP and access to essential medicines)
- Patents and access to genetic resources and traditional knowledge
- International IP issues relating to agricultural innovation
- TRIPS-plus provisions in bilateral free-trade agreements
- The global enforcement of IP and the challenge of global piracy and counterfeiting
- Describe the main issues and identify the institutions where relevant international negotiations and discussions on these subjects take place
- Explain how human rights have influenced international IP law and give examples
- Compare the main enforcement provisions of the TRIPS agreement with national procedures
- Understand the international dimensions of piracy and counterfeiting, as well as the criminal nature of such activities

### Target audience

Students of law, economics, sociology and political sciences, plus students with an interest in international policy in the area of IP and trade

### Prior knowledge

Familiarity with IP (introductory modules 1A or 1B or equivalent) and basic knowledge of the history of IPRs (module 1C, "History of IP", or equivalent).

### Teacher profile

Academic with knowledge of international law and familiarity with international IP law plus assistance from visiting speakers (IP negotiators, diplomats, ministerial staff, NGO staff, etc.)

### Knowledge of this module is recommended/required for

Module 5C

### Student assessment

Exam and a final research paper

### Related modules

3B, 3D

# I. Introduction to the dynamics of international IP law/sources of international IP law/international IP institutions (2 hrs)

## 1. Introduction to international IP law

(a) Historical background

### (a) Historical background

Give an introduction to the different stages of the development of international IP law, starting from the concept of territoriality and examining the processes of internationalisation, globalisation and "globalisation plus" through bilateral instruments.

(b) The dynamics of international IP law

### (b) The dynamics of international IP law

Examine the growing complexity of international IP law.

## 2. Sources of international IP law

(a) International

### (a) International

- Conventions and treaties (focus on the main treaties)
  - Treaties on IP protection (e.g. Paris Convention, Berne Convention, Rome Convention)
  - Treaties on global protection and administration of IP rights (e.g. treaties on international registration, harmonisation of procedures)
  - Treaties on classification. TRIPS and international IP in the WTO system. Mention IP provisions in other international conventions (e.g. the Convention of Biodiversity).
- International dispute resolution (e.g. WTO Panels)
- Decisions of courts and tribunals

(b) Regional

### (b) Regional (with the focus on the EU)

- Agreements
- Legislative work within the framework of the EU:
  - Regulations (trade marks, designs, protected designations of origin and protected geographical indications, plant varieties, etc.)
  - EC directives (trade marks, copyright, designs, biotechnology, etc.)
  - Tribunal and court decisions (e.g. in the EU Court of Justice of the European Union (ECJ) and the General Court (GC))
  - Other sources of European IP law (e.g. European Patent Convention, EPO boards of appeal)
- Other examples
  - La Comunidad Andina de Naciones
  - MERCOSUR

(c) National

(d) Secondary sources

### (c) National

- Legislation
- Determination of courts and tribunals

### (d) Secondary sources

Recommend a selection of treatises and law review articles.

## 3. International IP institutions

(a) International organisations dealing with IP

(b) Co-operation between patent and trade mark offices

(c) The role of non-governmental organisations (NGOs)

### (a) International organisations dealing with IP

The World Trade Organization (WTO), the World Intellectual Property Organization (WIPO), the World Health Organization (WHO), United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Labour Organization (ILO), United Nations Conference on Trade and Development (UNCTAD), The Secretariat of the Convention on Biological Diversity, the United Nations Human Rights Council (formerly UN Human Rights Commission) (UNHRC), the World Bank

### (b) Co-operation between patent and trade mark offices

Provide an overview of the objectives and activities of the trilateral co-operation between the European Patent Office, the United States Patent and Trademark Office and the Japan Patent Office.

*www.trilateral.net/*

### (c) The role of non-governmental organisations

Highlight the emergence of NGOs in the TRIPS era. Explain their role in underpinning existing links between IP rights and objectives and other rights and social goals (biodiversity, sustainable development, free competition, etc.). Examine the objectives and activities of one or two representative NGOs (e.g. *ICTSD* [www.ictsd.org](http://www.ictsd.org)).

## II. The TRIPS Agreement and the globalisation of IP law (4 hrs)

### 1. IP as a trade issue

The GATT "Uruguay Round" negotiations, main discussions, positions, the GATT framework, outcome

### 2. General clauses

#### (a) Main traits

#### (a) Main traits

Mention some of the salient aspects, e.g. the introduction of international minimum standards of protection, the enforceability of the agreement and the dispute resolution procedure.

#### (b) National treatment and most favoured nation clauses

#### (b) National treatment and most favoured nation clauses

#### (c) Definition of IP in TRIPS and IP categories covered by the agreement

Explain that these are basic principles of the GATT trading system which are applied to IP. Explain the substance of Articles 3 and 5 of the TRIPS Agreement.

#### (d) Relationship with other agreements

#### (c) Definition of IP in TRIPS and IP categories covered by the agreement (Art. 2 TRIPS)

Explain that "intellectual property" means copyright and related rights, trade marks, geographical indications, industrial designs, patents, topographies of integrated circuits and undisclosed information (trade secrets).

#### (d) Relationship with other agreements

Explain that the TRIPS Agreement contains references to the provisions of certain pre-existing IP conventions:

- Paris Convention for the Protection of Industrial Property (1967)
- Berne Convention for the Protection of Literary and Artistic Works (1971)
- International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (the Rome Convention) (1961)
- Treaty on Intellectual Property in Respect of Integrated Circuits (1989)

#### See also:

Arts. 2, 2.1, 3, 5, 9.1 and 35 TRIPS

### 3. IP rights protection in the TRIPS Agreement

- (a) Copyright and related rights
- (b) Trade marks
- (c) Geographical indications
- (d) Industrial designs
- (e) Patents
- (f) Topographies of integrated circuits
- (g) Undisclosed information (trade secrets)

This section should ideally form around 50% of the total time for part II.

Apply the matrix method (suggested by Professor Charles McManis in "Principles and Methods of Teaching Intellectual Property, McManis 2008) to each IP category to consider the provisions governing:

- Acquisition of rights (subject-matter and requirements for obtaining protection)
- Exclusive rights (scope and term)
- Infringement (ownership, direct and contributory infringement, vicarious liability)
- Exceptions and limitations

### 4. International IP and competition law

- (a) Attempts to deal with competition law in the multilateral system
- (b) Competition law issues in the TRIPS Agreement

#### (a) Attempts to deal with competition law in the multilateral system

- Havana Charter of 1948
- The New International Economic Order (1970s)
- The Multilateral Agreed equitable Principles and Rules for the Control of Restrictive Practices
- The International Code of Conduct on the Transfer of Technology (1980s)

#### (b) Competition law issues in the TRIPS Agreement

- Members' competence to pursue competition policies
- Exhaustion: national, regional and international doctrines. TRIPS: "flexible" approach
- Measures to prevent abusive use of IPRs which restrain trade
- Anti-competitive practices in licensing agreements
- Conditions for compulsory licensing (the principal requirement being that attempts to obtain a licence under reasonable commercial terms must have failed over a reasonable period of time. However, this requirement may be waived by a member in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use (see Art. 31 TRIPS)).

#### See also:

TRIPs Agreement Arts. 40.2 and 31

## 5. Technology transfer, including elements of competition law

(a) What is technology transfer?

(b) International protection: background

(c) Technology transfer in the TRIPS agreement

(d) Current policies of major organisations and governments facilitating and promoting international technology transfer

**(a) What is technology transfer?**

- Technology transfer, licensing and patents
- Forms of agreement (licensing, joint ventures, collaboration agreements, know-how agreements, turn-key arrangements, etc.)
- Legal protection for technology transfer

**(b) International protection: background**

- Technology transfer and developing countries
- Background - issues and changing approaches in the 70s, 80s and 90s (see 4(a) above)
- Developing countries and technology transfer

**(c) Technology transfer in the TRIPS agreement:**

- The TRIPS "bargain"
- Technology transfer objectives of the TRIPS agreement
- Incentives for least developed countries

**See also:**

TRIPS agreement, Arts. 7, 66.2

**(d) Current policies of major organisations and governments facilitating and promoting international technology transfer**

- On "collaborative" innovation
- On university (and public research) business initiatives
- On SMEs
- On education and awareness

**See also:**

IP and technology transfer (European Commission website at [http://ec.europa.eu/invest-in-research/policy/ipr\\_en.htm](http://ec.europa.eu/invest-in-research/policy/ipr_en.htm))

Licensing and technology transfer (WIPO website at [www.wipo.int/patent-law/en/developments/licensing.html](http://www.wipo.int/patent-law/en/developments/licensing.html))

### **III. The expansion of IP law and the new challenges: public policies and technological change**

#### **III.1 Introduction (1 hr)**

##### **1. The expanding boundaries of IP**

The expansion of IP and emerging challenges for international IP law may be explained in geographical terms (the significance of TRIPS implementation and the entry of developing countries into the international IP community) and in substantive terms (where the salient consequence has been the growing interface of IP with different spheres of law and public policy, including health, competition, innovation, the right to access information, the right to access genetic resources, etc.).

##### **2. New challenges arising from technological change**

Talk about the effects on IP law of the explosion in digital technologies and the internet and of recent developments in biotechnology.

## III.2 International IP and digital technologies (5 hrs)

### 1. International responses to the challenges of the digital age: an overview of the WIPO treaties

Provide an overview of the main aspects of the WIPO treaties

- New subject-matter of international law governed by the Copyright Treaty (computer program protection by copyright/databases)
- Rights (new aspects):
  - The author's exclusive right to authorise any communication to the public, including "making available" works to the public for their access.
  - The prohibitions concerning the circumvention of technological measures/the unauthorised modification of rights management information
  - The introduction of rental rights
  - The possibility for parties to provide for exceptions and limitations and the application of the three-step test in the digital environment

#### See also:

WIPO Copyright Treaty  
Art. 13 TRIPS

### 2. The protection of computer programs in international IP law

(a) Computer programs considered as literary works: copyright protection

#### (a) Computer programs considered as literary works: copyright protection

Describe the "hybrid" nature of software: an "expression" - the source code - which provides a function.

(b) Other forms of protection (patents and trade secrets)

Refer to problems in classifying software into a single category of IPR and the CONTU recommendations in the US.

(c) Scope of protection and implications derived from the different forms of protection

Mention the protection of computer programs as literary works under the Berne Convention (1971).

#### (b) Other forms of protection (patents and trade secrets)

Talk about the debate surrounding the protection of software through patents in the US and Europe.

(d) Non-exclusionary models of software development and IP

#### (c) Scope of protection and implications derived from the different forms of protection

Highlight the important differences from the point of view of protecting the expression or subjacent idea of the program (source code vs algorithm)/ reverse engineering (possible under trade secret rules, but not under copyright rules)/ measures concerning interoperability, etc.

#### **(d) Non-exclusionary models of software development and IP**

Outline the main characteristics of "open-source", "free", etc. models of software development. Discuss how technological development may have created tensions and pressures in the IP system.

### **3. Database protection**

Refer to copyright protection and sui generis protection in Europe.

### **4. Digital content, the internet and new IP issues**

(a) Online file-sharing/liability on the internet

#### **(a) Online file-sharing/liability on the internet**

Explain that peer-to-peer, BitTorrent and www-based hyperlinked document-sharing are forms by which files are shared by end-users on the internet. They constitute massive networks of content (in many cases subject to copyright) which is exchanged, giving rise to unprecedented legal issues on the interpretation of copyright laws, liability, consumer and privacy rights, etc.

(b) New dimensions of IP infringement

Examine the different approaches (US, EU) to the liability of service providers and end-users in these cases.

(c) The internet, IP and consumers

#### **(b) New dimensions of IP infringement**

Explain that the new digital environment presents a number of issues for discussion.

Talk about potential conflicts between the use of domain names and IP rights, namely trade marks:

- Domain names are names used to identify webpages on the internet, which may function - as trade marks do - as distinctive signs in the internet environment. The acquisition of a domain name on a first come, first served basis, and the transnational nature of the internet, has led to different forms of conflicts with the owners of trade marks, leading to consumer confusion and/or increased consumer search costs. Also, certain practices, such as "framing" another person or company's website, concern the rights of the creators of websites or of creators publishing on websites in terms of the false attribution of authorship of some works on the web.

Related issues:

- Domain names and cybersquatting
- Typosquatting
- Metatags
- Framing
- Domain name dispute resolution

### (c) The internet, IP and consumers

Discuss the balance of copyright law in the digital environment.

- The rights of authors over literary and artistic works are balanced by exceptions and limitations (provided for under the conditions set out in the three-step test) which represent safe harbours for certain uses of the copyrighted works. In these cases, involving activities such as those specifically carried out for academic purposes, users do not require the authorisation of the author. Clearly, such exceptions are granted in the pursuit of the public interest, to avoid curtailing research and the free flow of information.

Certain international law provisions (to be found chiefly in the WIPO internet treaties discussed earlier), however, have stretched the rights of copyright holders to digital content to an extent that arguably breaches the limitations and exceptions given by copyright law.

This, in conjunction with the application of new forms of contractual agreements specifically applied to digital products, which may include private arrangements which override existing limitations and go beyond the scope of established copyright rules, has led to debates on the process of privatisation of copyright and its effects on innovation and consumers .

Finally, discuss the need to reconcile copyright laws and consumer laws.

Other issues that may be explored:

- Self-help measures
- Technological measures
- Rights management
- Mass-market licensing provisions
- Shrink-wrap/click-wrap licences
- Enforceability

### III.3 International IP and the environment: biotechnology, public health, biodiversity, traditional knowledge and agriculture (5 hrs)

#### 1. IP and public health

(a) Pharmaceutical patents in TRIPS: obligations and exceptions

(b) Compulsory licences before and after the Doha declaration

(c) Case study

#### (a) Pharmaceutical patents in the TRIPS agreement: obligations and exceptions

Explain that TRIPS members must provide protection for pharmaceutical products, as for any invention (product or process), without discrimination to the field of technology, provided that patentability requirements (novelty, inventive step and industrial applicability) are met. However, TRIPS allows patentability to be limited for reasons which, inter alia, may relate to public health.

These include:

- Reasons of "ordre public" or morality, including the protection of human, animal or plant life or health or to avoid serious prejudice to the environment
- Diagnostic, therapeutic and surgical methods for the treatment of humans or animals
- Plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes.

In addition, members may permit the use of a protected invention when such use is for research purposes, or provide exceptions permitting manufacturers of generic drugs to use a patented drug with the objective of obtaining marketing approval before the expiry of the preceding patent.

The agreement has also lays down provisions covering the exceptional grounds under which compulsory licences may be justified (i.e. that attempts to obtain a licence under reasonable commercial terms must have failed over a reasonable period of time (see Art. 31 TRIPS)).

#### (b) Compulsory licences before and after the Doha declaration

Explain that the urgent need, particularly in developing countries, to guarantee access to drugs and affordable medicines led to the issuance of the Doha declaration in 2001, in which it was conceded that the TRIPS agreement had to be interpreted in a manner that was supportive of the public health needs of these countries. In addition to a separate statement on IP and health, the Doha declaration covered a number of topics in the area of IP and trade. This eventually led to the first modification of the TRIPS Agreement relaxing the requirements allowing one member to supply another member with a product, without the authorisation of the patent owner. (A member may waive the requirements for compulsory licenses in the event of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use.)

### (c) Case study

Organise a case study involving the issues studied relating to patents, parallel importation and compulsory licensing of essential medicines in developing countries (see "The Experience of Kenya" on the WTO website at

[http://www.wto.org/english/res\\_e/booksp\\_e/casestudies\\_e/case19\\_e.htm](http://www.wto.org/english/res_e/booksp_e/casestudies_e/case19_e.htm)).

## 2. IP, biodiversity and traditional knowledge

(a) IP and access to genetic resources/biopiracy

(b) IP and the Convention on Biodiversity (CBD)

(c) International discussions on the TRIPS Council and the WIPO Intergovernmental Committee

Examine IP regulations touching upon the protection of plants and animals (either by patents or by specific plant variety protection laws), their relation to the access to genetic resources and the fair and equitable sharing of benefits arising from it (regulated under the Convention of Biodiversity – CBD), as well as the protection of traditional knowledge.

### See also:

TRIPs Agreement

Convention on Biodiversity

## 3. IP and agriculture

(a) Article 27.3.b. TRIPS

(b) Patenting living organisms

(c) Plant variety protection

(d) The International Treaty on Plant Genetic Resources for Food and Agriculture (CGIAR) and IP

(e) Assignment: Discuss the IP rights on "derived" plant varieties (optional)

(f) Geographical indications and agriculture

(a), (b) and (c)

Study the IP regulations relating to the protection of plants and animals and the possibility of removing certain life forms from IP protection.

Examine the different positions held by WTO member countries in relation to this issue.

### (d) The International Treaty on Plant Genetic Resources for Food and Agriculture (CGIAR) and IP

Discuss the relationship of IP to the regime for plant genetic resources (regulated under FAO's CGIAR treaty):

- The multilateral system: facilitated access to plant genetic resources and IP protection
- IP protection and "derived" plant varieties

**(e) Assignment: Discuss the IP rights on "derived" plant varieties (optional)**

#### **(f) Geographical indications and agriculture**

Define GIs and examine the means of protection (trade marks, unfair competition, sui generis protection).

Mention the on-going Old World/New World debate on the nature and scope of the protection of GIs.

Refer to the multilateral register for wines and spirits

Mention the extension of the "absolute" protection provided for wines and spirits to other products.

**See also:**

TRIPS Agreement, UPOV

## **IV. International enforcement, bilateral treaties, FTA and TRIPS-plus provisions (3 hrs)**

### **1. The enforceability of international IP laws under the TRIPS Agreement**

Refer to the WTO/TRIPS dispute settlement system/panels and sanctions/overview of IP-related case law.

### **2. Global enforcement of IP**

(a) TRIPS obligations for enforcement of IP

#### **(a) TRIPS obligations for enforcement of IP**

- Obligations regarding civil and administrative procedures
- Requirements in relation to border measures
- Criminal procedures

(b) International, EU and US initiatives on international enforcement

#### **(b) International, EU and US initiatives on international enforcement**

- The proposed Anti-Counterfeiting Trade Agreement (ACTA)
- EU Strategy for the Enforcement of Intellectual Property Rights in Third Countries (OJ C129 of 26.5.2005 )
- US Joint Strategic Plan on Intellectual Property Enforcement
- The proposed Anti-Counterfeiting Trade Agreement (ACTA)

### **3. Challenges for international enforcement: the dimension of international counterfeiting and piracy/institutional reactions**

Discuss the draft provisions of the proposed ACTA agreement.

### **4. Global "plus" provisions in bilateral treaties**

- IP within the framework of free-trade agreements (FTAs) and bilateral treaties (BITs)
- Discussion: "The most favoured nation clause, FTAs and BITs"



# 3D IP litigation

Contents	Minimum duration (15 hours in total)
I. Framework and general view of IP enforcement in Europe	2 hrs
II. IP infringement and defences	3-4 hrs
III. Relief/remedies	2-3 hrs
IV. Litigation practice	6-8 hrs
V. Alternatives to litigation in civil courts: criminal action and alternative dispute resolution	2-3 hrs

Overview	Learning objectives
<p>Lawyers representing company interests are likely to encounter situations in which they will have to deal with IP infringement. Law students should therefore have an understanding of the legal issues and procedures which typically occur in such circumstances.</p> <p>Main topics:</p> <ul style="list-style-type: none"> <li>- Legal framework and institutions (national and European)</li> <li>- Options available to the right-holder for enforcing IP rights</li> <li>- Infringement and defences for different IP rights (patents, trade marks, copyright and designs)</li> <li>- Practice and litigation from a European perspective, including pre-trial activities (cease and desist letters, gathering evidence, burden of proof, search and seize orders), matters of jurisdiction and courts, objectives, requirements and risks inherent in interposing preliminary injunctions, seeking relief (including damages) and available administrative measures (customs actions)</li> <li>- Counterclaims and nullity proceedings</li> <li>- Criminal enforcement of IP</li> <li>- Alternatives to litigation: arbitration, mediation and negotiations</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>- Describe the different instances in which enforcement of IP requires legal intervention</li> <li>- Identify applicable laws as well as competent institutions and courts</li> <li>- Demonstrate knowledge of and differentiate between, IPR infringement acts and defences in cases relating to patents, trade marks, copyright and designs</li> <li>- Demonstrate knowledge of the available remedies</li> <li>- Take the appropriate steps in pre-litigation and litigation phases. In particular, demonstrate acquired skills on how to establish which are the competent courts and jurisdictions, writing warning letters, gathering evidence (including recourse to the appropriate legal measures to secure such evidence) and drafting claims and arguments</li> <li>- Summarise the requirements and purpose of obtaining preliminary and final injunctions, as well as the risks implied</li> <li>- Gain practical experience in IP infringement proceedings through an interactive moot court session</li> <li>- Identify situations where criminal enforcement appears as an alternative or complementary action in an infringement case</li> <li>- Select alternatives to litigation, by recourse to alternative dispute resolution (ADR) systems</li> </ul>

Target audience	Prior knowledge
Law students (postgraduate level)	Basic knowledge of IP rights, for example Module 1B, "Introduction to IP law", or equivalent
Teacher profile	Knowledge of this module is recommended/required for
Lecturer in IP/IP law or related areas (commercial, civil, procedural) with the assistance/participation of an IP litigator	Not applicable
Student assessment	Related modules
Examination + assessment of participation in the final moot court and workshop	2G, 3C

# I. Framework and general view of enforcement of IP in Europe (2 hrs)

## 1. Legal framework

(a) Harmonisation of substantive European law

(b) Harmonisation of procedural law

(c) National laws and procedures

(d) Proposed centralised procedures (for patents)

(e) International treaties and agreements with an impact on EU law

### (a) Harmonisation of substantive European law

Describe the process of the harmonisation of European law, with special emphasis on Articles 114 and 118 TFEU.

- European Union
  - EC directives
  - Unitary systems (Community Trade Mark Regulation, Community Designs Regulation, Community Plant Variety Regulation, PDO-PGI Regulation)
- The European Patent Convention's harmonising effects on national substantive patent law
  - Includes the protocol for the interpretation of patent claims under Article 69 EPC (Art. 164 EPC) which provides guidance to the national courts instructing them to combine fair protection for the patent-holder with legal certainty for third parties in the interpretation of the claims.

### (b) Harmonisation of procedural law

- Brussels I Regulation 44/2001, Rome I Regulation 593/2008 and Rome II Regulation 864/2007
- Enforcement Directive 2004
- Customs Regulation 2003
- The proposed Criminal Enforcement Directive

### (c) National laws and procedures

Place particular focus on:

- Courts dealing with IP
- Non-harmonised aspects

### (d) Proposed centralised procedures (for patents)

- Draft Unified Patent Litigation System (UPLS)
- European and EU patent courts

### (e) International treaties and agreements with an impact on EU law

- Arts. 41-61 TRIPS
- Proposed Anti-Counterfeiting Trade Agreement (ACTA)

## 2. Institutions

(a) Patent and trade mark offices

(b) The courts

(c) Other institutions

### (a) Patent and trade mark offices

- National offices
- Community and other regional offices, including Community Trade Marks and Designs (OHIM), Community Plant Variety Office (CPVO), competent authorities for PDO-PGI registration, national authorities and EC DG Agriculture
- European Patent Office (EPO)

### (b) The courts

- National courts
- Court of Justice of the European Union (ECJ)
- General Courts of the European Union (GCEU) (formerly Court of First Instance)

### (c) Other institutions

- Customs authorities

## 3. Enforcement of IP/acquiring and defending IP rights

Give a brief overview of the different stages in the enforcement of IPRs, as a framework for further sections. Use the patent or trade mark procedure to illustrate the types of acts and decisions involved (filing an application, overcoming or formulating objections, pre- and post-grant appeals, infringements and counterclaims, etc.).

## 4. Litigation - why and how

(a) Objectives

(b) Options

### (a) Objectives

- To review decisions of the PTO: e.g. disagreements on filing date, formal defects and substantive matters (rejection of an application)/pre-grant and post-grant appeals/"internal" appeals and appeals in court
- To impede uses which are in conflict with IP rights
  - Conflicting applications
  - Conflicting registrations
  - Infringing uses of an IPR

### (b) Options

- File an opposition
- Seek cancellation or revocation of the IPR
- Go to litigation (seek injunctions, damages or other corrective measures)

## II. IP infringement and defences (3-4 hrs)

### 1. Introduction to IP infringement and defences

Explain that defined acts of IP infringement are governed by the respective IP law (patent law, trade mark law, etc.). The same applies to possible defences, although some generally available defences may be singled out, such as delayed ambush, acquiescence, estoppels of record or defences based on previously licensed rights or exhausted IPRs.

### 2. Infringement of patents and defences

(a) Literal and non-literal interpretation of claims in infringement cases

#### (a) Literal and non-literal interpretation of claims in infringement cases

Explain that patent infringement is always interpreted in relation to the scope of claims. Some conflictive issues to be considered may include literal and non-literal interpretation of the claims. Contrast examples of infringement under a strict interpretation with situations where a broader interpretation is applied. There is no need to go into detail on concepts such as fence-post approaches or the doctrine of equivalents, but it is essential to make clear the difference between a strict view and a broader view of infringement (on the interpretation of the claims in Europe, see Art. 69 EPC and its interpretation protocol).

(b) Acts

#### (b) Acts

Explain that infringing acts are defined by each law (see II.1). Generally speaking, they include fabrication/manufacture or sale, disposing of, offering to dispose of, importing, keeping for disposal and other unauthorised uses which are not private in nature or belong to an exception established for policy reasons (see "Defences").

(c) Defences

#### (c) Defences

- When the alleged infringement does not fall within the scope of the claims
- Allowed uses: private use, research or experimental use, conducting necessary studies, tests and trials on medicinal products to obtain market authorisation for a generic product (in the case of pharmaceutical products)
- Invalidity (grounds for a counterclaim)/lack of novelty or inventive step/the accusing party is not the owner of the patent

### 3. Infringement of trade marks

- (a) Infringing acts
- (b) Similarity of goods and services
- (c) Similarity of signs
- (d) Likelihood of confusion (LoC)
- (e) Marks with a reputation
- (f) Non-registered trade marks
- (g) Defences

#### (a) Infringing acts

Provide examples of commercial uses, such as the offering for sale or advertising of goods or services of a certain type or category, bearing a sign identical or confusingly similar to a registered mark.

#### (b) and (c)

Give examples illustrating the criteria used by PTOs and courts to assess similarity of signs and similarity of goods. Take a closer look at the principle of "likelihood of confusion". For example:

- Similarity of signs: visual, phonetic and conceptual
- Similarity of goods: nature, trade channels and method of use

#### (d) Likelihood of confusion (LoC)

Give a brief outline of the relevant factors in establishing a judgment on LoC. Provide examples, including elements considered in the assessment of LoC (similarity of goods and services, similarity of signs, including phonetic, written and conceptual similarities, relevant consumer, global assessment, overlapping sales, distinctive power of the mark, etc.).

#### (e) Marks with a reputation

Give examples of marks with a reputation (situations where there is dilution by blurring or tarnishment).

#### (f) Non-registered trade marks (optional)

Indicate the countries that recognise them (e.g. UK).

Explain that some jurisdictions do not recognise them at all.

#### (g) Defences

- Non-commercial uses/uses other than as an indication of source
- Acquiescence of the defendant's mark over a five-year period
- Causes for revocation: explain grounds of revocation based on lack of use, misuse or fault to impede misuse of the trade mark by its proprietor. Also, introduce the notion of revocation based on (a) failure to put the trade mark to genuine use during a period (five years); (b) a trade mark having become generic for goods and services as a consequence of action or lack of action by the proprietor; and (c) uses made of the trade mark by its proprietor, making him liable to mislead the public.
- Invalidity (absolute and relative grounds) - primary claim or counterclaim
  - Trade marks conflicting with previously registered signs
  - Trade marks registered in bad faith

- Trade marks deemed to be invalid based on "absolute grounds" of refusal
- Trade marks conflicting with other personal or IP rights (use of proper name, right of self-portrayal, copyright, etc.)

## 4. Infringement of designs

(a) Definition

### (a) Definition

A use which does not produce a different overall impression in relation to a previous design

(b) Prohibited acts

### (b) Prohibited acts

Making, offering for sale, putting on the market, importing, exporting, stocking

(c) Unregistered designs

### (c) Unregistered designs

Consider the same kind of acts as in (b), whereas it must be shown that the defendant copied the design.

(d) Defences

### (d) Defences

- Non-infringement (private acts, research and experimental use, academic citation)
- "Must-fit" pieces (component parts that must be reproduced in their exact form and dimensions in order to be mechanically connected to the product or allow the product to perform its function, e.g. a car exhaust pipe) with the exception of parts of modular systems ("Lego exemption")
- Designs falling under other exceptions recognised by some national legislations, e.g. "must-match" items (parts of complex products which have special features that must correspond to the appearance of the whole product so precisely that their replacement entails using a part that is identical to the original, e.g. a car chassis, a car door, etc.) subject to the conditions established in the corresponding law.
- For Community designs, the part of a complex product used in repairs of a complex product in order to restore it to its original form.
- Invalidity of the claimant's design (grounds for counterclaims)/not a design according to legal definition, not novel, no individual character/ conflict with prior rights
- Exhaustion

#### See also:

Arts. 7, 11 and 15 Design Directive

Arts. 8, 22 and 24 Community Design Regulation

## 5. Infringement of copyright

(a) Initial considerations and concepts

(b) Infringement of reproduction rights

(c) Infringement of communication rights

(d) Infringement of moral rights

(e) Defences

### (a) Initial considerations and concepts

- Copies and copying
- Originality/causal connection:  
A substantially similar work, but created independently (i.e. original works) does not qualify as an infringement. The owner of the original work must show that the similarity of the infringed works is not fortuitous. Elements which may be an indication of the connection include the date of creation and the probability that the infringer has accessed (seen or heard) the original work. Other situations that could be discussed: subconscious copying, indirect copying, plagiarism
- Exact reproductions and non-exact reproductions:  
Non-exact reproductions or copies of parts of works may still constitute an infringement of copyright. The determination of whether there is an infringement or not will depend on the question of whether the "taking" was important enough or substantial.
- In relation to the scope of protection, remind students that copyright protects expression and not ideas. Use examples to illustrate different cases.
- Ownership of the content does not imply ownership of the embodiment

### (b) Reproduction rights

- Primary infringements: copying, issuing copies, rental, lending and other types of distribution
- Indirect infringements, secondary liability: dealing with copies

### (c) Communication rights

- Primary infringement: communication to the public (performances, making the work available, including on the internet)
- Secondary infringement: providing means for communication to take place (premises, apparatus, etc.), e.g. "dance hall" cases.

### (d) Infringement of moral rights

- Paternity/attribution
- Integrity

Mention that moral rights are not harmonised and that classification therefore depends on the country concerned.

### (e) Defences

- Independent works (claiming the originality of the work alleged to be infringing)
- Taking the idea but not its expression
- Allowed uses/restrictive interpretation of the exceptions and limitations

Explain that copyright limitations and exceptions are only subject to minimum harmonisation in the European Union. However, depending on what is provided by national legislation, mention some "allowed uses" which exist to permit the necessary flow of knowledge and information, but at the same time seek to provide a balance between these needs and the author's right. In this sense they must be interpreted restrictively.

Mention the three-step test (exceptions; (a) confined to special cases; (b) must not conflict with the normal exploitation of the work; and (c) must not unreasonably prejudice the legitimate interest of the owner) (Art. 5 Information Society Directive - Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society).

Possible exceptions and limitations which may be considered for discussion are listed in Articles 5.2 and 5.3 of the Information Society Directive. As they are all optional, only the exceptions incorporated in national legislations should be discussed. Interesting exceptions include the use for the sole purpose of illustration for teaching or scientific research, reproduction by the press, making available of published articles on current events, etc. (see Art. 5.2 Information Society Directive).

Aside from the lists of optional exceptions included under Arts. 5.2, 5.3 and 5.4, all national legislations must provide an exception for temporary acts of reproduction which are an integral and essential part of a technological process and whose sole purpose is to enable a transmission in a network, as well as any "lawful use" of subject-matter having no independent economic significance (Art. 5.1 Information Society Directive).

#### **See also:**

Information Society Directive

### III. Relief/remedies (2-3 hrs)

#### 1. Who is entitled to apply for measures and remedies?

#### 1. Who is entitled to apply for measures and remedies?

- Right-holders (mandatory)

Possibly also (in so far as permitted by national legislation):

- Licensees
- Collective management societies
- Professional defence bodies

#### See also:

Arts. 4 and 5 Enforcement Directive (Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of Intellectual Property Rights - OJ L 157, 30.4.2004)

#### 2. Injunctions

#### (a) Precautionary measures

(a) Precautionary measures

Talk about interlocutory injunctions intended to prevent imminent infringement of an IP right or continuation of the alleged infringement:

(b) On the merits of the case

- the conditioned continuation of the defendant's activity subject to the lodging of guarantees
- injunctions against an intermediary
- orders of seizure or delivery up of the goods suspected of infringing an IP right
- precautionary seizure to ensure the recovery of damages
- requirements of evidence (e.g. that the applicant is the right-holder and that the applicant's right is being infringed and that such infringement is imminent)
- the possibility of taking measures without the defendant having been heard, notification of such measures to the parties and review upon request of the defendant
- revocation of the provisional measures

#### (b) On the merits of the case

Discuss injunctive relief and other corrective measures (see points 3-5).

#### See also:

Enforcement Directive

### 3. Corrective measures

(a) Recall/definitive removal from the channels of commerce/destruction

#### (a) Recall/definitive removal from the channels of commerce/destruction

Issues to be considered:

- Provision upon request of the applicant (courts should consider the interests of third parties, including consumers and private parties acting in good faith)
- Proportionality between the seriousness of the infringement and the remedies ordered
- Expenses of carrying out the measure are borne by the infringer

### 4. Damages

Explain the different methods of determining/quantifying damages with reference to lost profits, unfair profits made by the infringer and, in appropriate cases, elements other than economic factors (moral prejudice caused to the right-holder by the infringement).

Include the setting of damages as a lump sum on the basis of elements such as the amount of royalties or fees which would have been due.

#### **See also:**

Enforcement Directive

### 5. Other actions/costs

(a) Disclosure of information (about infringers, channels of trade, etc.)

(b) Publication of judgement

(c) Costs

#### (a) - (c)

Discuss Articles 8, 14 and 15 of the Enforcement Directive and compare with similar remedies available under national law in respect of non-IP actions.

## IV. Litigation practice (6-8 hrs)

### 1. Overview of courts and jurisdiction

(a) National

(b) European Union and quasi-judicial instances in Europe

#### (a) National

Explain how your national court system functions and include the main procedures for dealing with IP infringements (e.g. which courts are competent, degree of specialisation, instances, particular traits, such as the separation of validity and infringement procedures in Germany, etc.). Optionally, give a general outline of selected court systems (e.g. England, Germany, France, Italy) and procedures, contrasting the different systems.

#### (b) European Union and quasi-judicial instances in Europe

Review the main court systems dealing with IP infringement in Europe (e.g. Community Trade Mark and Community Designs Courts for CTM and CD infringements), as well as quasi-judicial instances dealing with patents (EPO boards of appeal).

### 2. Pre-trial activities

Provide a guide to the pre-trial activities to be carried out (based on best practice).

Issues may include:

- Determining the infringement
- Sending a cease and desist letter (warning letter). See content, objectives and risks, and liability in case of unjustified request
- Drawing up a preparative strategy
- Carrying out litigation value and risk evaluation
- Carrying out a validity assessment
- Deciding when and where to sue
- Putting together a litigation team
- For patent cases mention that the team will integrate legal (procedural law specialists, legal IP specialists) and technical support (patent attorneys).

### 3. Gathering evidence

Cover rules and issues on evidence, burden of proof, pre-trial discovery, "saisie" (optional - relevance in patent infringement cases), surveys and market studies (relevance in trade mark cases).

### 4. Preliminary injunctions (provisional measures)

Look at the strategic aspects of preliminary injunctions.

Present them as a form of "quick relief".

Refer to ex-parte/inter-parte proceedings and urgency.

## 5. Stating the claims

Point out the elements to consider when writing the statement of the claims: relief sought, parties to proceedings, facts and presentation of proof, legal reasoning.

## 6. Defences and counterclaims

(a) Grounds

### (a) Grounds

See section II (Infringement and defences).

(b) Procedural and substantive defences

### (b) Procedural and substantive defences

Mention that, in jurisdictions where separate proceedings are carried out for infringement and invalidity or when nullity actions are brought before the PTO, it is possible to "stay" infringement proceedings until the final determination from the other proceedings on the invalidity of the IP right.

## 7. Customs action in the EU

(a) Objective

Discuss the main provisions of Council Regulation (EC) No. 1383/2003 concerning customs action against goods suspected of infringing certain IP rights and the measures to be taken against goods found to have infringed such rights.

(b) Subject-matter and scope

### (a) Objective

Refer to recitals of the Regulation.

(c) Procedure

### (b) Subject-matter and scope

Discuss definitions of 'counterfeit' and 'pirated' goods and compare with definitions (where available) in the relevant IP laws.

### (c) Procedure

- Modes of action: 'ex officio' or after the lodging of an application by the right-holder.
- The application
- Seizure of goods
- Deadlines to initiate legal action

#### **See also:**

Customs Regulation

## 8. Practical exercises

With the aid of a practitioner design a variety of practical exercises to help students apply what they have learned about IP litigation. Include:

- a workshop on how to write a statement of claims
- a moot court representing oral proceedings

## V. Alternatives to litigation in civil courts: criminal action and alternative dispute resolution (2–3 hrs)

### 1. Criminal action

#### (a) to (c)

(a) Intention

Explain that criminal action is preponderantly applied in trade mark (counterfeiting) and copyright (piracy) infringements. Such acts, which because of their nature imply a clear deceptive, fraudulent intention, and are carried out on a significant commercial scale, are not the same as common acts of IP infringement. Due to their character, there is a public interest in preventing them, and therefore a need for public prosecution.

(b) Commercial scale

(c) Public prosecution/collecting and providing evidence to the authorities

(d) Fines/imprisonment

#### (d) Fines/imprisonment

Fines and/or imprisonment

(e) Compare criminal enforcement with civil enforcement

#### (e) Compare criminal enforcement with civil enforcement

Explain, for example, that penalties (fines, imprisonment) do not provide for the recovery of damages. For this, the litigator should combine criminal action with civil action.

### 2. Alternative dispute resolution (ADR)

#### (a) Introduction

Give definitions of ADR instruments.

(a) Introduction

Refer to commonly used instruments (e.g. NY Convention).

(b) Negotiations

#### (b) Negotiations

(c) Mediation and arbitration

Explain that they are carried out to determine whether the parties can go to arbitration.

(d) Institutions

Refer to arbitration proceedings (e.g. choice of arbitrators).

### **(c) Mediation and arbitration**

- Mediation:  
Point out that mediation is based on the interests of the parties, rather than applicable law.
- Arbitration:  
Point out that awards are not subject to appeal.
- Comparison of arbitration and litigation:
- Compare the two procedures from the point of view of the number of proceedings involved, the technical expertise of the decision maker, the length of the procedure, confidentiality, termination of the procedure and costs.
- General advantages:  
Mention the single procedure, party autonomy, neutrality, expertise, confidentiality.

### **(d) Institutions**

e.g. WIPO Arbitration and Mediation Center



# 4A IP for computer sciences and software engineering

Contents	Minimum duration (25 hours in total)
I. IP, computer programs and the ICT sector	4 hrs
I.1 Characteristics and economic importance of the software sector	
I.2 IPRs in a nutshell	
II. Copyright protection for computer programs	2 hrs
III. Patent protection for computer-implemented inventions (CII) in Europe	2 hrs
IV. Other forms of IP protection for technology and innovation	2 hrs
V. Exercises and workshops	2 hrs
VI. Enforcement of IP rights	3 hrs
VII. IP management and commercialisation	5 hrs
VII.1 Assessing and exploiting IP/ IP and entrepreneurial and collaborative ventures for the development and commercialisation of innovation	
VII.2 IP licensing (with special reference to software licences)	
VIII. Workshops and practical exercises; case study	4 hrs

Overview	Learning objectives
<p>The increase in the importance and value of software which has accompanied the vast growth in the use of computers has focused attention on the associated legal issues affecting software developers, publishers and others. It therefore essential for future software professionals to understand IP such as copyright and patents, as well as other rights such as trade secrets and trade marks, and how they relate to software and IT.</p> <p>Focussing on software, this module will show students how to achieve effective protection and defence of essential assets and efficient management and economic exploitation of developed IP. It also looks at alternative models of development and commercialisation, based on free and open source licensing.</p>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>– Demonstrate a knowledge of the different categories of IP rights and explain the function of each set of rights (patents, trade marks, copyright, etc.) and their similarities and differences</li> <li>– Show how computer-implemented innovation, and software in particular, may be protected through different IPRs, and indicate which aspects of a program will find protection under each category of IP</li> <li>– Write a document or check-list including the requirements necessary for obtaining IP protection (patents, copyright, trade secrets) and initiate the process of obtaining a patent, trade mark, design, etc.</li> </ul>

Topics include:

- IP in a nutshell
  - The software sector and IP
  - Copyright and patent protection for computer programs
  - Other forms of IP protection for innovation
  - Enforcement of IP rights
  - Assessing and exploiting IP
  - IP and entrepreneurial/collaborative ventures
  - Strategic use of licensing agreements
  - FLOSS/GPL licence
  - Business models based on FLOSS
- Workshops and practical exercises
- Explain the different options available for enforcing IPRs, including when and how to have recourse to criminal enforcement, to counter piracy and counterfeiting
  - Account for different ways in which IP may be commercialised
  - Summarise the principal elements and issues relating to IP licensing
  - Read a licence and draft a simple heads of agreement
  - Describe the main legal structures used to establish collaborations and partnerships
  - Explain the process of licensing under proprietary and non-proprietary schemes and compare two or three different business models which may be implemented under each scheme

### Target audience

Students of software engineering, information sciences, micro-electronics, and business and technology management (postgraduate level)

### Prior knowledge

Basic technical knowledge in computer sciences Module 1A ("Introduction to IP") or equivalent IP knowledge recommended

### Teacher profile

Knowledge of IP and/or computer law, as well as computer engineering (informatics) and/or electronics

### Knowledge of this module is recommended/required for

Not applicable

### Student assessment

Exam plus final research paper

### Related modules

This module relates to most of the modules in the manual. It can also be offered as a stand-alone module.

# I. IP, computer programs and the ICT sector

## I.1 Characteristics and economic importance of the software sector (2 hrs)

### 1. The software industry

#### (a) Markets

(a) Markets

– Define software and software-based services

(b) Emerging sectors

– Applications

– Tools

– System infrastructure software

– Hardware

– Games

#### (b) Emerging sectors

Mention cloud computing, open source, service-oriented architecture, mobile software, etc.

### 2. Economic and social importance

(a) Importance among the ICT industries:

Point out that a number of studies, including some commissioned by the European Commission, contain information on the economic and social importance of the software industry and are available on the internet (e.g. Pierre Audoin Consultants SAS (PAC), "The European Software Industry. Economic and Social Impact of Software & Software-Based Services". Smart 2009/0041 2009 available in [http://cordis.europa.eu/fp7/ict/ssai/docs/20090730-d2-eu-ssbs-industry\\_en.pdf](http://cordis.europa.eu/fp7/ict/ssai/docs/20090730-d2-eu-ssbs-industry_en.pdf)).

(b) Contribution to the EU economy

(c) Contribution to productivity

(d) Social contribution

## **I.2 IPRs in a nutshell (1.5-2 hrs)**

### **IPRs in a nutshell**

See the ancillary module "IPRs in a nutshell"

## II. Copyright protection for computer programs (2 hrs)

### 1. What is copyright?

(a) Originality

#### (a) Originality

- Protection for original expressions of a creative nature (not ideas, facts or information)

(b) What can be copyrighted

#### (b) What can be copyrighted

- Traditional examples (art, literature, scientific works, etc.)

But also ...

- Computer programs
- Databases

### 2. Copyright protection for computer programs

(a) Problems in fitting software and programming into a category of IPR

#### (a) Problems in fitting software into a category of IPR

- The hybrid nature of software: an expression - the source code - which provides a function
- Background: the CONTU recommendations in the US (National Commission on New Technological uses of *Copyrighted Works (CONTU) 1974*; available at <http://digital-law-online.info/CONTU/contu2.html>)
- The protection of computer programs as literary works
- International framework: TRIPs Agreement, WIPO Copyright Treaty
  - European Union: requirement to provide protection as literary works, under the Computer Programs Directive (Art. 1)

(b) The object of protection

#### (b) The object of protection

- Copyright protects the "expression" of the source code.
- Requirement of originality: generic codes do not receive protection.
- Underlying ideas (which are often the functional aspects of the program) remain unprotected. Note that this differs from patent protection (see section III).

#### See also:

- Art. 10 TRIPS Agreement
- Art. 4 WIPO Copyright Treaty
- Art. 1 Computer Programs Directive

### 3. Exclusive rights

(a) Economic rights (in general)

(b) Economic rights (computer programs)

#### (a) Economic rights (in general)

- Producing
- Copying
- Distribution
- Communication

#### (b) Economic rights (computer programs)

- Permanent or temporary reproduction
- Any other form of distribution
- Modifications of the program (requiring copies)

**See also:**

Computer Programs Directive

### 4. How is copyright obtained? How long does it last?

(a) Absence of formalities

(b) 70 years from the death of the author/programmer

#### (a) Absence of formalities

- The © symbol
- Convenience of registering
  - Submitting programs (source code) to the register - explain with reference to national regulations and practices.

#### (b) 70 years from the death of the author/programmer

**See also:**

Copyright Duration Directive

### 5. Exceptions

List the various exceptions included in the Computer Programs Directive.

- Adapting the computer program for its intended purpose
- Back-up copies
- The decompilation of the program by a licensee with the aim of achieving interoperability

**See also:**

Computer Programs Directive

## 6. Protection of databases

### (a) Copyright protection

(a) Copyright protection

- Available for original selection and arrangement of contents - limited protection

(b) Sui generis protection

- Core characteristics (where different from general copyright regime)

### (b) Sui generis protection

- Available for substantial investment against substantial taking
- The concept of substantial investment
- Core characteristics (e.g. duration) - copyright protection
- Sui generis protection

#### **See also:**

Database Directive

### III. Patent protection for computer-implemented inventions (CII) in Europe (2 hrs)

#### 1. Patents and the software industries

(a) Facts and figures

(b) Why do software companies seek patent protection?

(c) The software patent debate

#### (a) Facts and figures

- Provide an estimate of the number of software patents (for example in Europe, the US and Japan).
- Provide a list showing which companies hold the greatest number of patents on CII.

#### (b) Why do software companies seek patent protection?

- Economic reasons (protecting investments)
- Reasons of scope of protection (e.g. for software, there is a larger scope of protection: protecting expression through copyright vs protecting the functional aspects of a computer program through patents)
- Strategic reasons (obtaining freedom to operate)

#### (c) The software patent debate

Discuss the difficulties of assessing the effects of patents on innovation in this field. Include the debate generated by the Proposal for a Directive on the Patentability of Computer-implemented Inventions (CII) ([http://ec.europa.eu/internal\\_market/indprop/comp/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/comp/index_en.htm)).

#### 2. What are computer-implemented inventions (CII)? What are the requirements for patentability?

(a) Definition of CII

(b) Overview of requirements

#### (a) Definition of CII

Explain the origin of the term and the range of inventions it covers. Discuss, based on examples, whether (and when) it essentially embraces software or may be expanded to incorporate a wider range of inventions (including software). See [www.epo.org](http://www.epo.org) for more information.

#### (b) Overview of requirements

Provide a brief overview of the requirements for obtaining a patent (subject-matter/ novelty/inventive step/ industrial applicability).

Explain that, according to current legal practice, patents should be available in all fields of technology, which would include computer programs.

#### See also:

Art. 27 TRIPS, Art. 52 EPC

### 3. Patentable inventions

(a) Patentable and non-patentable inventions/exclusions and exceptions

(b) The exclusion of computer programs "as such" and the requirement of technicality in an invention

#### (a) Patentable and non-patentable inventions/exclusions and exceptions

Lack of a definition for the term "invention" in patent law (the EPC) and provide an overview of excluded subject-matter.

#### (b) The exclusion of computer programs "as such" and the requirement of technicality in an invention

Issues:

- Technical character as an implicit requirement
- Lack of definition of "technical"
- Examples of technical attributes + examples of attributes devoid of technical character (e.g. elements which perform an aesthetic function or which solve a financial, marketing or mathematical problem, for example)
- Computer programs "as such" are excluded, but programs which fulfil the requirement of technical character are patentable.

Pay special attention to the exclusions which are relevant to computer programs, aside from computer programs as such (e.g. mathematical formulae, methods for doing business, etc.).

#### See also:

Arts. 52 and 53 EPC

Case law of the EPO boards of appeal (T 0769/92, T 1173/97, T 931/95, T 258/03)

### 4. Novelty

(a) Priority/first to file

(b) Prior art

(c) Problems regarding the non-existence of prior art

#### (a) Priority/first to file

Distinguish between first to file and the first to invent system in the US.

Explain the implications from the point of view of taking measures to "prove" the invention (keeping records, technical notes, etc.).

#### (b) Prior art

Refer to prior publications, prior use anticipations, etc.

Provide examples.

#### (c) Problems regarding the non-existence of prior art

Show that this problem is common when there is a technological break-through, as in the case of the advent of digital/computer technologies.

## 5. Inventive step

(a) The person skilled in the art (in general and in relation to computer programs and CII)

(b) Technical contribution of the invention/the requirement that the solution or contribution should lie in a technical field

(c) The problem/solution approach, applied to CII

### (a) The person skilled in the art (in general and in relation to computer programs and CII)

Explain that in the digital technology field, despite the lack of a definition and a uniform doctrine, the person skilled in the art could be defined as someone skilled in data processing or as a software team consisting of programmers.

Cite the case law of the EPO boards of appeal: "If the technical problem is concerned with a computer implementation of a business, actuarial or accountancy system, the skilled person will be someone skilled in data processing, and not merely a businessman, actuary or accountant" (T641/00).

Also mention "software project team, consisting of programmers" (T172/03).

### (b) Technical contribution of the invention/the requirement that the solution or contribution should lie in a technical field

Mention problems and complexities: CIIs often include both technical and abstract elements in one invention.

See examples of computer programs implementing business methods

Other examples:

- Information "modelling" of a physical system on a computer (T 49/99)
- A remote control system which allows you to move a cursor in multiple directions on a TV menu due to a new graphic design of the menu (T 244/00)
- A programmed computer which controls values related to exposure of an X-ray machine (T 26/86)

### The problem/solution approach, applied to CII

Explain how the problem/solution approach applied by the European Patent Office to decide whether an invention involves an inventive step applies to CII (focus on the fact that the problems to be solved must be "technical").

## 6. Inventive step II

Give examples of CII applications fulfilling (or failing to fulfil) the requirement of technical contribution.

## 7. Other requirements: industrial application and sufficiency of disclosure

Explain what they consist of and the necessity to comply with these requirements in order to obtain a patent.

Industrial applicability: mention that this requirement is to be interpreted in its broadest sense.

Sufficiency of disclosure: inventions must be disclosed in a manner sufficiently clear and complete to be carried out by the person skilled in the art! Mention the "best mode" requirement which exists in some countries (e.g. the US).

## 8. Scope of protection/scope of the claims

- Exclusive rights on anything that falls within the scope of the claims
- Importance of the claims

## 9. How do you obtain a patent? How long does protection last?

(a) National and international protection

### (a) National and international protection

- Territoriality of IPRs
- Priority
- Alternative paths used to obtain protection in other countries (national, European and PCT routes)

(b) Prosecution steps

### (b) Common prosecution steps

- Filing/importance of filing date
- Publication (provisional protection)
- Protection
- Validity/oppositions/judicial avenues

(c) The role of the patent agent/patent office

### (c) The role of the patent agent/patent office

- Patent drafting and prosecution: the role of the patent agent
- Patent office/patent examiners
- Importance of the search report, preliminary opinions on patentability and substantive examination

(d) Duration of patent rights

### (d) Duration of patent rights

Mention the duration of patent rights. Discuss whether the 20-year term is appropriate for inventions relating to digital technologies.

## 10. What does a patent document look like?

(a) Structure (title page, description, claims and drawings)

(b) Size

(c) Using patent information/patent information databases

Illustrate the degree of standardisation by showing different patent documents. Explain the purpose of these mandatory elements and the use of patent information for research and business objectives.

See module 2E for more details.

## IV. Other forms of IP protection for technology and innovation (2 hrs)

### 1. Trade secrets

(a) to (e)

(a) What is a trade secret?

Refer to module 1A, section II.10 and 1B, II.8 for more detail and suggestions on the topics to be included.

(b) When is a trade secret protectable?

(f) Patents or trade secrets?

(c) Secrecy, commercial value, efforts to maintain secrecy

Explain how source codes are protected under trade secret law. Assess the limitations of the protection by trade secrets due to commercial distribution of software.

(d) Types of information which can be protected (including technical information)

(e) Protection afforded

(f) Patents or trade secrets?

### 2. Topographies of integrated circuits

(Optional)

### 3. Designs

(a) Function of designs/enhancing the attractiveness and value of products

(a) Function of designs/enhancing the attractiveness and value of products

Point out that - unlike patent protection - design protection is not afforded to features which exhibit a technical functionality.

(b) IP protection for the visible appearance of products

(b) to (d)

See module 1A for more details.

(c) Obtaining design rights

(e) Applications in the software industry

(d) What rights does the right-holder have, where are they valid, and for how long?

Mention graphic user interphase elements (icons) as an example.

(e) Applications in the software industry

## 4. Trade mark protection

### (a) to (c)

(a) What is a trade mark? The function of distinctive signs

See module 1A for more details.

(b) Signs that serve as trade marks

(c) Signs that may not become trade marks (absolute and relative refusal)

(d) Obtaining trade mark protection/rights afforded

### (d) Obtaining trade mark protection/rights afforded

- Obtaining protection: applying for a trade mark/PTO
- Unregistered trade marks
- European Community-wide protection: Community trademark and the OHIM
- Obtaining international protection
- Validity of trade marks
- Obligation of use/protection for well-known marks

## V. Exercises and workshops (2 hrs)

### 1. Exercise 1: Validity assessment of a CII

Example: Assist students in filing an opposition with the patent office alleging the lack of technical contribution to the state of the art of a computer-implemented invention.

### 2. Exercise 2: Choosing the right way to protect a computer program

Engage students in a discussion on a given program, including the possibility and effectiveness of protecting it via patents, copyright and/or trade secrets. Examine the possibility of using more than one form of protection jointly.

## VI. Enforcement of IP rights (3 hrs)

### 1. Defending IP rights

(a) Conflicts over IPRs are frequent

(b) The importance of enforcing IPRs

#### (a) Conflicts over IPRs are frequent

Point out the characteristics which make IPRs particularly subject to conflict, including the value of IP, the intangible, non-excludable nature of intellectual creations, economic incentives for competitors to copy or imitate, technological races and trends conducive to overlapping innovation.

Provide examples from the media relating to different forms of IP, including technology (inventions), content, art, trade marks, designs and trade secrets.

Mention that conflicts may occur among people or companies with different types of relationship (competitors, partners/collaborators, employees/employers).

#### (b) The importance of enforcing IPRs

Refer to the possession of exclusive rights (protection) vs the enforcement of IPRs.

Explain that the power of IPRs to prevent others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right-holders must take a proactive role in the defence of their IP.

Illustrate using a timeline showing the different phases of the product cycle, including the point at which it is necessary to protect IPRs and when enforcement becomes necessary (see section 5 of ancillary module "IPRs in a nutshell").

### 2. What constitutes an infringement?

Explain which acts normally constitute an infringement of IPRs (use, making, selling, importing, etc.).

Also explain that the laws relating to each category of IP define the nature of the exclusive right in terms of content and business activity. For example, an invention subject to a patent is defined within the claims, and unauthorised use, making or selling of the invention within that scope constitutes an infringement.

In another example, a person who copies a copyrighted image for a commercial purpose, or any person who distributes the copies, infringes copyright in that image and is liable for that act.

### 3. Options for enforcement

(a) Action before the PTO

(b) Litigation

(c) Alternatives

#### (a) Action before the PTO

- Opposition to a patent, trade mark or design application

#### (b) Litigation

- Differentiate between civil and criminal (see section VI.5)

#### (c) Complementary actions and alternatives to litigation

- Customs actions
- Alternative dispute resolution
- See sections VI.6 and VI.7)

### 4. Remedies following successful litigation

(a) Injunctions

(b) Destruction and delivery-up

(c) Damages

(d) Disclosure of information

(e) Publication of judgment

Examine the available remedies using the Enforcement Directive as a guide [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of Intellectual Property Rights (OJ L 157, 30.4.2004)].

#### (a) to (e)

See module 3D, section 2 for suggestions and more detail on the topics to be included in this section.

Also, for (c):

Highlight the different methods of calculating damages, including on the basis of lost profits, unfair profits made by the infringer and, where appropriate, elements other than economic factors (moral prejudice caused to the right-holder by the infringement).

### 5. Criminal enforcement

(a) When are violations of IPRs criminal acts?

(b) Criminal infringements vs. Civil infringements

#### (a) When are violations of IPRs criminal acts?

- Intention
- Commercial scale

Explain that criminal action is preponderantly used in copyright, design and trade mark infringements.

#### (b) Criminal infringements vs civil infringements

Explain the difference between civil and criminal infringements.

- Private prosecution (civil) vs public prosecution (criminal)
- Penalties and sanctions

Point out that penalties (fines, imprisonment) do not provide for recovery of damages. This would require combining criminal action with civil action.

## 6. Customs action

Commission Regulation (EC) No. 1891/2004 of 21 October 2004 laid down provisions for the implementation of Council Regulation (EC) No 1383/2003 concerning customs action against goods suspected of infringing certain IP rights and the measures to be taken against goods found to have infringed such rights.

See module 2G - "Defending IP assets: IP infringement and breach of confidentiality" - for more details.

## 7. Other issues

(a) Costs of enforcement

### (a) Costs of enforcement

See module 2G, "Defending IP assets".

(b) Alternatives to litigation/alternative dispute resolution (ADR) procedures

### (b) Alternatives to litigation/ADR procedures

- Negotiation
- Mediation
- Arbitration
- Main centres of mediation and arbitration

See module 2G - "Defending IP Assets: IP infringement and breach of confidentiality" - for more details.

## **VII. IP management and commercialisation**

### **VII.1 Assessing and exploiting IP/IP and entrepreneurial and collaborative partnerships and ventures for the development and commercialisation of innovation (2 hrs)**

#### **1. Assessing IP**

- IP on the balance sheet
- IP valuation

#### **2. Economic exploitation of IP**

- IP transactions
- Licensing/assigning IP
- IP as a financial asset

#### **3. IP and entrepreneurial and collaborative ventures**

- Spin-offs and start-ups
- Collaborative ventures
- Open innovation frameworks and IP
- IP and knowledge/technology transfer involving public and private institutions

## VII.2 IP licensing (with special reference to software licences) (3 hrs)

### 1. Licensing basics

(a) What is a licence?

#### (a) What is a licence?

Business objectives reflected and contractual nature.

(b) What can be licensed?

#### (b) What can be licensed?

Mention technology, trade marks and merchandising, entertainment and publishing, franchising, software.

(c) Licensor and licensee

#### (c) Licensor and licensee

Consider who can enter into a licence agreement/legal capacity.

Examine the case of affiliates in group companies.

(d) Licensing-in/licensing-out

#### (d) Licensing-in/licensing-out

Licensing is a suitable mechanism for transferring technology between licensors (who license out) who want to leverage their technological assets and licensees (who license in) who want to complement their in-house technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

### 3. What purpose do licences serve/application of licences in business

Mention financial and strategic purposes:

- Obtaining revenues
- Gaining access to complementary assets, e.g. through cross-licensing and patent pools (see module 3A)
- Developing efficient partnerships

### 4. The process of negotiation and the elements of the licensing agreement

(a) Preparing to enter an agreement

#### (a) Preparing to enter an agreement

- Identifying and evaluating IP for licensing
- Memorandum of understanding (MOU)/letter of intent
- Confidentiality issues

(b) Overview of the main elements of an agreement

## (b) Overview of the main elements of an agreement

- Parties
- What is being licensed (subject-matter)
- Scope of the licence
- Establishing a field of use
- Exclusive, sole and non-exclusive licences (advantages and disadvantages of exclusivity for the licensor/licensee)
- Territory
- Other issues (sub-licences, arrangements concerning improvements to inventions [for technology licences])
- Economic arrangements (see section VII.2.5)
- Other clauses (representations and warranties, liabilities, termination)

Point out that clauses found to be 'anti-competitive' in terms of EU competition law are not permitted and are deemed to be void.

### See also:

Art. 101 TFEU

## 5. Main economic considerations

(a) Forms of paying for licensed IP

(b) How the value of a royalty is established

### (a) Forms of paying for licensed IP

- Lump sums
- Royalties
  - Royalty basis
  - Royalty rates
  - Commercial objectives and royalty variables
- Combination of lump sums and royalties

Explain the advantages and disadvantages of each.

### (b) How the value of a royalty is established

- Calculation on the basis of profits or sales (define these terms)
- Refer to market practices in specific sectors

## 4. Software licensing

- End-user licences
- Contracts for custom software development
- Software licensing and source codes

## 5. Free and open source licences (FLOSS)

(a) Origin and definitions

(b) Types of FLOSS licences

(c) Business models built on FLOSS

### (a) Origin and definitions

- The GNU project and the Free Software Foundation
- Linux
- The Open Source initiative
- Technologies based on FLOSS

### (b) Types of FLOSS licences

- General Public Licence (GPL)
- Other forms of licence granting the right to copy, modify and redistribute source code (e.g. the Apache License, BSD License, MIT License, Mozilla Public License, etc.)

### (c) Business models built on FLOSS

Give examples of businesses basing revenue on the provision of services and support/companies which combine proprietary models (selling software and OSS models).

Use well-known cases: Novell, Red-Hat, Sun Microsystems, etc.

## 6. Licensing in the ICT sector - strategic issues

(a) Defensive uses

(b) Cross-licensing and patent pools

(c) Licensing and open innovation models

(d) Reasonable and non-discriminatory (RAND) licensing and technology standards

### (a) Defensive uses

- IP taken to prevent operation of other firms
- IP as a defence against attack from other firms

### (b) Cross-licensing and patent pools

- Cross-licensing, patent pools and access to complementary resources and technologies
- Examples of cross-licences in the IT field

For an insight into how cross-licensing has become a common transaction used by right-holders, ask students to search "Microsoft cross-licences" in an internet search engine to see Microsoft's cross-licensing arrangements with companies such as Cadence, Amazon, Lexmark, JVC, Olympus, Intel, Toshiba, etc.

- Examples of patent pools:  
A number of patent pools can be found in the IT sector, perhaps the most well known being the MPEG-2 pool.

The importance of performing "freedom to operate" searches

### **(c) Licensing and open innovation models**

- Concept
- Open vs closed innovation
- Open-innovation intermediaries

### **(d) RAND licensing and technology standards**

Examine how IP protection on standard technologies may affect competition.

What is RAND? Examine sample cases.

Give examples using case studies of the use of IP by ICT companies ([www.ebusiness-watch.org/studies/special\\_topics/2007/documents/Study\\_08-2008\\_IPR.pdf](http://www.ebusiness-watch.org/studies/special_topics/2007/documents/Study_08-2008_IPR.pdf)).

## VIII. Workshop, exercises and case study (4 hrs)

### 1. Overview of common clauses and specific aspects of different licensing arrangements

Use templates or examples of licensing agreements to discuss common clauses and specific issues relating to some or all of the following:

- Technology licences
- Trade mark licences
- Software licences
- Know-how licences

### 2. Workshop and practical exercise

Workshop: Drafting a heads of agreement for a licence involving software.

Practical exercise: Negotiating a licensing agreement.

### 3. Case study on the incorporation of IP into the business strategy of an ICT SME.

Examine best practice for the use of licences in the development and exploitation of technology.

## 4B IP and biotechnology

Contents	Minimum duration (25 hours in total)
I. IPRs in a nutshell	1.5-2 hrs
II. Biotechnology and patents	7 hrs
II.1 Background on biotech and patents	
II.2 Patents and patentability of biotechnological inventions	
II.3 Reading patent documents and searching them for information	
III. Plant variety protection	2 hrs
IV. Exercises	2-4 hrs
V. Enforcement of IP rights	3 hrs
VI. Managing and exploiting biotechnological innovation	7-8 hrs
VI.1 IP planning and management in biotechnological R&D	
VI.2 Commercialising biotechnology IP	
VI.3 Licensing biotechnology innovation	
VII. Workshops and practical exercises	4 hrs

Overview	Learning objectives
<p>Biotech researchers and students at postgraduate level should be familiar with and know how to use IP rights in their field. This includes obtaining and defending IP rights and putting them to work.</p> <p>Topics</p> <ul style="list-style-type: none"> <li>– An overview of IP rights: definition/ justification/types/history</li> <li>– Patents and biotechnology</li> <li>– Sources of patents and organisations</li> <li>– Subject-matter and patentability criteria</li> <li>– How to obtain a patent</li> <li>– Features of a (biotech) patent: title, abstract, description, claims</li> </ul>	<p>On completion of this module students should be familiar with:</p> <ul style="list-style-type: none"> <li>– The different types of IP rights, what they have in common and how they differ</li> <li>– How biotechnology inventions are protected through patent law</li> <li>– The basic requirements and administrative steps necessary to obtain a patent</li> <li>– How to read a patent</li> <li>– The different uses of patent information and how to find it</li> <li>– The nature of plant breeders rights systems and the requirements and scope of PVP in Europe</li> </ul>

- Rights and limitations of the patent holder
- Enforcement of IPRs
- Managing and exploiting biotechnological innovation
- Other IPRs for biotechnology: plant variety protection (PVP)

- How to enforce IP rights
- Why and when they should incorporate IP considerations into research strategies
- How to commercialise IP, including how to use licensing as a tool for exploiting IP, and what structures are used to establish partnerships

Workshops and practical exercises: reading patent documents and using patent information

<b>Target audience</b>	<b>Prior knowledge</b>
Students of biotechnology and related subjects (postgraduate level)	No previous knowledge of IP required, although basic knowledge equivalent to module 1A -"Introduction to IP" - is recommended. A background in biotechnology or related fields (biology, biochemistry, etc.) is mandatory, preferably at postgraduate level.
<b>Teacher profile</b>	<b>Knowledge of this module is recommended/required for</b>
Expert in biotechnology and IP (patents), preferably from industry or a member of a university technology transfer office with IP management and teaching experience	Not applicable
<b>Student assessment</b>	<b>Related modules</b>
Participation and performance in exercises and workshops combined with exams or tests (multiple-choice)	Modules 4A-4D cover most of the aspects relating to the protection, enforcement and commercialisation of IP. They can therefore be offered in conjunction with most of the other modules in the manual or as stand-alone modules.

## **I. IPRs in a nutshell (1.5-2 hrs)**

### **IPRs in a nutshell**

See ancillary module "IPRs in a nutshell".

## II. Biotechnology and patents

### II.1 Background on biotech and patents (1 hr)

#### 1. Definitions of biotechnology

##### 1. Definitions

- Common definition
- Legal definitions
  - Point out that "biotechnology" is not defined in IP laws (but "biological material" is defined -see Art. 2.1.a Biotechnology Directive). Mention the definitions in other laws and treaties (e.g. Convention on Biological Biodiversity).

#### 2. Scope and industrial applications of biotechnological inventions

##### 2. Scope and industrial applications of biotechnological inventions

- The range covers traditional biotechnologies such as isolation, breeding, selection, etc. and modern biotechnology (genomics-related technologies, stem cell technologies, cell and tissue-related applications).
- Industrial applications, e.g. human diagnostics and therapeutics, chemical and pharmaceutical industries, biomass fuel, animal breeding, plant breeding, etc.

#### 3. Patent applications relating to early and modern biotechnological inventions

##### 3. Patent applications relating to early and modern biotechnological inventions

- Patent protection background: early biotechnological developments and early IP protection, e.g. for microorganisms and related processes
- Examples
  - For traditional biotech: Louis Pasteur's "purifying yeast for beer-making" patent (US patent No. 141072 (1873))
  - For modern biotech: gene-splicing techniques, e.g. the Cohen and Boyer patents ('Process for producing biologically functional molecular chimeras' (US Patent No. 4,237,224), granted on 2 December 1980, 'Biologically functional molecular chimeras' (US Patent No. 4,468,464), granted on 28 August 1984, and 'Biologically functional molecular chimeras' (US Patent No. 4,740,470), granted on 26 April 1988).
  - Later: living bacterial cells (see *Diamond vs Chakrabarty*, 447 U.S. 303 (1980))

## II.2 Patents and patentability of biotech inventions (4 hrs)

### 1. Overview of the requirements for obtaining a patent

(a) International standards

#### (a) International standards

Refer to the TRIPS agreement.

(b) European patentability requirements

#### (b) European patentability requirements

See the European Patent Convention and its implementing rules, the EPO's examination guidelines and the Biotech Directive 98/44/EC.

(c) Overview of requirements/patentability hurdles

#### (c) Overview of requirements/patentability hurdles

Explain the different hurdles which must be faced in order to obtain a patent:

- Invention
  - Exclusions and exceptions
- Novelty
- Inventive step
- Industrial application
- Claims and descriptions (clarity, support), enablement or sufficiency of disclosure

Explain patentability requirements in the international and European context (international harmonisation).

#### See also:

Art. 27 TRIPS

Arts. 52, 53, 54, 55, 56, 57, 83 and 84 EPC

### 2. Patentability of biotech inventions (subject-matter)

(a) Patentable biotechnological inventions

#### (a) Patentable biotech inventions

- Biological material (as defined in the Biotechnology Directive) isolated from its natural environment or produced by means of a technical process
- Plants and animals not confined to single plant or animal varieties (see the Novartis/Transgenic plants case - G1/98 OJ 2000, 111)
- Patentability of microorganisms and microbiological processes

(b) Exclusions and exceptions in general

(c) Exclusions and exceptions relevant to biotechnology in particular

#### (b) Exclusions and exceptions in general

- Exclusions set out in Arts. 52 and 53 EPC
- Abstract and "non-technical" inventions

### **(c) Exclusions and exceptions relevant to biotechnology in particular**

- Essentially biological processes for the production of plants and animals
- Public order or morality
- Methods for treatment of the human or animal body by surgery or therapy, and diagnostic methods practised on the human or animal body
- Plant and animal varieties

See the interpretation of the exceptions following the provisions of the Biotechnology Directive included in Rules 26-28 EPC.

Use sample cases to discuss important issues:

- Patentability of living animals, e.g. the "Harvard onco-mouse" patent (European patent No. EP0169672)
- Essentially biological processes  
Discuss referrals G2/07 and G1/08 to the Enlarged Board of Appeal regarding the issue of the degree of human intervention needed for a patent to become available.
- Public order/morality  
Edinburgh stem cell patent (European patent No. EP0695351)  
"Relaxin" patent (European patent No. EP 0112149)

## **3. Novelty**

(a) Basic concepts

(b) Prior art/prior publications/prior use/anticipations

### **(a) Basic concepts**

- Requirement of absolute novelty
- What does "state of the art" mean?
- Relevant point in time for the determination of novelty
- Test: comparison in isolation
- Limited grace period under Art. 55 EPC
- Priority (first to file vs. first to invent)

### **(b) Prior art/prior publications/prior use/anticipations**

Pay special attention to the concept of novelty-breaking publications by the inventor.

Explain why it is important to file first before publishing.

Explain how it is different in the US, where there is a grace period.

## 4. Inventive step

(a) Concept of inventive step

(b) The person skilled in the art

(c) Factors considered in determining inventive step

(d) Discovery and inventive step in biotechnology (discussion)

(e) The rapid pace of technological change and the determination of inventive step in biotechnology

### (a) Concept of inventive step

What is non-obviousness?

### (b) The person skilled in the art

- The person skilled in the art is a legal fiction used as a yardstick to determine inventive step.
- Examine the "skill" of the person skilled in the art in biotechnology ("The 'person skilled in the art' should be presumed to be a skilled practitioner in the relevant field, who is possessed of average knowledge and ability and is aware of what was common general knowledge in the art at the relevant date ... Assessment of whether the solution involves an inventive step must therefore be based on that specialist's knowledge and ability" - Guidelines for Examination in the EPO - status April 2010 - 11.3). In the field of genetic engineering, the case law of the EPO boards of appeal states that his attitude would be conservative and that he would never go "against an established prejudice, nor try to enter unpredictable areas nor take incalculable risks". The case law has also established that he could not be defined as a Nobel Prize winner (T 60/89, OJ 1992, 268). Rather, he is a specialist (or team of specialists) in the relevant field operating at a practical level, who is not expected to solve technical problems through scientific research (T 500/91 - "BIOGEN II").
- "Individual" versus "team" (The Guidelines for Examination in the EPO state that "there may be instances where it is more appropriate to think [about the PSA] in terms of a group of persons, e.g. a research or production team, rather than a single person".) (T 164/92, OJ 5/1995, 305, T 986/96, not published in OJ).

### (c) Factors considered in determining inventive step

Test for inventive activity (problem/solution approach)

Explain the difference between the tests used by examiners for novelty and those used for inventive step.

Mention secondary considerations: producing unexpected results, solving a long-standing problem, etc.

(d) and (e) are suggested topics for discussion.

## 5. Industrial application

- Substances found in nature and industrial application
- Specifications for genes
- Sample case: "Zymogenetics" (T 0898/05)

## 6. Description of the invention

(a) Sufficiency of disclosure (definition)

(b) Biological material and the deposit of microorganisms under the Budapest Treaty

(c) Relationship between description and claims

### (a) Sufficiency of disclosure (definition)

- Give the definition established in Art. 83 EPC (disclosure of the invention should be sufficiently clear and complete for it to be carried out by a person skilled in the art).
- Insufficiency (Guidelines for Examination in the European Patent Office - status April 2010 - 4.11  
[http://www.epo.org/patents/law/legal-texts/html/guix/e/c\\_ii\\_4\\_11.htm](http://www.epo.org/patents/law/legal-texts/html/guix/e/c_ii_4_11.htm))
  - "Unrepeatable" results or results achieved in a totally unreliable way, e.g. in a microbiological process involving mutations, as distinguished from one where repeated success is practically assured.
  - Performance contrary to well-established physical laws, e.g. perpetual motion machine.

### (b) Biological material and the deposit of microorganisms under the Budapest Treaty

Explain the implementing rule in the EPC.

### (c) Relationship between description and claims

Note that in Europe there is no "best mode" requirement, unlike in the US, where inventors are obliged to "set forth the best mode contemplated by the inventor of carrying out his invention" (35 U.S.C § 112).

## 7. Scope of protection/scope of the claims

(a) Derived material

(b) Processes enabling biological material to be produced

(c) Extension of protection on genetic information to derived material in which the information is contained and performs its function

### (a) Derived material

Point out that the protection of biological material extends to material derived through propagation.

### (b) Processes enabling biological material to be produced

Explain that protection of a process enabling biological material to be produced extends to the biological material obtained through that process.

### (c) Extension of protection of genetic information to derived material in which the information is contained and performs its function

Explain that the protection available for DNA is not absolute since it does not extend to materials incorporating DNA where the DNA is not able to "perform its function" (e.g. a gene conferring herbicide resistance to soy plants, found on soy meal). See the recent Monsanto case decided by the ECJ (Monsanto vs Cefetra, C-428/08).

#### See also:

Arts. 8-9 Biotechnology Directive, Directive 98/44/EC of 6 July 1998

## 8. Obtaining patent protection (procedures)

(a) Territoriality of IPR/alternatives used to obtain protection in other countries

(b) The role of the patent office/patent agent

(c) Milestone events in the grant procedure

(d) Duration of patent rights

### (a) Territoriality of IPR/alternatives used to obtain protection in other countries

- Territoriality of IPRs
- The concept of "priority"
- Available "routes": national, European, PCT and EURO-PCT

### (b) The role of the patent office/patent agent

Describe what your national PTO does. Explain the role of the patent agent, highlighting the degree of specialisation needed to draft a patent application.

### (c) Milestone events in the grant procedure

- Filing the application. Explain that the 20-year countdown starts at this point. See section II.2 for a details.
- Publication. Explain when it occurs, what effects it has (e.g. disclosure effects affecting prior art) and what the published application looks like.
- Grant
- Duration from filing to grant
- Possible extensions:
  - Supplementary protection certificates (different from actual patent extensions)
- Validity (opposition and judicial avenues to contest the PTO's decisions)
- Appeals (at the EPO and national offices). Explain the difference between the technical boards of appeal and the Enlarged Board of Appeal.

Mention the search report (a preliminary opinion on patentability) and substantive examination.

## 9. Ethical issues

Look in particular at ethical and religious concerns about patenting life forms.

## II.3 Reading patent documents and searching them for information (2 hrs)

### 1. Introduction to the content and structure of patent documents

Refer to the legal and technical information, content and structure.

### 2. Structure of patent documents

Show examples of different patent documents to illustrate the different elements and the degree of standardisation in the way patent documents are organised.

(a) Mandatory elements (title page, description, claims and drawings)

Explain that the claims are the most important part since they define the scope of the invention.

(b) "Size" of the patent document

Briefly explain the usefulness of these elements and of patent information for research and business purposes.

Refer to module 2E - "Using patent information" - for more details.

### 3. What are the most important elements of a patent document and where can they be found?

- Title page (includes title, bibliographic data, abstract and drawing)
- INID codes and bibliographic data
- Publication number
- Classification - IPC (check categories on WIPO website)
- Priority
- Description
- Claims
- Drawings
- Inventor/applicant

### 4. The information contained in patent documents

#### (a) What is published and when?

(a) What is published and when?

- Patent applications, patent specifications and utility models (gazettes)
- Eighteen-month term
- The examination document

(b) Technical and legal nature of patent documents

#### (b) Technical and legal nature of patent documents

(c) Patent classification

- Disclosure of technical knowledge
- Legal information (claims, bibliographic data)
- Patent language as the intersection of legal and technical requirements

(d) Patent families

### (c) Patent classification

- Purpose
- Utility
- IPC sections and divisions
- ECLA classification

### (d) Patent families

- Definition
- How knowledge about patent families can be used to solve language translation issues

Pay particular attention to:

- Disclosure and issues specific to biotech inventions, e.g. requirements of European patent applications relating to nucleotide and amino acid sequences and inclusion of gene sequence listings

#### **See also:**

Rule 27a EPC

Claims, scope of protection and patent infringement

## **5. Patent searches**

(a) Introduction to patent searches for technical, business and legal purposes

(b) Technological applications of patent searches

(c) Business applications of patent searches

(d) Legal applications

### (a) Introduction to patent searches for technical, business and legal purposes

- Public versus commercial databases
- Search strategies/key words

### (b) Technological applications of patent searches

- Technology searches and patentability searches (applications)
- Patent family searches (and applications including search for translations of patent)
- How to carry out technology searches (search criteria, how to use classification symbols, key words)
- Where to search (Espacenet, national patent office database)
- Examples

### **(c) Business applications of patent searches**

- Getting information on competitors (patenting activity, strategic technologies (what they are protecting, clusters), technological interests, evolution of their patent trends)
- Interpreting data to get an overview of the technology markets, performing statistical analyses of patent information, benchmarking by analysing innovative firms in a market and ranking them, interpreting competitors' patent strategies, time trends and geographical areas where patenting is most frequent, finding geographical trends, searching for partners for licensing/collaboration, e.g. for complementary technologies
- Practical search tips
- Databases
- Free services (e.g. Espacenet) and commercial services
- Examples

### **(d) Legal applications**

- Legal status of patents (is a patent in force?)/warnings on unavailability of information in certain countries
- Freedom-to-operate searches: searching (including patent family searches) to find areas to operate without risk of liability, i.e. outside the protected scope
- Finding conflicting patents
- Opposition/nullity searches (searches for prior art to "knock off" a rival patent)
- Examples from the EPO's Online Register

### III. Plant variety protection (2 hrs)

#### 1. Plant breeding and plant variety protection (PVP)

(a) Plant breeding and plant varieties

(b) Why have plant variety protection?

##### (a) Plant breeding

- Definition
- Techniques (traditional vs modern)
- Definition of plant varieties

##### (b) Why have PVP?

- Public interest in new plant varieties (growing world population needs food)
- PVP as an incentive for plant breeding (to foster investments in this area)
- Explain why patents are not available for plant varieties. Explore the different arguments: product-of-nature argument/living organism argument/lack of novelty argument/lack of description argument.

#### 2. Alternatives for protecting plant varieties through IP laws

(a) International framework for the protection of plant varieties

(b) Alternative IP systems for the legal protection of plant varieties

##### (a) International framework for the protection of plant varieties

- Obligation to provide protection for plant varieties in TRIPS
- UPOV convention

##### (b) Alternative IP systems for the legal protection of plant varieties

- Patents (mention the availability of alternatives in the US - utility patents, plant patents - while in the EU plant varieties are expressly excluded from patent protection)
- Trade secrets/unfair competition
- Sui generis plant variety rights (UPOV)

### 3. Plant variety protection in the EU

(a) A sui generis system (Community Plant Variety Regulation)

(b) Conditions for protection

(c) Scope of protection

(d) Duration

(e) Obtaining protection

(f) Community plant variety protection and patents

#### (a) A sui generis system (Community Plant Variety Regulation)

Joined UPOV in 2005

#### (b) Conditions for protection

PV must be

- Distinct
- Uniform
- Stable
  - DUS criteria (point out the need to perform field tests in order to meet them)
- Novel (point out the differences vis-à-vis the concept of novelty under patent law)

#### (c) Scope of protection

- Definition: exclusive rights over specific acts in relation to an eligible new plant variety. Authorisation is required for the following acts:
  - Production or reproduction
  - Conditioning for the purpose of propagation
  - Offering for sale, selling or otherwise marketing
  - Exporting or importing (from the EU)
  - Stocking for any of these purposes
- Uniform Community protection

#### (d) Duration

Under UPOV, the breeder's right must be granted for a period of not less than 20 years from the date of grant or, in the case of trees and vines, for not less than 25 years. In the case of Community Plant Variety Protection, once granted, the maximum duration of protection is 25 years, or 30 years in the case of vine and tree varieties. These periods may be extended by legislation for an additional five-year period for specific genera or species. The duration of the right in relation to potato varieties has been extended to 30 years.

#### (e) Obtaining protection

- The Community Plant Variety Office
- Alternative national protection

**(f) CPVP and patents**

- The ban on patenting plant varieties as such in the EPC
- Prohibition on cumulating patent protection and PVP stipulated in the CPVR

**See also:**

- Community Plant Variety Regulation; EPC

#### IV. Exercises (2-4 hrs one/two options)

**Exercise 1: Carry out a validity assessment of a biotechnological patent**

Read an examination report and, using it as a basis, substantiate the arguments for a patent opposition to be filed with the EPO.

**Exercise 2: Carry out patent searches**

Carry out assisted patent searches in Espacenet.

**Exercise 3: Perform a validity assessment on a plant variety protected under the Community plant variety protection system**

## V. Enforcement of IP rights (3 hrs)

### 1. Defending intellectual property rights (IPRs)

(a) Conflicts over IPRs are frequent

(b) The importance of enforcing IPRs

#### (a) Conflicts over IPRs are frequent

Point out the characteristics which make IPRs particularly subject to conflict, including the value of IP, the intangible, non-excludable nature of intellectual creations, economic incentives for competitors to copy or imitate, technological races and trends conducive to overlapping innovation.

Provide examples from the media relating to different forms of IP, including technology (inventions), content, art, trade marks, designs and trade secrets. Mention that conflicts may occur among people or companies with different types of relationship (competitors, partners/collaborators, employees/employers).

#### (b) The importance of enforcing IPRs

– Protection vs enforcement of IPRs:

The power of IPRs to prevent others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right-holders must take a proactive role in the defence of their IP.

This topic may be explained with the aid of a timeline showing the different phases of the product cycle, including the point at which it is necessary to protect IPRs and when enforcement becomes necessary (see section 5 of the ancillary module on IPRs in a nutshell).

### 2. What constitutes an infringement?

Explain which acts normally constitute an infringement of IPRs (use, making, selling, importing, etc.).

Also, explain that the laws relating to each category of IP define the nature of the exclusive right in terms of content and business activity. For example, an invention subject to a patent is defined within the claims, and unauthorised use, making or selling of the invention within that scope constitutes an infringement.

In another example, a person who copies a copyrighted image for a commercial purpose, or any person who distributes the copies, infringes copyright in that image and is liable for that act.

### 3. Options for enforcement (a) Action before the PTO (within a certain time period)

(a) Action before the PTO Opposition to a patent, trade mark or design application

(b) Litigation (b) Litigation

(c) Alternatives Differentiate between civil and criminal (see section V.5).

#### (c) Complementary actions and alternatives to litigation

- Customs actions
- Alternative dispute resolution

(See V.6 and V.7)

### 4. Remedies following successful litigation

(a) Injunctions Examine the available remedies using the Enforcement Directive as a guide [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of Intellectual Property Rights (OJ L 157, 30.4.2004)].

(b) Destruction and delivery-up (a) to (e)

(c) Damages Please see module 3D, section 2 for suggestions and more detail of the topics to be dealt with in this section.

(d) Disclosure of information Also, for (c)

(e) Publication of judgment Highlight the different methods of calculating damages, including on the basis of lost profits, unfair profits made by the infringer and, where appropriate, elements other than economic factors (moral prejudice caused to the right-holder by the infringement).

### 5. Criminal enforcement

(a) Intention Explain that criminal action is preponderantly used in cases of trade mark and copyright infringement.

(b) Commercial scale Point out that penalties (fines, imprisonment) do not provide for recovery for damages. This would require combining criminal action with civil action.

(c) Public prosecution Discuss anti-counterfeit actions and measures in the proposed directive on criminal measures aimed at ensuring the enforcement of intellectual property rights.

(d) Penalties

#### See also:

Proposal for a European Parliament and Council Directive on criminal measures aimed at ensuring the enforcement of intellectual property rights {SEC(2005)848}. Available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005PC0276\(01\):EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005PC0276(01):EN:NOT)

## 6. Discussion on the (proposed) provisions in the Anti-Counterfeit Trade Agreement (ACTA) and their effects on current standards for enforcement of IP

Lead a discussion on the effects of the ACTA (requires previous preparation by students).

### See also:

European Commission Trade website at <http://ec.europa.eu/trade/creating-opportunities/trade-topics/intellectual-property/anti-counterfeiting/>

## 7. Customs action

Commission Regulation (EC) No. 1891/2004 of 21 October 2004 lays down provisions for the implementation of Council Regulation (EC) No. 1383/2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights.

Discuss the purpose of customs measures

**See** module 2G - "Defending IP assets: IP infringement and breach of confidentiality" - for more details.

## 8. Other issues

(a) Costs of enforcement

### (a) Costs of enforcement

Financial, time, other costs ("emotional" costs) (see also module 2G, "Defending IP assets")

(b) Alternatives to litigation/alternative dispute resolution (ADR) procedures

### (b) Alternatives to litigation/ADR procedures

- Negotiation
- Mediation
- Arbitration
- Main centres of mediation and arbitration

**See** module 2G - "Defending IP assets: IP infringement and breach of confidentiality" - for more details.

## VI. Managing and exploiting biotechnological innovation

### VI.1 IP planning and management in biotechnological R&D (2-3 hrs)

#### 1. Putting IP to work (an overview)

(a) Reasons for protecting innovation

(b) IP as a source of revenue

(c) IP as a strategic tool

(d) Using IP to access complementary assets

#### (a) Reasons for protecting innovation

Recap from section I (IP in a nutshell) adding the perspective of IP as a valuable and essential business asset worth protecting.

#### (b) IP as a source of revenue

- IP as a financial asset
- Commercialisation of IP (licensing, selling)

#### (c) IP as a strategic tool (see OECD, 2006: 7-10)

- As a defensive legal weapon (defensive patenting)
- Freedom to operate
- Cross-licensing and patent pools (provide examples of patent pools in the pharmaceutical and agricultural biotechnology fields, e.g. WHO and SARS patent pool, Golden Rice patent pool)
- Enforcing IP

#### (d) Using IP to access complementary assets

- Modern innovation models and biotechnology (open innovation)

#### 2. Public and private IP management

Commercialisation and exploitation are matters which normally arise under private models of developing and marketing products or processes. When related to IP, they suggest that IP rights are being used in a market environment.

In Europe, however, much research activity is carried out under the auspices of public institutions. IPRs are important to public sector institutions, to promote the development and dissemination of research and guarantee its financial viability. Recent developments have shown that the boundaries between the commercial and public sector models are becoming blurred. This calls for special attention to be paid to management issues, as the management of assets developed wholly or in part using public resources often carries inherent obligations.

Entrepreneurial universities

### 3. Research and IP

(a) The researcher's view of IP

#### (a) The researcher's view of IP

Explain that the traditional view is of the patent process as an expensive burden diverting attention from core research.

(b) The importance of managing IP and R&D

The main aim of academics is to publish their research results, which often interferes with the process of protecting these results by patents (see section on novelty, II.1.4).

#### (b) The importance of managing IP and R&D

Point out that IP management in research aims to strike the right balance between maintaining control of IP and disseminating the benefits of research, while getting access to the resources needed to bring inventions to the public.

### 4. Incorporating IP considerations into research strategy

(a) Patent information and planning directions for research

#### (a) Patent information and planning directions for research

Underline the importance of IP information.

Highlight the importance of contact with technology transfer units or specialists.

Set aims to avoid duplication of research.

(b) Obtaining/choosing IP protection

#### (b) Obtaining/choosing IP protection

Include a special section on patenting and publishing, as well as considerations on how to treat knowledge at an early stage (patents or trade secrets?).

(c) Proof of invention/how to keep lab notes

#### (c) Proof of invention/how to keep lab notes

Explain that keeping lab notes is an important consideration because of the "first to invent" rule in the US. From a European point of view, lab notes help the patent agent to draft the patent application.

(d) Freedom to operate (FTO)

#### (d) Freedom to operate (FTO)

- What is FTO?
- How to determine FTO?
- FTO and patents/FTO and other IP rights (PVP, trade marks, etc.)

(e) Using complementary technology in research (options for dealing with existing patents)

#### (e) Using complementary technology in research (options for dealing with existing patents)

- Research exceptions
- Licensing-in/licensing-out at the research phase
- Inventing around

## 5. IP in agreements and collaborations

- (a) Research-related agreements
- (b) Sponsorship agreements
- (c) Collaboration agreements
- (d) Licensing
- (e) Assignments

### (a) Research-related agreements

Include reference to confidentiality clauses and researcher contracts.

### (b) Sponsorship agreements

One important issue relates to the research results to be obtained, through R&D, in particular regarding the ownership of the resulting IP assets.

### (c) Collaboration agreements

See, in particular, material transfer agreements (MTAs).

### (d) and (e)

Explain how IP licensing and assignments can be important tools for enhancing collaboration with partners.

## 6(a) Case study: Main elements of a research agreement

Follow a checklist of the clauses to be included in a research agreement and briefly explain the importance of each clause.

## 6(b) Exercise: Negotiating a research agreement

Relates to the case study, optional depending on the time available.

## 6(c) Examples/templates

If time allows, examine some examples/model templates of different agreements.

## VI.2 Commercialising biotechnology IP (2 hrs)

### 1. Investing in IP/IP-generated costs

Explain the global costs of obtaining, maintaining and defending a patent. What is the equivalent cost for trade marks?

### 2. Methods of commercialising and exploiting IP

Describe the main forms of transaction and co-operation, including partnerships and business set-ups, by which protected research results may be exploited.

(a) In-house development and commercialisation

(b) Licensing

(c) Start-ups and spin-offs

(d) Forming joint ventures with the purpose of exploiting IP

(e) Assigning IP (with and without the company)

### 3. Protecting confidential information/non-disclosure agreements

- Obligations of employees
- Non-disclosure agreements
- Tips

## VI.3 Licensing biotechnology innovation (3 hrs)

### 1. Licensing basics

(a) What is a licence?

#### (a) What is a licence?

Point out that licences pursue business objectives and that they are of a contractual nature.

(b) What can be licensed

#### (b) What can be licensed

- Technology
- Trade marks and merchandising
- Entertainment and publishing licensing
- Franchising, software (end-user licences)

(c) Licensing-in/licensing-out

#### (c) Licensing-in/licensing-out

Licensing is a suitable mechanism for transferring technology between licensors (who license out) who want to leverage their technological assets and licensees (who license in) who want to complement their in-house technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

Illustrate using real-life cases and agreements.

Stress the important role of licensing-in/out technology in the early phases of R&D within the framework of new and open development models.

(d) Other forms of licensing: compulsory licensing

#### (d) Other forms of licensing: compulsory licensing

Explain that compulsory licensing is a form of countermeasure against potential abuse of the patent system (see module 3A, section IV.2).

### 2. The advantages of licences from the business point of view

- To obtain revenue
- To provide access to complementary assets (cross-licensing)
- To develop efficient partnerships

### **3. The process of negotiation and the elements of the licensing agreement**

(a) Preparing to enter an agreement

(b) An overview of the main elements of the licensing agreement

#### **(a) Preparing to enter an agreement**

- Identifying and evaluating IP for licensing
- Due diligence and patent information
- Establishing value (IP valuation)
- Relationship development
- Memorandum of understanding/letter of intent
- Confidentiality agreements and clauses

#### **(b) An overview of the main elements of the licensing agreement**

- Parties
- What is being licensed (subject-matter)
- Confidentiality clauses
- Scope of the licence
- Establishing a field of use
- Exclusive, sole and non-exclusive licences
- Advantages and disadvantages of exclusivity for the licensor/licensee
- Advantages and disadvantages of non-exclusive licences for the licensor/licensee
- Competition law issues for technology licences in the EU
- Territory
- Sub-licences; improvements (for technology licences)
- Economic arrangements (royalties)
- Other clauses (representations and warranties, liabilities, termination)

Note: There is no need to study all the elements in detail. Highlight the most important clauses that you feel should be included in the agreement.

#### 4. Main economic considerations

(a) Ways of paying for licensed IP (royalties and lump sums)

(b) Calculating the value of royalties

(c) Post-management of licensing agreements (optional)

**(a) Ways of paying for licensed IP (royalties and lump sums)**

- Lump sums
- Royalties
  - Royalty basis
  - Royalty rates
  - Commercial objectives and royalty variables

**(b) Calculating the value of royalties**

See the valuation methods in module 2F, "IP valuation".

**(c) Post-management of licensing agreements (optional)**

For details of possible topics to be included in this section see module 2c, section VI.

## VII. Workshops and exercises (2-4 hrs, one or two options)

### Workshop 1: How to draft a heads of agreement for a licence

#### Exercise 1: Negotiating a licensing agreement

Workshop: Guide students through the drafting of a heads of agreement, based on a practical case. Provide information about the characteristics of the firms involved, the technology or other innovation in question, the market values of the technology or IP to be licensed, market conditions and competitors (including if there are other licensees). The exercise should allow students to anticipate and weigh up the various elements that need to be taken into consideration in the licensing process.

Exercise: Hold moot negotiations on how to conclude a licensing agreement.

### Workshop 2: How to structure an investment vehicle: the joint venture

#### Exercise 2: Drafting a heads of agreement for a joint venture

Divide the workshop into two parts. In the first part, introduce students to the main characteristics of joint ventures, including the issues to be addressed:

- Legal issues: Discuss which legal structures are most/least advantageous.
- Issues relating to share-holder agreements aimed at the exploitation of IP (e.g. as an equity investment vehicle)
- Allocation of tradable shares or units
- IP ownership issues: Resolve issues relating to ownership of the IP by the entity (trust or company) which receives the capital investment
- Forms: Private companies, unit trusts (in UK), etc.
- Functioning (share-holder structures, licensing agreements for exploitation of IP, etc.)
- Forming a joint venture
  - Scope of the venture
  - Ensuring and defining contributions
  - Ensuring proper administration
  - Assignment and licensing of IPRs
  - Exit mechanisms
  - Tax issues
- Restrictions upon termination

The second part of the exercise consists of drafting the heads of agreement of a joint venture including one or more investors. The exercise should allow students to apply what they learnt in the first section.



# 4C IP and the creative industries

Contents	Minimum duration (25 hours in total)
I. Introduction to IP and the creative industries	2.5-3 hrs
I.1. The creative industries: scope of activity, organisation and economic importance	
I.2. IPRs in a nutshell	
II. Copyright and the creative industries	8 hrs
II.1. Copyright, copyright works and creators	
II.2. Copyright: what does it protect and for how long?	
III. "Not just copyright": other forms of protecting creativity through IP	3 hrs
III.1 Why people in creative and arts-related businesses need to know about other forms of IP	
III.2 Design protection	
III.3 Trade mark protection	
III.4. Trade secrets and confidential Information	
IV. Defending IP rights (enforcement)	3 hrs
V. Managing and exploiting creative works	6 hrs
V.1 Commercialisation of IP	
V.2 Licensing	
VI. Workshop and practical exercises	4 hrs

<p><b>Overview</b></p>	<p><b>Learning objectives</b></p>
<p>In today's economy, the creative industries such as film, music, publishing, video games and other multi-media and digital technologies are enormously important.</p> <p>This module looks at how these industries are organised, the impact they have on the global economy, and the significance for them of intellectual property, in particular copyright, arguably the most important economic asset of this sector.</p> <p>Topics include:</p> <ul style="list-style-type: none"> <li>- The organisation and economic importance of the creative industries and the importance of IPRs to these industries</li> <li>- IP rights, including copyright and the challenges relating to protecting creative content online</li> <li>- The importance of IPR enforcement and urgent issues related to dealing with criminal infringement of copyright and other IPRs</li> <li>- Theory and practice of IP exploitation, in particular contracts in the different sectors, as well as recent legal developments in the protection of digital content and new licensing structures in the online environment</li> </ul>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>- State why copyright is a business asset the exploitation of which depends greatly on the legal protection afforded to it</li> <li>- Identify the rights available to authors, artists and impresarios in the different creative industries and understand the relationship between copyright and other rights</li> <li>- Identify the aspects of music, film, literary creation and so on that can be protected and the form of IPR (copyright, designs, trade marks) applicable in each case</li> <li>- Obtain IP protection and defend IPRs, including against piracy and counterfeiting</li> <li>- Clear copyright and other IPRs before using or exploiting other works. This includes understanding when authorisation is necessary and where copyright does not apply</li> <li>- Extract maximum value from IP and understand the main legal mechanisms (contracts).</li> </ul>
<p><b>Target audience</b></p>	<p><b>Prior knowledge</b></p>
<p>Students of film and the arts, music, editing and design, as well as law students with an interest in copyright and media</p>	<p>Previous knowledge of IP is not required, but a basic knowledge equivalent to modules 1A or 1B is recommended</p>
<p><b>Teacher profile</b></p>	<p><b>Knowledge of this module is recommended/required for</b></p>
<p>Lecturer in copyright and media law, assisted by visiting speakers from the creative industries</p>	<p>Not applicable</p>
<p><b>Student assessment</b></p>	<p><b>Related modules</b></p>
<p>Participation and performance in exercises and workshops combined with intermediate exams/tests (multiple-choice)</p>	<p>Module 4C covers many of the aspects relating to the protection, defence and exploitation of IP rights contained in the other modules</p>

## I. Introduction to IP and the creative industries (1.5-2 hrs)

### I.1 The creative industries: scope of activity, organisation and economic importance (1 hr)

#### 1. The creative industries: scope of activity/organisation/structure

(a) Scope of activity/industries concerned

(b) Organisation and structure

#### (a) Scope of activity/industries concerned

The scope of activity includes book publishing, music, film and multi-media.

Other definitions could include handicrafts, fashion, etc. These are not addressed here specifically, but the contents of the module may be of relevance (see module 4D for details of IP for designers).

#### (b) Organisation and structure

- Publishing industry
- Music industry
- Film industry
- Multi-media (video game industry)

#### 2. Strategic and economic importance of the creative industries

(a) The economic importance of IP produced by the creative industries

(b) Current socio-economic and technological trends/the phenomenon of technological and content convergence

#### (a) The economic importance of IP produced by the creative industries

Include current economic data, e.g. relative importance in terms of GDP/ employment/trade (through indicators of trade in IPR-sensitive products, i.e. CDs, DVDs, reproduction equipment, etc. and other indicators reflecting the importance and value of copyright and IP produced by this sector).

Point out possible sources, including WIPO, UNESCO, EU, local authorities (ministries of culture and arts).

#### (b) Current socio-economic and technological trends/the phenomenon of technological and content convergence

Describe the impact of technological developments on the media and on the exploitation of copyright of music, film and publishing.

Introduce the concept of convergence ("The flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want" - Jenkins, 2007: 1). This may be done by including the topic in a lecture or by directed reading.

## **I.2 IPRs in a nutshell (1.5-2 hrs)**

### **IPRs in a nutshell**

See ancillary module "IPRs in a nutshell".

## II. Copyright and the creative industries (4-8 hrs)

### II.1 Copyright, copyright works and creators (1 hr)

#### 1. What is copyright?

(a) Approaches to copyright/copyright and authors' rights

#### (a) Approaches to copyright/copyright and authors' rights

Talk about the conceptual differences, historical origin and scope.

(b) Subsistence of copyright

#### (b) Subsistence of copyright

Refer to originality as a requirement for copyright. Show students simple examples of "works" (a novel, a phone-book) to introduce them to the concept of originality.

(c) Copyright and neighbouring rights

#### (c) Copyright and neighbouring rights

Differentiate from "copyright" (protecting authors): performers, phonogram producers, broadcasting organisations, film producers.

(d) Copyright in Europe/partial harmonisation

Use an example (or ask the students to provide an example) highlighting the rights to be found to subsist, e.g. sound recording authors (composers, lyricists)/performers/phonogram producers.

Mention other rights which are close to copyright, e.g. databases which do not meet the criterion of originality, designs, semiconductor designs.

#### (d) Copyright in Europe/partial harmonisation

Mention sources of EU competence/harmonised vs non-harmonised terrain.

#### 2. Copyrighted works

(a) What can be copyrighted?

#### (a) What can be copyrighted?

Original expressions of a creative nature (not ideas, facts or information)

(b) Types of work protected

Contrast with other concepts or doctrines ("sweat of brow" ) and note that different standards of originality are required, depending on the type of work and the laws of each country.

#### (b) Types of work protected

Artistic works, literary works, dramatic works, musical works, but also...

– Sound recordings, films, broadcasts, published editions and ...

– Computer programs (protected as literary works)

– Databases (meeting the originality requirement)

– Multimedia works (different kinds of works within/protection for original aspects of the compositions or compilations)

### 3. Authorship

(a) Authorship

(b) Authors/co-authors

(c) First ownership of copyright

(d) Employers and employees

#### (a) Authorship

Talk about authors, non-transferable moral rights, economic rights and ownership.

#### (b) Authors/co-authors

- Joint authorship
- Collective authorship
  - The case of authorship in derivative works requires special attention for its importance in the creative industries (musical arrangements, translation, motion picture adaptations, original aspects of the derivative work).
- Collaborative authorship
- The difference between collective and collaborative authorship

#### (c) First ownership of copyright

- Differences between EU and US

#### (d) Employers and employees

- Copyright under an employment relationship
- Commissioned works

## II.2 Copyright: what does it protect and for how long (4 hrs)

### 1. What rights does the copyright holder have?

(a) Economic rights

(b) Moral rights

(c) Neighbouring rights

#### (a) Economic rights

- Reproduction/distribution (including rental and lending)
- Communication and making available
- Transformation, translation, adaptation

#### (b) Moral rights

- Attribution: right to be recognised as author, needs to be asserted
- Integrity: right to object to derogatory treatment of the work (refusal to supply the original, correction or withdrawal after publication, completion of a work as designed by the author, prevention of destruction of the work, etc.)

#### (c) Neighbouring rights

- Relation to authors' rights
- Performers' rights (includes rental in EU)
  - e.g. broadcasting rights, fixation rights, reproduction rights, rental rights, making available to the public (internet)
- Phonogram producers' rights
  - e.g. music publishing rights, public performance rights, mechanical rights, synchronisation rights
- Broadcasting organisation rights
  - Rebroadcasting
  - Recording
  - Reproduction of recordings or broadcasts
  - Public performance
- Film producers' rights
  - Producer's rights to the master copy
  - Reproduction, communication rights

## 2. Obtaining copyright protection

- (a) Absence of formalities
- (b) Duration of the rights
- (c) Works in the public domain
- (d) Orphan works
- (e) Obtaining international protection

### (a) Absence of formalities

Automatic protection for original works from the moment of creation

Explain briefly the role of copyright registers. Point out that the purpose of depositing works is to ascertain rights and create a presumption of authorship in case of dispute, but that such registration has no immediate legal effect.

### (b) Duration of the rights

- Literary, musical, visual
- Anonymous works
- Films
- Photographs
- Neighbouring rights

### (c) Works in the public domain

Define "public domain" and the type of works comprised.

### (d) Orphan works

Describe the problems arising from the impossibility of contacting the author or owner for authorisation.

### (e) Obtaining international protection

Give a brief outline of the main features of the Berne Convention, TRIPS, WIPO Copyright Treaties, Universal Copyright Convention.

Refer to the problem of bilateral treaties.

#### **See also:**

Berne Convention, TRIPS, WIPO Copyright Treaties, Universal Copyright Convention

## 3. Copyright infringement

- (a) Reproduction rights/primary and secondary infringements
- (b) Communication rights/primary and secondary infringements
- (c) Works in digital format made available on the internet

Refer to "substantial taking" (how much can you copy without infringing - a question frequently asked by students).

### (a) Reproduction rights

- Primary infringements:  
copying, issuing copies, rental and lending
- Secondary infringements:  
dealing with copies

## **(b) Communication rights/primary and secondary infringements**

- Primary infringements:  
communication to the public (performances, broadcasting through different media, including the internet)
- Secondary infringements:  
providing means for communication to take place (premises, apparatus, etc.).

## **(c) Works in digital format made available on the internet**

Uploading vs downloading as infringing acts

## **4. Limitations of copyright/allowed uses of copyrighted works**

(a) Independent (original) works

(b) Non-substantial takings

(c) Ideas are not protected, just the expression

(d) Exceptions

(e) Restrictive interpretation of exceptions and limitations

(f) Fair compensation/levies

(g) Technological protection measures

### **(a) Independent (original) works**

Claiming the originality of the work alleged to be infringing.

### **(b) Non-substantial takings**

The determination of whether or not there is an infringement will depend on the question of whether the "taking" was important enough or substantial. Remind students that copyright protects expression, and not ideas, and give them some examples. Point out, however, that there are no uniform criteria for the whole of the EU, and that national laws and jurisprudence should be consulted.

### **(c) Ideas not protected, just the expression**

(See above)

### **(d) Exceptions**

For example, research and private study, citation, reporting current events

### **(e) Restrictive interpretation of exceptions and limitations**

Limitations should be interpreted in accordance with the Berne Convention three-step test (i.e. applied in special cases + not in conflict with the normal exploitation of the work + without unreasonable prejudice to the interests of the right-holder).

### **(f) Fair compensation/levies**

The system of levies vs Digital Rights Management

## (g) Technological protection measures

Mention the balance between technological protection measures and limitations (of special interest to the music and film industries) - more details further on.

### See also:

Art. 5 Information Society Directive

## 5. Protecting computer programs and databases

(a) Computer programs and copyright protection

(b) Infringement of copyright over computer programs

(c) Protection of databases

### (a) Computer programs and copyright protection

- Scope: protects the expression of a program (the source code).
- Requirement of originality: generic codes do not receive protection, higher level of originality required ("the author's own creation").
- Underlying "ideas" (which are often the functional aspects of the program) are not protected. Relate this point to patent protection (See also module 4A).
- Authorship (ownership): programmer (original author)/employers and employees.

### (b) Infringement of copyright over computer programs

- Copies (permanent or temporary), e.g. for websites, multimedia (copying the HTML, JavaScript or other code of a page)
- Any form of distribution
- Modifications of the program (requiring copies)
- Allowed uses: adapting the program for its intended purpose, making back-up copies, the decompilation of the program (by a licensee) with the aim of achieving interoperability

### (c) Protection of databases

Provide a short overview/highlight applications to multimedia works.

- Copyright protection
  - Available for original selection and arrangement of contents - limited protection
  - Outline core characteristics where different from general copyright regime
- Sui generis protection
  - Available for substantial investment against substantial taking
  - Concept of substantial investment
  - Outline core characteristics (e.g. duration)

### See also:

Software Directive, Database Directive

### III. "Not just copyright": other forms of protecting creativity through IP (3 hrs)

#### III.1 Why people in creative and arts-related businesses need to know about other forms of IP

##### 1. Why do people in creative and arts-related businesses need to know about other forms of IP?

(a) To support business management needs

(b) To enhance the commercialisation of art and products

(c) To complement copyright protection

##### (a) To support business management needs

- To avoid loss of investment in valuable creativity and intellectual capital
- To reduce the risk of using other people's rights (clearance of IP)

##### (b) To enhance the commercialisation of art and products

- Product presentation
- Strengthening market position (e.g. names of music bands)
- Facilitating secondary exploitation: "merchandising" (e.g. in the music and film industry)
- Example: the group Metallica, who are proactive enforcers of IPRs, starting with the copyright on their songs, and of the Metallica brand.

##### (c) To complement copyright protection

Modern creative trends (e.g. "Convergence" see section I.1.2) and the growing complexity of creative products mean IP must be seen in much wider terms, involving different forms of protection as the products reach the market.

## III.2 Design protection

### 1. What is a design?

(a) The nature and function of design protection

(b) How are design rights obtained?

(c) What rights does the right-holder have, where are they valid and for how long?

(d) Overlaps with copyright and trade mark law

#### (a) The nature and function of design protection

- Designs enhance the attractiveness and value of products.
- They are not related to technical functionality //contrast with utility models and patents.
- They are not legally related to the concept of "distinctiveness", but they are important in enhancing corporate image/brand equity//contrast with trade marks.

#### (b) How are design rights obtained?

- Registered and unregistered (Community) designs
- National and Community-wide protection

#### (c) What rights does the right-holder have, where are they valid and for how long?

- Scope of registered and unregistered designs
- Duration of registered and unregistered designs
- Renewal (registered designs)

#### (d) Overlaps with copyright law

Explain the concept of accumulation of copyright and design IP protection.

#### **See also:**

Module 4D, "IP for designers"

Community Designs Regulation

Designs Directive

### III.3 Trade mark protection

#### 1. Trade marks

(a) What is a trade mark?

**(a) What is a trade mark?**

Explain the function of distinctive signs. Explain the basic rule that a trade mark must provide distinctiveness to the product or service it refers to.

(b) Signs that serve as trade marks

**(b) Signs that serve as trade marks**

- Personal names, designs, letters, numerals, the shape of goods or of their packaging
- Graphic representations

(c) Signs that may not become trade marks (absolute and relative refusal)

**(c) Signs that may not become trade marks (absolute and relative grounds of refusal)**

- Absolute grounds of refusal
  - No protection is offered for generic or descriptive terms.
  - Provide examples of generic and descriptive terms.
  - For the sake of comparison, provide examples of names and symbols that are close to being considered descriptive ("suggestive" marks, e.g. Newsweek magazine).
  - Mention the exception of generic/descriptive trade marks which, having acquired distinctive power through use (i.e. a "secondary meaning"), may be afforded trade mark protection.
  - Other absolute grounds of refusal: refusal for reasons of public morality, marks registered in bad faith, etc.
- Relative grounds of refusal:
  - Signs which are likely to be confused with protected, earlier signs for the same kind of product cannot coexist in markets.

**See also:**

Trade Mark Directive and Community Trade Mark Regulation

## 2. Obtaining trade mark protection/rights afforded

(a) Obtaining protection/registration procedure

### (a) Obtaining protection/registration procedure

Go over the essential points, e.g. priority, how absolute/relative rights are assessed (opposition), how long it takes to register a trade mark.

Highlight the role of the main actors (PTO, trade mark agent, etc.).

(b) Unregistered trade marks

### (b) Unregistered trade marks

Explain that unregistered trade marks may receive protection in some cases and in some jurisdictions and that in the UK and other common law countries there is protection against acts of "passing-off".

(c) European Community-wide protection/Community trade mark and OHIM

### (c) European Community-wide protection/Community Trade Mark and OHIM

(d) Obtaining international protection

Briefly explain that under the European Union system, national trade marks co-exist with the CTM registered in OHIM in Alicante (Spain).

(e) Validity of a trade mark

### (d) Obtaining international protection

The Madrid system (Madrid system of international registration of marks)

### (e) Validity of a trade mark

- Obligation of use
- Protection for well-known marks

#### **See also:**

Trade Mark Directive and Community Trade Mark Regulation. For the Madrid system, see the WIPO website at [www.wipo.int/madrid/en/](http://www.wipo.int/madrid/en/)

### III.4 Trade secrets and confidential information

#### 1. Trade secrets and confidential information

(a) What is a trade secret?

(b) When is a trade secret protectable?

(c) Protection afforded

(d) Applications in the creative industries

**(a) What is a trade secret?**

Define trade secrets and/or confidential information under national law.

**(b) When is a trade secret protectable?**

Conditions:

- The existence of secrecy, commercial value, efforts to maintain secrecy (under most legal systems)
- Types of information which can be protected

**(c) Protection afforded**

Explain that it depends on national laws. Consult national legislation.

**(d) Applications in the creative industries**

Give examples, including samples (templates) of non-disclosure agreements.

## IV. Defending IP rights (enforcement) (3 hrs)

### 1. Defending intellectual property rights (IPRs)

(a) Conflicts over IPRs are frequent

(b) The importance of enforcing IPRs

#### (a) Conflicts over IPRs are frequent

List the characteristics which make IP particularly subject to conflict (the value of IP, the intangible, non-excludable nature of intellectual creations, economic incentives for competitors to copy or imitate, technological (patent) races and trends conducive to overlapping innovation).

Provide examples from the press of well-known litigation on different forms of IP, including technology (inventions), content, art, trade marks, designs and trade secrets.

Make it clear that there is a need to safeguard IP in many circumstances and that there are IP issues (such as ownership, infringement, violation of trade secrets, etc.) which may occur among people or companies having different types of relationship (competitors, partners/collaborators, employees/employers).

#### (b) The importance of enforcing IPRs

Explain that the power of IPRs to prevent others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right-holders must take a proactive role in the defence of their IP.

Illustrate this using a timeline showing the different phases of the product cycle, including the point at which it is necessary to protect IPRs and when enforcement becomes necessary.

### 2. Options for dealing with IPR infringement

(a) What acts constitute an IP infringement?

(b) What are the options when this occurs?

(c) What acts do not constitute an IP infringement?

#### (a) What acts constitute an IP infringement?

Explain that the laws relating to each category of IP define the nature of the exclusive right in terms of content and business activity.

For example, a person who copies a copyrighted image for a commercial purpose, or any person who distributes the copies, infringes copyright in that image and is liable for that act. The same may be said for users/sellers of designs causing the same overall impression as a protected design. In yet another example, the invention subject to a patent is defined within the claims, and unauthorised use, making or selling of such invention within that scope constitutes an infringement.

## (b) Options

- Litigation (civil and criminal)
- Customs
- Actions before the PTO (for trade marks, registered designs and patents)
- Alternatives to litigation: explain the main aspects of alternative dispute resolution

## (c) What acts do not constitute an IP infringement?

Examine some allowed uses/exceptions:

- Independent works (claiming the "originality" of the work alleged to be infringing)
- Taking the idea but not its expression

Allowed uses

Restrictive interpretation of the exceptions and limitations

There is minimum harmonisation of copyright limitations and exceptions in the European Union. However, depending on what is provided by your national legislation, mention some "allowed uses" which exist to permit the necessary flow of knowledge and information, but at the same time seek to provide a balance between these needs and the author's rights. In this sense they must be interpreted restrictively.

Mention the three-step test (exceptions: (a) confined to special cases; (b) must not conflict with the ordinary exploitation of the work; (c) must not unreasonably prejudice the legitimate interest of the owner) (Art. 5 Information Society Directive).

Some exceptions and limitations which may be considered for discussion can be found in the collection of acts referred to in the Information Society Directive, which member states may incorporate into their national legislation, including, for instance, use for the sole purpose of illustration for teaching or scientific research, reproduction by the press, making available of published articles on current events, etc. (see Art. 5.2 Information Society Directive).

All national legislations must also provide an exception for temporary acts of reproduction which are an integral and essential part of a technological process and whose sole purpose is to enable a transmission in a network, as well as any lawful use of subject-matter having no independent economic significance (Art. 5.1 Information Society Directive).

### **See also:**

Information Society Directive

### 3. Remedies following successful litigation/penalties for infringers

- (a) Injunctions
- (b) Destruction and delivery-up
- (c) Damages
- (d) Disclosure of information
- (e) Publication of judgment

Examine the available remedies using the Enforcement Directive as a guide [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004)]. and/or from the perspective of your national legislation.

**(a) – (e):** See module 3D, section 3 for more information on the remedies available.

Calculating damages:

Lost profits, unfair profits made by the infringer and, where appropriate, elements other than economic factors (moral prejudice caused to the right-holder by the infringement)/setting the damages as a lump sum on the basis of elements such as the amount of royalties or fees which would have been due.

### 4. Taking urgent measures/procuring evidence

- (a) Urgent/precautionary measures
- (b) Procuring evidence/seizures/civil searches

#### (a) Urgent/precautionary measures

Explain that there are remedies (interlocutory injunctions, interim injunctions and precautionary measures) which are designed to prevent imminent infringement of an IP right or continuation of an alleged infringement. Also, see module 2G, "Defending IP assets" for more information on the topics that may be included in this section.

#### (b) Procuring evidence/seizures/civil searches

Include a comment on the need to support public prosecution in criminal cases by collecting evidence.

### 5. Costs and risks involved in IP litigation

Show the principal costs involved in litigation proceedings. For example:

- Lawyers
- Court expenses
- Costs for experts
- Translation costs

**See also:**

Module 2G, "Defending IP assets".

## 6. Specific measures to prevent or obstruct copyright infringement in the digital environment

(a) Usefulness of the © symbol, copyright notices and registration of copyright

(b) Digital rights management (DRM)

(c) Choosing the right option

### (a) Usefulness of the © symbol, copyright notices and registration of copyright

Refer to the absence of formalities vs deterrent effect of such actions.

Refer to the importance of having a proof of creation date.

### (b) Digital rights management

Rights management information: notices, time stamps, digital object identifiers, digital watermarks, etc.

Technical protection measures (TPMs): encryption, access control, etc.

TPMs and anti-circumvention measures: circumventing TPMs is not legal. Refer to the Copyright Directive.

Treating TPMs with care: point out that TPMs affect consumer rights and private rights.

### (c) Choosing the right option

Explain that each has its strengths and weaknesses, as well as acquisition, integration and maintenance costs. Select on the basis of the level of risk of infringement associated with the use of the work.

## 7. Criminal enforcement

(a) When are violations of IPRs criminal acts?

(b) Criminal infringements vs civil infringements

### (a) When are violations of IPRs criminal acts?

- Intention
- Commercial scale

Explain that criminal action is preponderantly used in copyright, design and trade mark infringements.

### (b) Criminal infringements vs civil infringements

Explain the difference between civil and criminal infringements.

- Private prosecution (civil) vs public prosecution (criminal)
- Penalties and sanctions

Point out that penalties (fines, imprisonment) do not provide for recovery of damages. This would require combining criminal action with civil action.

## 8. Avoiding costly disputes/alternatives to litigation/alternative dispute resolution (ADR) procedures

- Negotiation
- Mediation
- Arbitration
- Main centres of mediation and arbitration

See module 2G - "Defending IP Assets: IP infringement and breach of confidentiality" - for more information.

## 9. Incorporating IP defence and infringement into business management

(a) Infringement avoidance strategies

(b) How to secure trade secrets: confidentiality agreements

(c) Legal support

(d) Budgetary considerations

### (a) Infringement avoidance strategies

- Copyright clearance
- Identifying third-party IP
- Raising in-house IP awareness and providing training

### (b) How to secure trade secrets: confidentiality agreements

Explain how confidentiality agreements may be used to ensure that valuable trade secrets are not stolen. For information on the contents of confidentiality agreements see module 3A “IP contracts”, section 3.

### (c) Legal support

Emphasise the need for the help of a specialist IP lawyer

### (d) Budgetary considerations

Explain the need to incorporate possible IP litigation costs into business planning, in particular in sectors where IP is the key asset.

Refer to the registration costs for trade marks and designs.

Other issues:

- Cost of enforcing protection in more than one country
- Weighing cost and risks of going to court against seeking alternatives
- Tips

## V. Managing and exploiting creative works

### V.1 Commercialisation of IP (2 hrs)

#### 1. Assignments and licensing

(a) Assignments (copyright and embodiment, assignments and copyright transfer)

(b) Licensing (see section below for more details)

#### (a) and (b)

Introduce students to the difference between assignment (selling) and licensing of IP:

- Non-assignment of moral rights
- Limitations applicable to assignments of economic rights
- Lack of harmonisation in this area at European level (e.g. in Germany there is no assignment of copyright)
- Types of licence and "typical" applications (e.g. licensing through agencies, catalogue licensing, exclusive licences conceded for publishers, non-exclusive for performances, computer programs, etc.)

#### 2. Dealings (by industry) (different types of copyright assignment/licensing contract)

Examine briefly the main dealings in relevant sectors and point out the contracts which may be regulated by the law of the particular country.

- Publishing (e.g. publishing contracts)
- Music (publishing/distribution/performance contracts)
- Cinema, TV (film production contracts)
- Multimedia

Here again, it must be emphasised that there are great differences between the various national systems. Some countries provide a few general rules on copyright contracts, while others include regulations concerning the different types of contract.

#### 3. Copyright clearance/collective management of copyright

(a) Incorporating copyrighted material and other IP into new works/obtaining authorisation

(b) Collective management organisations

#### (a) Incorporating copyrighted material and other IP into new works/obtaining authorisation

- Getting authorisation (from collective management organisations (CMOs)/owners) - important for films and multimedia
- Securing exclusive rights (essential for procuring investment and ensuring future transactions)
- Reducing risk (procuring licences/marketing equipment/providing for infringement prevention/educating staff)

#### (b) Collective management organisations

- Role and organisation of CMOs
- Importance of CMOs for the different industries (music, publishing, films)

## V.2 Licensing (4 hrs)

### 1. Licensing basics

- (a) What is a licence?
- (b) What can be licensed?
- (c) Licensor and licensee
- (d) Licensing-in/licensing-out

#### (a) What is a licence?

Business objectives reflected and contractual nature

#### (b) What can be licensed?

- Copyright and neighbouring rights
- Other licences (trade marks and merchandising, franchising, software, technology, etc.)

#### (c) Licensor and licensee

- Choosing a licensee/licensor, plus possible pitfalls
- Who can enter into a licence agreement/legal capacity (see for example affiliates in group companies)

#### (d) Licensing-in/licensing-out

Licensing is a suitable mechanism for transferring technology between licensors (who license out) who want to leverage their technological assets and licensees (who license in) who want to complement their in-house technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

### 2. When should licences be used?

- (a) Publishing
- (b) Music contracts
- (c) Other media and entertainment contracts

Adjust the content to reflect national legislation, as several countries include specific contractual forms in their legislation.

#### (a) Publishing

- Difference between music and literary editing
- Obligatory clauses

#### (b) Music contracts

- Performance contracts
- Representation, agency and management contracts
- Publishing and recording contracts

#### (c) Other media and entertainment contracts

- Contracts relating to TV programmes and motion pictures
- Imaging, endorsement and marketing agreements

### 3. The process of negotiation and the main elements of the licensing agreement

Depending on the time available, include topics from module 2C.

### 4. Main economic considerations

See also: module 2C

### 5. Collective licensing

- Explain the origin of and rationale for the outsourcing of copyright management.
- Explain the contractual system of fully fledged collective management:
  - "Upstream" (mandate given by author or owner)
  - Bilateral representation contracts between CCSs
  - "Downstream" (licences from CCS to users)
  - Blanket licensing

**Option:** Include problems relating to collective licensing in Europe involving more than one territory (see Commission Recommendation of 18 May 2005 on collective cross-border management of copyright and related rights for legitimate online music services available on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005H0737:EN:HTML>).

### 6. Creative Commons licences and other open licensing schemes

(a) Characteristics and types of licence

#### (a) Characteristics and types of licence

- Attribution
- Attribution - share alike
- Attribution - no derivative works
- Attribution - non-commercial
- Attribution - non-commercial - share alike
- Attribution - non-commercial - no derivative works

(b) Business models built on open licensing schemes

#### (b) Business models built on open licensing schemes

Initiate a discussion on how to exploit works licensed using Creative Commons.

Examine case studies (for examples see [http://wiki.creativecommons.org/Case\\_Studies](http://wiki.creativecommons.org/Case_Studies)).

## **VI. Workshop and practical exercise (2-3 hrs)**

### **1. Workshop: Drafting a heads of agreement for a licence**

### **2. Practical exercise: Negotiating a licensing agreement**

1. Guide students through a session in which they draft a heads of agreement, based on a practical case. Provide them with sufficient information about the firms involved, the technology or other innovation involved, the market value of the technology or IP to be licensed, market conditions and competitors, including any other licensees). The exercise should allow students to anticipate and weigh up the different elements that need to be taken into consideration in the licensing process.

2. Carry out moot negotiations on how to conclude a licensing agreement.

# 4D IP for designers

Contents	Minimum duration (25 hours in total)
I. Designers and design-based industries	1 hr
II. IPRs in a nutshell	1.5-2 hrs
III. IP protection and designs	4 hrs
III.1 What is a design and what does IP protection for designs consist of in Europe?	
III.2 Requirements and scope of protection	
IV. Other relevant rights	3 hrs
IV.1 Copyright	
IV.2 Protection for technical functions: patents and legal protection afforded to minor inventions (utility models, short-term patents, petty patents)	
IV.3 Trade marks	
V. Exercises and practical cases: IP protection and validity	2 hrs
VI. Enforcement of IP rights	3 hrs
VII. Managing and exploiting IP	6 hrs
VII.1 Accessing the market	
VII.2 IP commercialisation and collaboration	
VII.3 An in-depth look at IP licensing	
VIII. Workshops and practical exercises: Exploiting IP	

Overview	Learning objectives
<p>This module will introduce aspiring designers to IP and show them how to protect and exploit their work.</p> <p>A practical approach will allow students to work on diverse processes such as determining whether a design qualifies for IP protection and setting up an IP-based business.</p> <p>Special emphasis is put on the rights which are most relevant to protecting industrial designs (designs and copyright).</p> <p>The module also looks at IP management issues such as licensing and partnerships.</p>	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> <li>- Distinguish what aspects of a designer's work can be protected and how (designs, copyright, patents, trade marks)</li> <li>- Know how to obtain protection and how to defend IPRs</li> <li>- Know how to extract maximum value from and exploit IP</li> </ul>
Target audience	Prior knowledge
<p>Postgraduate students of design and design-related courses (e.g. industrial design)</p>	<p>No prior knowledge required</p>
Teacher profile	Knowledge of this module is recommended/required for
<p>University lecturer/member of IP department in industry/representative of national patent office with knowledge of/qualification in IP management/commercialisation (particularly designs and copyright law)</p>	<p>Not applicable</p>
Student assessment	Related modules
<p>Assessment of participation and performance in exercises and workshops combined with intermediate exams or tests (multiple choice)</p>	<p>Module 4D covers many of the aspects relating to the protection, defence and exploitation of IP rights contained in the other modules</p>

## **I. Designers and design-based industries (1 hr)**

### **1. Scope of activity/industries concerned**

Design-based industries include:

- Fashion, textiles, leather
- Footwear
- Furniture
- Consumer electronics
- Automotive industries and accessories
- Other consumer goods

### **2. Strategic and economic importance of the designer's work**

Design as a business asset - the importance of design in global competition

## II. IPRs in a nutshell (1.5-2 hrs)

### IPRs in a nutshell

See the ancillary module "IPRs in a nutshell".

### III. IP Protection and designs (4 hrs)

#### III.1 What is a design and what does IP protection for designs consist of in Europe?

##### 1. What is a design/what aspects of a design are afforded IP protection?

(a) The function of designs and design protection

(b) IP protection afforded to the visible appearance of a product/parts of a product

##### (a) The function of designs and design protection

Designs enhance the attractiveness and value of products.

Design protection is not related to technical functionality //contrast with utility models and patents.

Not legally related to the concept of distinctiveness (but designs are important in enhancing corporate image/brand equity//contrast with trade marks).

##### (b) IP protection afforded to the visible appearance of a product/parts of a product

Non-separable parts of a product may be protected (e.g. the pattern on a cloth, the handle on a coffee cup, etc.)

##### 2. Examples of different protected elements coming from different industries

Show as many examples as possible illustrating the combination of aesthetic, functional and branding elements.

Distinguish between protected aspects and those aspects not protected prima facie by design laws.

##### 3. Harmonised EU laws/overview of main features

(a) Who can obtain protection/how design rights are obtained/registered and unregistered designs

(b) Requirements

(c) Scope of the protection

Mention the fact that the law on IP rights for designs is largely harmonised across the European Union.

Refer to the effect of the Design Directive and the existence of a unified system offering the possibility of obtaining protection valid for the European Union (Community design).

##### (a) Who can obtain protection/how design rights are obtained/registered designs and unregistered designs

- Ownership of a design: the designer
- How do rights arise? Explain the origin and purpose of registered and unregistered designs.

##### (b) Requirements

Protection for the appearance of a product which must be:

- New
- Possess individual character

##### (c) Scope of protection

The exclusive right/duration (for RD, for UD)/ geographical scope

## III.2 Requirements and scope of protection

### 1. The appearance of a product

(a) What is meant by the "appearance" of a product?

(b) Examples involving manufactured and handcrafted products.

### 2. Designs must be new and have individual character

(a) Novelty and novelty-breaking disclosures

(b) Individual character

(c) Examples

(a) What is meant by the "appearance" of a product?

- "Appearance", therefore visible
- Not an aesthetic appreciation (it's an objective assessment)
- Includes parts of the product

(b) Examples involving manufactured and handcrafted products.

Get-ups, packaging, typefaces, 2-D or 3-D

(a) Novelty and novelty-breaking disclosures

- Anticipations (previous designs) must have been made available to the public and accessible to specialised circles in the EU:
  - before the filing date in the case of registered designs
  - before the date made available to the public in the case of Community unregistered designs
- Grace period of 12 months

(b) Individual character

- The overall impression on the informed user must differ from previous designs
  - For this assessment, the degree of freedom of the designer in developing the design must be taken into account. This degree of freedom "is established, inter alia, by the constraints of the features imposed by the technical function of the product or an element thereof, or by statutory requirements applicable to the product. Those constraints result in a standardisation of certain features, which will thus be common to the designs applied to the product concerned"(Case T 9/07, Grupo Promer Mon Graphic SA vs OHIM - Metal plate for games/Circular promotional item).

(c) Examples

"Rappers" or toy discs (see case T 9/07 above)

### 3. What cannot be protected?

- Non-visible parts or components
- Designs made to achieve a technical function
- Features allowing interconnections. except for the purpose of allowing the multiple assembly or connection of mutually interchangeable products within a modular system (e.g. the interconnections in a Lego® brick).
- Spare parts used to restore the original aspect of a complex product (at Community level, and in some countries - see below)
- Reasons of public morality or public policy

### 4. What rights does the right-holder have, where are they valid and for how long?

- (a) Exclusivity
- (b) Territoriality
- (c) Duration

#### (a) Exclusivity

Exclusive rights on designs with the same overall appearance

#### (b) Territoriality

Briefly explain the territorial nature of IP rights.

Distinguish between national protection and Community-wide protection available under the Community Design Regulation.

#### (c) Duration

Registered: 25-years

Unregistered (for Community Designs): 3 years (from the day first made available to the public)

#### See also:

Council Regulation (EC) No. 6/2002 of 12 December 2001 on Community designs

### 5. What is an infringement?

- (a) Comparing conflicting designs
- (b) Prohibited acts or uses/exceptions
- (c) Proving infringement for unregistered designs

#### (a) Comparing conflicting designs

Discuss with students the assertion that designs which do not produce a different overall impression on the informed user are infringing the exclusive right. Look at some examples.

#### (b) Prohibited acts or uses/exceptions

- Making, offering for sale, putting on the market, importing, exporting, stocking
- Non-infringement (private acts, research and experimental use, academic citation)
- "Must-fit" pieces (component parts that must be reproduced in their exact form and dimensions in order to be mechanically connected to the product or allow the product to perform its function, e.g. a car exhaust pipe), with the exception of parts of modular systems ("Lego exemption")

- Designs falling under other exceptions recognised by some national legislations, e.g. "must-match" items (parts of complex products which have special features that must correspond to the appearance of the whole product so precisely that their replacement entails using a part that is identical to the original, e.g. a car chassis, a car door, etc.), subject to the conditions established in the corresponding law
- For Community designs, the part of a complex product used in repairs of a complex product in order to restore it to its original form
- Invalidity of the claimant's design (grounds for counterclaims): not a design according to legal definition, not novel, no individual character/conflict with prior rights
- Exhaustion

### **(c) Proving infringement for unregistered (Community) designs**

Infringement of unregistered designs involves the same kind of acts as for registered designs, whereby it must be shown that the defendant copied the design.

#### **See also:**

Arts. 7, 11 and 15 Design Directive

Arts. 8, 22, 24 and 100 Community Design Regulation

## **6. Registering a design**

(a) Why is it a good idea to apply for registration?

### **(a) Why is it a good idea to apply for registration?**

- Obtain protection against independent creations
- Longer duration
- Allows transactions (licensing, assignments)

(b) Filing an application with your national office

### **(b) Filing an application with your national office**

(c) Routes for obtaining protection in more than one country

Give a general description of the procedure: filing date (priority)/no substantive examination (for the RCD and in most countries)/no opposition/ grant/appeals.

Mention other aspects: deferred publication (usefulness for the textile industry in particular - extended confidentiality), "multiple" applications (possible under the CDR and in most countries).

**(c) Routes for obtaining protection in more than one country**

Explain the differences between/advantages of the different options:

- National
- European Community-wide protection (Community design and OHIM)
- International Registration System and WIPO (The Hague System for the International Registration of Industrial Designs)

## IV. Other relevant rights (3 hrs)

### IV.1 Copyright

#### 1. What is copyright/what are author's rights?

(a) Types of work protected

(b) Who is the author/who owns the copyright?

#### (a) Types of work protected

- Copyright in the designer's work: applied art/computer programs (programming in HTML and CSS languages, etc.)/photography

#### (b) Who is the author/who owns the copyright?

- Authorship/joint authorship/employers and employees

#### 2. What rights does the copyright holder have? How is copyright obtained and how long does it last?

(a) Economic rights/moral rights

(b) Duration

#### (a) Economic rights/moral rights

Explain distribution rights and communication rights in particular.

No formalities/advantages of registration/© symbol/using copyright notices on the Web

#### (b) Duration

#### 3. What is infringement of copyright?

(a) General concepts

(b) Types of prohibited act

(c) Limitations of copyright

(d) Piracy

#### (a) General concepts

Originality/copies and causal connection

- Exact and non-exact reproductions
- Ownership of the content does not imply ownership of the embodiment

#### (b) Types of prohibited act

- In relation to distribution rights: copying, issuing copies, rental, lending, also dealing with copies. Special mention: infringement of photography rights (relevant to Web designers).
- Also mention exclusivity vis-à-vis communication of the work (performance/broadcasting through different media, including the internet/making works available online).
- "Secondary" infringements: providing the means for communication to take place (premises, apparatus, etc.)

### (c) Limitations of copyright

Lack of harmonisation in the EU

- Independent works (claiming the "originality" of the work alleged to be infringing)
- "Non-substantial" takings
- Exceptions:

e.g. research and private study, citation, reporting current events.

Restrictive interpretation of the exceptions and limits

### (d) Piracy

In relation to copyrights and designs, piracy refers to the manufacture, distribution and sale of copies of goods and copyrighted works which are intended to appear to be so similar to the original as to be passed off as genuine items, such as exact copies of CDs containing music or software.

Piracy is often associated with "criminal infringements" of IP, as the acts are often intentional and involve a desire for profit on behalf of the infringer, who normally carries out the piracy on a commercial scale.

## 4. Other aspects: copyright and designs/cumulative IP protection

Copyright protection is enjoyed by designs that meet the conditions established by national copyright law. As the requirements for protecting designs are harmonised, approaches to accumulation may differ from country to country. In general, three main forms exist:

- Full cumulative protection (a design is almost automatically protected as a work of "functional art"). This is the case in France, Portugal and the Benelux countries, where unity of absolute and functional art (unité de l'art) prevails.
- Partial cumulative protection (a strict condition of originality is required when providing industrial designs with cumulative protection). This is the case in countries such as Germany, Spain and, more recently, Italy.
- Restrictive approaches towards cumulative protection, for example in the United Kingdom or - prior to 2000 - Italy.

## IV.2 Protection for technical functions: patents and legal protection afforded to minor inventions (utility models/short-term patents/petty patents)

### 1. Patents on the designer's desk

(a) Definition of "invention"

(b) Forms of invention that may be patented

(c) Type of inventions patents are granted for/patentability requirements

(d) Examples of patents and utility models on the designer's desk

**(a) Definition of "invention"**

- Technical solutions to problems
- Aesthetic solutions are not protected by patents
- Other exclusions and exceptions

**(b) Forms of invention that may be patented**

- Products, processes and new uses for a product

**(c) Type of inventions patents are granted for/patentability requirements**

- Requirements: novelty, inventive step, industrial application

Mention the protection available for "minor" inventions (utility models)/establish the difference vis-à-vis design protection

**(d) Examples of patents and utility models on the designer's desk**

Give examples of subject-matter protectable by patents or designs co-existing in the same product (e.g. sports shoes, furniture).

### 2. Obtaining a patent/protection afforded

(a) Who can get a patent

(b) How patents are obtained

(c) Scope of protection/duration

**(a) Who can get a patent**

- Inventors (joint inventions: employers and employees)

**(b) How patents are obtained**

- Filing an application with the national office or via the European or PCT routes

**(c) Scope of protection/duration**

Briefly outline the scope of protection of a patent.

## IV.3 Trade marks

### 1. Trade marks

(a) What is a trade mark?

(a) What is a trade mark?

– Contrast the market-related function of distinctive signs with the function of designs.

(b) Signs that serve as trade marks

– Trade mark protection for products and services: explain the principle of specialty and mention the existence and function of trade mark classification.

(c) Signs that may not be trade marks

(b) Signs that serve as trade marks

- Words, graphic marks, 2D and 3D trade marks, non-traditional trade marks.
- Examine the case of graphic trade marks and possible overlaps with subject-matter that may be protected by design law.

(c) Signs that may not be trade marks

- Absolute\* and relative grounds of refusal

Distinguish between these two forms and explain why they exist (absolute grounds = existing interest to protect the public from traders obtaining rights in signs that should be free for everyone to use; relative grounds = the need to protect the market from the co-existence of confusingly similar signs for the same products).

\* Regarding absolute grounds of refusal, mention that signs which have been refused on the basis of lacking distinctiveness or being descriptive or the customary name for a product may overcome the prohibition if they acquire a secondary meaning. Other categories of signs, however, are permanently barred from trade mark protection. One of these is particularly relevant to designers, and that is "the shape which gives substantial value to the goods". Such shapes, which cannot be protected by a trade mark, may however always rely on design or copyright protection. For relevant cases see T-270/06, Lego Juris A/S vs OHIM (Lego brick) or T-508/08, Bang & Olufsen vs OHIM (representation of a loudspeaker).

**See also:**

Arts. 2-4 Community Trade Mark Directive

Arts. 4, 7 and 8 Community Trade Mark Regulation

## 2. Obtaining trade mark protection/rights afforded

(a) Obtaining protection

(b) European Community-wide protection/Community Trade Mark and OHIM

(c) Obtaining international protection

(d) Validity of trade marks

(e) Protection for marks with a reputation

### (a) Obtaining protection

Trade marks must be registered.

Refer to highlights of the procedure before the PTO (in particular, the importance of oppositions, where claims based on relative grounds of refusal are dealt with, and cancellation).

Time needed for registration.

### (b) European Community-wide protection/ Community Trade Mark and OHIM

- Scope of protection of the CTM
- Co-existence with national systems
- When is it important to get a CTM?
- OHIM

### (c) International protection

- The Madrid System and International Registration
- When to use the International Registration System
- WIPO

### (d) Validity of trade marks

- Obligation to use
- Validity and grounds for refusal

### (e) Protection for marks with a reputation

Trade mark protection going beyond the principle of specialty. Explain the concepts of dilution, blurring and tarnishment.

## V. Exercises: IP protection and validity (2 hrs)

**1. Assessing the validity of a registered Community design** Ask students to assess the validity of a registered Community design.

### 2. Group discussion

3D shapes

When are they trade marks and when are they designs?

When can copyright protection accumulate with design protection?

What can happen if the design includes elements with technical functionality?

Can aesthetic features be protected if they also have a technical function?

Some possible examples for discussion:

- Lego® brick (patent protection/design protection/distinctive power)
- Jean-Paul Gaultier® perfume bottle (signature packaging/relationship between copyright, design and 3-D trade marks)

## VI. Enforcement of IP rights (3 hrs)

### 1. Defending intellectual property rights (IPRs)

(a) Conflicts over IPRs are frequent

(b) The importance of enforcing IPRs

#### (a) Conflicts over IPRs are frequent

Mention characteristics which make IPRs particularly subject to conflict, including the value of IP, the intangible, non-excludable nature of intellectual creations, economic incentives for competitors to copy or imitate, technological (patent) races and trends conducing to overlapping innovation.

Provide examples from the media relating to different forms of IP, including technology (inventions), content, art, trade marks, designs and trade secrets.

Mention that conflicts may occur among people or companies with different types of relationship (competitors/partners/collaborators, employees/employers).

#### (b) The importance of enforcing IPRs

Explain that the power of IPRs to prevent others from using protected rights depends on the ease with which they can be effectively enforced. Primarily, enforcement depends on private action, so right-holders must take a proactive role in the defence of their IP.

This topic may be explained with the aid of a timeline showing the different phases of the product cycle, including the point at which it is necessary to protect IPRs and when enforcement becomes necessary (see section 5 of the "IPRs in a nutshell" module).

### 2. Options for dealing with IPR infringement

(a) What acts constitute infringement of IP?

(b) What are the options when this occurs?

(c) What acts do not constitute an infringement?

#### (a) What acts constitute infringement of IP?

Explain that the laws relating to each category of IP define the nature of the exclusive right in terms of content and business activity. For example, an invention subject to a patent is defined within the claims, and unauthorised use, making or selling of the invention within that scope constitutes an infringement.

In another example, a person who copies a copyrighted image for a commercial purpose, or any person who distributes the copies, infringes copyright in that image and is liable for that act. The same may be said for users/sellers of designs causing the same overall impression as a protected design.

#### (b) Options

- Action before the PTO
- Litigation (civil and criminal)
- Customs
- Alternatives to litigation/explain the main aspects of alternative dispute resolution

### (c) What acts do not constitute an infringement?

Examine some allowed uses or exceptions which are commonly applied in different IPRs, such as:

- Private acts, research and experimental use, academic citations

In the case of designs, mention that use, sale etc. of spare parts used in the repair of a complex product (e.g. a car) in order to restore it to its original form are a specific exception due to reasons of political economy.

#### **See also:**

Arts. 7, 11 and 15 Design Directive

Arts. 8, 22, 24 and 100 Community Design Regulation

### **3. Remedies following successful litigation**

- (a) Injunctions
- (b) Destruction and delivery-up
- (c) Damages
- (d) Disclosure of information
- (e) Publication of judgment

Examine the available remedies using the Enforcement Directive as a guide [Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights (OJ L 157, 30.4.2004)] and/or referring to the national legislation in your country.

Highlight the different methods for calculating damages, including lost profits, unfair profits made by the infringer and, where appropriate, elements other than economic factors (moral prejudice caused to the right-holder by the infringement).

Include setting the damages as a lump sum on the basis of elements such as the amount of royalties or fees which would have been due.

### **4. Taking urgent measures/procuring evidence**

- (a) Urgent/precautionary measures
- (b) Procuring evidence/seizures

#### **(a) Urgent/precautionary measures**

Explain that there are remedies (interlocutory injunctions, interim injunctions and precautionary measures) which are designed to prevent imminent infringement of an IP right or continuation of an alleged infringement. Also, see module 2G, "Defending IP assets", for more information on topics that may be included in this section.

#### **(b) Procuring evidence/seizures**

Comment on the need to support public prosecution in criminal cases by collecting evidence.

### **5. Costs and risks involved in IP litigation**

See module 2G, "Defending IP assets".

## 6. Specific measures to prevent or obstruct copyright infringement in the digital environment

(a) Usefulness of the © symbol/copyright notices/registration of copyright

(b) Digital rights management (DRM)

(c) Choosing the right option

### (a) Usefulness of the © symbol/copyright notices/registration of copyright

Refer to the absence of formalities vs the deterrent effect of such actions.

Refer to the importance of having proof of the creation date.

### (b) Digital rights management (DRM)

- Notices/time stamps/digital object identifiers (DOIs)/digital watermarks, etc.
- Technical protection measures (TPMs)/encryption/access control, etc.
- TPMs and anti-circumvention measures/circumventing TPMs not legal/see Copyright Directive.
- Treat TPMS with care/point out that TPMs affect consumer rights and private rights.

### (c) Choosing the right option

Point out that each one has its strengths and weaknesses, as well as acquisition, integration and maintenance costs. Select on the basis of the level of risk of infringement associated with the use of the work.

## 7. Criminal enforcement

(a) When are violations of IPRs criminal acts?

(b) Criminal vs civil infringements

### (a) When are violations of IPRs criminal acts?

- Intention
- Commercial scale

Explain that criminal action is preponderantly used in copyright, design and trade mark infringements.

### (b) Criminal vs civil infringements

Explain the difference between civil and criminal infringements.

- Private prosecution (civil) vs public prosecution (criminal)
- Penalties and sanctions

Point out that penalties (fines, imprisonment) do not provide for recovery of damages. This would require combining criminal action with civil action.

## 8. Avoiding costly disputes/alternative dispute resolution procedures (ADR)

- Negotiation
- Mediation
- Arbitration
- Main centres of mediation and arbitration

See module 2G - "Defending IP assets" - section 7, "IP infringement and breach of confidentiality" - for more information.

## 9. Incorporating IP enforcement into business planning

(a) Infringement avoidance strategies

(b) How to secure trade secrets: confidentiality agreements

(c) Legal support

(d) Budgetary considerations

### (a) Infringement avoidance strategies

- Freedom to operate strategies (see next section)
- Copyright clearance
- Identifying third-party IP
- Raising in-house IP awareness and providing training

### (b) How to secure trade secrets: confidentiality agreements

Explain how confidentiality agreements may be used to ensure that valuable trade secrets are not stolen. For information on the contents of confidentiality agreements see module 3A, "IP contracts", section 3.

### (c) Legal support

Emphasise the need for the support of a specialist IP lawyer.

### (d) Budgetary considerations

Explain the need to incorporate possible IP litigation costs into business planning, in particular in sectors where IP is the key asset.

Mention the cost of enforcing protection in more than one country.

Weigh up the costs and risks of going to court against seeking alternatives.

## VII. Managing and exploiting IP

### VII.1 Accessing the market (1 hr)

#### 1. Freedom to operate (FTO) in the market

- (a) Objectives of FTO searches
- (b) Information from PTOs
- (c) Copyright clearance

#### (a) Objectives of FTO searches

Define FTO searches and help students understand what they are used for (i.e. to make sure that a product in the process of being developed will not infringe third-party IPRs).

#### (b) Information from PTOs

- Design Classification System/design searches/OHIM database/WIPO Digital Intellectual Property Library
- Trade mark classification/trade mark searches/OHIM database/WIPO Digital Library
- Patent searches/Espacenet
- Other uses of patent information (ideas, technological trends, monitoring competitors' activities)

#### (c) Copyright clearance

- Clearance houses
- Using templates (Web design)

#### 2. Exercises

- (a) How to use the OHIM and EPO databases
- (b) Where to look for clearance of copyrights

## VII.2 IP commercialisation and collaboration (2 hrs)

### 1. Options for commercialising IP

Explain the different ways in which IP assets can be commercialised.  
Examples: selling products, selling IP, licensing IP, selling the business

### 2. IP collaborations and partnerships

Overview of some common agreements used in IP-related transactions

(a) Different partnerships/legal arrangements

(b) Examples of IP-based collaborations and partnerships

#### (a) Different partnerships/legal arrangements

Demonstrate that almost every form of exploitation requires a legal agreement with one or more parties.

#### (b) Examples of IP-based collaborations and partnerships

Provide an overview of some of the most common forms of collaboration and/or agreements:

- Research collaboration agreements (sponsorship agreements)
- Licensing (looked at in detail in next section)
- IP assignments
- Distribution contracts
- IP-related issues in employee contracts
- IP-related issues in researchers' contracts

Explain the nature and purpose of the different agreements (parties involved/categories of IP concerned/IP ownership/current ownership/ownership of future developments or improvements/ownership of IP resulting from R&D/the point in the innovation cycle where the agreement is likely to appear/business situations typically associated with the agreement.

Stress the importance of taking sufficient account of IP issues in collaborations and partnerships.

## VII.3 An in-depth look at IP licensing (3 hrs)

### 1. Licensing basics

(a) What is a licence?

**(a) What is a licence?**

Business objectives reflected and contractual nature

(b) What can be licenced

**(b) What can be licenced**

Technology, trade marks and merchandising, entertainment and publishing. Other agreements (franchising, software).

(c) Licensor and licensee

**(c) Licensor and licensee**

Who can enter into a licence agreement/legal capacity? Refer to the example of affiliates in group companies.

(d) Licensing-in/licensing-out

**(d) Licensing-in/licensing-out**

Licensing is a suitable mechanism for transferring technology between licensors (who license out) who want to leverage their technological assets and licensees (who license in) who want to complement their in-house technological capabilities.

Stress the increasing role of licensing in "new" technology development models. Place the use of licensing in a context where innovation models evolve from "closed innovation" to "open innovation" (see Chesbrough [2006], OECD [2006]).

### 2. Reasons for using licences

- To obtain revenue
- To gain access to complementary assets (cross-licensing)
- To develop efficient partnerships

### 3. The process of negotiation and the elements of the licensing agreement

(a) Preparing to enter an agreement

**(a) Preparing to enter an agreement**

- Identifying and evaluating IP for licensing
- Memorandum of understanding (MOU)/letter of intent
- Confidentiality issues

(b) Overview of main elements

**(b) Overview of main elements**

- Parties
- What is being licensed (subject-matter)
- Scope of the licence
- Establishing a field of use
- Exclusive, sole and non-exclusive licences (advantages and disadvantages of exclusivity for the licensor/licensee)
- Territory

- Other issues (sub-licences; technology licenses, arrangements concerning improvements to inventions)
- Economic arrangements (dealt with in more detail in section III.2.5)
- Other clauses (representations and warranties, liabilities, termination)

Point out that clauses found to be 'anti-competitive' in terms of EU competition law are not permitted and are deemed to be void.

**See also:**

Art. 101 TFEU

#### 4. Paying for licensed IP

(a) Forms of paying for licensed IP

(b) How is the value of a royalty calculated?

#### (a) Forms of paying for licensed IP

- Lump sums
- Royalties
- Royalty basis
- Royalty rates
- Commercial objectives and royalty variables
- Combination of lump sums and royalties
- Explain the advantages and disadvantages of each.

#### (b) How is the value of a royalty calculated?

- Calculation on the basis of profits or sales (define these terms)
- Reference to market practices of specific sectors

## **VIII. Workshops and exercises: Exploiting IP (4 hrs)**

### **1. Common clauses and special features of different licensing arrangements**

1. Use templates or examples of licensing agreements to discuss common clauses such as those studied earlier.

### **2. Workshop: Drafting a heads of agreement for a licence**

2. Divide students into groups and ask them to draft a heads of agreement for a licence. Discuss the elements to be included/excluded, with the aim of anticipating the issues which need to be taken account when entering into a licensing deal.

### **3. Practical exercise: Negotiating a licensing agreement**

3. Hold moot negotiations on how to conclude a licensing agreement.

# 5 Student projects on IP and the changing environment

## 5A: Using patent information in research and development

## 5B: IP-based entrepreneurship

## 5C: Advanced legal research on IP

Overview	Learning objectives
<p>The purpose of this module is to allow students to apply their advanced knowledge of IP at a pre-doctoral stage.</p> <p>A central general topic, "IP and the changing environment", is proposed. This topic places IP at the centre of what is arguably the most significant global issue of our time: the effect of technological development on climate change.</p> <p>Under the guidance of a tutor, students should write a paper on the relationship between IP and the development of environmentally sound technologies (EST) from one of three different perspectives, in the field of their core studies (science and engineering, business and economics, legal studies).</p> <p><b>5A : Using patent information in research and development</b></p> <p><b>5B: IP and technology-based entrepreneurship</b> (Initiating an EST-based start-up)</p> <p><b>5C: Advanced legal research on IP</b> (The effects of international IP law on EST)</p>	<p>Students should apply their acquired knowledge of IP and carry out research aimed at making an original contribution to knowledge of the subject.</p>
Target audience	Prior knowledge
<p>Postgraduate students 5A: Engineering and science 5B: Business and economics 5C: Law</p>	<p>1A, 1B (Introduction to IP) Additionally: For 5A: Patent information (module 2E) For 5B: IP commercialisation (module 2B); IP and financing (module 2A) For 5C: International IP law (module 3C)</p>
Teacher profile	Knowledge of this module is recommended/required for
<p>For 5A: lecturer in engineering or science For 5B: lecturer in business management or economics For 5C: lecturer in IP/international law</p>	<p>Not applicable</p>
Student assessment	Related modules
<p>Written and oral presentation to an academic tribunal and oral defence of dissertation or final project</p>	<p>Not applicable</p>



# Ancillary module: "IPRs in a nutshell" (1.5-2 hrs)

## 1. What is intellectual property (IP) and how are intellectual property rights (IPRs) justified?

(a) Definition and characteristics of IP

(b) Social and economic justifications

(c) The importance of IP in the knowledge economy

### (a) Definition and characteristics of IP

Define IP (e.g. as a form of ownership of creations of the mind).

Explain that IP is intangible property. Use examples to compare a piece of work or knowledge achieved at the end of a creative process (e.g. R&D) with a "physical" product made by a person. Initiate a discussion on the differences between tangible and intangible goods, from the point of view of establishing the enjoyment and ownership of these goods.

From an economic perspective, explain the "public good" characteristics of knowledge and intellectual creations (non-excludable and non-rival).

Make it clear that the field of IP is not monolithic since the IP landscape comprises an array of quite distinct legal regimes, namely patents, copyright, trade marks, designs and a variety of specialised modes of protection (plant variety protection, semiconductor protection, etc.).

### (b) Social and economic justifications

- Refer to two distinct functions:
  - Promoting innovation (obtaining new and improved works )
  - Ensuring the integrity of the marketplace (ensuring that the quality of the information that consumers receive about products is accurate and not confusing or misleading)
- IPRs - and other laws - established in favour of the promotion of innovation (patents, copyright, designs, trade secrets, other rights, including plant variety rights, topographic designs rights for semiconductors, etc.)
  - The economic problem: solving "market failures" in the production of knowledge
  - Solution: "exclusivity" provided for the enjoyment of works as an incentive for investments in innovation and creative activity ("reward theory", "incentive theory", "prospect theory")
  - Fields where the validity of these theories is disputed (optional). Mention in particular the challenges which arise in fields such as information technology, where innovation is often dependent on cumulative and/or networking patterns. Point out the existing view that IP may restrict the diffusion of ideas and knowledge.

- IPRs - and other laws - which ensure integrity in the marketplace (trade marks, geographical indications, unfair competition)
  - The economic problem: solving "information asymmetries" and ensuring quality of information on products in the marketplace
  - The solution: protection for distinctive indications of origin of goods and services in order to protect consumers against confusion in the marketplace and to ensure that investments in product quality are transmitted properly to the public

### (c) The importance of IP in the knowledge economy

Mention the growing importance of intangible property in the knowledge economy.

Use statistics and newspaper information to show:

- Examples of the value of some IP assets (e.g. most valuable brands/patents/copyright)
- The growth in utilisation of the IP system (e.g. trends in patent and trade mark applications and registrations)

Some sources of IP-related statistics:

[www.wipo.int](http://www.wipo.int), [www.epo.org](http://www.epo.org),

[www.oami.europa.eu](http://www.oami.europa.eu)

## 2. IP rights (IPRs)

(a) Categories of IPR

(b) Different aspects of innovation protected by IPRs

(c) Obtaining protection for IP and defending IP rights

(d) Transactions involving IP

### (a) Categories of IPR

For each of the IPR categories, provide a systematic outline of the contents. For example, provide a table showing in each case the name of the IPR, the subject-matter, the reason why it exists, the main requirements/standards for protection, and the scope and duration of protection.

Main categories:

- Patents and utility models
- Copyright
- Designs
- Trade marks
  - Other distinctive signs (geographical indications, trade names)
- General laws protecting IP rights: trade secrets, unfair competition law, other rights

### (b) Different aspects of innovation protected by IPRs

Examine a complex product such as a mobile phone and show how different elements of this product are protected by different IP laws, e.g. the hardware by patents, the software by patents and/or copyright, the name/logo by trade marks, the shape of the casing by designs, etc.

### (c) Obtaining protection for IP and defending IP rights

Explain that different rights are obtained through different mechanisms.

Explain that registration is necessary for patents, including petty patents and utility models, trade marks and registered designs.

- The patent and trade mark/IP office
- Different routes for obtaining protection in more than one country (point out that such alternatives exist for industrial property rights)

Explain that, for unregistered rights, copyright on works is granted automatically from the moment they are created and they do not require formalities such as registration. Mention that copyright registers exist in many countries, but with the purpose of giving the author of a work means to ascertain his rights to that work. Also, mention that in Europe there are other IPRs which arise in a similar way (unregistered Community designs).

### (d) Transactions involving IP

List typical transactions involving IP:

- Selling a product which embodies the IP
- Selling the IP rights (where IPRs are transferred in exchange for money)
- Licensing the IP rights (explain that in the course of licensing, the owner grants a third party permission to use his rights in exchange for a price (royalty)).

### 3. Where are IPRs valid? Are IP laws the same in every country?

(a) The principle of territoriality

(b) Harmonisation of IP laws

#### (a) The principle of territoriality

IPRs are protected only within and in accordance with the legal rules of the jurisdiction (country, region) where they have been granted.

The authorities of the jurisdiction where the right has been granted or registered have exclusive competence in deciding on its validity.

#### (b) Harmonisation of IP laws

Explain that international treaties (the Paris Convention and TRIPS, in particular) have established the minimum levels of protection to be applied in each country. Provide examples of what is the same in every country.

Warn students that there may be significant differences between national laws, so they must always take national/regional rules as a reference.

Harmonisation of IPRs in Europe: three levels of harmonisation, depending on the category and rights concerned:

- Complete integration (trade marks and designs)
- Partial integration/harmonisation (copyright law)
- Partial harmonisation/integration under the aegis of the European Patent Office (patent granting)

#### 4. Advantages derived from IP protection

Advantages and benefits include:

- IPRs increase control over creative works, knowledge, technology and other intellectual creations developed by a company and help prevent competitors free-riding on them.
- IPRs help recoup investments made in R&D.
- IP assets are a source of revenue obtainable through transactions (see 2(d) above) and may be used as a source of financing.
- IP registers, in particular of patents, are a valuable source of information which can be used for different purposes (technical, legal, competitive, etc.).

#### 5. IP management: IP-related decisions in the life cycle of a product

Explain how different IP decisions belong to different stages in the life cycle of a new product:

- In research planning → patent/freedom to operate searches
- During research (early phases) → confidentiality/managing disclosures which may annul future patents
- Research breakthrough → patent filing strategies/deciding between patents and trade secrets/obtaining protection for software protection (copyright and/or patents)/IP evaluation/using IP to attract investments in development or further research
- Development phase → deciding whether or not to go international (plus international filing strategies)/using IP to gain access to complementary assets/licensing (plus cross-licensing)/IP evaluation
- Marketing phase → choosing and protecting trade marks and designs/IP enforcement/monitoring infringement and infringement/portfolio management - valuation of IP/licensing

Illustrate the explanation with a drawing showing a product life-cycle timeline.

# List of main legal texts referred to

## European Union

### Regulations

Agricultural products and foodstuffs as traditional specialities guaranteed (TSGs): Reg. 509/2006 [1996]. OJ L093/1

Brussels (I) Regulation: Reg. 44/2001 on the jurisdiction and enforcement of judgments in civil and commercial matters [2001] OJ L012/1

Community Designs Regulation (CDR): Reg. 6/2002 [2002] OJ L1

Community Plant Variety Rights (CPVR): Reg. 2100/94 [1994] OJ L 227/1

Community Plant Variety Rights – entitlement to file an application: Council Reg. 15/2008 [2008] OJ L8/2

Community Trademark (CTMR): Reg. 40/94 [1994] OJ L11/1

Community Trademark (Amendment): Reg. 422/2004 amending Reg. 40/94

Compulsory licensing of patents relating to the manufacture of pharmaceutical products for export to countries with public health problems: Reg. 816/2006 [2006] OJ L 157/1

Customs Regulation (CR): Reg. 1383/2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against them [2003] OJ L196/7

Geographical indications (PDO/PGI Reg.): Reg. 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs [1996] OJ L93/12

Know-how licensing agreements: Reg. 556/1989 on the application of Art. 85(3) of the EC Treaty to certain categories of know-how licensing agreements

Motor vehicle industry (spare parts): Reg. 1400/2002 on the application of Art. 81(3) of the Treaty to categories of vertical agreements and concerted practices in the motor vehicle industry OJ L203/30

Patent licensing agreements: Reg. 2349/1984 on the application of Art. 85(3) of the Treaty to certain categories of patent licensing agreements

Research and development agreements: Commission Reg. 2659/2000 on the application of Art. 81(3) of the Treaty to categories of research and development agreements [1999] OJ L304

Specialisation agreements: Commission Reg. 2658/2000 on the application of Art. 81(3) of the Treaty to categories of specialisation agreements

Supplementary protection certificate for medicinal products (SPC (MP) Reg): Reg. 1768/92 [1992] OJ L182/1

Technology transfer agreements: Reg. 240/1996 on the application of Art. 85(3) of the Treaty to certain categories of technology transfer agreements

Technology transfer regulation: Commission Reg. 772/2004 on the application of Art. 81(3) of the Treaty to categories of technology transfer agreements [2004] OJ L123/11

Technology transfer regulation: Guidelines on the application of Art. 81 of the EC Treaty to technology transfer agreements [2004] OJ C101/2

Vertical agreements and concerted practices: Commission Reg. 2790/1999 on the application of Art. 81(3) to categories of vertical agreements and concerted practices [1999] OJ L336

## **Directives**

Biotechnology: Dir. 98/44 on the legal protection of biological inventions [1998] OJ L213/13

Comparative advertising: Dir. 97/55 [1997] amending Directive 84/450/EEC concerning misleading advertising so as to include comparative advertising OJ L 290 pp. 18-23

Copyright duration: Dir. 93/98/EEC [1993] OJ L290, 1993-11-24, pp. 9–13

Databases: Dir. 96/9 [1996] OJ L 77/20

Designs: Dir. 98/71 on the legal protection of designs [1998] OJ L289/28

Enforcement: Dir. 2004/48/EC [2004] OJ L 195/16

Information society: Dir. 2001/29 [2001] OJ L 1767/10

Misleading advertising: Dir. 84/450 [1984] OJ L250

Rental and lending rights: Dir. 2006/115 OJ [2006] L376/28

Resale right: Dir. 2001/84 [2001] OJ L272/32

Satellite and cable: Dir. 93/83 [1993] OJ L248/15

Semiconductor chips: Dir. 87/54 on the legal protection of semiconductor chips [1988] OJ L24/36

Software (computer programs): Dir. 2009/24 [2009] OJ L111/21

Term of copyright and certain related rights: Dir. 2006/116 [2006] OJ L372/12

Trade Marks Directive (TMD): Dir. 89/104 [1989] OJ L040/1

Unfair commercial practices (UCPD): Dir. 2005/29 [2005] OJ L149

## **Treaties**

Treaty on the Functioning of the European Union (TFEU): [2008] OJ C115/58

## International treaties

Berne Convention for the Protection of Literary and Artistic Works, 1886 (revised), WIPO

Brussels Convention (Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters), 1968

Budapest Treaty on the international recognition of the deposit of microorganisms for the purposes of patent procedure, 1977, WIPO

Convention on Biological Diversity (CBD), 1992, UN

Cartagena Protocol on Biosafety, 2000

EC Convention on the Law Applicable to Contractual Obligations (Rome I), 1980

European Convention on Human Rights (ECHR)

European Patent Convention (EPC), 1973

European Patent Convention (EPC) 1973, Rules

European Patent Convention, 2000 (EPC 2000)

Protocol on the Interpretation of Article 69 EPC

EPC 2000 Implementing Regulations

General Agreement on Tariffs and Trade (GATT)

Hague Agreement Concerning the Registration of International Designs, 1934 (as amended), WIPO

International Convention for the Protection of New Varieties of Plants (UPOV), 1961

London Agreement (Agreement on the application of Article 65 EPC) [2001], OJ EPO, 549

Lugano Convention (Convention on jurisdiction and the enforcement of judgments in civil and commercial matters), 1988

Madrid Agreement Concerning the International Registration of Trademarks, 1891 (as amended), WIPO

Madrid Protocol (Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks), 1989, WIPO

Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of Registration of Marks, WIPO

Paris Convention for the Protection of Industrial Property, 1883 (as revised), WIPO

Patent Cooperation Treaty (PCT), 1970 (as amended), WIPO

Patent Law Treaty (PLT), 2000, WIPO

Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations, 1961 (as amended), WIPO

Singapore Treaty on the Law of Trademarks, 2006, WIPO

Trademark Law Treaty (TLT), 1994, WIPO

TRIPS (Agreement on trade-related aspects of intellectual property rights), 1994

Doha Declaration, 2001

Protocol amending the TRIPS Agreement, 2005

Universal Copyright Convention 1952 (revised 1971)

Vienna Convention on the Law of Treaties, 1969

WIPO Internet Treaties (WIPO Copyright Treaty [WCT] and WIPO Performances and Phonograms Treaty [WPPT])

## Acronyms and abbreviations

<b>ACTA</b>	Anti-Counterfeiting Trade Agreement
<b>BOA</b>	Boards of appeal (EPO)
<b>CFI</b>	Court of First Instance (currently: "General Courts of the European Union", GCEU)
<b>CII</b>	Computer-implemented invention
<b>CJEU</b>	Court of Justice of the European Union
<b>COM</b>	European Commission
<b>CPVO</b>	Community Plant Variety Office
<b>CTM</b>	Community trade mark
<b>DBA</b>	Decision of the boards of appeal (EPO)
<b>DRM</b>	Digital rights management
<b>EC</b>	European Commission
<b>ECJ</b>	European Court of Justice (currently: "Court of Justice of the European Union" CJEU)
<b>EP</b>	European patent
<b>EPLA</b>	European Patent Litigation Agreement
<b>EPO</b>	European Patent Office
<b>EU</b>	European Union
<b>ESHE</b>	European Space for Higher Education
<b>FLOSS</b>	Free/libre/open-source software
<b>FTO</b>	Freedom to operate
<b>GATT</b>	General Agreement on Tariffs and Trade
<b>GCEU</b>	General Courts of the European Union
<b>GI</b>	Geographical indication

<b>ICTSD</b>	International Centre for Trade and Sustainable Development
<b>IMPI</b>	Instituto Mexicano de la Propiedad Industrial
<b>IP</b>	Intellectual property
<b>IPC</b>	International Patent Classification
<b>IPRs</b>	Intellectual property rights
<b>ISR</b>	International search report
<b>ITC</b>	Information and communication technology
<b>JPO</b>	Japan Patent Office
<b>KT</b>	Knowledge transfer
<b>KTO</b>	Knowledge transfer office
<b>NPV</b>	Net present value
<b>OA</b>	Open access
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OHIM</b>	Office for Harmonisation in the Internal Market
<b>OJ</b>	Official Journal
<b>OSS</b>	Open-source software
<b>PCT</b>	Patent Cooperation Treaty
<b>PDO</b>	Protected designation of origin
<b>PGI</b>	Protected geographical indication
<b>PTO</b>	Patent and trade mark office
<b>PVP</b>	Plant variety protection
<b>RCD</b>	Registered Community design
<b>TFEU</b>	Treaty on the Functioning of the European Union (formerly Treaty Establishing the European Union)
<b>TPMs</b>	Technical protection measures
<b>TSG</b>	Traditional specialities guaranteed

<b>TTO</b>	Technology transfer office
<b>UCD</b>	Unregistered Community design
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>USPTO</b>	United States Patent and Trademark Office
<b>WIPO</b>	World Intellectual Property Organization
<b>WTO</b>	World Trade Organization



# Annex: IP courses, training and source material worldwide

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## I. Selection of undergraduate courses with IP content offered by departments of engineering, science, economics and business

### Europe

#### Undergraduate/1st cycle

##### **"Introduction to Intellectual Property"**

Mechanical Engineering, Imperial College London (United Kingdom)

[http://workspace.imperial.ac.uk/college/public/pdfs/ugsyllabus/UG\\_syllab\\_MechEng\\_09-10.pdf](http://workspace.imperial.ac.uk/college/public/pdfs/ugsyllabus/UG_syllab_MechEng_09-10.pdf)

##### **"Patents", "Discovery of Agrochemicals" course**

Imperial College London (United Kingdom)

[http://workspace.imperial.ac.uk/college/public/pdfs/ugsyllabus/UG\\_syllab\\_MechEng\\_09-10.pdf](http://workspace.imperial.ac.uk/college/public/pdfs/ugsyllabus/UG_syllab_MechEng_09-10.pdf)

##### **"Patents and licensing"**

compulsory elective, Social Science Law Department, ETH (Switzerland)

##### **"Introduction to patent law by means of a case study - research, development, innovation"**

Faculty of Theoretical Physics, University of Frankfurt (Germany)

[https://qis.server.uni-](https://qis.server.uni-frankfurt.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=23938&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung)

[frankfurt.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=23938&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung](https://qis.server.uni-frankfurt.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=23938&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung)

##### **"Inventions at university and in industry"**

lecture and practical, Faculty of Chemistry and Geosciences, University of Heidelberg (Germany)

[http://lsf.uni-](http://lsf.uni-heidelberg.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=66950&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung)

[heidelberg.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=66950&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung](http://lsf.uni-heidelberg.de/qisserver/rds?state=verpublish&status=init&vmfile=no&publishid=66950&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung)

##### **"IP rights for chemists and chemicals"**

Department of Chemistry and Pharmacy, University of Innsbruck (Austria)

[http://orawww.uibk.ac.at/public\\_prod/owa/ifuonline\\_lv.home?open\\_in=c32262cA&sx\\_in=0&sy\\_in=340&c\\_in=8&sem\\_id\\_in=09W&suche\\_in=patent&opened=e0eBc36675cAc32262cA](http://orawww.uibk.ac.at/public_prod/owa/ifuonline_lv.home?open_in=c32262cA&sx_in=0&sy_in=340&c_in=8&sem_id_in=09W&suche_in=patent&opened=e0eBc36675cAc32262cA)

##### **"Patents and scientific documentation"**

Licenciatura de Química (Chemistry) University of Alicante (see annex in "A Plan for Spanish Universities", OEPM website) (Spain)

[www.oepm.es/cs/OEPMSite/contenidos/PDF\\_Varios/Plan\\_VersionInglesa.pdf](http://www.oepm.es/cs/OEPMSite/contenidos/PDF_Varios/Plan_VersionInglesa.pdf)

##### **"Curso Online de Patentes e Información Tecnológica"**

Escuela Técnica Superior de Ingenieros Industriales (Engineering) (see annex in "A Plan for Spanish Universities", OEPM website) (Spain)

[www.oepm.es/cs/OEPMSite/contenidos/PDF\\_Varios/Plan\\_VersionInglesa.pdf](http://www.oepm.es/cs/OEPMSite/contenidos/PDF_Varios/Plan_VersionInglesa.pdf)

#### Undergraduate/2nd cycle

##### **"Technology and innovation strategy"**

(core elective), Said Business School, Oxford University (United Kingdom)

[www.sbs.ox.ac.uk/EMBA/Electives.htm](http://www.sbs.ox.ac.uk/EMBA/Electives.htm)

##### **"Technology and the management of technology"**

(lectures on patent portfolio management and licensing), Centre for Technology Management, (CTM - CAMBRIDGE) (United Kingdom)

[www.ifm.eng.cam.ac.uk/ctm/t\\_cat/Technology%20management/index.htm](http://www.ifm.eng.cam.ac.uk/ctm/t_cat/Technology%20management/index.htm)

### **"Intellectual capital and competitiveness"**

School of Management and Organizational Psychology, Birkbeck College, University of London (United Kingdom)

[www.bbk.ac.uk/manop/prospective-students/postgraduate/degrees/modules/icc/?searchterm=intellectual%20property](http://www.bbk.ac.uk/manop/prospective-students/postgraduate/degrees/modules/icc/?searchterm=intellectual%20property)

### **"The economics and governance of innovation and institutions"**

Birkbeck College, University of London (United Kingdom)

[www.bbk.ac.uk/manop/prospective-students/postgraduate/degrees/modules/egii/?searchterm=intellectual%20property](http://www.bbk.ac.uk/manop/prospective-students/postgraduate/degrees/modules/egii/?searchterm=intellectual%20property)

### **"Internationalizing IP"**

School of Management, Bradford University (United Kingdom)

<http://sipr.admin.brad.ac.uk/ipo/00004816-0026.htm>

### **"Intellectual property"**

Elective courses in Accounting (analysis of goodwill and RD), Entrepreneurship (new creative ventures, new tech ventures), Marketing (brand management), and Strategic and International Management (strategic innovation), London School of Business (United Kingdom)

[www.london.edu/programmes/mba/programmedetails/electives.html](http://www.london.edu/programmes/mba/programmedetails/electives.html)

### **"IP asset management seminar"**

Schulich Executive Education Centre, York University (United Kingdom)

[http://seec.schulich.yorku.ca/enrollment/programs/alpha\\_listing/file\\_2\\_listing.php?course\\_id=178](http://seec.schulich.yorku.ca/enrollment/programs/alpha_listing/file_2_listing.php?course_id=178)

### **IP content in MSc in Biotechnology**

Bioprocessing and Business Management –patents and other IP issues (United Kingdom)

[www2.warwick.ac.uk/fac/sci/bio/msc/biobusiness/](http://www2.warwick.ac.uk/fac/sci/bio/msc/biobusiness/)

### **"Intellectual property and copyright management"**

MA in Music Management, University of Westminster (United Kingdom)

[www.wmin.ac.uk/mad/page-901](http://www.wmin.ac.uk/mad/page-901)

### **IP content in the Industrial Systems Engineering Diploma**

École Central de Paris (France)

[www.ecp.fr/en/B\\_ formations/B4\\_ masteres/B4b\\_ mastere\\_ detail.htm?formation\\_id=17](http://www.ecp.fr/en/B_ formations/B4_ masteres/B4b_ mastere_ detail.htm?formation_id=17)

### **"Propriété Intellectuelle" in "Innovation et valorisation de la recherche et transferts de compétences"**

Université Paris Sud (France)

<http://www.u->

[psud.fr/fr/les\\_ formations/les\\_ formations\\_ par\\_ diplome/masters/economie\\_ technologie\\_ territoire/m2\\_ innovation\\_ et\\_ valorisation\\_ de\\_ la\\_ recherche.html](http://www.u-psud.fr/fr/les_ formations/les_ formations_ par_ diplome/masters/economie_ technologie_ territoire/m2_ innovation_ et_ valorisation_ de_ la_ recherche.html)

### **"OSP 6 Propriété Intellectuelle"**

École Doctorale des Sciences pour Ingénieurs, Université de Clermont Ferrand (France)

[www.univ-bpclermont.fr/edspi/spip.php?article87](http://www.univ-bpclermont.fr/edspi/spip.php?article87)

### **"Gestion juridique et propriété industrielle"**

Master en Sciences, Technologie et Gestion, Université de la Rochelle (France)

[www.univ-bpclermont.fr/edspi/spip.php?article87](http://www.univ-bpclermont.fr/edspi/spip.php?article87)

### **"Master in intellectual property law and management"**

CEIPI and Steinbeis Transfer Institute (France/Germany)

[www.ceipi.edu/pdf/Master\\_Management/Plaquette\\_PIM\\_2009\\_2010.pdf](http://www.ceipi.edu/pdf/Master_Management/Plaquette_PIM_2009_2010.pdf)

## **"Formations en Stratégies de propriété intellectuelle/Nouvelles technologies/Évaluation financière & fiscalité/Licensing"**

IEEPI (France)

<http://www.ieepi.org/les-formations/2.html>

## **IP content in "Master in biotechnology management"**

Instituto de Empresa (Spain)

[http://master-biotech.ie.edu/pdf/core\\_courses.pdf](http://master-biotech.ie.edu/pdf/core_courses.pdf)

## **"Intellectual property and data protection"**

Instituto de Empresa (Spain)

[www.master-telecom.ie.edu/pdf/CourseDescriptions2.pdf](http://www.master-telecom.ie.edu/pdf/CourseDescriptions2.pdf)

## **IP content in "Master en Dirección de Sistemas de Información"**

Instituto de Empresa (Spain)

[www.enter.ie.edu/enter/mybox/cms/1193.pdf](http://www.enter.ie.edu/enter/mybox/cms/1193.pdf)

## **IP content in "Master in sport management"**

Instituto de Empresa (Spain)

[http://master-sports.ie.edu/pdf/core\\_courses.pdf](http://master-sports.ie.edu/pdf/core_courses.pdf)

## **"Economia e Gestão da Propriedade Industrial"**

Instituto para o Desenvolvimento e Estudos Económicos, Financeiros e Empresariais, ISEG (Portugal)

[www.idefe.pt/ficheiros/EGPI\\_brochura.pdf](http://www.idefe.pt/ficheiros/EGPI_brochura.pdf)

## **"Master in intellectual property management"**

ALMA Graduate School, Università di Bologna (Italy) (2007/2008 programme)

<http://www.eng.unibo.it/PortaleEn/Academic+programmes/Masters/2007-2008/IntellectualProperty.htm>

## **IP content in "Master in computer sciences"**

Università di Trento (Italy)

[http://mcs.dit.unin.it/edu/compsciences/s3ad.xml?cds\\_id=10117&pds\\_id=9999&aa\\_ord\\_id=2008&aa\\_off\\_id=2008&ad\\_id=87825](http://mcs.dit.unin.it/edu/compsciences/s3ad.xml?cds_id=10117&pds_id=9999&aa_ord_id=2008&aa_off_id=2008&ad_id=87825)

## **"Patent analysis", in "Innovation research methods"**

part of the Science and Innovation Management Masters Course, Utrecht University (Netherlands)

<http://www.mastersportal.eu/students/browse/programme/533/science-and-innovation-management.html>

## **"Comparative intellectual property law"**

in International Business Law and Globalisation, Utrecht University (Netherlands)

[www.uu.nl/en/informationfor/internationalstudents/intbuslaw/studyprogramme/schedule/Pages/default.aspx](http://www.uu.nl/en/informationfor/internationalstudents/intbuslaw/studyprogramme/schedule/Pages/default.aspx)

## **"Intellectual property management"**

in MSc in Innovation Management, Aarhus School of Business (Denmark)

[www.asb.dk/article.aspx?pid=16725](http://www.asb.dk/article.aspx?pid=16725)

## **United States and Canada**

### **Undergraduate level (BA)**

## **"Intellectual property, patenting and technology transfer"**

in Engineering, University of Colorado (United States)

<http://vast.uccs.edu/~tboult/CS601/>

## **"Experiences in teaching FOSS"**

in Intellectual property, engineering and society, University of Virginia (United States)

<http://oss2005.case.unibz.it/Papers/OES/ES1.pdf>

### **"An intellectual property course for computer systems majors"**

University of Charleston (United States)

[www.acm.org/crossroads/xrds8-1/ipcourse.html](http://www.acm.org/crossroads/xrds8-1/ipcourse.html)

### **"Concepts of intellectual property and its protection through patents, copyrights, trademarks, and trade secrets"**

in Creativity and New Business Development, University of Virginia (United States)

[http://records.ureg.virginia.edu/preview\\_course.php?catoid=22&coid=68988](http://records.ureg.virginia.edu/preview_course.php?catoid=22&coid=68988)

### **"Government contract computer law"**

University of Virginia (United States)

[http://records.ureg.virginia.edu/preview\\_course.php?catoid=22&coid=69347](http://records.ureg.virginia.edu/preview_course.php?catoid=22&coid=69347)

### **"Intellectual property, engineering and society"**

University of Virginia (United States)

[http://records.ureg.virginia.edu/preview\\_course.php?catoid=22&coid=70394](http://records.ureg.virginia.edu/preview_course.php?catoid=22&coid=70394)

IP-related courses, including **"Antitrust"**, **"Business law for entrepreneurs"**, **"Profiting from technology: an entrepreneur's legal guide"**, **"The business of intellectual property"**, **"Product design and marketing"**, **"Business and nanotechnology"** and **"Intellectual capital management"**

Kellogg School of Management, Northwestern University (United States)

[www20.kellogg.northwestern.edu/dpco/offdtl.asp?coursecatalogid=374](http://www20.kellogg.northwestern.edu/dpco/offdtl.asp?coursecatalogid=374)

## **Postgraduate level**

IP content in **"Executive Master's in Technology Management"**

University of Pennsylvania and Wharton Business School (United States)

[www.emtm.upenn.edu/program/courses.html#core](http://www.emtm.upenn.edu/program/courses.html#core)

IP-related courses in **"Technology and Innovation Management"** and **"Business Development"** Caltech University (United States)

[www.irc.caltech.edu/SearchPDF.aspx?SearchTerm=intellectual+property](http://www.irc.caltech.edu/SearchPDF.aspx?SearchTerm=intellectual+property)

### **"Intellectual property and business strategy"**

Harvard Business School (United States)

[www.exed.hbs.edu/programs/ip/curriculum.html](http://www.exed.hbs.edu/programs/ip/curriculum.html)

### **"Patents and corporate value: exploration of public policy, business strategy, and financial issues"**

University of Virginia, Darden Business School (United States)

*C:\Documents and Settings\PC\Mis documentos\Blocos de notas de OneNote\IP Syllabus\Courses.one*

### **"Valuation litigation support"**

Mendoza MBA, Notre Dame (United States)

[http://business.nd.edu/Accountancy/Academics/MBA\\_Accountancy\\_Courses/](http://business.nd.edu/Accountancy/Academics/MBA_Accountancy_Courses/)

IP issues in **"Legal issues for businesses"**

Mendoza Executive MBA, Notre Dame (United States)

[http://business.nd.edu/Executive\\_MBA/Academics/Chicago\\_Courses/](http://business.nd.edu/Executive_MBA/Academics/Chicago_Courses/)

### **"Intellectual capital and competitive strategy"**

University of Michigan, Ross Business School (United States)

[www.bus.umich.edu/CourseManagement/ViewCourseDescriptions.asp?Term=F06&Division=STRATEGYf](http://www.bus.umich.edu/CourseManagement/ViewCourseDescriptions.asp?Term=F06&Division=STRATEGYf)

### **"Intellectual property and its effect on business"**

Stanford Graduate Business School (United States)

[www.gsb.stanford.edu/research/courses/polecon.html](http://www.gsb.stanford.edu/research/courses/polecon.html)

IP issues in **"International legal environment of business"**

Global Management Program, Queens University (Canada)

**"Certificate in IP management"**

Washington University (United States)

[www.extension.washington.edu/ext/certificates/inp/inp\\_gen.asp](http://www.extension.washington.edu/ext/certificates/inp/inp_gen.asp)

**"Copyright crash online tutorial"**

University of Texas (United States)

[www.lib.utsystem.edu/copyright/index.html](http://www.lib.utsystem.edu/copyright/index.html)

**Other countries (postgraduate)**

**"The distance education system on intellectual property for engineers"**

(Japan). Information in article (in Japanese)

<http://sciencelinks.jp/j-east/article/199914/000019991499A0407367.php>

IP content in **"Technology and innovation management Master programme"**

National Chengchi University, (Taiwan)

[http://tim.nccu.edu.tw/course/en\\_course.htm](http://tim.nccu.edu.tw/course/en_course.htm)

IP content in **"Technology management programme"**

National Yunlin University of Science and Technology (Taiwan)

[www.mba.yuntech.edu.tw/english/coures/Technology Management.htm](http://www.mba.yuntech.edu.tw/english/coures/Technology Management.htm)

IP content in **"Innovation management course"**

UNSW (Australia)

[www.handbook.unsw.edu.au/undergraduate/programs/2007/3451.html](http://www.handbook.unsw.edu.au/undergraduate/programs/2007/3451.html)

## II. Selection of specialist IP courses for postgraduate programmes

### Europe

#### Belgium

##### **Katholieke Universiteit Leuven and Katholieke Universiteit Brussel**

Master of Laws (LL.M.) - Specialization in intellectual property law

[www.kubrusssel.ac.be](http://www.kubrusssel.ac.be)

[www.law.kuleuven.be/cir/](http://www.law.kuleuven.be/cir/)

##### **Institut d'Etudes Juridiques Européennes Université de Liège**

Master's in intellectual property and competition law

[www.ije.net/Master\\_complementaire\\_en\\_droit.21.0.html](http://www.ije.net/Master_complementaire_en_droit.21.0.html)

#### Finland

##### **Hanken Swedish School of Economics and Business Administration**

Intellectual property law – Master degree programme

[www.hanken.fi/student/en/ipi](http://www.hanken.fi/student/en/ipi)

#### France

##### **Université de Grenoble**

Master 2 Propriété intellectuelle et droit des nouvelles technologies (M2 Finalité Professionnelle)

[www.facdroid-grenoble.org/formations/formations\\_m2\\_propriete\\_intellectuelle.php](http://www.facdroid-grenoble.org/formations/formations_m2_propriete_intellectuelle.php)

##### **Université de Strasbourg**

##### **Centre d'Études Internationales de la Propriété Intellectuelle (CEIPI)**

- Master 2 in intellectual property law and valuation of intangible assets
- Master 2 in intellectual property law and business
- Master of intellectual property law and management (MIPLM)
- Master 2 in European and international intellectual property law
- Master 2 in intellectual property law and cultural heritage
- Master of laws 2 in multimedia law and information systems
  - Long tuition in patents and trademarks/industrial designs
  - Accelerated tuition in patents and trademarks/industrial designs

[www.ceipi.edu/index.php?id=5442&L=2](http://www.ceipi.edu/index.php?id=5442&L=2)

#### Germany

##### **Max Planck Institute for Intellectual Property, Competition and Tax Law, University of Augsburg, Technische Universität München and George Washington University Law School**

LL.M. in intellectual property and competition law, Munich Intellectual Property Law Center (MIPLC)

[www.miplc.de](http://www.miplc.de)

##### **Technische Universität Dresden – Juristische Fakultät (organised with University of Exeter, Queen Mary College, University of London, CEIPI, University of Washington, University of Prague)**

LL.M. in international studies in intellectual property law

[http://tu-dresden.de/die\\_tu\\_dresden/fakultaeten/juristische\\_fakultaet/igewem/llm](http://tu-dresden.de/die_tu_dresden/fakultaeten/juristische_fakultaet/igewem/llm)

## Holland

### University of Maastricht

LL.M./M.Sc. in intellectual property law and knowledge management

[www.maastrichtuniversity.nl/web/Faculties/FL/TargetGroup/ProspectiveStudents/MastersProgrammes/Programmes/AdvancedMasterInIntellectualPropertyLawAndKnowledgeManagementLLMSc/ProgrammeInformation/ProgrammeStructure.htm](http://www.maastrichtuniversity.nl/web/Faculties/FL/TargetGroup/ProspectiveStudents/MastersProgrammes/Programmes/AdvancedMasterInIntellectualPropertyLawAndKnowledgeManagementLLMSc/ProgrammeInformation/ProgrammeStructure.htm)

## Italy

### Università di Torino

Master of laws in intellectual property/WIPO

[www.turin-ip.com/course-info](http://www.turin-ip.com/course-info)

## Spain

### Universidad de Alicante

- Master in intellectual property law
- Specialization courses
  - Patents and technology transfer
  - Trade marks and unfair competition law
  - Copyright

[www.ml.ua.es](http://www.ml.ua.es)

### Universidad Autónoma de Madrid

Máster en Propiedad Intelectual (Copyright)

[www.propiedad-intelectual.dursa.com/](http://www.propiedad-intelectual.dursa.com/)

### Universidad Carlos III de Madrid

Máster en Propiedad Intelectual (Copyright)

[www.uc3m.es/portal/page/portal/postgrado\\_mast\\_doct/masters/mu\\_prop\\_intelec/programa](http://www.uc3m.es/portal/page/portal/postgrado_mast_doct/masters/mu_prop_intelec/programa)

### Universidad Ramón Llull (ESADE)

Máster en Propiedad Intelectual y Sociedad de la Información

[www.esade.edu/landingfu/esp/masterderecho/prop\\_int\\_sociedad\\_info](http://www.esade.edu/landingfu/esp/masterderecho/prop_int_sociedad_info)

### Universidad Santiago de Compostela

IDIOUS, Curso de Especialización en Marcas, Patentes, Derechos de Autor y Competencia

[www.usc.es/gl/institutos/idius/](http://www.usc.es/gl/institutos/idius/)

### Escuela de Negocios EOI

Máster en Propiedad Industrial, Intelectual y Nuevas Tecnologías

## Sweden

### University of Lund

Master Programme in International Human Rights Law

[http://www.lunduniversity.lu.se/o.o.i.s/24725?lukas\\_id=JAMRH.IHRL](http://www.lunduniversity.lu.se/o.o.i.s/24725?lukas_id=JAMRH.IHRL)

### University of Stockholm

Master of European intellectual property law

[www.juridicum.su.se/jurweb/utbildning/master/master\\_of\\_european\\_intellectual\\_property\\_law/index.asp](http://www.juridicum.su.se/jurweb/utbildning/master/master_of_european_intellectual_property_law/index.asp)

## Switzerland

### ETH (Zurich Swiss Federal Institute of Technology Zurich)

Master in advanced studies in intellectual property

[www.masip.ethz.ch](http://www.masip.ethz.ch)

## United Kingdom

### University of Aberdeen

LL.M. in intellectual property law

[www.abdn.ac.uk/law/graduate/gradcourse.php?ID=LL.M.IPL](http://www.abdn.ac.uk/law/graduate/gradcourse.php?ID=LL.M.IPL)

### Bournemouth University, "Centre for Intellectual Property Policy & Management"

– LL.M. in intellectual property

– PG in intellectual property

[www.cippm.org.uk/degrees.html](http://www.cippm.org.uk/degrees.html)

### Cambridge University

LL.M. Master of Law (includes a choice of IP topics)

[www.cam.ac.uk/guide/pgcourses/llm.html](http://www.cam.ac.uk/guide/pgcourses/llm.html)

– e.g. international intellectual property

– e.g. intellectual property

[www.law.cam.ac.uk/faculty-resources/courses-and-subjects/llm/papers/intellectual-property/40](http://www.law.cam.ac.uk/faculty-resources/courses-and-subjects/llm/papers/intellectual-property/40)

### University College London

LL.M. specialist degrees - intellectual property law

[www.ucl.ac.uk/laws/prospective/llm/index.shtml?llm\\_spec\\_29](http://www.ucl.ac.uk/laws/prospective/llm/index.shtml?llm_spec_29)

### University of East Anglia

LL.M. in information, technology and intellectual property law

[www.uea.ac.uk/law/LLMProgs/llminfotechintelproplaw](http://www.uea.ac.uk/law/LLMProgs/llminfotechintelproplaw)

### University of Edinburgh, AHRC Research

Centre for Studies in Intellectual Property and Technology Law

– LL.M. in innovation, technology and the law

– LL.M. in intellectual property law

[www.law.ed.ac.uk/distancelearning/programme/](http://www.law.ed.ac.uk/distancelearning/programme/)

### King's College London

LL.M. in intellectual property

[www.kcl.ac.uk/schools/law/prospective/grad/llm/ippath](http://www.kcl.ac.uk/schools/law/prospective/grad/llm/ippath)

### University of Leeds

LL.M. in cyberlaw: information technology, law and society

[www.law.leeds.ac.uk/leedslaw/HomePage.aspx](http://www.law.leeds.ac.uk/leedslaw/HomePage.aspx)

### London School of Economics

LL.M. with IP law courses

[www2.lse.ac.uk/graduateProspectus2010/taughtProgrammes/LLM.aspx#generated-subheading3](http://www2.lse.ac.uk/graduateProspectus2010/taughtProgrammes/LLM.aspx#generated-subheading3)

### University of Manchester

– Intellectual property diploma

– LL.M. in intellectual property

[www.law.manchester.ac.uk/postgraduate](http://www.law.manchester.ac.uk/postgraduate)

### Nottingham Trent University

LL.M. in intellectual property law

[www.ntu.ac.uk/apps/pss/courses/cf/60678-1/3/LLM\\_Intellectual\\_Property\\_Law.aspx](http://www.ntu.ac.uk/apps/pss/courses/cf/60678-1/3/LLM_Intellectual_Property_Law.aspx)

LL.M. in IP litigation

[www.ntu.ac.uk/apps/pss/course-cf-60362-3/LLM\\_Intellectual\\_Property\\_Litigation.aspx](http://www.ntu.ac.uk/apps/pss/course-cf-60362-3/LLM_Intellectual_Property_Litigation.aspx)

LL.M. in commercial intellectual property

[www.ntu.ac.uk/apps/pss/course-cf-60653-3/LLM\\_Commercial\\_Intellectual\\_Property.aspx](http://www.ntu.ac.uk/apps/pss/course-cf-60653-3/LLM_Commercial_Intellectual_Property.aspx)

### **Queen Mary University London**

- LL.M. in intellectual property law
- MSc in management of intellectual property
- Certificate in intellectual property law
- LL.M. in computer and communications law

[www.qmul.ac.uk/courses/courses.php?dept\\_id=14&pgcourses=1&course\\_id=336&course\\_level=1&article\\_id=241](http://www.qmul.ac.uk/courses/courses.php?dept_id=14&pgcourses=1&course_id=336&course_level=1&article_id=241)

## **United States and Canada**

### **University of Akron**

LL.M. in intellectual property

[www.uakron.edu/law/curriculum/llm/](http://www.uakron.edu/law/curriculum/llm/)

### **University of California, Boalt Hall School of Law**

- Law and technology certificate programme

[www.law.berkeley.edu/5256.htm](http://www.law.berkeley.edu/5256.htm)

- LL.M. (Master of Laws)

[www.law.berkeley.edu/admissions/advdegree/LL.M.html](http://www.law.berkeley.edu/admissions/advdegree/LL.M.html)

### **Boston University**

LL.M. in intellectual property

[www.bu.edu/law/prospective/llm/intellectual/index.html](http://www.bu.edu/law/prospective/llm/intellectual/index.html)

### **Benjamin N. Cardozo School of Law, Yeshiva University**

LLM in intellectual property

[www.cardozo.yu.edu/info.aspx?cid=2152&content=true](http://www.cardozo.yu.edu/info.aspx?cid=2152&content=true)

### **Case Western Reserve University School of Law**

LL.M. with certificate in intellectual property

[www.case.edu/law/llm/academics/intellectualproperty.html](http://www.case.edu/law/llm/academics/intellectualproperty.html)

<http://law.case.edu/Academics/Concentrations/LawTechnologyandtheArts.aspx>

### **Howard University, Institute of Intellectual Property and Social Justice Programmes**

- Equalizing Access to Knowledge
- IP Empowerment Program

<http://www.iipsj.org/Programs-SJImpact-Overview.html>

### **Chicago-Kent College of Law**

LL.M. in international intellectual property law

[www.kentlaw.edu/international/LLM/iplaw/](http://www.kentlaw.edu/international/LLM/iplaw/)

LL.M. University of Columbia

[www.law.columbia.edu/focusareas/ip](http://www.law.columbia.edu/focusareas/ip)

### **DePaul University (Center for Intellectual Property Law & Information Technology)**

- LLM in intellectual property law

[www.law.depaul.edu/programs/llm/intellectual\\_property.asp](http://www.law.depaul.edu/programs/llm/intellectual_property.asp)

- IP/IT certificate programmes

- General IP
- Patents
- Arts and museums
- Information technology

[www.law.depaul.edu/programs/areas\\_specialization/ciplit.asp](http://www.law.depaul.edu/programs/areas_specialization/ciplit.asp)

### **Duke Law University**

Program in intellectual property

[www.law.duke.edu/ip/](http://www.law.duke.edu/ip/)

### **Fordham Law School, New York**

LL.M. in IP/IT

<http://law.fordham.edu/llm-program/2082.htm>

<http://law.fordham.edu/16158.htm>

### **University of Houston**

LL.M. in intellectual property and information law

[www.law.uh.edu/ipil](http://www.law.uh.edu/ipil)

### **John Marshall University**

- LL.M. in intellectual property
- M.Sc. in intellectual property law
- LL.M. program in information technology law
- M.Sc. in information technology law

[www.jmls.edu/academics/index.shtml](http://www.jmls.edu/academics/index.shtml)

### **George Mason University**

LL.M. in intellectual property

[www.law.gmu.edu/academics/degrees/llm\\_ip](http://www.law.gmu.edu/academics/degrees/llm_ip)

### **Michigan State University (MSU) College of Law**

- LL.M. (Master of Laws)

[www.law.msu.edu](http://www.law.msu.edu)

- M.J. (Master of Jurisprudence)

[www.law.msu.edu](http://www.law.msu.edu)

### **University of New Hampshire, School of Law (Franklin Pierce Law Center)**

- JD degree (IP concentration)

<http://law.unh.edu/jd/ip.php>

- Master of laws in intellectual property (LL.M.-IP)

- Master of intellectual property (MIP)

- Diploma of intellectual property (DIP)

<http://law.unh.edu/masters/ip.php>

### **University of San Francisco**

LL.M. program in intellectual property and technology law

[www.usfca.edu/law/llm/iptl/](http://www.usfca.edu/law/llm/iptl/)

### **University of Santa Clara**

LL.M. in intellectual property law

[www.scu.edu/law/hightech/about-the-institute.cfm](http://www.scu.edu/law/hightech/about-the-institute.cfm)

### **Stanford University**

LL.M. in law, science and technology

[www.law.stanford.edu/program/degrees/advanced/LL.M.\\_lawsciencetechnology](http://www.law.stanford.edu/program/degrees/advanced/LL.M._lawsciencetechnology)

Center for Internet and Center for E-commerce Law Society programs

<http://cyberlaw.stanford.edu/>

[www.law.stanford.edu/program/centers/cfec/#overview](http://www.law.stanford.edu/program/centers/cfec/#overview)

Center for Law and the Biosciences programs

<http://Cyberlaw.stanford.edu/>

### **The George Washington University Law School**

LL.M. in intellectual property law

[www.law.gwu.edu/Academics/curriculum/Pages/IP.aspx](http://www.law.gwu.edu/Academics/curriculum/Pages/IP.aspx)

### **Washington University in St. Louis School of Law**

LL.M. in intellectual property and technology

<http://law.wustl.edu/iplaw/>

## **University of Washington**

- Intellectual property law and policy graduate program
  - Certificate program on IP
- [www.law.washington.edu/IPLaw/](http://www.law.washington.edu/IPLaw/)

## **Africa**

### **South Africa**

#### **University of South Africa WIPO**

Certificate programme in intellectual property

[www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=16822](http://www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=16822)

## **Asia**

### **Korea**

#### **INHA University College of Law**

LL.M. (elective and obligatory courses in IP law)

<http://laweng.inha.ac.kr/inharo/overview.asp>

### **Hong Kong**

#### **University of Hong Kong - Faculty of Law**

Master of Laws in information technology and intellectual property law

[www.hku.hk/law/programmes/pp\\_llm\\_it\\_ip.html](http://www.hku.hk/law/programmes/pp_llm_it_ip.html)

### **India**

#### **Indian Institute of Technology**

Rajiv Gandhi School of Intellectual Property Law

<http://iitkgp.ac.in/departments/home.php?deptcode=RG>

#### **National Law University, Jodhpur**

LL.M. in intellectual property

[www.nlujodhpur.ac.in/pgcourse.html](http://www.nlujodhpur.ac.in/pgcourse.html)

#### **Cochin University of Science & Technology - School of Legal Studies**

LL.M. with specialization in IP law

<http://sls.cusat.ac.in/programmes.html>

#### **The Tamil Nadu Dr Ambedkar Law University**

Master of Laws with specialisation in IP

[www.tndalu.org/ins-dep-coll.html](http://www.tndalu.org/ins-dep-coll.html)

#### **Indira Gandhi National Open University School of Sciences**

Postgraduate diploma in intellectual property rights

[www.egyankosh.ac.in/handle/123456789/778](http://www.egyankosh.ac.in/handle/123456789/778)

### **Israel**

#### **Haifa University**

LL.M. in law & technology

[http://law.haifa.ac.il/programs/programs\\_index.asp?a=1&pos=pages&fname=tech&fType=ma\\_programs&lang=eng&show2=5&show=4](http://law.haifa.ac.il/programs/programs_index.asp?a=1&pos=pages&fname=tech&fType=ma_programs&lang=eng&show2=5&show=4)

## Japan

### **National Graduate Institute for Policy Studies**

Intellectual property programme

[www.grips.ac.jp/pstudents/dom\\_programs/intellectual.html](http://www.grips.ac.jp/pstudents/dom_programs/intellectual.html)

### **Osaka Institute of Technology**

Graduate school of intellectual property (professional master's degree)

[www.oit.ac.jp/english/daigakuin/titekizaisankenkyuuka/index.html](http://www.oit.ac.jp/english/daigakuin/titekizaisankenkyuuka/index.html)

### **Kanazawa Institute Of Technology**

IP LL.M.

Contact: Prof. Shinichi Tonomura, 1-3-4 Aiko Minato-ku, Tokyo, Japan

### **Waseda Law School**

Research Center for the Legal System of Intellectual Property

JD IP Concentration & PhD

[www.21coe-win-cls.org/rclip/](http://www.21coe-win-cls.org/rclip/)

### **The University Of Tokyo Department Of Intellectual Property**

IP certificate program

[www.ip.rcast.u-tokyo.ac.jp/en/index\\_en.htm](http://www.ip.rcast.u-tokyo.ac.jp/en/index_en.htm)

### **Tokyo Medical Dental University**

Technology transfer manager development program (until 2007)

[www.tmd.ac.jp/tlo/e\\_h\\_message.html](http://www.tmd.ac.jp/tlo/e_h_message.html)

### **Tokyo University Of Sciences**

Master of Intellectual Property, Graduate School of Management of Science and Technology

<http://www.tus.ac.jp/en/grad/mip.html>

### **Tokyo University Law School**

JD IP concentration and Ph.D.

Contact: Prof. Tetsuya Obuchi

## Singapore

### **IP Academy/National University of Singapore (NUS)**

– Graduate certificate in IP law

[www.ipacademy.edu.sg/section/education/gcip.html](http://www.ipacademy.edu.sg/section/education/gcip.html)

– MSc in IP management

[www.ipacademy.com.sg/section/education/mip.html](http://www.ipacademy.com.sg/section/education/mip.html)

### **NUS**

LL.M. in intellectual property and technology law

<http://law.nus.edu.sg/prospective/postgrad/coursework/coursework.htm>

## Australia

### **The Bond University – Faculty of Law**

Master of Laws in intellectual property, information technology and e-commerce

[www.bond.edu.au/study-areas/law/degrees/pg/masters\\_degrees.html](http://www.bond.edu.au/study-areas/law/degrees/pg/masters_degrees.html)

### **Melbourne University**

– Master in intellectual property law

– Diploma in intellectual property law

[www.masters.law.unimelb.edu.au/index.cfm?objectid=3A3A7E7E-1422-207C-BA951B9A518F6CF7&view=overview&cid=383](http://www.masters.law.unimelb.edu.au/index.cfm?objectid=3A3A7E7E-1422-207C-BA951B9A518F6CF7&view=overview&cid=383)

## **Monash University**

- Master of Laws with specialisation in intellectual property law
  - Diploma in intellectual property
- [www.law.monash.edu.au/postgraduate/law-ip.html](http://www.law.monash.edu.au/postgraduate/law-ip.html)

## **University of Technology Sydney**

The UTS Master of Industrial Property

[http://datasearch.uts.edu.au/law/courses/details.cfm?spk\\_cd=C04150&spk\\_ver\\_no=4](http://datasearch.uts.edu.au/law/courses/details.cfm?spk_cd=C04150&spk_ver_no=4)

## **South America**

### **Argentina**

#### **Universidad de Buenos Aires**

Postgraduate programs

- Programa de Actualización en Propiedad Intelectual
- Propiedad Intelectual y Diseño

Intensive courses

- Curso Intensivo en Propiedad Industrial
- Curso Intensivo en Derechos de Autor

Online courses

- Programa de Actualización en Derecho Industrial –Intelectual y de Mercado
- [posgrado@Derecho.uba.ar](mailto:posgrado@Derecho.uba.ar)

#### **Facultad Latinoamericana de Ciencias Sociales (FLACSO)**

Maestría en Propiedad Intelectual

[www.flacso.org.ar/formacion\\_posgrados\\_contenidos.php?ID=74](http://www.flacso.org.ar/formacion_posgrados_contenidos.php?ID=74)

#### **Universidad Austral**

Maestría en Propiedad Intelectual

[www.austral.edu.ar](http://www.austral.edu.ar)

### **Brasil**

#### **Instituto Nacional de Propiedad Intelectual: Academia de Inovação e Propriedade Intelectual**

Maestría en Propiedad Intelectual

[www.inpi.gov.br/.../academia-da-propriedade-intelectual-e-inovacao](http://www.inpi.gov.br/.../academia-da-propriedade-intelectual-e-inovacao)

#### **Universidad Federal de Río de Janeiro**

Gestión de la Propiedad Intelectual e Innovación Tecnológica

[www.ie.ufrj.br/pos/lato\\_sensu.html#13](http://www.ie.ufrj.br/pos/lato_sensu.html#13)

### **Chile**

#### **Universidad de Chile (Centro de Estudios en Derecho Informático)**

Diploma de Postítulo en Nuevas Tecnologías y Propiedad Intelectual

<mailto:creusser@uchile.cl>

### **Colombia**

#### **Universidad Externado de Colombia**

Especialización en Propiedad Industrial, Derechos de Autor y Nuevas Tecnologías

[propintel@uexternado.edu.co](mailto:propintel@uexternado.edu.co)

Especialización en Propiedad Industrial y los Sistemas Informáticos en la era de los Computadores

[posfader@uexternado.edu.co](mailto:posfader@uexternado.edu.co)

Peru

**Pontificia Universidad Católica del Perú**

Maestría en Derecho de la Propiedad Intelectual y de la Competencia

<http://www.pucp.edu.pe/content/pagina42.php?pid=542&pidSeccionWeb=25&pidReferencial=&pBusqueda=&pidMapa=>

### III. IP courses for specific audiences

#### **"Intellectual property for software (re-)engineers"**

Working Conference In Software Reverse Engineering, Vancouver

<http://turingmachine.org/blog/index.php?/archives/16-Intellectual-Property-for-Software-Re-engineers.html>

#### **"Patent and other intellectual property law for the life sciences industry"**

The Center for Professional Innovation & Education

<http://www.cfpie.com/content.aspx?c=048agenda.html>

#### **Licensing essentials**

LIMA (UK)

[www.brandlicensing.eu/wp-content/uploads/2009/03/lima-brochure-final.pdf](http://www.brandlicensing.eu/wp-content/uploads/2009/03/lima-brochure-final.pdf)

#### **Basic licensing course**

LES, Singapore

[www.ipacademy.com.sg/site/ipa\\_cws/resource/brochure/programmes/LES Singapore Basic Licensing Course 09.pdf](http://www.ipacademy.com.sg/site/ipa_cws/resource/brochure/programmes/LES%20Singapore%20Basic%20Licensing%20Course%2009.pdf)

#### **"Intellectual property for technology & business development"**

CALTECH (USA)

<http://www.irc.caltech.edu/p-280-intellectual-property-for-technology-business-development.aspx>

#### **Advanced course on intellectual property and biotechnology**

WIPO LDE

[http://www.wipo.int/academy/en/courses/distance\\_learning/catalog/dl204bio.html](http://www.wipo.int/academy/en/courses/distance_learning/catalog/dl204bio.html)

## IV. Projects, workshops and networks

### **Teaching the individual engineer about fair credit and intellectual property**

Online Ethics Centre, National Academy of Engineering (FP6 – RTD OMC-Net - developed for certified training providers)

[www.onlineethics.org/CMS/edu/instructguides/credit.aspx](http://www.onlineethics.org/CMS/edu/instructguides/credit.aspx)

### **Certified transnational technology transfer manager**

FP6 programme of the EU

[www.ttt-manager.eu/download/ANNEX%202\\_The%20Framework%20&%20Curriculum\\_TP.pdf](http://www.ttt-manager.eu/download/ANNEX%202_The%20Framework%20&%20Curriculum_TP.pdf)

### **Intellectual property: a key legal subject for engineers**

Engineering Subject Centre, HEA

[www.engsc.ac.uk/resources/ipminiproj/index.asp](http://www.engsc.ac.uk/resources/ipminiproj/index.asp)

### **European Intellectual Property Institutes Network (EIPIN)**

[www.eipin.org](http://www.eipin.org)

### **Intellectual Property Awareness Network**

[www.ipaware.net](http://www.ipaware.net)

### **The Stockholm Network**

[www.stockholm-network.org/Conferences-and-Programmes/Intellectual-Property](http://www.stockholm-network.org/Conferences-and-Programmes/Intellectual-Property)

### **ASEAN University Network Intellectual Property Network (AUNIP)**

[www.ecap-project.org/ip\\_education\\_and\\_networking/aunip.html](http://www.ecap-project.org/ip_education_and_networking/aunip.html)

## V. Toolboxes, training kits and guides

### From the European Patent Office

Patent Teaching Kit

[www.epo.org/patents/learning/teaching/about.html](http://www.epo.org/patents/learning/teaching/about.html)

European Patent Academy e-learning courses and modules

<https://e-learning.epo.org>

### From other sources

#### European Commission

Publishing and Patenting: Intellectual property Guidance Document for Researchers: EU Study on the monitoring and analysis of technology transfer and intellectual property regimes and their use.

[www.liaison.tuc.gr/fileadmin/users\\_data/liaison/Library/IPR/Publishing\\_and\\_patenting\\_guidance\\_document.pdf](http://www.liaison.tuc.gr/fileadmin/users_data/liaison/Library/IPR/Publishing_and_patenting_guidance_document.pdf)

#### European Commission/EPO

IP4Inno (Pro-Inno Europe): Inno Actions

[www.ip4inno.eu/](http://www.ip4inno.eu/)

#### Auril/Universities UK

Managing Intellectual Property: A Guide to Strategic Decision-Making in Universities

[www.ipo.gov.uk/managingipguide.pdf](http://www.ipo.gov.uk/managingipguide.pdf)

#### Department of Foreign Affairs, Australia

Intellectual Property & Biotechnology

[www.dfat.gov.au/publications/biotech/overview.html](http://www.dfat.gov.au/publications/biotech/overview.html)

#### IP Australia

IP ToolBox: Using intellectual property in your business

[www.iptoolbox.gov.au/default.asp?action=article&ID=3](http://www.iptoolbox.gov.au/default.asp?action=article&ID=3)

IP ToolBox: "Conducting an IP audit" Using intellectual property in your business

[www.iptoolbox.gov.au/default.asp?action=category&ID=44&order=rank&sort=asc&limit=0](http://www.iptoolbox.gov.au/default.asp?action=category&ID=44&order=rank&sort=asc&limit=0)

#### IPR Helpdesk

Intellectual Property Due diligence in preparation of TT agreements

[www.ipr-helpdesk.org/documents/ES\\_IP\\_Due\\_diligence\\_0000006578\\_00.xml.html](http://www.ipr-helpdesk.org/documents/ES_IP_Due_diligence_0000006578_00.xml.html)

#### UKPTO

How licensing intellectual property can help your business

[www.ipo.gov.uk/licensingbooklet.pdf](http://www.ipo.gov.uk/licensingbooklet.pdf)

#### USPTO

E-learning intellectual property modules

[www.uspto.gov/ip/training/elearn.jsp](http://www.uspto.gov/ip/training/elearn.jsp)

#### WIPO

Guide on surveying the economic contribution of the copyright-based industries

[www.wipo.int/copyright/en/publications/pdf/copyright\\_pub\\_893.pdf](http://www.wipo.int/copyright/en/publications/pdf/copyright_pub_893.pdf)

Successful technology licensing

[www.wipo.int/ip-development/en/strategies/pdf/publication\\_903.pdf](http://www.wipo.int/ip-development/en/strategies/pdf/publication_903.pdf)

Exchanging value: negotiating technology licensing agreements. A training manual

[www.wipo.int/sme/en/documents/guides/technology\\_licensing.html](http://www.wipo.int/sme/en/documents/guides/technology_licensing.html)

A stitch in time: smart use of intellectual property by textile companies

[www.wipo.int/freepublications/en/sme/794/wipo\\_pub\\_794.pdf](http://www.wipo.int/freepublications/en/sme/794/wipo_pub_794.pdf)

Creative expression: an introduction to copyright and related rights for small and medium-sized enterprises

[www.wipo.int/sme/en/documents/guides/creative\\_expression.html](http://www.wipo.int/sme/en/documents/guides/creative_expression.html)

Inventing the future: an introduction to patents for small and medium-sized enterprises

[www.wipo.int/freepublications/en/sme/917/wipo\\_pub\\_917.pdf](http://www.wipo.int/freepublications/en/sme/917/wipo_pub_917.pdf)

Making a mark: an introduction to trademarks for small and medium-sized enterprises

[www.wipo.int/about-ip/ru/links/www.wipo.int-freepublications-en-marks-900-wipo\\_pub\\_900.pdf](http://www.wipo.int/about-ip/ru/links/www.wipo.int-freepublications-en-marks-900-wipo_pub_900.pdf)

Looking good: an introduction to industrial designs for small and medium-sized enterprises

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International conference on intellectual property management education and research; summary of discussions

[www.wipo.int/academy/en/execed/conf/index.html](http://www.wipo.int/academy/en/execed/conf/index.html)

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