

Intellectual Property Teaching Kit

IP Basics



IP Basics

An introduction to intellectual property

Part of the IP Teaching Kit

Table of contents

| Content | Slide | Page |
|---|---------------|-------------|
| Introduction | | 4 |
| About IP Basics | | 5 |
| List of slides | | 7 |
| Introduction to IP | Slide 1 – 9 | 8 |
| Patents | Slide 10 – 12 | 26 |
| Databases | Slide 13 – 16 | 32 |
| Trade marks | Slide 17 – 20 | 40 |
| Designs | Slide 21 – 24 | 48 |
| Geographical indications | Slide 25 – 27 | 56 |
| Utility models | Slide 28 – 30 | 62 |
| Plant variety rights | Slide 31 – 33 | 68 |
| Semiconductor topography rights | Slide 34 – 36 | 74 |
| Copyright | Slide 37 – 39 | 80 |
| Trade secrets | Slide 40 – 43 | 86 |
| IP in the real world – a practical exercise | Slide 44 – 50 | 94 |
| Terms of use | | 109 |
| Imprint | | 110 |

Introduction

Intellectual property (IP) reaches into everyone's daily lives. A basic awareness and understanding of IP is therefore essential for today's university students, who are the engineers, researchers, lawyers, politicians, and managers of tomorrow.

It is vital that students become acquainted with elementary aspects of IP, so that they can benefit from it fully in whatever career they eventually pursue. Students and universities should be aware too of how they can utilise the incomparable wealth of technical and commercial information to be found in IP documentation, and understand the need for universities to convert their research into IP rights, manage their IP portfolios and engage in technology transfer to industrial partners for value creation and the benefit of society as a whole.

Last but not least, students and universities should be aware of the consequences of failing to protect IP assets correctly, including the risk of reverse engineering, blatant copying and even industrial espionage.

This is where the IP Teaching Kit (IPTK) comes in. Produced by the European Patent Office (EPO) in co-operation with the European Union Intellectual Property Office

(EUIPO), the IPTK is a collection of materials – including PowerPoint slides, speaking notes and background information – which can be used to put together lectures and presentations on all kinds of IP, including patents, utility models, trade marks, copyright, designs and trade secrets. The materials can be tailored to the background of the students (science or engineering, business or law), their knowledge of the topic, the time available and their learning objectives.

The first part of the kit – IP Basics – is a follow-up to the successful Patent Teaching Kit launched in 2010 by the European Patent Academy. It contains the tools and information you need to deliver a lecture on the role of IP lasting between one and two hours.

With the IPTK you have at your disposal an extensive set of freely accessible, professional teaching materials which represents one of the most comprehensive IP teaching resources in the world.

About IP Basics

IP Basics is part of the IPTK. It has been designed for teachers of students with little or no prior knowledge of IP, in order to provide them with a basic introduction to a range of different IP rights. The material is available in English, French, German, Italian and Spanish, both in printed and online version.

In addition to a general introduction, IP Basics covers patents, databases, trade marks, designs, geographical indications, utility models, plant variety rights, semiconductor topography rights, copyright and trade secrets, as well as a classroom exercise that demonstrates the use of IP in the real world.

IP Basics consists of ready-made PowerPoint slides with speaking notes and additional background information. The speaking notes can be read out as they stand. The background information provides additional details which will help you prepare for the more advanced questions that students might have. It is not intended for this information to be included in the lecture.

For online access to the extensive IPTK collection, plus updates and further learning opportunities, go to www.epo.org/learning-events/materials/kit.html where you will also find a tutorial for teachers and lecturers.

List of slides

| | | | |
|-----------------|--|-----------------|--|
| Slide 1 | Introduction to IP | Slide 28 | Utility models |
| Slide 2 | General introduction | Slide 29 | What is a utility model? |
| Slide 3 | The different types of IP (I) | Slide 30 | Scope of protection compared with patents |
| Slide 4 | The different types of IP (II) | Slide 31 | Plant variety rights |
| Slide 5 | One product – many IP rights | Slide 32 | What are plant variety rights? |
| Slide 6 | The importance of intellectual property (I) | Slide 33 | Scope of protection |
| Slide 7 | The importance of intellectual property (II) | Slide 34 | Semiconductor topography rights |
| Slide 8 | The IP system | Slide 35 | What are semiconductor topography rights? |
| Slide 9 | Examples of valuable intellectual property | Slide 36 | Scope of protection |
| Slide 10 | Patents | Slide 37 | Copyright |
| Slide 11 | What is a patent? | Slide 38 | What is copyright? |
| Slide 12 | What exactly can be patented? | Slide 39 | Scope of protection |
| Slide 13 | Databases | Slide 40 | Trade secrets |
| Slide 14 | What is a database? | Slide 41 | What are trade secrets? |
| Slide 15 | Scope of protection | Slide 42 | Scope of protection |
| Slide 16 | Rights and limitations | Slide 43 | Means of protection |
| Slide 17 | Trade marks | Slide 44 | IP in the real world – a practical exercise |
| Slide 18 | What is a trade mark? | Slide 45 | An anti-allergy sprayer and spray |
| Slide 19 | Registration | Slide 46 | Which elements can be protected? |
| Slide 20 | Scope of protection | Slide 47 | Patents and designs (I) |
| Slide 21 | Designs | Slide 48 | Patents and designs (II) |
| Slide 22 | What is a design? | Slide 49 | Trade marks, copyright and domains |
| Slide 23 | Registered and unregistered design rights | Slide 50 | What next? |
| Slide 24 | Scope of protection | | |
| Slide 25 | Geographical indications | | |
| Slide 26 | What are geographical indications? | | |
| Slide 27 | Difference between PGIs and PDOs | | |

Slide 1
Introduction to IP

Title slide



Introduction to IP

Intellectual Property Teaching Kit

1

Slide 2

General introduction

The following slides provide a general introduction to the different types of IP.

GENERAL INTRODUCTION

Slide 3

The different types of IP (I)

Patents are granted for technical inventions. Applications for patents must be filed with a national or regional patent office. They are examined in a process that results in the grant or refusal of a patent. Patents normally last for a maximum of 20 years from the date of filing of the application. In some countries, a special, less powerful kind of patent called a utility model (or "petty patent") is also available.




Utility models usually offer simpler protection, for a shorter period of time. Most countries require inventions simply to be new in order for them to receive utility model protection. Others, for example Germany, also require them to involve an inventive step. But most countries examine neither novelty nor inventive step and will register any utility model that complies with the formalities.

Copyright does not need to be registered.

It "automatically" exists when the work is created.

Copyright protects any original, creative, intellectual or artistic expression, including novels, scientific literature, plays, software, photographs and paintings, music, sculptures, television broadcasts, etc. Even the smell of a perfume may be (indirectly) protected by copyright: the blend of ingredients that goes into a perfume can represent an original work of authorship and can therefore be protected by copyright. The duration of a copyright is roughly the life of the author plus 70 years, depending on the case and country.

The different types of IP (I)

| Legal right | What for? | How? | |
|----------------|-------------------------------------|------------------------------|---|
| Patents | New inventions | Application and examination |  |
| Utility models | New inventions | Application and registration |  |
| Copyright | Original creative or artistic forms | Exists automatically |  |

Intellectual Property Teaching Kit 3

Patents are granted for technical inventions. Applications for patents are examined by the patent office they are filed with, in order to determine whether they meet the stringent requirements for a patent to be granted. Patents generally last for a maximum of 20 years from the date of filing.

Utility models offer simpler protection, for a shorter period of time, but are usually registered and published much more quickly than patents.

Copyright does not need to be registered. It automatically exists when a work is created. It protects any type of original, creative expression, including literature, art, drama, music, photographs, recordings and broadcasts.

Slide 4

The different types of IP (II)

Trade marks are distinctive signs identifying and distinguishing the commercial source of goods or services. They can consist of words, logos, names and colours, as well as any other means of identifying commercial origin, such as the shape of the product or its packaging, or even sounds or smells. For instance, most Disney characters are registered as trade marks. Trade marks can be created simply by using them (as Google did, for example) or by explicitly registering them.

Registered designs (USA: "design patents") protect the ornamental design, form, appearance and style of objects, but not their functional aspects. The requirements are absolute novelty and individual character. The duration of protection for a Community registered design is a maximum of 25 years from the date of application to register. They are granted in five-year terms, which are renewable.

Unregistered designs also enjoy protection under certain conditions. You get a free, automatic right when you present an original design to the public. It gives you the right to stop anyone from copying your design, but is usually of a more limited duration than that available for registered designs. The duration of protection for a Community unregistered design is a maximum of three years following publication of the design in the European Union.




A trade secret

Trade secrets consist of any confidential business information which provides an enterprise a competitive edge. Contrary to other figures of IP, trade secrets are protected without any procedural formalities; consequently, they can be protected for an unlimited period of time. A trade secret information must be (a) secret, (b) must have commercial value due to its secret nature and (c) must have been subjected to reasonable steps by the rightful holder of the information to keep it secret (i.e. non-disclosure agreements with employees and business partners and measures to prevent industrial espionage).

The conditions may vary from country to country; however, the information provided above corresponds to the general standards which are referred to in article 39 of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement).

Other forms of IP not shown here include plant variety protection (USA: "plant patents"), databases, geographical indications and semiconductor topography designs.

The different types of IP (II)

| Legal right | What for? | How? | |
|--------------------|--|-----------------------------------|---|
| Trade marks | Distinctive identification of products or services | Use and/or registration |  |
| Registered designs | External appearance | Registration |  |
| Trade secrets | Valuable information not known to the public | Reasonable efforts to keep secret |  |

Intellectual Property Teaching Kit 4

Trade marks are distinctive signs indicating the source of a product or service. They include, for example, names, logos and colours applied to the owner's products or services, which distinguish them from products and services provided by competitors.

Registered designs protect the external appearance of a product. They do not give any protection for technical aspects. They include new patterns, ornaments and shapes. To be officially registered, designs need to be original and possess individual character distinctive. The artistic aspects of a design may also be protected by copyright.

Unregistered designs also enjoy some protection. An unregistered design is a free, automatic right that you get when you present a design to the public. It gives you the right to stop anyone from copying your design. The protection afforded by an unregistered design is normally of more limited duration than that available for a registered design.

Trade secrets cover information not known to the public. If the possessor of the information is careful to keep it confidential, he can sue anyone who steals it.

Slide 5

One product – many IP rights (animated slide)

All the IP rights described so far can be used in combination to help inventors protect their innovations. For example, a company might use a patent in order to ensure that it is the only one that offers a particular technical feature, and registered or unregistered designs to protect the features relating to the appearance of the product. It can also use trade marks to communicate the source of the product.

It might also choose to keep some aspects of the production process secret. If it makes serious efforts to maintain secrecy then it can enjoy the protection of trade secrets.

Students may well be unaware, for example, of the range of IP it takes to make and market a mobile phone. This slide gives some examples. This will help students understand how to protect different aspects of their own intellectual creations.

The terms and conditions for use of the content of the Nokia website in public state that "The contents of Nokia World Wide Web pages are Copyright © Nokia Corporation 2014. ... The use of this site and the content therein, is permitted to private, non-commercial use. The use of press releases and other documents classified as public is permitted in public communications if the source for the information has been stated."

This also applies to images available from their website at <http://company.nokia.com/en/news/media-library>

One product - many IP rights



- Trade marks**
 - NOKIA
 - Product "208"
 - Start-up tone
- Patents and utility models**
 - Data-processing methods
 - Operating system
 - Operation of user interface
- Copyright**
 - Software
 - User manuals
 - Ringtones
 - Start-up tone
 - Images
- Designs**
 - Form of overall phone
 - Arrangement and shape of buttons
 - Position and shape of screen
- Trade secrets**
 - Some technical know-how kept "in-house" and not published

Intellectual Property Teaching Kit 5

This slide shows the wide range of intellectual property that can be involved in protecting a single product, in this case a mobile phone.

Slide 6

The importance of intellectual property (I)

Innovation is one of the areas covered by the five key targets set in "Europe 2020", the ten-year growth strategy adopted by the European Union with a view to creating a more competitive economy with higher employment.

It has never been so important to foster the "virtuous circle" leading from Research and Development (R&D) investment to jobs – via innovation, competitive advantage and economic success – as in today's world of increasingly globalised markets and the knowledge economy. This process depends on several different factors, but an efficient system of intellectual property rights (IPR) undoubtedly ranks among the most important, given IP's capacity to encourage creativity and innovation, in all its various forms, throughout the economy.

IP plays a very important role in today's knowledge-based economy. Start-up companies use IP to prevent large industrial competitors copying their products. Large companies use IP to reap the benefits of their investments. Even seemingly "traditional" sectors such as the steel industry use IP to protect their intangible assets.

Most technical inventions require substantial investment before they can be produced and used. In order to attract funding, inventions must offer the potential to generate income. This perspective is greatly enhanced if IP protection is available. If there were no IP protection, competitors could offer the same products or services at a lower price because they have not had to invest in research and development themselves.

IP laws allow owners to transfer the right to use the IP to another party, in other words to grant them a licence. The conditions under which the licence is granted can be determined by the owner of the IP. For this reason, buying a film on DVD almost never means actually buying the IP. Rather, it means that the owner of the film sold a licence to use the film.

Examples referred to on the slide

Sandvik AB is a Swedish engineering group with almost 47 000 employees and over 8 000 patents and other IP rights. It was named one of the world's 100 most innovative companies in 2012 (Thomson Reuters Top 100 Global Innovators list). In 2005, Sandvik reorganised the ownership and management of its IP rights by transferring its patents and trade marks to an IP company (Sandvik Intellectual Property AB). They reckon that concentrating their IP rights activities in one company provides them with operational advantages.

W.L. Gore & Associates, Inc. was founded in 1958 and is best known as the developer of waterproof, breathable Gore-Tex fabrics. In 1969, W.L. Gore invented a remarkably versatile new polymer which led the company to an immense number

of new applications in the medical, fabric and industrial markets. Virtually all of Gore's thousands of products are based on this one material. Gore has been granted more than 2 000 patents worldwide. Based on a patent for a membrane technology, Gore developed a special breathable fabric (known under the trade mark GORE-TEX®) that is both waterproof and wind-proof. The phrase "Guaranteed to Keep you Dry®" is also a registered trade mark in the US.

Dolby Laboratories, Inc. was founded by American engineer and inventor Ray Dolby, who pioneered noise-reduction technology known as Dolby NR®. It uses a form of audio compression and expansion that reduces background hiss in tape recording. Early on, Dolby adopted a business strategy under which the company would develop and manufacture audio products for the professional market only, and license the same technologies for consumer equipment. The company used a combination of patents to protect the technology and trade marks to identify Dolby as an indicator of quality to customers. The key component in Ray Dolby's strategy was to license their patented technology to tape deck manufacturers instead of charging the individual consumers using an audio product with Dolby technology. This strategy allowed Dolby to remain unaffected by illegal copies, as they still had to be played on tape decks containing Dolby technology. In 2013, Dolby had over 2 800 granted patents and a further 2 700 patents pending. Patents are the principal source of licensing revenue. Dolby also holds over 990 trade marks worldwide. They are an integral part of its licensing programme. The company makes approximately 86% of its revenue from the licensing of its technology.

ARM Holdings, plc is a British multinational semi-conductor and software company. It was founded in 1990 as a joint venture between Acorn Computers, Apple Computer Inc. (now Apple Inc.) and VLSI Technology to develop energy-efficient microprocessors. The low power consumption of these microprocessors makes them particularly suitable for portable devices such as smart phones, gaming applications, navigation devices and digital cameras. ARM is the world's leading supplier of semiconductor IP. Rather than manufacturing and selling its own semiconductor chips, ARM licenses its technology to a network of partner companies who incorporate the ARM technology with their own technology to create and manufacture microchips. In return, ARM receives a license fee and a royalty on every microchip that contains its technology. As of 2014, over 800 licences have been sold to more than 250 partners, including the world's leading semiconductor and systems companies such as Intel, Samsung, Texas Instruments and Qualcomm. Around 25 000 million ARM microprocessors have since been manufactured under licence. The company has grown to more than 2 000 employees and is the world leader in mobile phone microprocessors. Today, ARM technology is used in 95% of smart phones, 80% of digital cameras and 35% of all electronic devices.



Without IP, many innovative projects would not be profitable, because anyone who wanted to could simply copy the results. This slide gives some examples of companies which use IP and how they benefit from it.

Sandvik AB is a Swedish developer and manufacturer of high-tech tools and machinery, with 47 000 employees with sales in more than 150 countries.

In 2012 it was named one of the world's 100 most innovative companies. Sandvik's subsidiary company, Sandvik Intellectual Property AB, holds and manages the firm's IP, including 8 000 patents.

ARM Holdings is a British multinational semiconductor and software company which earns licensing royalties from the energy-efficient microprocessors which it develops but does not manufacture.

W.L. Gore & Associates was founded by the Gore family in 1958. It developed high-tech products based on a remarkably versatile new polymer. Based on a patent for a membrane technology, Gore developed a special breathable fabric - known under the trade mark GORE-TEX® - that is both waterproof and windproof. With over 9 500 employees, it has also trade-marked the phrase "Guaranteed to Keep you Dry®" in the US.

Dolby Laboratories uses a combination of patents to protect its noise-reduction technology and associated trade marks. Founded in 1965, it is a successful high-tech company with over 2 800 granted patents and an additional 2 700 patents pending. It also has over 990 trade marks worldwide. Licensees are obliged to use the Dolby trade mark on every product including Dolby technology. The company makes approximately 86% of its revenue from the licensing of its technology.

Slide 7

The importance of intellectual property (II)

Linux is an example of how IP can be used to enforce "public ownership" of intellectual property. Open source software developers rely on IP protection (copyright) to ensure that people building upon their work have to adhere to certain terms. Because they own the copyright, Linux developers are able to demand that improvements to the Linux code (that they give away for free) have to be free to use, too. In this way, the Linux developers ensure that their IP is not exploited by anyone to set up new proprietary rights. It is the IP system that enables Linux developers to create free knowledge that will remain free.



Another example is the Creative Commons licence. This enables authors to allow other people to use their work, subject to certain conditions, e.g. that their name must be stated or that the work cannot be used commercially. If the audience is not familiar with licensing, we suggest not mentioning this example.

Other examples where the IP system is used for public benefit rather than for profit include the Forest Stewardship Council (wood produced without devastating natural forests) and Fairtrade International (campaigning for fair standards in trade). These organisations license their trade marks (FAIRTRADE, FSC) only to those companies prepared to sign up to certain environmental and/or moral criteria.

The IP system ensures that unlicensed use of trade marks can be prevented, so consumers can be confident that all products bearing the mark really do adhere to the promised standards.

The importance of intellectual property (II)

- IP is needed to enable the release of IP into the public domain under controlled conditions.
 - General Public License (GPL); Linux
 - Creative Commons License
- IP helps guarantee standards for public benefit by means of licensed trade marks.
 - Fairtrade International (FAIRTRADE)
 - Forest Stewardship Council (FSC)

Intellectual Property Teaching Kit

The LINUX operating system and other open source software is free to use, but users must accept the General Public License – or GPL – which includes an agreement to put any improvements under the GPL too.

Creative Commons is a range of sample licences for books, software, photos, etc. Authors may grant free use, but may require, for example, that their names be stated or that use be non-commercial.

Fairtrade International, which campaigns for fair-traded products such as coffee, and the Forest Stewardship Council are run for the public benefit rather than for profit. They license their trade marks – including FAIRTRADE and FSC – only to those companies prepared to sign up to certain environmental and/or moral criteria. The unlicensed use of these trade marks can be prevented via the IP system.

Slide 8

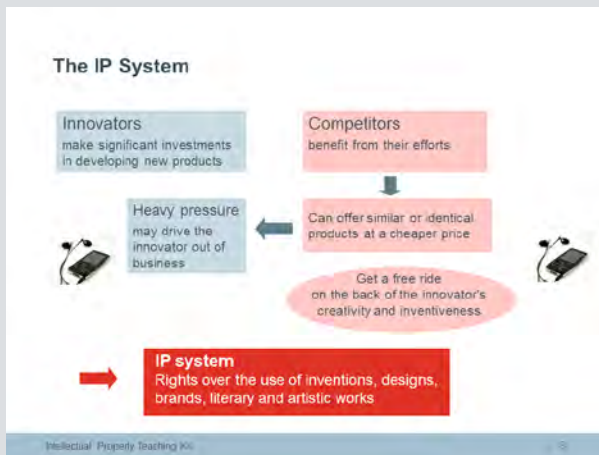
The IP system (animated slide)

Whenever a new product is successful on the market, it is very likely that competitors will follow the market trend and attempt to make similar or identical products.

The innovator of the original product may have invested significantly not only in developing the product but also in establishing the supply chain for production, getting the product known on the market and finding distributors.

As competitors come in at a later stage, they benefit from the innovator's efforts and can thus offer their products at a cheaper price. This may put the innovator under heavy pressure and eventually drive him out of business, while his competitors get a free ride on the back of his creativity.

That is why innovators should make use of the IP system to protect their inventions, designs, brands, artistic works and so on. The IP system provides them with ownership over their work and exclusive rights to control the production, import and sale of infringing goods.



Whenever a new product is successful on the market, it is very likely that competitors will attempt to make similar or identical products.

The innovator will probably have invested significantly in developing the new product, establishing the supply chain for production, running marketing campaigns and finding distributors.

Competitors benefit from these efforts. They have greater market access, a better connection with distributors, and access to cheaper primary resources. As a result they are able to offer their products at a cheaper price.

Innovators are then under heavy pressure and may be driven out of business, while competitors get a free ride on the back of their creativity.

The IP system is there to help innovators protect their inventions, designs, brands, artistic works, and so on. It provides them with ownership over their work and the rights to exclude competitors from the production, import or sale of infringing goods.

Slide 9

Examples of valuable intellectual property

This slide contains examples of the value of a number of different IP assets.

Coca-Cola (registered trade mark): The 2013 value of the brand (brand = trade marks and the whole Coca-Cola customer experience) is estimated to be USD 79.2 billion (EUR 70.2 billion).

Apple iPod touch music player (registered trade marks and registered designs, some patents): The extremely successful iPod bases its competitive advantage not so much on technical innovation as on customer experience and distinctive design. Apple has filed several US 'design patents' (known in Europe as registered designs) on the iPod's design. Apple also applied for user interface-related patents on the iPod. From the launch of the iPod in 2007 to 2013 Apple sold more than 100 million units.

Harry Potter (registered trade marks and copyright): The author of the original Harry Potter book, J.K. Rowling, held all the associated IP rights. This meant that she was the only person allowed to write a sequel to that book. In April 2012 she was reported to have earned USD 910 million – almost a billion dollars (or EUR 807 million) from her IP rights to the Harry Potter story. The Harry Potter brand has been estimated to be worth as much as USD 15 billion (EUR 13.3 billion). For comparison: At 2013 prices, gold was worth around EUR 31 000 per kg. That means J.K. Rowling converted her imagination into the equivalent of 22 000 kg of gold – true intellectual property magic!

Instant camera technology (patents): Before the advent of digital cameras, instant camera technology was very valuable. In 1991, Kodak was found to have infringed seven instant photography patents held by Polaroid and was required to pay Polaroid USD 925 million (EUR 820 million) in damages – after a court case lasting more than 14 years. This was the largest patent settlement ever paid out, at least until recently, when Apple was awarded USD 1.05 billion (EUR 891 million) in 2012 in its fight with Samsung. Patents were highly important to Polaroid, as they allowed them to keep the market for instant photography technology exclusively to themselves (except for Fujifilm, who obtained a Polaroid licence).

DNA copying process (patents): The polymerase chain reaction (PCR) is a biochemical technology in molecular biology used to amplify one or more copies of a piece of DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence (Wikipedia). The PCR technique was developed by Kary Mullis and patented by Cetus Corporation, a biotech company where Mullis worked when he invented the technique in 1983. In 1991, Cetus sold the rights to the PCR patents to Hoffman-La Roche for USD 300 million (EUR 266 million). Kary Mullis was awarded the Nobel Prize in Chemistry in 1993. PCR is now a common technique used in research labs for a variety of applications.



Here are some examples of valuable intellectual property.

According to market research companies, the Coca-Cola brand – and its trade mark – is worth around USD 79.2 billion (EUR 70.2 billion).

More than 100 million units of the Apple iPod touch music player were sold between its launch in 2007 and 2013. The iPod is protected by trade marks, registered designs and patents for the user interface.

Harry Potter author J.K. Rowling converted her imagination into the equivalent of 22 000 kg of gold – true IP magic! She earned USD 910 million – approximately one billion dollars, or around EUR 807 million – from her copyright. The Harry Potter brand has been estimated to be worth USD 15 billion (EUR 13.2 billion).

In 1991, Kodak had to pay USD 925 million (EUR 820 million) to Polaroid for having illegally used Polaroid's patented inventions for instant cameras.

In 1991, biotech company Cetus Corporation sold the rights to the PCR patents for the DNA copying process to Hoffman-La Roche for USD 300 million (EUR 266 million).

Kary Mullis, who developed the PCR, was awarded the Nobel Prize in Chemistry in 1993.

Slide 10

Patents

The following two slides provide a basic introduction to patents.



Slide 11

What is a patent?

Patents are sometimes considered as a contract between the applicant and society. The applicant is interested in benefiting (personally) from his invention. Society is interested in

- encouraging innovation so that better products can be made and better production methods can be used for the benefit of all;
- protecting new innovative companies so that they can compete with large established companies, in order to maintain a competitive economy;
- finding out the details of new inventions so that other engineers and scientists can further improve them;
- promoting technology transfer (i.e. from universities to industry).

So both parties are interested in a contract that grants protection to innovators (thereby also increasing the motivation to innovate) in exchange for disclosure of the invention. This social contract is institutionalised in the form of patent law.

Against this background, two requirements for patent protection emerge almost naturally. Firstly, if the invention is not new to the world, then the applicant does not have anything to disclose, and society has no reason to conclude the above-mentioned contract with him. Secondly, if the invention is new but obvious to a person skilled in the art, then the applicant does not possess anything the public is eager to learn and there is again no reason to exchange exclusivity for the publication of the invention.

Applicants benefit from the patent system because they are granted the right to exclude others from commercially exploiting the invention. These rights are transferable.

Patents give patent owners the right to prevent others from making, using or selling the invention in the country for which the patent was granted, for a limited time. Patent owners can choose to license their invention to others or to allow everybody to use the invention for free.

For example, many important technologies, such as CDs, DVDs, mobile phone technology and digital TV, are covered by numerous individual patents that companies license to each other (cross-licensing).

If commercialising your invention means using other people's IP, then you need to have their permission!

What is a patent?

- A legal title which grants the holder
 - the exclusive right to prevent others from making, using or offering for sale, selling or importing a product that infringes his patent without his authorisation
 - in countries for which the patent was granted
 - for a limited time (up to 20 years).
- In return for this protection, the holder has to disclose the invention to the public.

Patents are granted in nearly every country in the world!

Intellectual Property Teaching Kit 11

A patent is sometimes considered as a contract between the applicant and society.

Applicants and patent owners are interested in benefiting – personally – from their inventions.

They have the right to prevent others from making, using, offering for sale, selling or importing a product that infringes their patent, for a limited amount of time and in the country for which the patent has been granted. The exception to this is use for non-commercial purposes, for example private use or academic research.

Society is interested in:

- encouraging innovation so that better products can be made and better production methods can be used for the benefit of all,
- protecting new innovative companies so that they can compete with large established companies, in order to maintain a competitive economy,

- learning the details of new inventions so that other engineers and scientists can further improve them, and
- promoting technology transfer, for example from universities to industry.

In return for this protection, the applicant has to reveal his invention to the public, so others can build on it. As a rule, patent offices publish applications after 18 months. At this stage they become visible to everyone.

This "social contract" is institutionalised in the form of patent law.

Slide 12

What exactly can be patented? (animated slide)

Patentability requirements vary from country to country.

To be patentable, inventions must normally be new, involve an inventive step and be susceptible of industrial application. They should not be contrary to morality or "ordre public".

In most countries, patents cannot be granted in respect of ideas, concepts, discoveries, computer programs, business methods or teaching methods as such, or diagnostic methods practised on the human or animal body or medical therapies, etc.

However, if a computer program is used to achieve a technical result, e.g. in an electronic control device, it can be patented. According to EPO case law, in order for a patent to be granted, a computer program claimed by itself would have to bring about, when running on a computer or loaded into a computer, a "further technical effect" going beyond the "normal" physical interactions between the computer program and the computer hardware on which it is run. The normal physical effects of the execution of a program, e.g. electrical currents, are not in themselves sufficient to lend a computer program technical character. A "further technical effect" is needed, e.g. a more efficient memory management within a computer.

For more information see the European Patent Office's "Patents for software?" brochure at www.epo.org/news-issues/issues/software.html

The European Patent Convention (EPC) provides a comprehensive list of matter excluded from patentability in Europe. Article 52 covers what is considered not to be an invention and Article 53 covers what is excluded from patentability even if it is an invention.

In addition to the list of subject-matter or activities "as such" that are not considered to be inventions for the purposes of granting European patents, inventions falling into any of the following categories are excluded from patentability:

- inventions whose commercial exploitation would be contrary to "ordre public" or morality (including, for example, processes for cloning human beings or the use of human embryos for commercial or industrial purposes).
- plant or animal varieties or essentially biological processes for producing plants or animals (although "microbiological processes and products thereof" are patentable).
- methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practiced on the human or animal body (although products, in particular substances or compositions for use in such methods, e.g. medicaments or surgical instruments, are not excluded).

For more information see the EPO's "Patents for life?" brochure at <http://www.epo.org/news-issues/issues/biotechnology-patents.html>

The text of the European Patent Convention is available at www.epo.org/law-practice/legal-texts/epc.html

What exactly can be patented?

Patents protect inventions which solve technical problems:

- chemical substances, pharmaceuticals
- processes, methods, uses
- products, devices, systems

For an invention to be patented, it must usually be

- ✓ new to the world (i.e. not available to the public anywhere in the world)
- ✓ Inventive (i.e. not an "obvious" solution), and
- ✓ susceptible of industrial application

In most countries, patents are not granted for business methods or rules of games as such, or for methods of treatment, diagnostics and surgery on the human or animal body.

Intellectual Property Teaching Kit 42

According to the European Patent Convention, or EPC, "European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application."

"New to the world" means that there should have been no previous public disclosure of the invention before the date of filing.

"Inventive step" is quite difficult to assess. To ascertain whether an invention involves an inventive step, the European Patent Office compares it with what would have been obvious to an imaginary person skilled in the art at the time of filing.

The EPC does not define what an invention is. It does, however, provide a non-exhaustive list of subject-matter and activities that are not considered inventions. The items listed at the bottom of the slide are expressly excluded from patentability.

Slide 13

Databases

The following slides provide a basic introduction to databases.



Slide 14

What is a database?

Definition

A database is a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means. This definition covers both electronic and non-electronic databases (electronic databases may include collections available on CD-ROM). The collection in a database may consist not only of literary, artistic, musical or other copyright-protected works, but also of other materials such as texts, sounds, images, numbers, facts and data. The contents of the database do not have to be (copyright-)protected.

The works, data or other materials should be "independent". This means that they should be separable from one another without their informative, literary, artistic, musical or other value being affected. On that basis, a recording or an audiovisual, cinematographic, literary or musical work as such does not fall within the scope of protection. Of course, these works as such can be protected under copyright if they are original. For example, a film consists of a collection of different frames, but these frames are interdependent. Only when they are put together are they able to tell a story.

The independent materials must be systematically or methodically arranged and individually accessible in some way. The arrangement does not have to be physically apparent. The collection should be contained in a fixed base of some sort, and should include technical means such as electronic, electromagnetic or electro-optical processes, or other means, such as an index, a table of contents, or a particular plan or method of classification, to allow the retrieval of any independent material contained within it.

For example, a fixture list of a football league can constitute a database. The compilation of dates, times and teams relating to the different fixtures in a football league is a collection of independent materials. Data about a football match in a specific league has an independent value in that it provides relevant information to interested third parties. Also, the arrangement in the form of a fixture list meets the conditions as to systematic arrangement and individual accessibility. However, this does not mean that it will also be protected under copyright or the *sui generis* right of the relevant EU directive (see next slide). In each case the conditions of protection must be met.

The European Union Intellectual Property Office (EUIPO) has continued to develop tools such as the Orphan Work database and the Enforcement database (EDB); the first one provides access to creative content protected by copyright whereas the second one has been designed to help the relevant authorities fighting the IP rights infringements by connecting right holders with custom authorities and police to protect products against counterfeiting.

Moreover, EUIPO makes available to the public the following databases:

- **eSearch plus:** collection of comprehensive information about trade marks, designs, owners, representatives and bulletins.
- **eSearch Case Law:** collection of EUIPO decisions, judgments of the General Court, Court of Justice and national courts.
- **EuroLocarno:** classification and terms for indications of products in each of the official EU languages.
- **Certified copies:** verification of certified copies.
- **TMview:** a collection of trade marks from all participating official trade mark offices which are participating at national, international and EU level.
- **DesignView:** centralized access point to registered designs information held by all of the participating National Offices.
- **TMclass:** the one-stop classification gateway to the Harmonised Database applied in the EU and databases worldwide.

Exclusion

Computer programs used in the making or operating of a database are excluded from protection. However, these programs could be protected as literary works under copyright, if they fulfil the conditions set out in the EU directive (see next slide).

What is a database?

- A database is a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.

Intellectual Property Teaching Kit

14

What is a database? A database is a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.

"Independent" means that they should be separable from one another without their informative, literary, artistic, musical or other value being affected.

"In a systematic or methodical way and individually accessible" means that the materials should be contained in a fixed base of some sort, and should include technical means such

as electronic, electromagnetic or electro-optical processes or other means, such as an index, a table of contents, or a particular plan or method of classification, to allow the retrieval of any independent material contained within it.

Examples of what can be considered a database include the fixture list of a football league, or a phone book.

Slide 15

Scope of protection

In the EU the protection of databases is covered by Directive 96/9/EC.

Considerable human, technical and financial investment is required to gather, select and arrange the subject-matter in a database, which could then be copied at a fraction of the cost. Protection of the investment in modern storage and processing systems is therefore needed, which is why it was decided at EU level to offer dual protection for databases: copyright protection for their structure and a new, exclusive *sui generis* right for their content.

These two types of right come with their own conditions of protection. Protection by copyright law does not automatically lead to protection under the *sui generis* right.

Copyright

The database directive focuses on database structure. A database can be protected by copyright if the selection or the arrangement of its content is the author's own intellectual creation; therefore, the relevant criterion in this case is originality.

Authorship of the database lies with the natural person (or group of natural persons) who created it. A legal person can only assume authorship after a designation and only where allowed by the relevant national legislation.

However, this copyright protection is limited to the specific original selection or arrangement of the content in the database. There is still a risk that the contents of the database could be copied, in whole or in part, and then rearranged by a third person. Even if the contents of the two databases are identical, there is still no copyright infringement if the arrangement is different. To safeguard the position of database makers and protect their financial and other investment in obtaining, selecting, verifying and presenting the contents of their databases, the directive offers them a *sui generis* right.

Sui generis right

The maker of a database who can show that there has been a substantial qualitative and/or quantitative investment in either obtaining, verifying or presenting the contents of the database receives the right to prevent others from extracting and/or re-using (all or a substantial part of) these contents.

The maker of a database is not necessarily the same person as its author. The author is the person who makes the selection or the arrangement, or who assumes the authorship through designation, while the maker is the person (natural or legal) who takes the initiative and the risk of investing. This investment may consist of financial resources and/or time, effort and energy. For example, the compilation of several recordings of musical performances on a CD does not come within the scope of the directive, because it does not represent a substantial enough investment.

Note: The subject-matter incorporated into a database remains independent. The content in itself can be protected by other (IP) rights. Other legal provisions can still be applicable, in particular provisions concerning copyright and rights relating to copyright (i.e. neighbouring rights), patents, trade marks, designs, laws on restrictive practices and unfair competition, trade secrets, confidentiality, privacy and contract law. The subject-matter remains protected by these exclusive rights and may not be incorporated into the database without the permission of the rights holder.

Scope of protection

- Directive 96/9/EC on the legal protection of databases
- Copyright protection
 - Structure
 - Originality
 - Authorship
 - Limited protection
- *Sui generis* protection
 - Contents
 - Investment
 - Maker
- Computer programs excluded

Intellectual Property Teaching Kit 15

In the EU, databases are protected under Directive 96/9/EC on the legal protection of databases. The Directive introduces two forms of protection, namely copyright protection and *sui generis* protection.

A database can be a copyright-protected work if the arrangement or the selection of the content is the author's own intellectual creation. In other words, a database will be protected by copyright if the selection or the arrangement of its content is original. The only relevant criterion is originality.

The authorship lies in the first instance with the natural person who created the database.

Copyright protection covers the specific structure of the database only. The material contained in it is not protected. There is still therefore a risk that all or substantial parts of the contents of the database may be copied, and then rearranged.

In addition to this somewhat limited copyright protection, the database directive also introduced a *sui generis* right to protect the specific investments made by the database maker. Makers have to show a substantial quantitative and/or qualitative investment in either obtaining, verifying or presenting the contents of their database. They obtain the exclusive right to prevent others from extracting and/or re-using all or a substantial part of the contents of the database.

Computer programs used in making or operating databases are excluded from protection.

Slide 16

Rights and limitations

Copyright

The author or owner of the copyright of the database has the exclusive right to carry out or authorise the following acts:

- Temporary or permanent reproduction by any means and in any form, in whole or in part.
- Translation, adaptation, arrangement and any other alteration, as well as any reproduction, distribution, communication, display or performance to the public of the results of these acts.
- Any form of distribution to the public of the database or of copies thereof.
- Any communication, display or performance to the public.

The duration of these rights is the term that is applicable to copyright-protected works in general, as governed by Directive 2006/116/EC on the term of protection of copyright and certain related rights. The basic rule is expiration of protection 70 years after the author's death.

On the other hand, the performance by a lawful user of any restricted acts for the purpose of access to the contents of the database and normal use thereof does not require the authorisation of the author. The term "lawful user" is not defined in the directive. It does, however, include users to whom the rights holder of the database has chosen to make available a copy of the database.

Member states can also limit the owner's exclusive rights in the following cases:

- reproduction for private purposes of non-electronic databases
- use for the sole purpose of illustration for teaching or scientific research (on condition that the source is indicated and the use is for non-commercial purposes)
- use for public security reasons
- other exceptions to copyright which are traditionally authorised under national law.

Sui generis right

The *sui generis* right has a more limited lifespan.

The term of protection is 15 years. This term can be extended if a substantial change is made which can be considered to be a new substantial investment.

The database resulting from that substantial change will have its own term of protection.

Regarding the whole or a substantial part of the database the maker of a database can prevent:

- extraction, i.e. permanent or temporary transfer of contents to another medium by any means or in any form; and/or
- re-utilisation, i.e. any form of making the database available to the public by the distribution of copies, renting, online or other forms of transmission.

These rights are limited as regards the lawful user. Extracting or re-utilising insubstantial parts of the contents of the database is allowed for any purpose whatsoever. Again, member states can also choose to grant other exceptions to the *sui generis* right. This can include extraction for private purposes, for the purposes of illustration for teaching or scientific research, or for reasons of public security.



This slide shows the scope of protection offered by the database directive. As far as copyright is concerned, the author or the owner of the copyright of the database has the exclusive right to reproduce, translate, adapt, arrange and make alterations to the database and to distribute, communicate and display it to the public. These rights are in line with general copyright protection, as is the term of protection.

By way of exception, any performance by a lawful user for the purpose of access to the contents and normal use thereof is excluded from the scope of protection. Other exceptions are:

- the reproduction for private purposes of non-electronic databases,
- use for the sole purpose of illustration for teaching or scientific research,
- use for public security reasons and
- other exceptions to copyright authorised under national law.

With the *sui generis* right, the term of protection is shorter. It is limited to 15 years. It can, however, be extended, as any major investment in substantially changing a database results in a new term of protection for that database.

Database makers can prevent extraction – or the transfer of content to another medium – and re-utilisation, in other words any form of making the database available to the public by any form of transmission.

Extracting or re-utilising insubstantial parts of the contents of the database is allowed for any purpose whatsoever. Again, member states can also choose to grant other exceptions to the *sui generis* right, such as extraction for private purposes, for the purposes of illustration for teaching or scientific research, or for reasons of public security.

Slide 17

Trade marks

The following slides provide a basic introduction to trade marks.

TRADE MARKS

Slide 18

What is a trade mark?

A trade mark consists of any signs capable of distinguishing goods or services of one firm or company (referred to in the legislation as an undertaking) from those of another.

Trade marks serve to indicate the commercial source or origin of the products and services they relate to. Moreover, trade marks may fulfil other functions such as advertisement or goodwill.

In the EU, pursuant to Article 3 of the Trade Mark Directive 2015/2436, the abovementioned signs must be able to be represented in the Register of the European Union Trade Marks, in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to their proprietors. It is essential to require that the sign is capable of being represented in a manner which is clear, precise, self-contained, easily accessible, intelligible, durable and objective.

The elimination of the requirement of graphical representation will enter into force on 1 October of 2017, once the European Commission issues secondary legislation to complement and develop some of the provisions of the EUTMR.

A sign should therefore be permitted to be represented in any appropriate form using generally available technology, and thus not necessarily by graphic means, as long as the representation offers satisfactory guarantees to that effect.

Said conditions have been settled in order to fulfil the objectives of the registration system for trade marks, namely to ensure legal certainty and sound administration.

To this end, the European Union Intellectual Property Office (EUIPO) provides users with information on the alternative media and formats that are considered to comply with the European Union Trade Mark Regulation (EUTMR).

There are many different types of trade mark:

- word marks
- figurative marks
- shape marks
- colour per se marks (where protection is sought for one or more colours, regardless of any specific shape or configuration)
- sound marks
- movement marks
- other: olfactory, taste, hologram, position and tracer marks.

You could ask the students to come up with examples of trade marks for each of the different categories listed above.

When it comes to refusing trade marks, a distinction is made between absolute grounds for refusal and relative grounds.

The grounds for refusal or invalidity concerning the trade mark itself, including the absence of any distinctive character, or concerning conflicts between the trade mark and earlier rights, are listed in an exhaustive manner.

Marks which are descriptive or generic are also excluded. A trade mark is descriptive if it consists exclusively of signs or indications which may serve, in trade, to designate the kind, quality, quantity, intended purpose, value, geographical origin or time of production of the goods or of the rendering of the service, or other characteristics of the goods or service. A trade mark is generic if it consists exclusively of signs or indications which have become customary in the current language or in the bona fide and established practices of the trade.

Other absolute grounds for refusal also exist, for example signs that are contrary to public policy and the principles of morality.

Provided there can be no confusion about the origin of the goods and services, trade marks can peacefully co-exist on the market. However, peaceful co-existence might not be possible if two marks are so closely similar that it is not possible to distinguish between them or if consumers might confuse the origin of the goods and services, i.e. if they might think that they come from the same company. The likelihood or risk of confusion constitutes relative grounds for refusal.

Peaceful co-existence might neither be possible with regard to geographical indications, traditional terms for wine, traditional specialties guaranteed and plant variety rights; ensuring full consistency with relevant Union and national legislation providing for the protection of these intellectual property titles.

Moreover, the EUTMR and Directive extend the prohibition of registration that used to be applied to “shape” marks also to signs consisting exclusively of other characteristics (e.g. colour, smell or sound) which result from the nature of the goods they designate, are necessary to obtain a technical result or add a substantial value.

Finally, regarding invalidity proceedings based on absolute grounds, the EUTMR codifies the existing practice and stipulates that the Office shall limit its examination to the grounds and arguments provided by the parties.

What is a trade mark?

- A trade mark is any sign, capable of being represented graphically, which distinguishes the goods and services of one undertaking (company or organisation) from those of another
- Many different types: word, figurative, colour, shape
- Absolute grounds for refusal
 - Distinctiveness
- Relative grounds for refusal
 - When peaceful co-existence of marks is impossible

Intellectual Property Teaching Kit

18

A trade mark consists of any signs capable of distinguishing goods or services of one firm or company (referred to in the legislation as an undertaking) from those of another.

Trade marks serve to indicate the commercial source or origin of the products and services they relate to. Moreover, trade marks may fulfil other functions such as advertisement or goodwill.

In the EU, pursuant to Article 3 TMD, the above mentioned signs must be able to be represented in the Register of the European Union Trade Marks, in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to their proprietors. The elimination of the requirement of graphical representation will enter into force on 1 October of 2017, once the European Commission issues secondary legislation to complement and develop some of the provisions of the EUTMR.

The many different types of trade mark include word marks, figurative marks and colour and shape marks.

According to the definition, trade marks or signs must be distinctive. A lack of distinctive character is therefore an absolute ground for refusal of registration. Trade marks which are descriptive or generic are not capable of fulfilling the origin function.

Other absolute grounds for refusal include signs that are contrary to public policy and the accepted principles of morality.

Relative grounds for refusal exist where the peaceful co-existence of two marks is not possible because of the likelihood of confusion on the part of the consumer.

Slide 19

Registration

To obtain protection for a trade mark you have to register it with a trade mark office.

In the EU, registration is possible at three levels. Whichever level is chosen, however, it is crucial to be the first to register the mark. Whoever registers the mark first will obtain the trade mark right, although this could be challenged by an earlier, unregistered use of the mark. It is therefore important to be first both to use and to register, in order to successfully defend the mark from others wishing to assert their rights to it.

As mentioned before, there are three different procedures to obtain the registration:

National procedure: If trade mark protection is sought in just a few European countries only, you can choose the national route. National applications can be filed with the national trade mark offices of the countries where protection is desired.

International procedure: International application and registration is possible with the World Intellectual Property Organization (WIPO). If you want worldwide protection this option is the best. Note: international registration does not result in a supranational mark, but in different national trade marks and, if requested, a European Union Trade Mark (EUTM).

European Union procedure: Applicants can apply to the European Union Intellectual Property Office (EUIPO) to obtain a European Union Trade Mark (EUTM), which offers protection across the whole territory of the EU. EUIPO provides a fast, high quality, streamlined trade mark registration system, which is also consistent, user friendly, publicly accessible and technologically up to date. Applicants should consider this option if they want protection in a larger number of countries within the EU.

The EUTM has a unitary character. This means that a sign cannot be registered as a EUTM if it lacks distinctive character or in case that any other absolute ground for refusal exists in just one of the Member States. Applications for EUTMs could also be challenged if there is a conflict with an earlier national right.



This slide shows the three different registration routes that can lead to trade mark protection.

Trade marks must be registered in order to obtain trade mark protection. It is essential to be the first to register.

Registration is possible at national level.

It is also possible to file an international application with WIPO, the World Intellectual Property Organization.

In Europe, applicants have the option of filing with the EUIPO with a view to obtaining a European Union Trade Mark, which affords protection in the whole of the EU.

Slide 20

Scope of protection

A registered trade mark gives its owner the exclusive right to prevent any one else from using the mark without his consent in the course of trade.

However, this exclusive right applies only to the goods and services for which the mark is registered, or to similar goods and services. In this regard, the EUTMR follows the line established by the ECJ in its judgment for the case "IP Translator" by requesting the goods and services to be identified with sufficient clarity and precision to enable the competent authorities and economic operators to determine the clear and precise subject matter of the protection of the trade mark. Indeed, the terms used, including the general indications for the class headings of the Nice Classification, will always be interpreted according to their literal meaning.

According to the Principle of Speciality, the same sign can be registered for different goods and services by another company, on condition that there is no likelihood of confusion. In some cases, the same trade marks can co-exist in the market.

Trade marks offer an exclusive right that is territorially limited. They offer protection only within the territory in which they are registered. For national trade marks this means that protection can only be invoked within the territory where registration is obtained. An EUTM offers protection throughout the whole of the EU.

Term of protection:

Trade marks are protected for an initial period of ten years from the date of filing of the application.

This protection can be renewed for further periods of ten years. There is no limit to the number of renewals.

End of protection:

Trade mark protection ends if:

- the protection is not renewed.
- the trade mark holder does not use his trade mark. (Note: This is not an obligation during the first five years after registration.)
- the trade mark is declared invalid, because peaceful co-existence on the market is not possible or because an absolute ground for refusal is detected after registration.

Limits of the protection:

There are some limits to this exclusivity. Some use of trade marks is allowed, for example for private purposes only.

Scope of protection

- Exclusive right, but
 - principle of speciality
 - principle of territoriality
- Potentially perpetual (renewal every ten years)
- Risk of loss of protection if:
 - not used after five years
 - found to be invalid
- Allowed uses

Intellectual Property Teaching Kit 20

Trade mark owners have an exclusive right to prevent others from using their mark in the course of trade.

Trade marks are registered for specific goods and services only. The exclusive right offered by the trade mark is linked to these specific goods and services. This is the principle of speciality.

A second limit is the principle of territoriality. Trade mark protection is limited to the territory where the mark is registered.

Unlike other IP rights, trade marks can be renewed indefinitely. Each renewal adds ten years of protection.

There are a number of different ways in which trade mark protection can end. For example, during the first five years after registration there is no obligation to use the mark. After this initial period, lack of genuine use can lead to cancellation of the mark. Also, a trade mark can still be declared invalid if, after registration, an absolute ground for refusal is identified or where peaceful co-existence on the market is no longer possible.

The scope of protection is broad, but some use by others is allowed, for example for private purposes only.

Slide 21

Designs

The following slides provide a basic introduction to designs.



Slide 22

What is a design?

A design is the outward or visible appearance of the whole or parts of a product resulting from its features.

In a legal sense, an industrial design constitutes the ornamental or aesthetic aspect of an article. An industrial design may consist of three dimensional features, such as the shape of an article, or two dimensional features, such as patterns, lines or color. These features can be:

- lines
- colours
- shapes
- textures
- contours
- materials
- ornamentation.

A "product" is any industrial or handicraft item. Almost any industrial or handicraft item can be eligible for design protection, including the following:

- the packaging of products
- the design of normal single products
- the design of composite products
- sets of articles
- parts of products
- graphic symbols (and logos)
- typographic typefaces
- computer icons
- drawings and artwork
- ornamentation that can be put on several different items
- web designs
- maps
- get-ups.

Before a design can be protected it has to fulfil two essential and substantive conditions. It has to be novel or new, and it has to possess individual character.

Novelty

This requirement can only be met if no identical design has been made available to the public earlier, i.e. before a certain date. Firstly, no other designer or company/organisation may have disclosed an earlier identical design. Secondly, the designer may not have made his own design available to the public before the date of filing the application. Once a design has been made available to the public it is no longer new.

Individual character

In addition to the novelty requirement, a design must also have "individual character". The requirement of individual character means that the design must give a different overall impression to any other design disclosed earlier. The overall impression that a design produces on the "informed user" must differ from the overall impression produced on such a user by any other earlier design which has been made available to the public.

Some types of design are excluded by law because they run counter to public order and morality.

What is a design?

- A design is the outward appearance of the whole or parts of a product resulting from its features.
- A product is any industrial or handicraft item.
- Requirements for protection
 - Novelty
 - Individual character
- Some exclusions

Intellectual Property Teaching Kit

22

A design is the outward appearance of the whole or parts of a product. A product can be any industrial or handicraft item.

Examples of design features include lines, colours and shapes. Examples of the products to which they are applied or in which they are incorporated include packaging and logos.

There are two requirements for protection.

The first is novelty. The design must be new. In other words, no other identical design has been made available to the public.

The second is that the design must have individual character. This requirement is not met if another design which creates the same overall impression on the informed user has already been disclosed.

Some designs are excluded from protection by law because they run counter to public order and morality.

Slide 23

Registered and unregistered design rights

Design protection has two forms: registered and unregistered.

a. Registered Designs:

Design rights can be obtained through registration with IP offices. These are what are known as registered design rights.

Registration is possible at three levels:

- Registration at national level with the relevant national IP office. The conditions and requirements may vary from country to country.
- International registration with WIPO: The Hague System for the International Registration of Industrial Designs provides a practical business solution for registering up to 100 designs in over 65 territories through filing one single international application.
- European Union (EU) registration through the EUIPO: The Office provides a fast, high quality, streamlined designs registration system, which is also consistent, user friendly, publicly accessible and technologically up to date. At the moment, the number of RCD Invalidation filings received is relatively small and is often volatile.

b. Unregistered Designs:

Unregistered design rights are obtained through disclosure to the public and use. There is no need for any type of registration. Unregistered designs can be useful for those types of products and designs that have an exceptionally short lifespan for which the registration process might take too long compared with the length of time for which the design is valuable.

At EU level, the Unregistered Community Design (UCD) exists alongside the Registered Community Design. The UCD offers a more limited protection, which will be explained in the next slide.



Design protection has two forms: registered and unregistered.

It is possible to register designs at national, international and EU level. The international registration of designs is run by WIPO. Registration for the whole of the EU is done by the EUIPO, where applicants can obtain a Registered Community Design.

Protection in the whole of the EU is possible without registration. This takes the form of Unregistered Community Designs.

Unregistered Community Designs can be useful for products and designs that have an exceptionally short lifespan, where the registration process might take too long compared with the length of time for which the design is expected to be valuable.

Slide 24

Scope of protection

The scope of protection includes any design which does not produce a different overall impression on the informed user. The right holder has the exclusive right over a design with the same overall appearance.

In terms of the territorial scope of protection, Community designs have effect in all the member states of the EU, while national designs offer protection in the member states in which they are registered.

The scope of protection of registered designs is different from that of unregistered designs.

a. Protection granted to registered designs:

The protection offered by registered rights is complete. They give the owner the exclusive right to use the design and to prevent others from, in particular, making, offering, putting on the market, importing, exporting or using any product in which the design is incorporated or to which it is applied.

b. Protection granted to unregistered designs:

Unregistered design rights, on the other hand, only offer protection against copying. There is no protection against independent works or creations that may be identical or similar to the unregistered design.

Term of protection:

Once registered, designs are protected for an initial period of five years. The protection runs from the date of filing of the application, not the date of registration. The term of protection can be renewed for one or more periods of five years each. The maximum term of protection is 25 years from the date of filing. This means that the design can be renewed a maximum of four times.

An unregistered design right only offers protection for up to three years.

Limits of the protection:

However, there are limits to the protection afforded by designs. Some actions or uses of the design by third parties are permitted, without the need for authorisation. These include, for example, private acts for non-commercial purposes.



Design rights are exclusive rights. Their scope of protection is broad and includes designs which do not produce a different overall impression on the informed user. Use of those designs can be prevented.

Design protection is limited to the territory in which the design is registered.

The scope of protection afforded by registered and unregistered designs is different. Unregistered rights protect the design against copying only, and for a limited time period of three years. Registered design rights are stronger. There is no need to prove copying by the infringer. Registered designs offer protection for an initial period of five years, and can be renewed up to four times.

There are some cases in which the right holder cannot invoke any protection, i.e. where the law states that the use is allowed, for example for private use only.

Slide 25

Geographical indications

The following slides provide a basic introduction to geographical indications.

GEOGRAPHICAL INDICATIONS

Slide 26

What are geographical indications?

The term "geographical indication" is defined in Article 22(1) TRIPS Agreement, which states that a good is identified as originating in the territory of a member country or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.

Under the Agreement, the member states must provide interested parties with the legal means to prevent the use of the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good. Moreover, Members shall provide the legal means for interested parties to prevent any use which constitutes an act of unfair competition within the meaning of the Paris Convention, including:

- Acts of competition contrary to honest practices in industrial or commercial matters;
- Acts of such nature as to create confusion with the establishment, the goods or the industrial/commercial activities of a competitor;
- Indications or allegations liable to mislead the public as to the nature, the manufacturing process, the characteristics, the suitability of their purpose or the quality of the goods.

At EU level, two other terms are used: Protected Geographical Indication (PGI) and Protected Designation of Origin (PDO). The following EU regulations provide protection for PGIs and PDOs for wines, aromatised wines, spirits and agricultural products and foodstuffs while national legislation provides protection for PGIs for non-agricultural products:

- Regulation No. 1151/2012 on the protection of geographical indications for agricultural products and foodstuffs;
- Regulation (EU) No 1308/2013 on the protection of geographical indications for wines;
- Regulation (EU) No 251/2014 on the protection of geographical indications for aromatised wines;
- Regulation (EC) No 110/2008 on the protection of geographical indications for spirit drinks.

Moreover, the Regulation (EU) No. 2015/2424 of the Parliament and Council of 16 December 2015 clarifies the degree of protection vis-à-vis trade marks of designations of origin, geographical indications, traditional terms for wine and traditional specialities guaranteed, ensuring full consistency with relevant Union and national legislation providing for the protection of the above mentioned intellectual property titles.

These EU schemes are meant to encourage the diversification of agricultural production, to protect product names from misuse and imitation, and to help consumers by giving them information about the specific character of the products concerned.

EU legislation provides for symbols that may be used on the labels or packaging of products whose names have been registered as a PDO or a PGI. The two logos are shown on the slide. The difference between PDOs and PGIs is explained on the next slide.

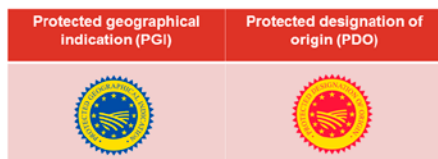
More information is available at https://ec.europa.eu/agriculture/quality_en

The connection with the title of the relevant Union and national legislation provided for often leads to vertical integration in the different sectors involved in producing GI goods: starting with the farmer and continuing to the manufacturer and even wholesale and retail distributor. However, contrary to other IP titles that are usually applied for and owned by private entities, most often individual companies, GIs are typically applied for and managed by producer associations in the relevant geographical area. The GI can then be used by all individual producers located in the area and complying with the defined production methods.

In terms of contribution of GIs to the economic performance and employment in the European Union, there is information available at http://ec.europa.eu/internal_market/intellectual-property/docs/joint-report-epo-ohim-final-version_en.pdf

What are geographical indications?

- Geographical indications identify a good as originating in the territory of a country or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.
- Protection under EU legislation



Intellectual Property Teaching Kit

26

At international level a definition of what is meant by the term "geographical indication" is provided by the TRIPS Agreement. That definition is shown on this slide. The Agreement also obliges the member states to take action and provide legal protection against any kind of use of geographical indications which may mislead the public as to the geographical origin of the goods concerned.

At EU level a distinction is made between Protected Geographical Indications (PGIs) and Protected Designations of Origin (PDOs). Various EU regulations allow the registration of geographical terms as PGIs and/or PDOs for wines, aromatised wines, spirits, non-agricultural products and agricultural products and foodstuffs.

The symbols for PGIs and PDOs are shown on the slide.

Slide 27

Difference between PGIs and PDOs

The main difference between PGIs and PDOs is that, with PDOs, there is a very close link between the specific geographical location and the character of the product. In other words, stricter conditions apply to PDOs.

The distinction is clear from Article 5 Council Regulation No. 1151/2012 and Article 93 Council Regulation No. 1308/2013.

European legislation also includes Traditional Specialities Guaranteed (TSG), which are regulated by Council Regulation (EU) No. 1151/2012. These are agricultural products or foodstuffs either produced using traditional raw materials or characterised by a traditional composition or a mode of production and/or processing reflecting a traditional type of production and/or processing.

PDOs

A product that is produced, processed and prepared in a defined geographical area using recognised know-how. Products owe their characteristics exclusively or essentially to their place of production and the skills of local producers.

If the qualities or characteristics of an agricultural product or foodstuff, a wine or a non-agricultural product are "essentially or exclusively due to a particular geographical environment with its inherent natural and human factors", the place name can be considered as a PDO. Also, all stages of the production

process must be located in the defined area. This means that the production, processing and preparation of the product must take place in the defined geographical area. Of course, the product must originate from the region, specific place or country to which its name refers.

PGIs

A product whose reputation or characteristics are closely linked to production in the geographical area. For PGI agricultural products, non-agricultural products, spirits and foodstuffs, at least one of the stages of production, processing or preparation takes place in the area. For PGI wines, at least 85% of the grapes come from the area. The name of a region, specific place or country used to describe an agricultural product or foodstuff, a non-agricultural product, a spirit, an aromatised wine or a wine originating from that geographical area will be considered as a geographical indication if this product possesses a specific quality, reputation or other characteristic attributable to the geographical origin. It is sufficient

if production and/or processing and/or preparation of the product take place in the defined geographical area. The link between the place name and the product is less strict, but nevertheless at least one of the stages of production, processing or preparation must take place in the defined area.

To find out which product names are protected as PDOs or PGIs consult the DOOR database at

https://ec.europa.eu/agriculture/quality_en
(click on "DOOR database" under "Related info").

E-bacchus database at

https://ec.europa.eu/agriculture/wine/e-bacchus_en/

and E-spirits at

<http://ec.europa.eu/agriculture/spirits/>

Difference between PGIs and PDOs

- Stricter conditions apply to PDOs:
 - Link between place name and product is essentially or exclusively due to the particular geographical environment.
 - All stages from production, processing and preparation are located in the defined geographical area.

The conditions to be met by PDOs are much stricter than those for PGIs.

Firstly, there is the difference in the required link between place name and product. In the case of PDOs, the qualities or characteristics of the product must be "essentially or exclusively due to a particular geographical environment with inherent natural and human factors".

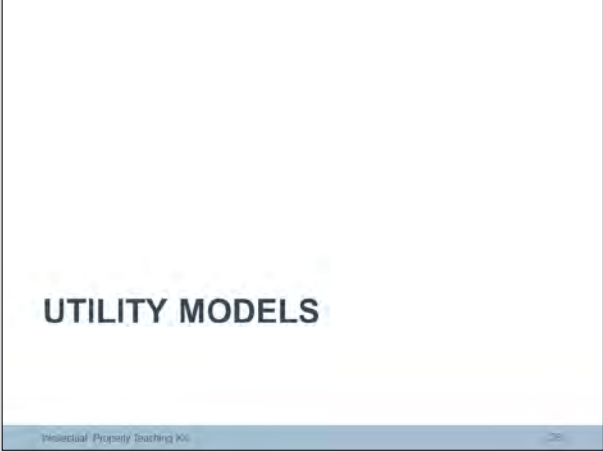
By contrast, a geographical term can be considered a PGI when the product's quality or reputation is attributable to its geographical origin.

Secondly, protection as a designation of origin is only possible when all the stages from production of the raw materials to preparation of the final product take place in the defined geographical area. For PGIs it is sufficient if just one of those stages is situated in the relevant area.

Slide 28

Utility models

The following slides provide a basic introduction to utility models.



Slide 29

What is a utility model?

WIPO describes the utility model (UM) system as follows:

"Like a patent, a UM confers a set of rights for an invention for a limited period of time, during which UM holders can commercially exploit their inventions on an exclusive basis. The terms and conditions for granting UMs are different from those for "traditional" patents. For example, UMs are issued for a shorter duration (3 to 10 years) and, at most offices, applications are granted without substantive examination. Like patents, the procedures for granting UM rights are governed by the rules and regulations of national intellectual property (IP) offices, and rights are limited to the jurisdiction of the issuing authority".

It is important to remember that a utility model is a territorial right that can only offer protection in the country of the issuing authority. For example, a German utility model is only valid in Germany and does not offer protection in France or any other country.

What is a utility model?

- A utility model grants the holder the exclusive right to prevent third parties from:
 - exploiting an invention (e.g. making, using, offering for sale)
 - without authorisation in the country where the utility model was registered for a short period (3 to 10 years).
- The holder has to disclose the invention to the public.

Utility models are intellectual property rights that protect technical inventions, just like patents. In contrast to patents, however, utility models are available in some countries – for example Austria, China, Germany and Japan – but not in others – for example Canada, the UK and the USA.

Generally speaking, applications for utility models must be filed in the country where the applicant is seeking protection for their invention.

There is no European or international utility model, nor, apart from in Africa, is there any centralised filing option. In some countries, however, utility models may be filed based on an international PCT application.

Depending on the law in the country concerned, utility models offer protection for up to a maximum of 10 years. This contrasts with patents, which offer 20 years of protection.

In most countries, utility models are registered without examination, within a few months of filing the application. They can be either in addition to or an alternative to a patent.

Slide 30

Scope of protection compared with patents

Utility models offer protection for inventions that are new, inventive and susceptible of industrial application. In that respect they are very similar to patents. However, in contrast to patents, in most countries the substantive requirements (novelty, inventive step, industrial applicability) are not examined when a utility model is registered and published. Like registered designs and registered trade marks, utility models are thus partially unexamined registered IP rights.

Utility model laws may differ from country to country. This is also true for national patent laws. Strictly speaking, almost every bullet point on this slide should begin with the words 'In the majority of countries', as there are numerous exceptions. For example, French patent law does not stipulate the same examination procedure as German patent law with respect to inventive step. However, rather than listing the exceptions, we have listed the major differences between utility model law and patent law that exist in most countries.

- UMs are registered IP rights. Any interested party can consult the register and find registered utility models (not possible with unregistered rights).
- UMs are territorial rights. They are valid in one country only, namely the country of the issuing authority. For example, a German UM is only valid in Germany and does not offer protection in France or any other country.
- UM applications must be filed individually with individual national offices. There is no equivalent of the PCT or EP/EU route for UMs. In many countries it is possible to file an application for a utility model based on a PCT application, and to file a PCT application claiming priority of a UM.
- UMs provide protection for technical inventions, but not normally for methods or processes. Some countries, such as Germany, do not allow protection for biotechnology.
- The definition of novelty may also be different for the two types of protection. For example, Germany still allows utility models to be filed after a product has been on the market for six months.
- UMs offer protection for a maximum duration of three to ten years. This limitation, in combination with the quick registration of utility models, makes UMs attractive for inventions with shorter life-cycles.
- UMs do not normally involve a search report (exceptions include Austria, for example). In some countries (e.g. Germany) search reports are available on demand.
- UMs constitute unexamined IP rights, i.e. they are not examined with respect to novelty, inventive step or industrial applicability. Exceptions include Brazil (similar examination as for patent applications).
- In most countries, the validity of a UM with respect to novelty and inventive step is only reviewed if the UM is challenged, i.e. in revocation or infringement proceedings. Patents are granted following an examination procedure. A published (and granted) patent therefore offers more legal certainty than a registered and published utility model.
- The procedural fees for UMs may be lower than those for national patent applications.
- However, the fact that utility models are available more quickly than patents, and that there are differing novelty and inventive step requirements, is generally more important than potential cost savings.

| Scope of protection compared with patents | |
|--|---|
| Utility models | Patents |
| <ul style="list-style-type: none"> ▪ Registered territorial IP right ▪ Available in limited number of countries ▪ No central filing in Europe ▪ Protection for 3 -10 years ▪ Search reports in some countries only ▪ Registered and published after a few months ▪ Generally no substantive examination (novelty, inventiveness) ▪ Reviewed only in revocation or infringement proceedings | <ul style="list-style-type: none"> ▪ Registered territorial IP right ▪ Available in most countries ▪ Central filing possible (e.g. EPO for Europe) ▪ Protection for up to 20 years ▪ Search reports standard ▪ Application published after 18 months ▪ Substantive examination (novelty, inventive step) ▪ Grant or refusal after substantive examination procedure |

Intellectual Property Teaching Kit 30

This slide compares some of the key aspects of utility models with those of patent applications and granted patents. Utility models and patents are both registered territorial rights offering protection for technical inventions. In contrast to patents, utility models are only available in certain countries. Utility models must be filed individually in each country where protection is desired, whereas patent applications may be filed centrally with the EPO or WIPO. Utility models offer protection for 3 to 10 years, while patents offer protection for 20 years.

Utility models are normally registered without a search - a report on the prior art - being carried out. Search reports are standard for patent applications. Exceptions exist, for example in Austria, where search reports are also produced for utility models. Utility models are normally registered and published within a few months, while patent applications are normally published after 18 months. The publication of a patent application is a procedural step prior to examination of the application.

In general, utility models are registered without substantive examination as to novelty, inventiveness or industrial applicability. There are some exceptions – for example Brazil. The result of the examination procedure is either the grant or the refusal of the application. The validity of utility models with respect to novelty and inventive step is only reviewed in revocation or infringement proceedings. Granted patents are the result of an examination procedure.

Patents can still be opposed in later proceedings. The financial advantage of utility models is often mentioned. However, while a single utility model is definitely cheaper than a plurality of patent applications, centrally filing one patent application for many countries is far less complex than filing a plurality of utility models in different countries with different languages.

The biggest advantage of filing a utility model is often the speed with which it is registered.

Slide 31

Plant variety rights

The following slides provide a basic introduction to plant variety rights.

PLANT VARIETY RIGHTS

Slide 32

What are plant variety rights?

Plant variety rights give the holder the exclusive right to exploit new plant varieties.

A plant variety can be protected if it is:

- New – the propagating or harvested material was not available in the country of application more than a year before application, or more than four years in other countries.
- Distinct – it is clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of filing of the application.
- Uniform – a variety is uniform if only a limited number of off-type individuals are observed for the relevant characteristics of the variety in one cycle of propagation.
- Stable – the variety's relevant characteristics remain unchanged after repeated propagation.

Plant variety rights are awarded to the breeder. The breeder is either the person who bred a variety, or who discovered and developed it, or the employer of that person, or the successor in title of either of these persons.

Plant variety rights are obtained through registration. They can be registered with the competent authority in the individual member states of the International Union for the Protection of New Varieties of Plants (UPOV) (= national registration) or the Community Plant Variety Office for registration of Community plant variety rights (registration valid throughout the entire European Union).

What are plant variety rights?

- Exclusive exploitation rights for new plant varieties
- Four requirements for protection:
 - novelty
 - distinctness
 - uniformity
 - stability
- Right holder = breeder
- Obtained through registration

Intellectual Property Teaching Kit

32

Plant variety rights give the holder the exclusive right to exploit new plant varieties.

A plant variety can be protected if it is new, distinct, uniform and stable.

The person who is entitled to the exclusive rights is referred to in the legal texts as the "breeder". The breeder can be the person who bred the variety, or that person's employer.

Plant variety rights are obtained through registration, either at national level in any of the member states of the UPOV Convention, or with the Community Plant Variety Office, which offers EU-wide protection.

Slide 33

Scope of protection

Duration

Plant variety rights are granted for a fixed period. In the UPOV member states this period may not be shorter than 20 years from the date of grant of the right. For trees and vines, the period may not be shorter than 25 years from that date. The term for Community plant variety rights runs to the end of the 25th calendar year following the year of grant or, in the case of varieties of vine and tree species, to the end of the 30th calendar year following the year of grant.

Subject-matter

Plant variety rights can be granted for propagating material or, under certain conditions, harvested material which is obtained from the protected variety, as well as non-distinct varieties or essentially derived varieties, and parental lines of hybrids.

"Propagating material" is the reproductive or vegetative propagating material of the variety. For plants that can be vegetatively propagated (by cuttings, runners, etc.), vegetative propagating material is deemed to include parts of plants used to produce new plants (for example seeds, cuttings and grafts) or whole plants.

The UPOV Convention does not define "harvested material". Article 14(2) of the 1991 Act stipulates that, in order for the breeder's right to extend to acts in respect of harvested material, the harvested material must have been obtained through the unauthorised use of propagating material and the breeder must not have had reasonable opportunity to exercise his right in relation to that propagating material.

Acts requiring the authorisation of the breeder

The following acts fall within the scope of protection and require the authorisation of the breeder:

- production or multiplication of the variety
- conditioning for the purpose of propagation
- offering for sale, selling or other marketing
- exporting or importing
- stocking for any of the purposes mentioned above.

Farm-saved seeds ("farmers' privilege")

Article 15 of UPOV 91 states that each contracting party may, within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder, restrict the breeder's right in relation to any variety in order to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings, the protected variety or varieties which are not distinguishable from it or essentially derived varieties. Under the UPOV Convention, this exception was optional for the member states (note the use of the word "may" in the article).

In the European system, Article 14 of Council Regulation (EC) No. 2100/94 provides a list of the species to which this exemption applies. Farmers availing themselves of this derogation are required to pay an equitable remuneration to the holder, the amount of which must be noticeably lower than the amount charged for the licensed production of propagating material of the same variety in the same area. Small farmers are exempt from such payment.

Scope of protection

- Duration
 - At least 20 years
 - At least 25 years for varieties of vine and tree species
- Subject-matter
 - Propagating material
 - Harvested material
- Acts subject to authorisation
- Exceptions

Intellectual Property Teaching Kit 33

Plant variety rights are awarded for a fixed period of time. In UPOV member states this term of protection cannot be shorter than 20 years. For trees and vines the minimum term is 25 years.

The breeder has exclusive rights relating to the propagating material and the harvested material. "Propagating material" is the reproductive or vegetative propagating material of the variety. "Harvested material" is material obtained through the unauthorised use of propagating material. The breeder must not have had reasonable opportunity to exercise his right in relation to the propagating material.

Certain acts relating to this material require the authorisation of the breeder. These are production or reproduction (also known as multiplication), conditioning for the purpose of propagation, offering for sale, selling or

other marketing, exporting and importing, and stocking for any of the purposes mentioned above.

The exclusive rights of the breeder are limited in that some acts done for certain purposes do not require his authorisation. These include acts done for:

- private and non-commercial purposes
- experimental purposes
- the purpose of breeding other varieties

and the use of farm-saved seeds.

Slide 34

Semiconductor topography rights

The following slides provide a basic introduction to semiconductor topography rights.

SEMICONDUCTOR TOPOGRAPHY RIGHTS

Slide 35

What are semiconductor topography rights?

An integrated circuit (IC) or chip is an electronic device that comprises a large number of circuit elements interconnected to each other that perform an electronic function. The circuit elements are created in and on a piece of semiconducting material (also called a substrate or wafer) and are built up in layers on top of each other. The integrated circuit becomes inseparable once the chip has been produced.

The layout design – or topography – of an IC can be thought of as a floor plan which determines the three-dimensional location and the arrangement of the various layers, the circuit elements and the interconnections between the circuit elements.

Semiconductor ICs are incorporated into a wide range of electronic devices such as computers, mobile phones and televisions. The time, know-how and financial outlay required to design them and to prepare photographic masks for manufacturing the layers is considerable. Layout designs therefore have a high commercial value. At the same time, it is reasonably easy to reproduce a photographic mask at much lower cost by photographing each layer and then removing it to reveal the next one. This process of reverse engineering is accepted practice in the semiconductor industry, as it not only allows for the analysis of IC chips in order to improve existing designs but also contributes to innovation. However, it also makes it possible to copy the designs easily and directly.

The legal protection available for layout designs is set out in the Washington Treaty (the Treaty on Intellectual Property in respect of Integrated Circuits 1989), the TRIPS Agreement (1995), which incorporated the Washington Treaty as the basis for the protection of layout designs of ICs, and the Semiconductor Topographies Directive (Council Directive 87/54/EEC of 16 December 1986 on the legal protection of topographies of semiconductor products). These provisions have been incorporated into national laws in most countries, either as separate stand-alone laws or by adapting existing laws. Germany, for example, has incorporated the protection into its laws on design rights.

The main purpose of the semiconductor design right is to prevent the copying of original chip designs and the subsequent commercialisation of either the infringing chips themselves or any products that incorporate them.

The layout designs must be

- original in the sense that they are the result of the creator's own intellectual effort, and
- not commonplace among creators of layout designs and manufacturers of integrated circuits at the time of their creation.


The TRIPS Agreement does not set out any formal requirements for obtaining protection for a layout design. The member states are free to require:

- that the layout design must have been commercially exploited somewhere in the world; and
- that the registration of the layout design must be filed with the competent authority, and that information on its electronic function must be disclosed.
- that filing has to be effected within a certain time period from the date of the first commercial exploitation, and that a fee must be paid.

What are semiconductor topography rights?

Semiconductor topography rights protect layout designs of integrated circuits.

- Three-dimensional components and layers and their interconnections
- Copying relatively easy
- Reverse engineering accepted practice



Substantive requirements

- Original, i.e. the result of the creator's own intellectual effort
- Not commonplace

Formal requirements

TRIPS member states may prescribe:

- registration
- disclosure of electronic function
- registration fee
- commercial exploitation

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Semiconductor integrated circuits (ICs) are embedded in a wide range of electronic devices such as computers, mobile phones and televisions. The size and performance of ICs is determined in part by the layout design.

A semiconductor consists of layers which are composed of semi-conducting material and upon which a pattern is fixed which performs an electronic function. The topography is the design of the pattern. Layout design or topography means the three-dimensional arrangement of the various layers and components and their interconnections.

IC chips are relatively easy to copy.

They are protected by the TRIPS Agreement of 1995. Under this agreement, to gain protection layout designs must be:

- original in the sense that they are the result of the creator's own intellectual effort, and
- not commonplace among creators of layout designs and manufacturers of integrated circuits at the time of their creation.

TRIPS member states may stipulate that:

- layout designs must be registered with the competent national authority
- information on their electronic function must be disclosed
- and a registration fee must be paid.

They may also stipulate that the design must have been commercially exploited somewhere in the world.

Slide 36

Scope of protection

The rights available are similar to those granted by other industrial property rights such as designs or patents. The owner obtains the exclusive right of exploitation and can prevent others from reproducing, selling or importing all or part of the protected design. This means that the owner of a protected layout design has the exclusive right to authorise the reproduction and commercial distribution of the design and of products incorporating it (e.g. consumer electronics).

Duration

This exclusive right of exploitation usually expires:

- 10 years after the first commercial exploitation anywhere in the world, or
- 10 years after the registration was filed with the competent authority (normally the patent and trade mark authority).

Some countries offer protection of up to 15 years after the creation of the design.

Limits and exceptions

It is generally not considered unlawful if another party, without authorisation, reproduces a protected layout design:

- for private purposes or
- for the sole purpose of evaluation, analysis, research or teaching.

This means that, as with patent law, private (i.e. non-commercial) reproduction and reproduction for research, evaluation, analysis or teaching purposes is allowed (at least in Europe).

The right holder may not enforce his rights against another party if that party independently creates an identical layout design. As in copyright, it is recognised that two people or teams may independently create identical layout designs. If both designs fulfil the requirements, i.e. if they are original and are not commonplace, then both designs qualify for protection individually.

The rights are further limited by "innocent infringement". The importation, sale or other commercial distribution of an IC chip incorporating a protected layout design is not unlawful as long as the person or company doing so was unaware that the design was protected. The commercial distribution of an unlawfully copied layout design or products incorporating the design cannot be prevented under such circumstances.

Co-existence with patent rights

Many circuit designs may also incorporate electronic circuits, which are also protected by patents.

Scope of protection

Rights prevent others from reproducing, selling or importing part or all of the protected design and of products incorporating it



Duration of protection

10-15 years from the date of creation of the layout design



Exceptions and limitations

- No infringement if for private use, research or teaching
- Reverse engineering to foster innovation
- Independent creation of an identical design
- Innocent infringement

Intellectual Property Teaching Kit

Semiconductor topography rights give the owner the exclusive right to exploit a protected layout design – in whole or in part – for commercial purposes. Some countries have special laws concerning this IP right. Other countries offer protection using other laws.

The owner of the topography right can prevent others from reproducing, selling or importing all or part of the protected design or of products incorporating such a design, for example consumer electronics.

The duration of protection is a maximum of 10 to 15 years from the date of creation of the layout design.

There are a number of exceptions and limitations to this protection.

– No infringement occurs if a protected design is reproduced for private purposes or for the purpose of evaluation, analysis, research or teaching.

– The TRIPS agreement allows reverse engineering by a third party for the purposes of examining the circuit and fostering innovation. The third party may use the information to create a new – original – layout and use the new layout design in their own integrated circuit.

– The right holder may not enforce their rights in the design against another party if that party independently creates an identical design.

An "innocent infringement" due to the importation, sale or other commercial distribution of an integrated circuit that incorporates a protected layout design is not unlawful as long as the person or company doing so was unaware that the design was protected.

Slide 37

Copyright

The following slides provide a basic introduction to copyright.

COPYRIGHT

Slide 38

What is copyright?

Copyright gives right holders exclusive rights to control the use (or economic exploitation) of their works, e.g. reproduction, distribution, adaptation, translation, performance or public display. It is important to note that copyright is applicable only to the expression of ideas, not to the ideas themselves.

When it comes to copyright, there are two main traditions. On the one hand, the United Kingdom, its former colonies (Australia, South Africa, New Zealand and India), Ireland and the United States (US) apply the copyright system, whereas on the other hand, countries in continental Europe, some African countries which inherited the French system, and central and South American countries apply the *droit d'auteur* system. These two systems differ in certain aspects, including the attribution of authorship and the kind of rights conferred.

Copyright protects any production of the human mind. However, two key concepts have to be taken into account.

1. Only the expression of an idea can be protected. Mere ideas themselves, or principles, discoveries, systems, facts, procedures, processes, concepts or methods of operation are not protectable under copyright law. The same idea can have many different forms of expression, for example where two artists paint a picture of the same model or landscape. This distinction is referred to as the idea/expression dichotomy.
2. Only original expressions can be protected. The condition of originality is approached differently in various countries. According to the civil law tradition, i.e. the *droit d'auteur* system, a work is original when it is the expression of the author's personality. In common law countries, where the copyright system is applied, the author must have put some skill and effort into creating the work.

Note: Copyright protection is not subject to any formality requirements, such as registration, even if some countries (e.g. the US) provide for the possibility of copyright registration.

Copyright-protected works include literary, dramatic, musical, artistic, photographic, phonographic and cinematographic works, in particular novels, plays, music, paintings, sculptures, films, film scripts and so on. Copyright is also important in the scientific domain. Copyright protection is possible for scientific articles.

Applied art – e.g. bridges, trains and furniture – can also be protected by copyright, as can computer programs and databases. With regard to the latter, the EUIPO has put at the disposal of the public the Orphan Works Database, collecting information about works such as books, newspaper, magazine articles and films that are still protected by copyright but whose authors or other right holders are not known or cannot be located.

Regarding the authorship, in the *droit d'auteur* system the author is the physical person who created the work. The same is generally also true in the world of copyright, but there are certain cases where a legal entity, e.g. a company, is considered as the author. For example, under US law the employer is deemed not only the owner of the copyright, but also the author of works created by his employees in the course of their employment. If a work is the result of the involvement of more than one person, a person must have made a contribution to the originality of the work to be recognised as a co-author.

Term of protection:

The protection is granted automatically from the moment a work is created. In this respect, copyright differs significantly from the other IP titles. As to the term of copyright protection, Article 7 of the Berne Convention and Article 12 of the TRIPS Agreement state that copyright lasts at least 50 years after the death of the author. In the EU a harmonised term of protection of 70 years after the author's death was implemented by Directive 2006/116/EC of 12 December 2006 on the term of protection of copyright and certain related rights.

Type of works that are protected under copyright laws:

There are still differences in copyright protection at national level. The types of works that are protected under national copyright laws include the following:

- Literary works (including novels, short stories, poems, dramatic works and any other writings, irrespective of their content, both fiction and non-fiction).
- Dramatic works
- Musical works
- Artistic works (whether two-dimensional such as drawings, paintings, etc. or three-dimensional such as sculptures, architectural works)
- Maps and technical drawings (including cartographic works, plans, blueprints, diagrams, etc.)
- Photographic works
- Cinematographic works
- Computer programmes and databases

What is copyright?

- Copyright protects any production of the human mind, such as literary and artistic works.
 - This production must be an expression and not a mere idea.
 - The expression must be original.
- Copyright creates a special legal relationship between authors and their work.
- It confers legal protection for a limited period of time.

Intellectual Property Teaching Kit

38

Copyright protects any production of the human mind, provided that this production is an expression, and not a mere idea, process or discovery. The expression must be original.

Examples of copyright-protected work in the artistic, literary and scientific fields include literary, dramatic, musical, artistic and photographic works, scientific articles and computer programs and databases.

Copyright creates a special legal relationship between authors and their work. The author is the physical person who created the work.

The period for which legal protection is conferred is called the "term". International treaties and conventions have laid down a term of a minimum of 50 years after the author's death. This means that the author enjoys copyright protection throughout the whole of his life. In the EU the term is 70 years.

Slide 39

Scope of protection

Independently of the economic rights, authors are granted moral rights (the right of authorship, the right of integrity of work and the right of divulgation). These rights can be asserted by the author even if the copyright has been transferred to a third party. Therefore, the rights which are conferred by copyright can be divided into two main groups: economic exploitation rights and moral rights.

Economic exploitation rights include

- the right to reproduce the work and to communicate it to the public.
- the right of adaptation and translation, the resale right and the right of distribution.

Specific examples include the act of making a copy of the work on the same or a different medium, a public performance of the work (e.g. the public projection of a film, the performance of a play, etc.), or broadcasting or renting out the work.

Moral rights include

- the right (not) to be recognised as the author of a work (right of authorship).
- the right of integrity. In other words, the author has the right to object to any changes made to the work that could jeopardise his honour and reputation.
- the right of divulgation of the work. In other words, the author has the right to decide when his work can be made public.

The rights awarded to the author are subject to some exceptions. These allow for the use of the work in specific situations, such as for personal use only, or for criticism and review.

Copyright infringement occurs when a person exercises a right conferred on the author or right holder without having obtained their consent. A violation of the right to reproduce occurs where a substantial part of the pre-existing work is used without the authorisation of the author or right holder. The "substantial part" has to be assessed both quantitatively and qualitatively, but always in relation to the original part of the work. In the event of infringement, authors and rights holders can ask the courts to take measures to stop further infringement, to have the infringing goods seized or destroyed, and to order the payment of damages.

Scope of protection

- Economic rights
 - relate to the economic exploitation of the work
 - are freely transferable or licensable
- Moral rights
 - relate to a moral interest of the author
 - are always retained by the author
- Exceptions and limitations
- Infringement and remedies

Intellectual Property Teaching Kit

39

Copyright confers both economic and moral rights on the owner.

The economic exploitation rights include the rights of reproduction, communication to the public, translation, adaptation, distribution and resale.

The moral rights include the rights of authorship, integrity and divulgation.

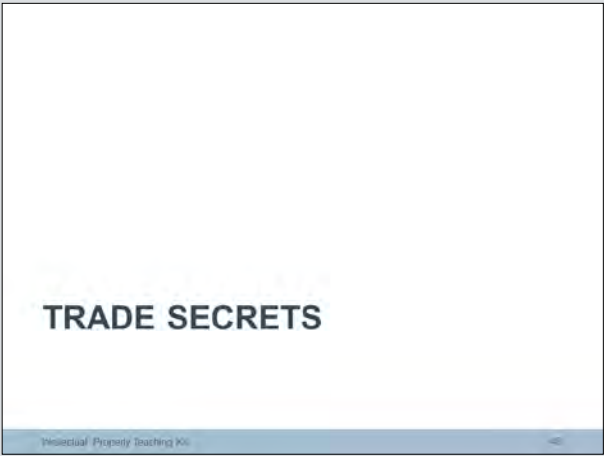
These rights are limited in that third parties are allowed to use the protected work in certain situations and for certain purposes. These exceptions and limitations are in the public interest.

Copyright infringement occurs if the protected work is used without the consent of the author or rights holder.

Slide 40

Trade secrets

The following slides provide a basic introduction to trade secrets.



Slide 41

What are trade secrets?

According to the World Intellectual Property Organization, the most common form of protection used by business is secrecy; even more that the best known areas of IP such as patents, copyright, trade marks or design.

Trade secrets consist on confidential business information which provides an enterprise with a competitive edge. Needless to say that the information in a trade secret must be not generally known or easily discovered; it must have a business, commercial or economic value from not being known; and reasonable efforts to maintain the secrecy of the information must be demonstrated.

In the event of a dispute, the person who claims it was their secret will need to show that it really was a secret. A court will then enquire as to whether reasonable efforts have been made to maintain the information as a secret. For example, was knowledge restricted to certain key personnel, and/or was it passed on a strictly "need to know" basis?

The subject matter of trade secrets is usually defined in broad terms and includes sales methods, distribution methods, consumer profiles, advertising strategies, lists of suppliers and clients, and manufacturing processes.

Examples

- Specific process conditions in a chemical process/plant
- Secret ingredients or sources of ingredients
- The famous Coca-Cola recipe
- Colonel Sander's Kentucky Fried Chicken (KFC) recipe (www.abs-cbnnews.com/lifestyle/05/31/12/kfc-unearths-colonel-sanders-%E2%80%99-secret-recipes)

Trade secrets can enjoy unlimited life, as long as they remain a secret – with Coca-Cola this has been the case now for more than 100 years – while patent protection normally does not last for more than 20 years.

Please note that, following the debate at the European Parliament on Wednesday 13th April 2016, the Parliament voted on Thursday 14th April to adopt the Trade Secrets Directive with no further amendments.

Said Directive seeks to harmonise the protection of trade secrets all across the European Union in three main areas, namely:

- The definition of what is a "trade secret" and how they will be protected;
- The remedies available to trade secrets holders in the event of misuse of misappropriation of their trade secrets; and
- The measures the Court can use to prevent the disclosure of trade secrets during legal proceedings.

Following the approval of the Parliament, the Council should formally adopt the Directive at its next sitting at the end of May or beginning of June 2016.

The proposal for a Directive provides the following definition of Trade Secret: 'trade secret' means information which meets all of the following requirements:

- It is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;
- It has commercial value because it is secret;
- It has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.

Therefore, according to the above mentioned proposal for a directive, the definition of 'trade secret' contains three elements: (i) the information must be confidential; (ii) it should have commercial value because of its confidentiality; and (iii) the trade secret holder should have made reasonable efforts to keep it confidential. This definition follows the definition of 'undisclosed information' in the TRIPS Agreement.

What are trade secrets?

- Information that
 - is not generally known or easily discovered
 - has a business, commercial or economic value (actual or potential) because the information is not generally known
 - is subject to reasonable efforts to maintain secrecy
- Unlimited life, provided the information does not become public knowledge.

To become a trade secret, information must not be generally known or easily discoverable. At the same time, it must have a business, commercial or economic value from the fact that it is secret. It must also be possible to demonstrate that reasonable efforts have been or are being made to maintain the secrecy of the information.

Trade secrets are valid for as long as they remain secret, in other words for as long as they do not fall into the public domain.

According to the Proposal for a Directive of the European Parliament and of the Council on the protection of undisclosed know-how and business information (Trade Secrets) against their unlawful acquisition, use and disclosure, the definition of ‘trade secret’ contains three elements:

- (i) the information must be confidential;
 - (ii) it should have commercial value because of its confidentiality; and
 - (iii) the trade secret holder should have made reasonable efforts to keep it confidential.
- This definition follows the definition of ‘undisclosed information’ in the TRIPS Agreement.

Slide 42

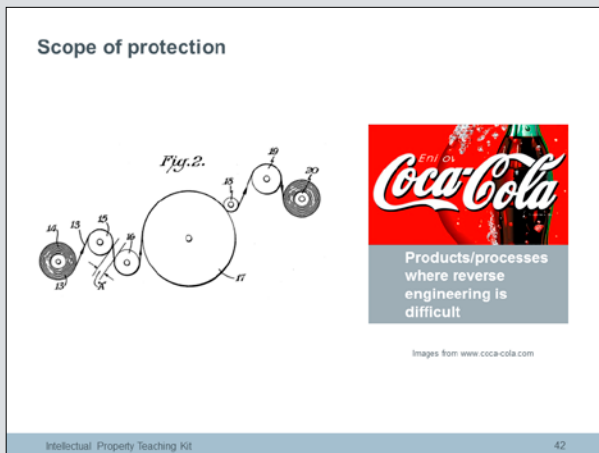
Scope of protection

As mentioned before, the subject-matter can be anything that is kept secret. This is useful for products and processes where reverse engineering is difficult. In this regard, the Directive applies to unlawful acquisition, disclosure and use of trade secrets and the measures, procedures and remedies that should be made available for the purpose of civil law redress.

This slide shows two sets of trade secrets. The formula for Coca-Cola is kept locked away in a vault at the Coca-Cola headquarters.

The process on the left-hand side is taken from the original GORE-TEX patent and shows an outline of the manufacturing process. In fact, a similar process had been discovered earlier by someone else and had been kept secret.

Trade secret protection can last longer than patent protection. However, once the information has been revealed (either accidentally or deliberately) then its value will be worthless.



Trade secrets can be just about anything that can be kept secret and that confers a commercial advantage.

One example of a trade secret is the formula for Coca-Cola, which is kept locked away in a vault at the Coca-Cola headquarters.

Chemical or other manufacturing processes can also be valuable. The diagram on the left is taken from the original GORE-TEX patent. Another company had kept a similar process secret for several years before Gore filed their patent.

Slide 43

Means of protection

Contrary to patents, trade secrets are protected without registration, that is, trade secrets are protected without any procedural formalities. Consequently, a trade secret can be protected for an unlimited period of time.

The protection of trade secrets involves both practical arrangements to restrict access to knowledge and legal or contractual arrangements to ensure that those who have access to the secret or confidential information do not divulge it. According to the Directive, a "Trade secret" must have been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.

In many countries, employment agreements can include a restriction stipulating that key employees may not go and work for a competitor. These agreements are normally restricted in duration; this "gardening leave" (as it is sometimes called) can be at most two years. The former employer still needs to pay at least part of the employee's new salary, so such restrictions can be quite expensive.

Most employees have a so-called "fiduciary" duty to their former employers to not reveal confidential information. This is difficult to enforce and is only effective if, for example, stolen documents are involved. It is not possible to stop employees from using their general knowledge.

Non-disclosure agreements will help keep information that is exchanged with customers or potential partners confidential. They are only effective if the other side keeps the information secret. Once the information is disclosed (even in breach of an agreement), it is no longer secret.

A better way to protect information is to restrict access to the information to those employees with a need to know. Other options include encrypting data (in particular if it is sent over the internet) and restricting entry into certain areas of manufacturing plants.

| Means of protection | |
|--|---|
| Practical <ul style="list-style-type: none"> ▪ Limited access to information ▪ "Need to know" ▪ Encryption of data ▪ Monitored entry to installations | Contractual <ul style="list-style-type: none"> ▪ Restrictive covenants in employment contracts ▪ Non-disclosure agreements |

Intellectual Property Teaching Kit 43

The protection of trade secrets involves both practical arrangements to restrict access to knowledge, and legal or contractual arrangements to ensure that those who have access to the secret or confidential information do not divulge it.

In many countries, employment agreements can include a restriction stipulating that key employees may not go and work for a competitor, and most employees have a so-called "fiduciary" duty to their former employers to not reveal confidential information.

Non-disclosure agreements help keep information exchanged with customers or potential partners confidential. They are only effective if the other side keeps the information secret.

A better way to protect information is to restrict access to those employees with a need to know the information. More generally, data can be encrypted (in particular if it is sent over the internet) and entry into certain areas of a manufacturing plant controlled.

Slide 44

IP in the real world – a practical exercise

This exercise deals with intellectual property and business strategies in very general terms. Professional advice should always be sought when taking business or legal decisions.

IP in the real world

A practical exercise to help you decide what IP to use and when

Slide 45

An anti-allergy sprayer and spray

Divide the students into groups of 4-5 and distribute the exercise.

Give them ten minutes to work on the questions, to be followed by ten minutes of discussion.

Exercise

A university research team has developed a new medicinal product which is very effective in treating certain allergies.

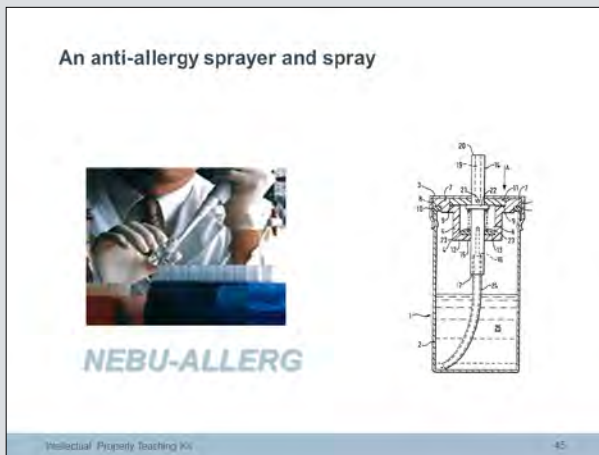
Having studied various ways of applying the product, the team concluded that a nasal application in the form of a subtle mist would be best. They designed a nebuliser and carried out some laboratory tests. The nebuliser has a special nozzle design that permits more effective delivery, by precisely forming tiny droplets of uniform size and speed to reach the optimal location inside the nose, allowing for better absorption. The pumping system has also been improved so that it delivers a fixed, precise dose of the product, sufficient to treat symptoms for a whole day. For these reasons, the team thinks it could become a market leader.

The team showed a prototype of the sprayer to one of the engineering companies from the university's technology park. In collaboration with this company, they came up with an attractive design for the overall sprayer can which is suitable for commercialisation. The design is minimal – "clean and clinical" – and comprises a white can with a single green button.

The team considers the field of allergy products to be a growth market, so they asked an advertising agency to devise a strategy that could give them an important share of the market over the next few decades. Together they came up with a brand name, NEBU-ALLERG, and a plan to create an attractive logo. They think the slogan should emphasise simplicity and have suggested "Press green for go!". The advertising agency will design a website and other material to support the promotional campaign.

What you have to do

- Identify the various IP elements in this project.
- Suggest ways in which they can be protected.
- Identify potential contractual issues.



Divide yourselves up into groups of 4 to 5 people and read the exercise you have been given.

The exercise is about a new medicinal product which has been developed by a university research team. The product is very effective in treating certain allergies. The team has also designed a nebuliser with a special nozzle design for nasal application that permits more effective delivery, and an improved pumping system which delivers a fixed, precise dose of the product.

In collaboration with an engineering company from the university's technology park, they have also developed an attractive design for the sprayer can.

Together with an advertising agency they have come up with a brand name, NEBU-ALLERG, an attractive logo and a slogan which reads "Press green for go!" The agency also plans to design a website and other material to support the promotional campaign.

In the next ten minutes I would like you to:

- Identify the various IP elements in this project,
- Suggest ways in which they can be protected, and
- Identify the potential contractual issues that might arise.

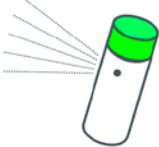
Slide 46


Which elements can be protected?

Use this slide to summarise the aspects that students should be focusing on.

Which elements can be protected?

- Medicinal product
- Nozzle
- Pumping system
- Sprayer can



- Brand name:
– "NEBU-ALLERG"
- Logo 
- Slogan:
"Press green for go!"
- Domain name
- Advertising material

Intellectual Property Teaching Kit 46

Here are some of the aspects you should be focusing on.

Slide 47

Patents and designs (I) (animated slide)

Medicinal product

Students may suggest that the active ingredient should be patented. That would be correct. They may also suggest that the process for making X should be patented as well. Yes – but have they considered that a trade secret might be just as effective? If the process cannot be guessed from the final product, then it might be better kept as a trade secret. However, if the process cannot easily be kept secret, or if the intention is to license it, then it is better to patent it.

They might also suggest patenting the formulation (the mixture of X in a solution with other materials, e.g. preservatives, acidity regulators, emulsifiers, etc.). If a patent application for X were to be rejected for lack of novelty, its novel formulation with other materials might get a patent instead. However, in this field of technology many formulations are commonplace, so proving inventive step might be difficult.


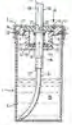

Finally, they might suggest patenting a method of using the chemical to treat allergies. They would be right in any other situation, but wrong here. If the invention was a new radar system, you could patent the radar equipment itself, a process for making it, and a method for detecting objects using the new radar system. However, in the medical field, "methods of treatment, diagnosis or surgery practised on the human or animal body" cannot be patented. This is a matter of public policy. It is not felt to be in the public interest for a doctor to be prevented from performing a life-saving operation simply because he cannot get a licence from the patentee for the method. So whilst medicines, medical equipment (X-ray machines, endoscopes, etc.) and prosthetics (e.g. artificial hip joints) can all potentially be patented, methods of diagnosing or treating arthritis, or methods for surgically implanting hip joints, cannot.

Patents and designs (I)

Medicinal product

Patents for

- the active ingredient?
(the "chemical X")
- the method of making X?
Better as a trade secret?
- the formulation?
(combination of X with other ingredients)
- ~~the method of use?
(i.e. treatment of allergies using X)~~

Intellectual Property Teaching Kit 41

First of all, how would you protect the medicinal product?

What about the process for making X?

And the formulation?

What about a method of using the spray to treat allergies?

Slide 48

Patents and designs (II) (animated slide)

Nozzle

If anyone suggests that the nozzle should be protected as a registered design, ask them if its internal shape is "ordinarily on view when in use" – a requirement for registered design protection. The answer is no. (This aspect is dealt with in more detail in the advanced module on designs).

Then ask if the shape of the nozzle is dictated by aesthetic or functional criteria. It is, of course, functional, and therefore patentable (and, in fact, barred from design protection). Furthermore, in countries which have a utility model system, it could be a utility model too. This would be quicker and possibly also cheaper, and therefore a more attractive option should money be limited in the early stages of the project.

Pumping system

Next, the pumping system, which is quite distinct from the nozzle. A patent application could be filed for this, and in some countries a utility model too. Counter any suggestion that the nozzle and pumping system could be wrapped up together in one patent application to save money. They are two quite different inventions. The pumping system patent could, in future, be licensed for other purposes quite independently of the nozzle patent, and vice versa.

Sprayer can

Finally we come to the sprayer can itself. The shape plus the colour of the bottle and button have been designed to make it attractive to consumers. These aesthetic features are different from the functional features of the nozzle and the pumping system. The design of the sprayer could easily be protected by a registered design (and already enjoys unregistered rights for three years). Students will probably also spot the opportunity to register the shape as a trade mark (see Toblerone or the Coca-Cola bottle).

But be careful! Who developed the sprayer can?

The engineering company from the university's technology park. So you have to check the contracts for the development of the sprayer can to ascertain if the university research team is even entitled to register IP for it, as it might actually belong to the engineering company. It would therefore be important to get ownership assigned as quickly as possible.

Point out that the engineering company – essentially a sub-contractor – could be a potential source of leaks regarding technical or commercial secrets (especially dangerous prior to patent filing), so it might also be worth thinking about confidentiality agreements. The prototype was shown to the engineering company, so even if patents or utility models have been applied for the technical features of the sprayer (nozzle and pumping system), it would be wise to sign a non-disclosure agreement. The agreement should establish the university's ownership of the initial prototype and the obligations of confidentiality; ownership of the resulting design might be better covered in a separate agreement.

Patents and designs (II)

Nozzle

- patent
- utility model

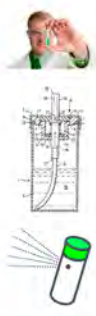
Pumping system

- patent
- utility model

Sprayer can

- designs: registered and unregistered
- trade mark

But who owns all this IP?



Intellectual Property Teaching Kit 45

What about the nozzle?

And the pumping system?

And the sprayer can?

And last but not least: who owns all this IP?

Slide 49

Trade marks, copyright and domain names (animated slide)

Brand name, logo and slogan

Are there any problems with the brand name, logo or slogan? The brand name is a made-up word (like Kodak or Sony) and therefore has the potential to become a "strong" mark. And a "pure" word mark, unlimited by font or style, gives broader protection than a "stylised" word mark, which protects the word or name only when written in a particular way.

The slogan is neither laudatory nor descriptive, nor indicative of type, quantity or kind, so there are no problems here. (This aspect is dealt with in more detail in the advanced module on trade marks.)

In the long-term, the registered trade marks (RTMs) could be the strongest asset. Unlike patents, utility models and design rights, they will not expire. If patent protection can keep the competition away from this market niche long enough to establish a reputation under the brand, then even after the patents and other IP expire, the trade marks can continue to maintain a substantial market share.

Advertising materials

Advertising materials – text and artwork for posters, flyers, jingles, television and radio advertisements and websites – will be covered by copyright.

But be careful: who owns this IP? Check the contracts with the advertising agency, and get assignment of the rights protecting the IP, such as the various advertising materials. You must also guard against the advertising agency becoming the owners of the RTMs (if you let them develop the brands and slogans and let them file the RTM applications).

A further suggestion might be to put confidentiality agreements in place to prevent leaks of commercially sensitive information (product pricing, marketing strategy, launch dates, technical data and so on).

Domain names

Domain names are important marketing tools.

If NEBU-ALLERG becomes an RTM, this will provide strong protection against cyber-squatters who might register "www.nebuallerg.com" (no hyphen) or "www.nebu-allerg.eu" and other variations.

To obtain damages to cover losses caused by cyber-squatters, you would have to take legal action under trade mark law to prove that their behaviour was an attempt to "confuse or divert" consumers.

The marketing team might also register "www.thegreenbutton.com" if they think that customers might well ask their pharmacist for "that allergy medicine with the green button" rather than mentioning NEBU-ALLERG by name. The domain name www.thegreenbutton.com might actually therefore be more valuable. It is therefore highly advisable to register domain names as RTMs.

Trade marks, copyright and domain names

- Brand name: NEBU-ALLERG **trade mark** ® 
- Logo: **trade mark** ®
- Slogan: "Press green for go!" **trade mark** ®
- Advertising material: **copyright** ©
- Domain names:
 - www.nebu-allerg.com
 - www.thegreenbutton.com

Who owns all this IP?

Intellectual Property Teaching Kit 45

What about the brand name, logo and slogan? Registered trade marks can be obtained for them.

As far as the advertising materials are concerned, the text and artwork for posters, flyers, jingles, TV and radio advertisements and websites are all covered by copyright. But be careful: who owns this IP? The advertising agency. So you must try and get these rights transferred.

What about confidentiality agreements with the agency? This is a good idea, as it will guard against leaks of commercially sensitive information such as pricing, marketing strategy, launch dates, technical data and so on.

With regard to the domain name, if NEBU-ALLERG becomes a registered trade mark, this will afford strong protection against cyber-squatters who might register "www.nebuallerg.com" – without a hyphen – or "www.nebu-allerg.eu" and other variations.

As customers are quite likely to ask their pharmacist for "that allergy medicine with the green button", it would be a good idea to register "www.thegreenbutton.com" as well.

Slide 50

What next?

So what happens next?

You need to check that you haven't re-invented technology that already exists and that you are not using a brand name that has already been registered as a trade mark.

You can carry out an initial search yourself in the relevant online databases, which are free to use:

- Search Espacenet, for example, to investigate relevant technical information (has existing technology been re-invented?).
- Search the TMview database, for example, or the relevant national database, to check if the brand name has been registered as a trade mark.

If you have only a basic knowledge of IP, you should always seek professional advice before applying for IP rights. So, if the research team in our exercise wanted to go further with their development and commercialise it, the next step would be to consult patent and trade mark attorneys to deal with the following questions:

- Is what you have developed patentable?
- What about "freedom to operate"? Is your technology infringing patents valid in the countries in which you wish to operate?
- Are there any companies who you could licence relevant technology to and from?
- Who are your potential partners, customers and suppliers, as well as competitors?
- For the trade marks and designs, is there any risk of infringement?

More information about searching for patent and trade mark information is covered in the module on IP search tools.

What next?

- Patents - search for free in Espacenet's 90+ million documents
- Trade marks and designs - search for free in eSearch plus
- Seek professional advice
 - Is your invention novel, inventive and patentable?
 - Do you risk infringing other people's rights?
 - Who could you license it to?
 - Who could you license from?
 - Who are your potential customers, suppliers and competitors?



Intellectual Property Teaching Kit 30

So what happens next?

You need to check that you haven't re-invented technology that already exists and that you are not using a brand name that has already been registered as a trade mark.

You can check this by doing what we call a search.

You can perform an initial online search yourself, for example in Espacenet or TMview, both of which are free to use.

But you should also seek professional advice for answers to the key questions shown here.

Text for practical exercise

Anti-allergy sprayer and spray

A university research team has developed a new medicinal product which is very effective in treating certain allergies.

Having studied various ways of applying the product, the team concluded that a nasal application in the form of a subtle mist would be best. They designed a nebuliser and carried out some laboratory tests. The nebuliser has a special nozzle design that permits more effective delivery, by precisely forming tiny droplets of uniform size and speed to reach the optimal location inside the nose, allowing for better absorption. The pumping system has also been improved so that it delivers a fixed, precise dose of the product, sufficient to treat symptoms for a whole day. For these reasons, the team thinks it could become a market leader.

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What you have to do

- Identify the various IP elements in this project.
- Suggest ways in which they can be protected.
- Identify potential contractual issues.

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