



WHAT IS INTELLECTUAL PROPERTY?

- TecMinho
- Intellectual Property – introduction
- Types of Intellectual Property
 - Copyright
 - Industrial Property
 - Trademarks
 - Geographical Indications
 - Industrial Design
 - Patents

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Location

Campus of Azurém
(Guimarães)



Rectory (Braga)



Campus of Gualtar
(Braga)



TecMinho, the University-Enterprise Association, was founded in 1990 as the knowledge transfer organisation of the University of Minho.

Three shareholders: University of Minho, Municipalities Association (AMAVE) and Institute of Support to SMEs and Innovation (IAPMEI).

It is a non-profit, private organisation that promotes regional development by stimulating knowledge transfer between the university and the businesses.

Technology Transfer & Entrepreneurship

C&T commercialization
GAPI (Industrial
Property)
Entrepreneurship

Training

Training courses
International Mobility of
Human Resources

Technology Transfer: promotes the valorisation and transfer of innovative technologies between academia and industry.

Entrepreneurship: fosters an entrepreneurial culture at the university and supports the establishment of high-tech, knowledge-based companies.

Vocational Training: provides advanced training services to qualified staff, including e-learning.

Technology Transfer and Entrepreneurship Team



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- An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organisation or external relations.”

Oslo Manual/OECD/EUROPEAN COMMUNITIES, 2005

- To benefit from what you create, you must be able to protect it from others.

- Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. (*World Intellectual Property Organization*)
- Includes the concept of legal protection for original creations.
- Law deters others from copying or taking unfair advantage of the work or reputation of the other and provides remedies should that happen.

- To attract investors
- To secure market position/exclusivity
- For further research & development



- **Tangible property**

Land, houses, equipment, car...

- **Intangible property**

Intellectual property

- Can be sold
- Can be bought
- Can be leased or rented
- Can pass under a will
- Can be assigned

Intellectual Property

Industrial Property

Protects technical creations,
ornamental or aesthetic aspect of
the creations, trademarks.

- ✓ Patents and Utility Models;
- ✓ Design;
- ✓ Trademarks and Geographical indication

Copyright

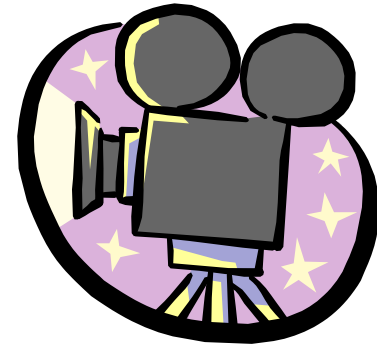
Protects the form of expression, not
the idea:

Ex: Literature, music, paintings,, etc.



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- Copyrights (also known as author's rights) – original works of authorship (including literary, dramatic, musical, artistic, and certain other intellectual works) that are fixed in a tangible form of expression



- Protection given by law for a term of years to the author to make copies of its work;
- Commercial and moral rights;
- No registration provision;
- Lasts for 70 years after death of author.

Only protects the form of expression, not the idea!

- Does not create a monopoly – others free to create similar or even identical works as long as they do so independently and by their own efforts.
- Some “permitted acts” of copying – for research, private study, criticism or review

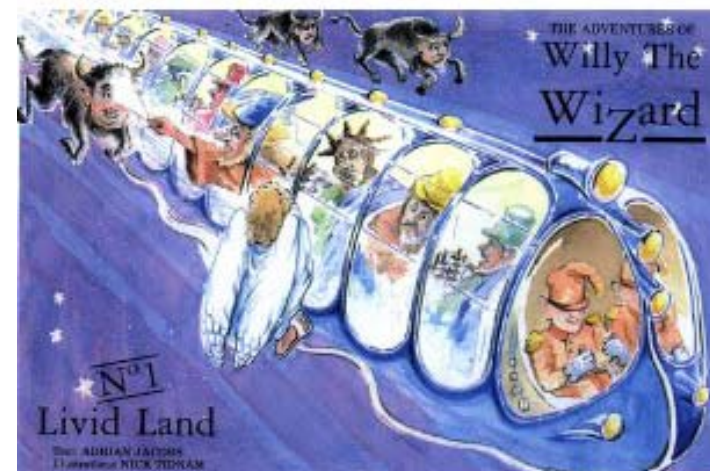
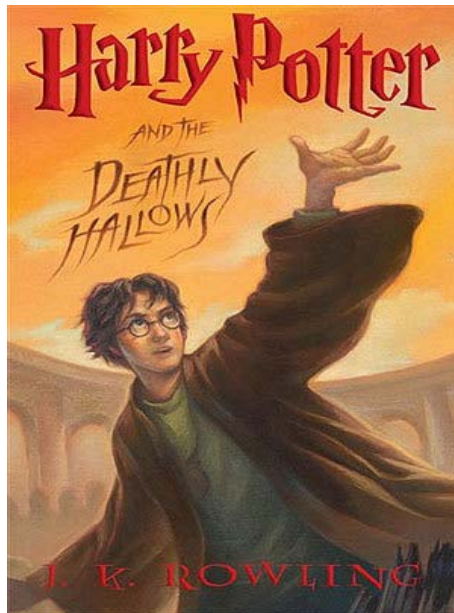
Examples:

- Books, pamphlets, and other writings
- Lectures, addresses, sermons
- Dramatic, dramatico-musical, cinematographic works
- Choreographic works and entertainments
- Musical compositions with or without words
- Drawing, painting, architecture, sculpture, engraving
- Photographic works
- Works of applied art: illustration, sketches, maps, plans
- Translations, adaptations, arrangements
- Collections of artistic and literary work, such as anthologies and encyclopedias

- Computer programs are protected under Copyrights in most countries
- A computer program is a set of instructions which controls the operations of a computer in order to enable it to perform a specific task, such as the storage or retrieval of information. The program in its final “form or mode of expression” can be understood directly only by a computer (machine), not by humans...



Copyright Lawsuit Against J. K. Rowling, Bloomsbury



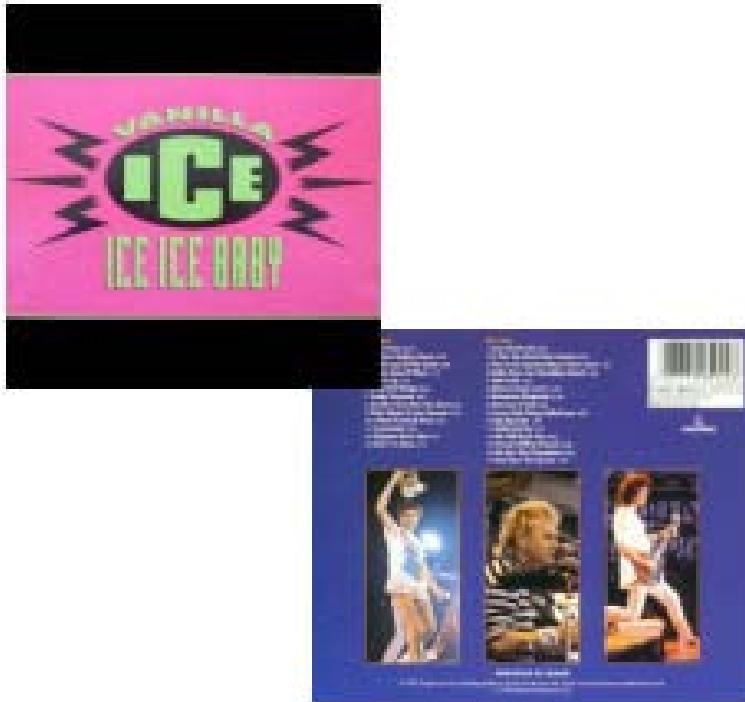
Michael Bolton vs the Isley Brothers



The Isley Brothers isn't as well known a name as Michael Bolton, but unfortunately for Mr. Bolton, they share a song with the same name and some of the same lyrics. The Isley Brothers song was released in 1966 under the name "Love is a Wonderful Thing, Michael Bolton's song was released in 1991.

A suit was brought against Michael Bolton by the Isley Brothers for allegedly lifting parts from their original song of the same name and in 1991 Despite Michael Bolton and the co-author of the song's argument that there was insufficient evidence supporting the jury's findings, the district court found in favor of the Isley Brothers and left the largest award in history for plagiarism in the music industry intact. The Isley Brothers were awarded 5.4 million dollars, the calculation based on sixty-six percent of past and future royalties. (Also taken into account was twenty-eight percent of the past and future royalties of the album Time, Love and Tenderness as Love is a Wonderful thing is contained within that album).

Vanilla Ice vs Queen & Bowie



Vanilla Ice became a household word for a while, not because of his talent, but because of the copyright infringement that occurred in 1990 when it came to light that he had sampled Queen and David Bowie's "Under Pressure" without consent or license. Ice Ice Baby hit number one on the charts in the United States and Vanilla Ice became the one 'under pressure'. Vanilla Ice altered the rhythm of the baseline thinking he would thereby avoid any question of credit, royalties, license or even permission. This case never went to court as it was clear that Vanilla Ice had stolen the sample without permission. He settled out of court with Queen and David Bowie for an undisclosed but very likely very high amount. Ice Ice Baby has been released in many different versions, since then, with all of the legal procedures followed.

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- A trademark is a sign, or a combination of signs, which distinguishes the goods or services of one enterprise from those of another.
- Such signs may use words, letters, numerals, pictures, shapes and colors, as well as any combination of the above.
- Nice Classification: products (1 a 34) ou services (35 a 45)





Magnum 1012 Up Close



Magnum 1012 & Box



MANGO

 *Mango.*

 **mango**
publicidade

 **magicmango**
INTERNATIONAL

 **RADIO mango**

Functions of a trademark:

- ✓ To distinguish the goods or services of a company from those of another;
- ✓ To identify the source of a product or service;
- ✓ To refer to the quality standards;
- ✓ To advertise and stimulate sales.

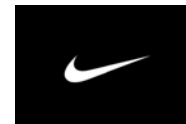


- Types

- Word Mark

ZARA, ROBOTPARTY

- Figurative Mark



- Figurative Mark containing word elements



- 3D Mark



- Sound Mark



- Colour Mark

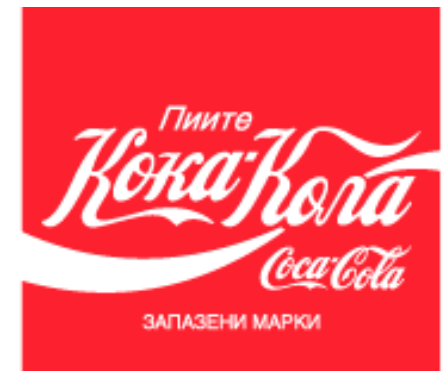


- Once registered, trade mark lasts as long as the owner continues to renew the registration. (Usually once every 10 years)
- Trade mark not used for five or more years can be revoked.
- The owner of a registered trademark has an **exclusive right** to use the mark and to prevent unauthorized third parties from using it, or a confusingly similar mark, so as to prevent consumers from being misled.



- National
- Community Trademark : 27 countries
- International Trademark: selection of countries
- Country by country





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Later, Don Diego de Vega would modify his mark to a simple letter z.

I'm afraid pretty much every esoteric hi-tech company name is taken—so we're left with "Mugwump," "Grungydink," or "Buh."



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- A geographical indication is a sign used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin.
- Geographical indications are not limited to agricultural products. They may also highlight particular qualities of a product, which are due to *human factors* found in the place of origin, such as specific manufacturing skills and traditions. That place of origin may be a village or town, a region or a country.

- An **appellation of origin** is a special kind of geographical indication, used on products that have a specific quality that is exclusively or essentially due to the geographical environment in which the products are produced.
- Geographical indications are protected in accordance with national laws.
- Unauthorized parties may not use geographical indications if it misleads the public as to the true origin of the product.



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- An industrial design is the ornamental or aesthetic aspect of a useful article.
- Design are feature of shape, configuration, pattern or ornament.
- The design must be applied to an article.
- The design must be applied by an industrial process.
- Visual appeal to influence consumers.



'The appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation'.

Exclude method of construction, features of shape or configuration of an article which is dictated solely by the function.



Fig. 1.1

National

Registered Community Design

Unregistered Community design (3years)

International

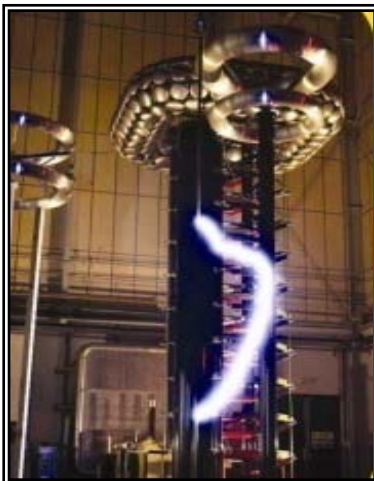
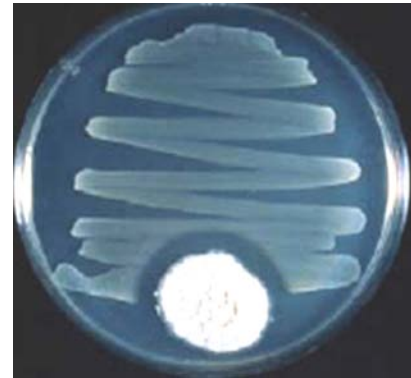
25 years!



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- Patents protect inventions.
- Inventions are new solutions to technical problems.
- Inventions are usually products or processes.
- Discovering something that already exists in nature, such as a previously unknown plant variety, is not an invention. Human intervention must be added. The process for extraction of a new substance from a plant may be an invention.





“The applicant applied to the government for the right of patent and in return for the monopoly given he must disclose everything about the invention in the patent document”.



**Patent rights last for 20 years from filing
(pharma 20 + 5)**

- Property rights in inventions may be sold or licensed
- Right to stop others from making, selling, importing the invention
- Only available for new inventions in a field of technology but small improvements can be enough
- Geographically limited under national patent laws (but there are regional and international treaties)
- Must file a patent application to obtain rights
 - fully describing invention
 - description is published

- **Objective**

- promote technological and economic development by encouraging innovation

- **Balance**

- between patentees' rights (protected inventions) and the public interest (public domain)

- **Relationship to other national policy measures**

- public health (e.g. AIDS drugs), use of genetic resources, traditional knowledge, environment protection

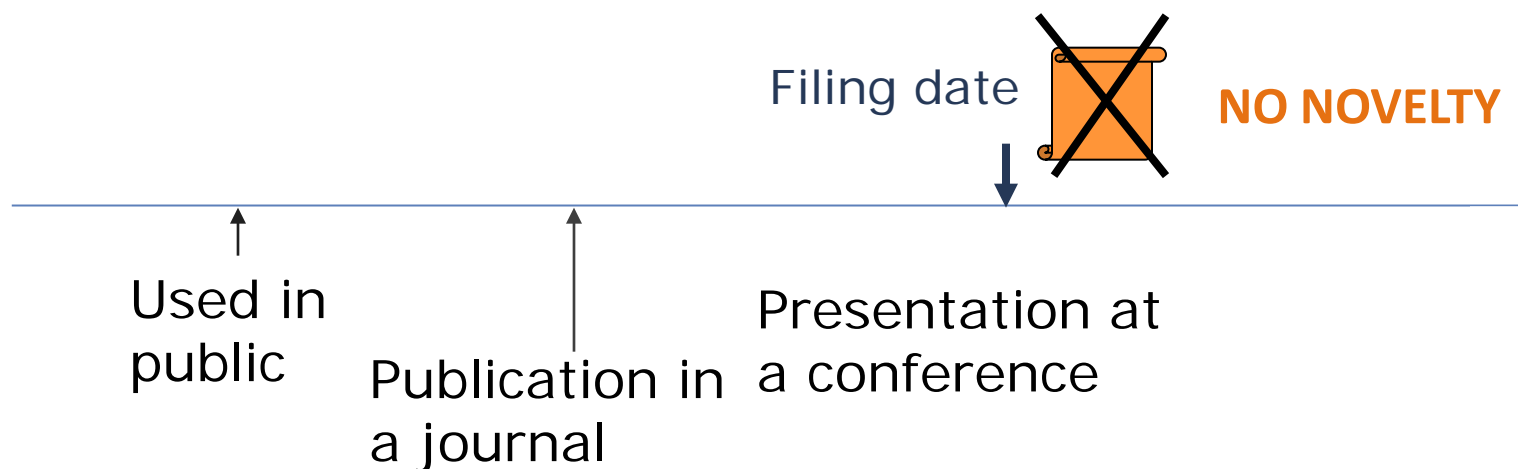


- Patent application must be filed;
- Invention must be new (“novel”) and involve an inventive step (“non-obvious”);
- Invention must be “industrially applicable” ;
- Application must fully disclose the invention (in the description and drawings), sufficiently to enable performance of the invention;
- Application must define the patent rights sought, in patent “claims” that are fairly based on what is described.



Novelty: The invention does not form part of the prior art

“Prior art” = any knowledge made available to the public before the filing date of the relevant patent application



Having regard to the prior art, an invention is not obvious to a person having ordinary skill in the art on the filing date

Examples

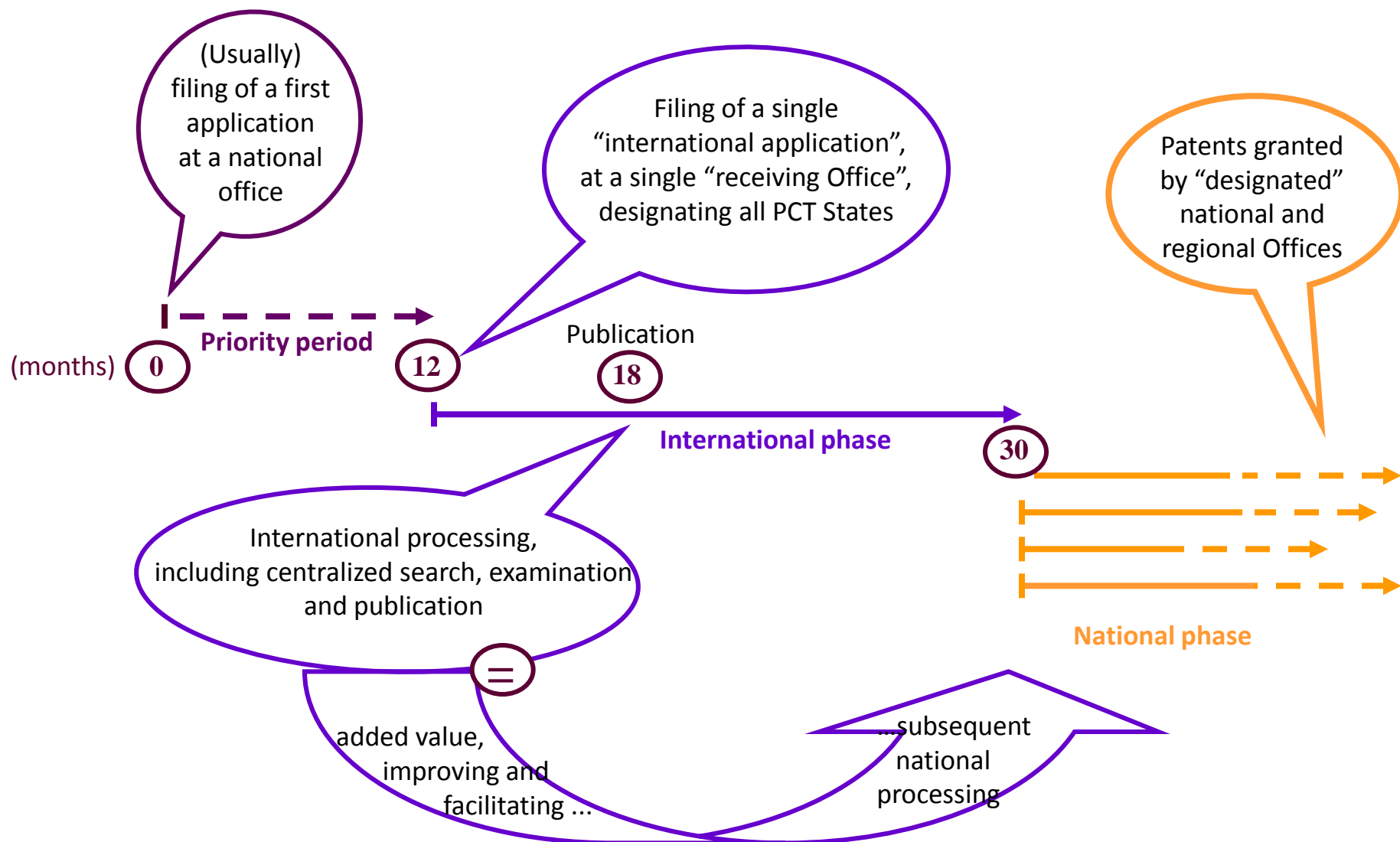
- obvious combination of features
- substitution of a material for analogous use
- routine experiment
- mere selection of optimal material from known materials

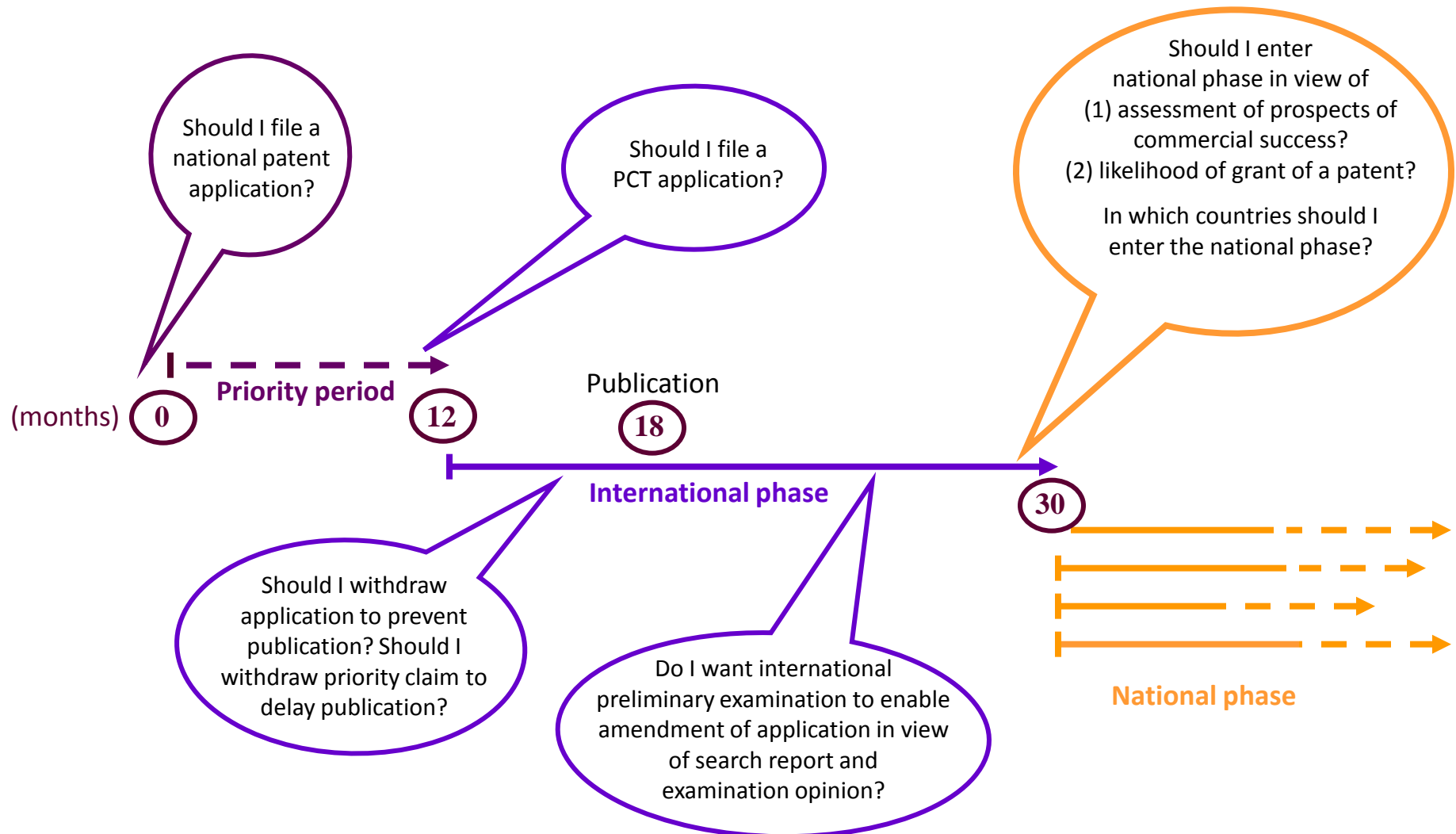


- European Patent Office:
http://worldwide.espacenet.com/?locale=en_EP
- USA: <http://www.uspto.gov/patft/>
- World Intellectual Property Organization:
<http://www.wipo.int/pctdb/en/index.jsp>
- Google Patents: <http://www.google.com/patents>



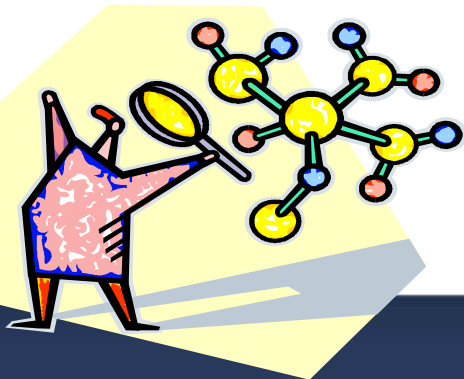
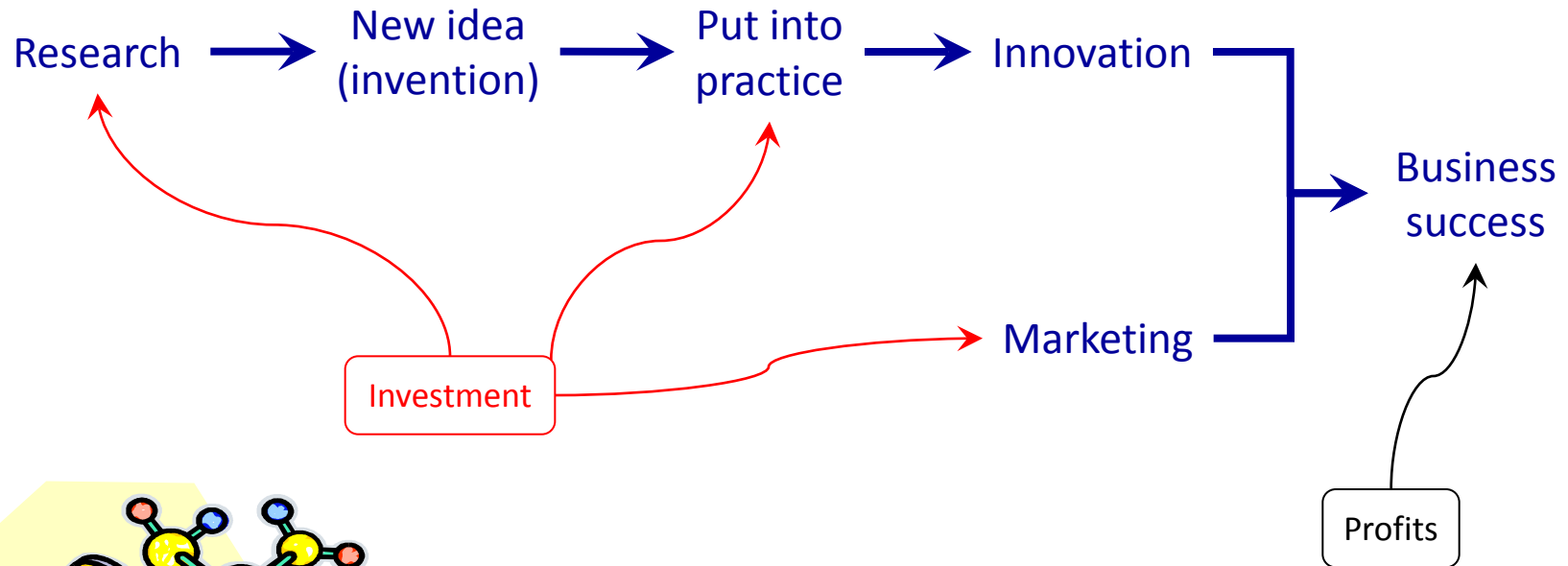
- Anything that is not human made can't be patented.
- A scientific truth is not patentable but a useful structure created with it is.
- Principles or laws of nature are not patentable. Naturally occurring substances are not patentable, even if they were previously unknown.
- Abstract ideas can't be patented, only an embodiment of that idea (the invention).
- Printed matter such as forms cannot be patented.
- Mere chemical formulas without function or purpose are not patentable.
- Mental steps are not patentable.
- Mathematical formulations (algorithms) are not patentable but processes that use them are.
- Manifestations of nature, natural forces, physical phenomenon, principals and abstract ideas are not patentable, but living organisms designed by man are.

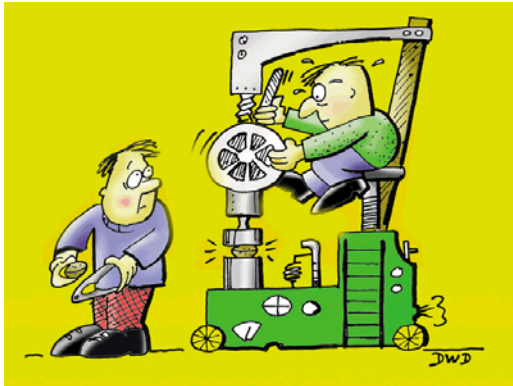




New ideas

Commercialization





What type of information can we find in a patent document?

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(19) World Intellectual Property
Organization
International Bureau



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(71) Applicant (for all designated States except US): **UNIVERSIDADE DO MINHO [PT/PT]; UNIVERSIDADE DO MINHO**, Largo do Paço, P-4700-320 BRAGA (PT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COLAÇO GOMES COVAS, José, António [PT/PT];** Rua Cândido Oliveira N.º 195 HAB-35, P-4710-358 Braga (PT). **MOREIRA MACHADO COSTA, Pedro, António [PT/PT];** Av. Marechal Humberto Delgado 603 3.º, P-4760 V. N. FAMALICÃO (PT).

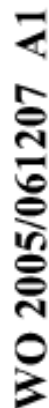
(74) Agent: **VIEIRA PEREIRA FERREIRA, Maria, Silvina; CLARKE, MODET & Cº**, Rua Castilho N.º 50 - 5º, P-1269-163 Lisboa (PT).

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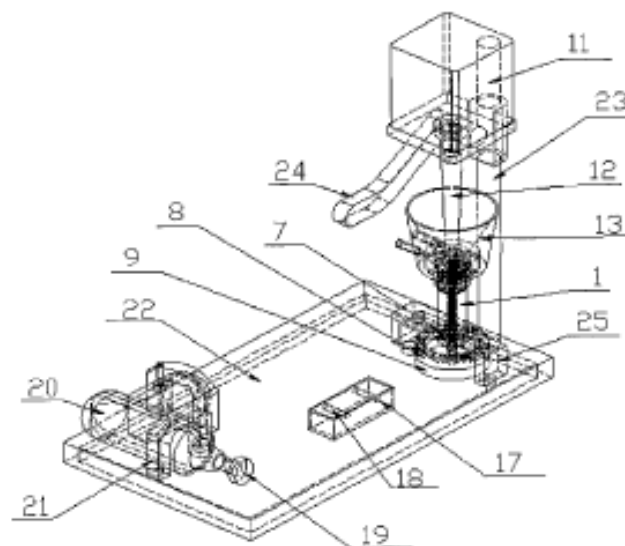
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[Continued on next page]

(54) Title: MICRO-EXTRUSION LINE



(57) Abstract: The invention refers to a micro-extrusion line that comprises a single screw (2) micro-extruder (1), a die (7), a cooling bath (17) and a haul-off (19), which together enables the manufacture of extruded profiles from small amounts of raw material. The rotation of the micro-extruder screw, together with the high temperatures created by the heater bands, produces the conveying, melting, mixing and pumping of the material through the die. The extrudate is cooled down in a bath containing a cooling liquid and wound in a coil (19), which has a linear speed higher than that of the extrusion, thus enabling the control of the extrudate cross-section.



ABSTRACT

DESCRIPTION

Invention background

Some of the large consumption plastic products, such as transparent films, raphia, straps, monofilaments, sheet manufactured in specific extrusion lines, developed production rates. Generally, these lines include an homogenizes and pressurizes the polymer), the extruder (the melt) and the accessory equipment (which calibrates, manipulates, winds or cuts the extrudate, etc). At control enable reaching outputs that can range between a few hundred to more than a thousand kilograms per hour, depending on the cross-section to be produced, the polymer to process and the equipment sophistication. These values are remarkable, if consideration is given to the low density materials (typically between 0.9 and 1.5 g/cm³). On the other hand, various equipment manufacturers fight between themselves to develop forward innovative constructive solutions, which may improve the performance of their equipments, namely in terms of mixing capacity, pressure drops associated to the flow and the environment to which the material is subjected to.

Detailed description of the invention

As it can be observed from the drawings, the micro vertical single screw extruder (1), an extrusion head (17) and a haul off (19), all fixed to a common platform. The extruder screw (2) can be replaced by another with different characteristics of the material to be processed. The extruder can be replaced by another with the same external diameter but with the manufacture of an extrudate with a different cross-section.

The extruder (Figure 2) is mounted vertically, i.e., the extruder and inserted screw (2) are vertical. The barrel is divided into three zones. The one on top allows for the circulation of a cooling fluid, the middle one for the circulation of a heating fluid, and the bottom one for the circulation of a cooling fluid.

DESCRIPTION OF DRAWINGS

Brief description of the drawings

The micro-extrusion line and respective components are illustrated in Figures 1 to 7.

Figure 1 represents the global micro-extrusion line, with all the components fixed to a common platform.

Figure 2 shows the construction of the vertical single screw extruder.

CLAIMS

CLAIMS

1. Micro-extrusion line which maintains the general principal and functionalities of equivalent industrial extrusion lines, miniaturized for allowing the production of small profiles and filaments in a continuous regimen, in a thermo-mechanical environment using only a few grams of raw material, typically 5 to 10 g, characterized in that it comprises a vertical extruder, basically consisting of a barrel (1) kept under controlled temperature, inside which an Archimedes-type screw rotates at a constant frequency, and on which a feeding hopper (13) for material discharge, an extrusion head/die (7), a cooling bath (17) and a winding system (19) are mounted, being all fixed on the same platform (22).

2. Micro-extrusion line in accordance with the previous claim, characterized in that the extruder driven by a motor (11) mounted on a column (23), through which it is capable of sliding by means of a lever (24), comprises a vertical hollow barrel (1) divided into three different zones, the top one that allows the circulation of a cooling fluid, contains two external grooves (3) covered by a ring (4) so as to create two inlet and outlet annular channels (5), the middle section, separated from the previous one by an external cross-sectional groove, which forms a thermal barrier, covered by the heating thermal barrier (6).

DETAILED DESCRIPTION

- Patents are one of the most valuable and comprehensive source of the technological information.
- Patent analysis and mining in combination with other tools (market research, financial analysis) can build up a strong competitive positioning, allowing a company (even with little resources available) to gather knowledge on its environment.
- Patent Intelligence provides information about specific conditions in relation to technological or market-related development, which is of crucial importance for the decision makers in tracking competitors' activity and new innovation trends.



Thank you for your attention!

Teresa Martins

TECMINHO

Universidade do Minho

Portugal

tmartins@tecminho.uminho.pt