Trade secrets and SMEs

The role of trade secrets within the SME innovation process

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- Background
- Innovation process
- Trade secrets versus patents
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- How to choose?

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- Authorised use of trade secrets: know-how contracts, employee/partners contractual safeguards
- How trade secrets can be broken: misappropriation, cyber theft, lawful acquisition, independent discovery, reverse engineering
- Enforcement

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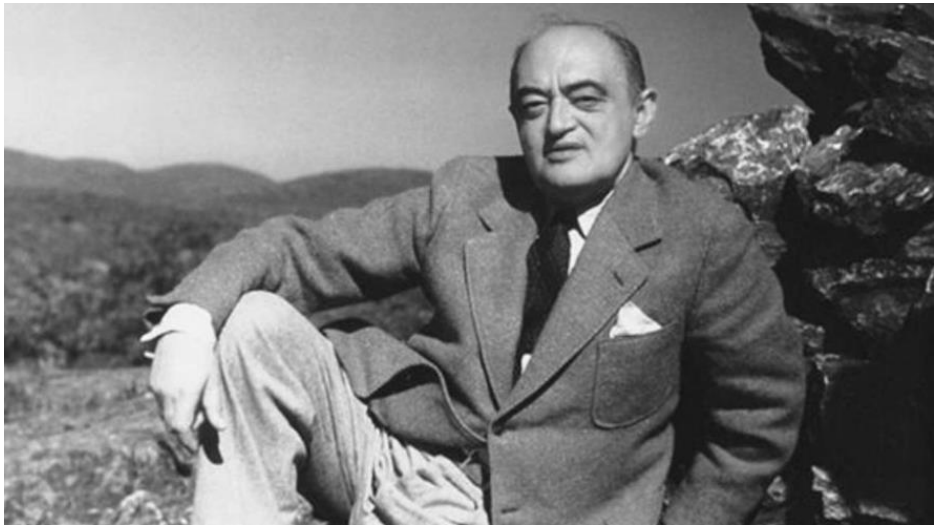
Innovation process



Joseph Alois Schumpeter (1883 –1950)

Innovation ≠ invention

Innovation = idea + marketplace

Innovation process

INNOVATION PROCESS

Acquisition of technology – commercial use

Innovation process

INNOVATION PROCESS

Acquisition of technology – commercial use

- Trade secrets
- Patents
- Copyright
- Trade marks
- Designs

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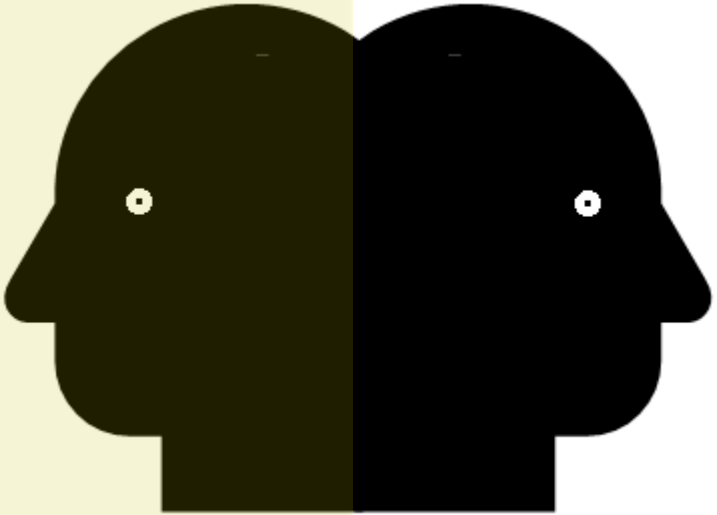
Trade secrets versus patents

Trade secrets



Patents

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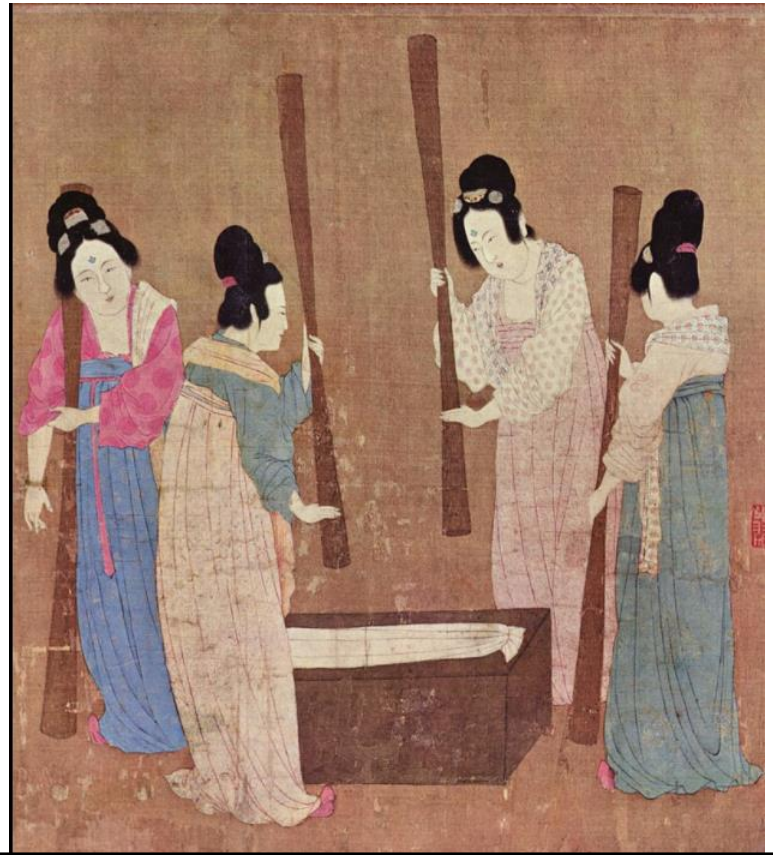
What are trade secrets?



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Legal framework of trade secret protection

European Scale

DIRECTIVE (EU) 2016/943

of the European Parliament and of the Council

of 8 June 2016

on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure

Definition of trade secret

DIRECTIVE (EU) 2016/943:

Any information which meets all of the following requirements:

- **it is not generally known**
- **it has commercial value because it is secret**
- **it has been subject to reasonable steps to keep it secret**

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Trade secrets

unlimited

- **Trade secrets are not registered in an IP office.**
- **They do not guarantee exclusivity.**

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What can be protected as a trade secret?

Information protected through a trade secret can be

strategic for decades

as a recipe or a chemical compound

ephemeral

as the name, appearance, price and launch date of a new product or the price offered in a bidding procedure

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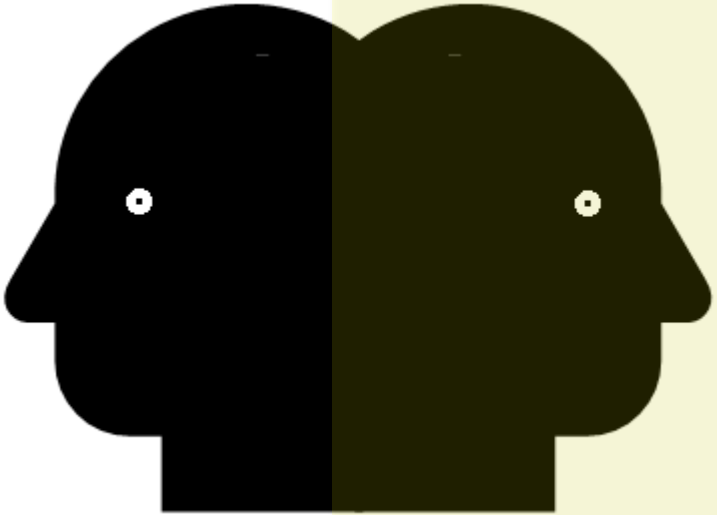
Trade secrets versus patents

Trade secrets



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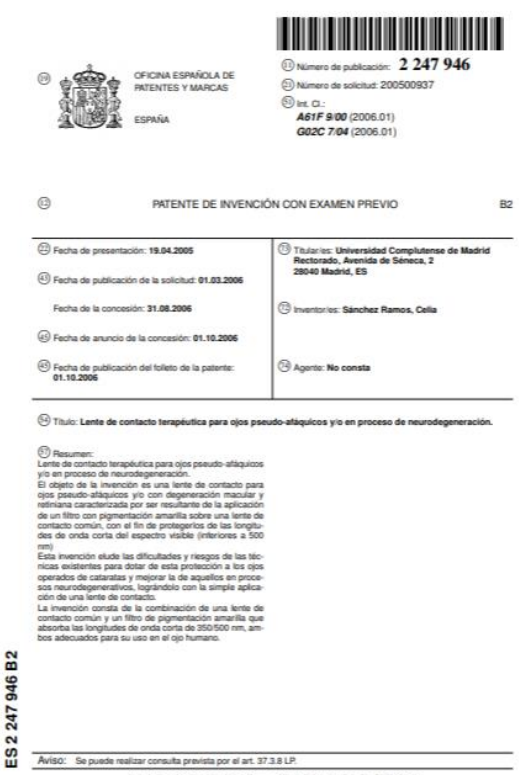
Definition of patent

A patent is a legal title granting its proprietor the right to prevent third parties from commercially using an invention without authorisation

Conditions:

- **public disclosure**
- **20 years**
- **payment of fees every year**
- **territoriality.**

Definition of patent



(19) OFICINA ESPAÑOLA DE PATENTES Y MARCAS
ESPAÑA

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(21) Número de solicitud: 200500937
(51) Int. Cl.:
A61F 9/00 (2006.01)
G02C 7/04 (2006.01)

(12) PATENTE DE INVENCIÓN CON EXAMEN PREVIO B2

(22) Fecha de presentación: **19.04.2005**
(43) Fecha de publicación de la solicitud: **01.03.2006**
Fecha de la concesión: **31.08.2006**
(45) Fecha de anuncio de la concesión: **01.10.2006**
(45) Fecha de publicación del folleto de la patente: **01.10.2006**

(73) Titular/es: **Universidad Complutense de Madrid Rectorado, Avenida de Séneca, 2 28040 Madrid, ES**
(72) Inventor/es: **Sánchez Ramos, Celia**
(74) Agente: **No consta**

(54) Título: **Lente de contacto terapéutica para ojos pseudo-afáquicos y/o en proceso de neurodegeneración.**

(57) Resumen:
Lente de contacto terapéutica para ojos pseudo-afáquicos y/o en proceso de neurodegeneración.
El objeto de la invención es una lente de contacto para ojos pseudo-afáquicos y/o con degeneración macular y retiniana caracterizada por ser resultante de la aplicación de un filtro con pigmentación amarilla sobre una lente de contacto común, con el fin de protegerlos de las longitudes de onda corta del espectro visible (inferiores a 500 nm).
Esta invención elude las dificultades y riesgos de las técnicas existentes para dotar de esta protección a los ojos operados de cataratas y mejorar la de aquellos en procesos neurodegenerativos, lográndolo con la simple aplicación de una lente de contacto.
La invención consta de la combinación de una lente de contacto común y un filtro de pigmentación amarilla que absorba las longitudes de onda corta de 350/500 nm, ambos adecuados para su uso en el ojo humano.

ES 2 247 946 B2

Aviso: Se puede realizar consulta prevista por el art. 37.3.8 LP.

Venta de fascículos: Oficina Española de Patentes y Marcas. Pº de la Castellana, 75 – 28071 Madrid

In order to be patentable, an invention must:

- **be** new,
- **involve** an inventive step,
- **have** industrial use.

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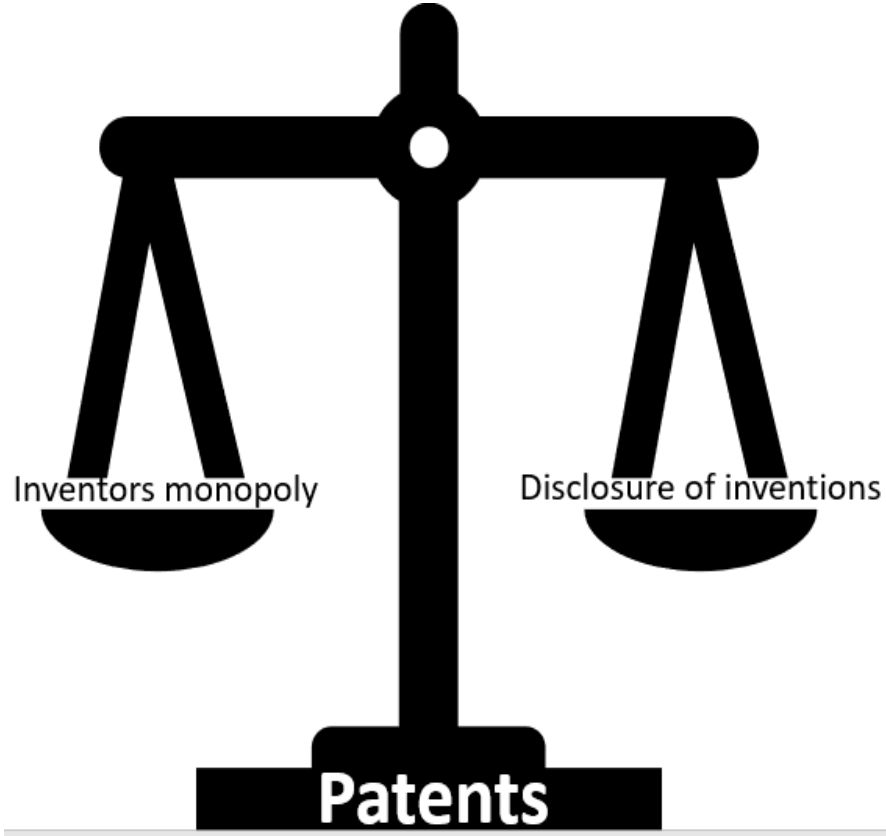
Patents as technical progress builders

Stimulus for inventiveness



Technical progress

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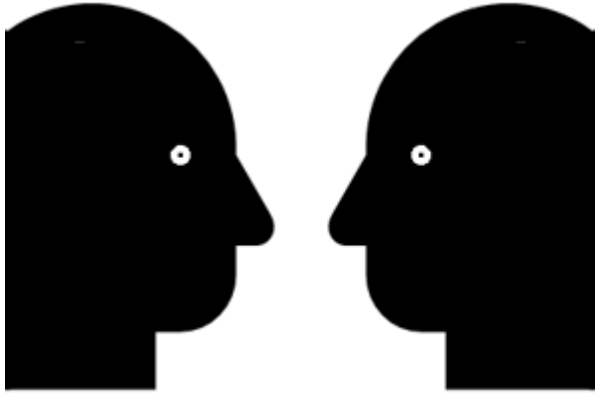
Trade secrets versus patents

Trade secrets



Patents

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Trade secrets versus patents

Patentable subject matter

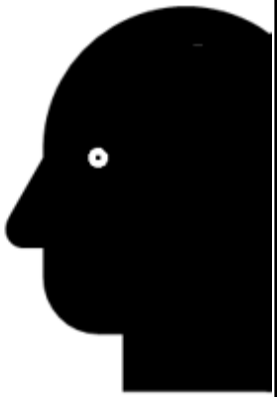
Patents

- New industrial processes
- New products
- New machines
- New compositions

Non-patentable subject matter

Trade secrets

- Algorithms, software
- Mathematical formulas
- Contract terms
- Information on customer, suppliers …
- Business/commercial plans
- Marketing, finance or strategy information
- ‘Negative know-how’, e.g. a failed experiment



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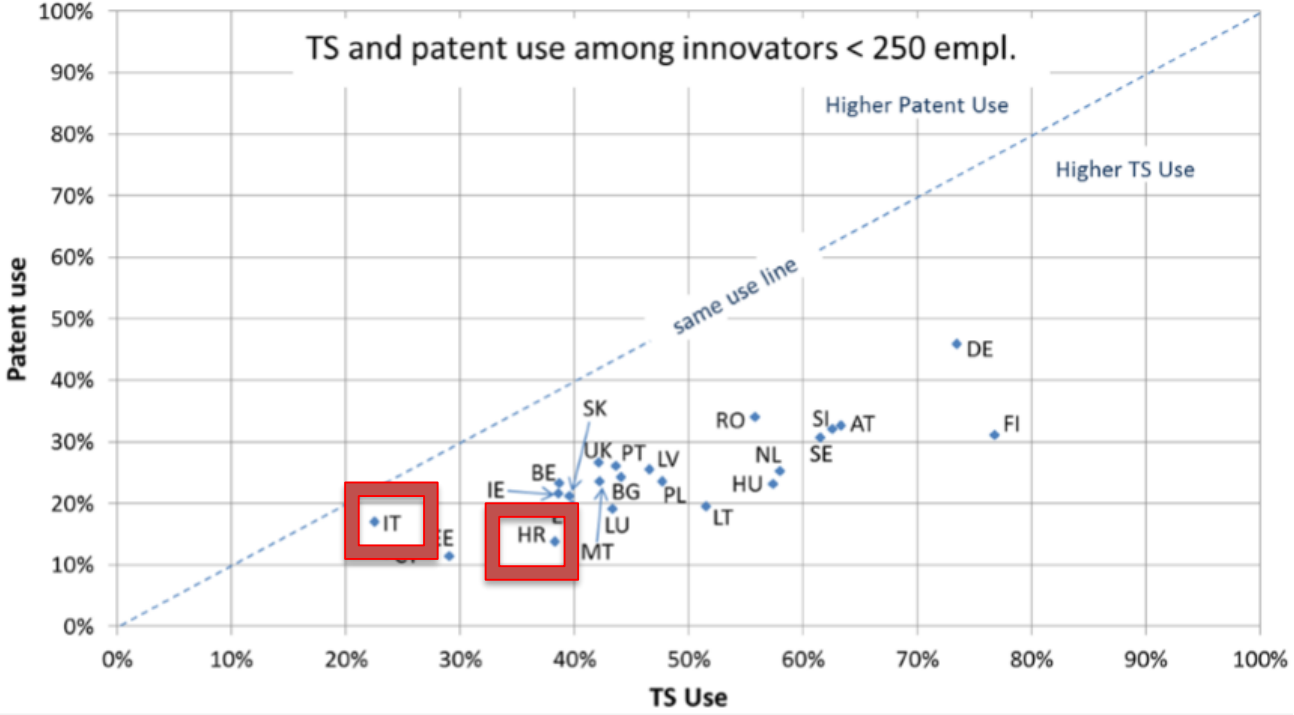
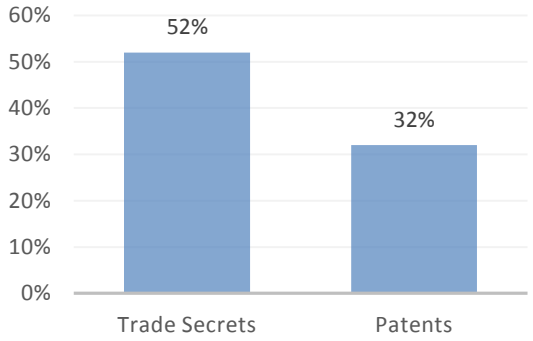
Trade secrets versus patents: economic importance of trade secrets

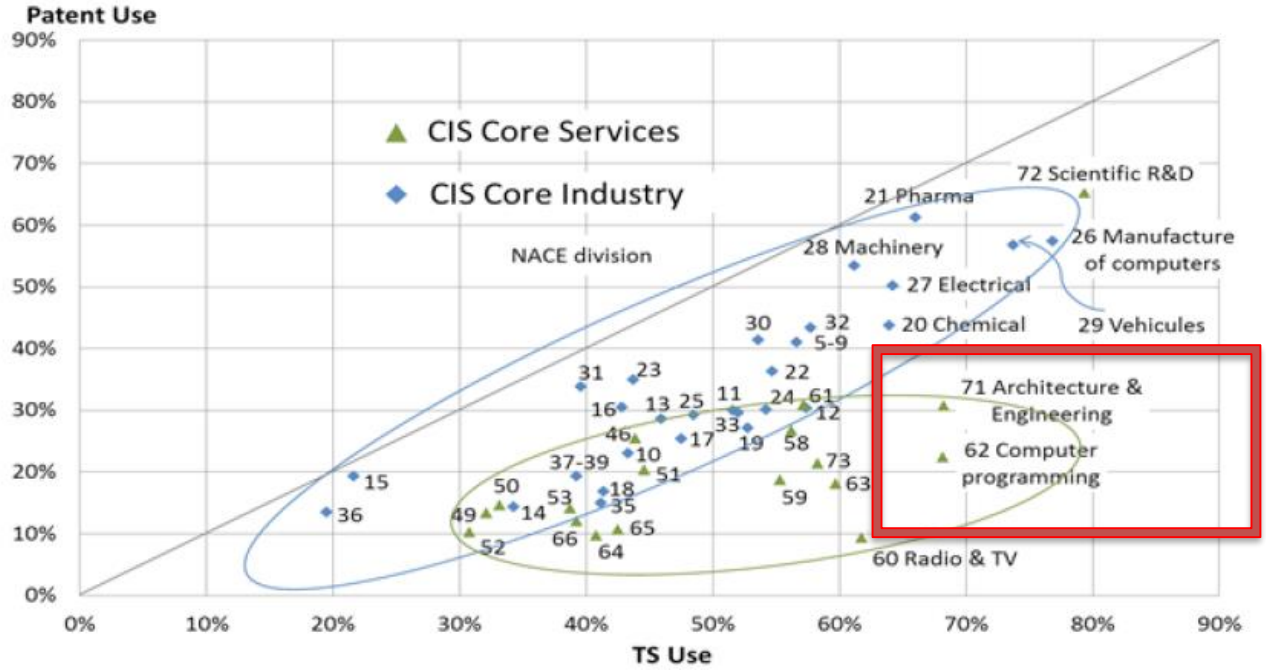




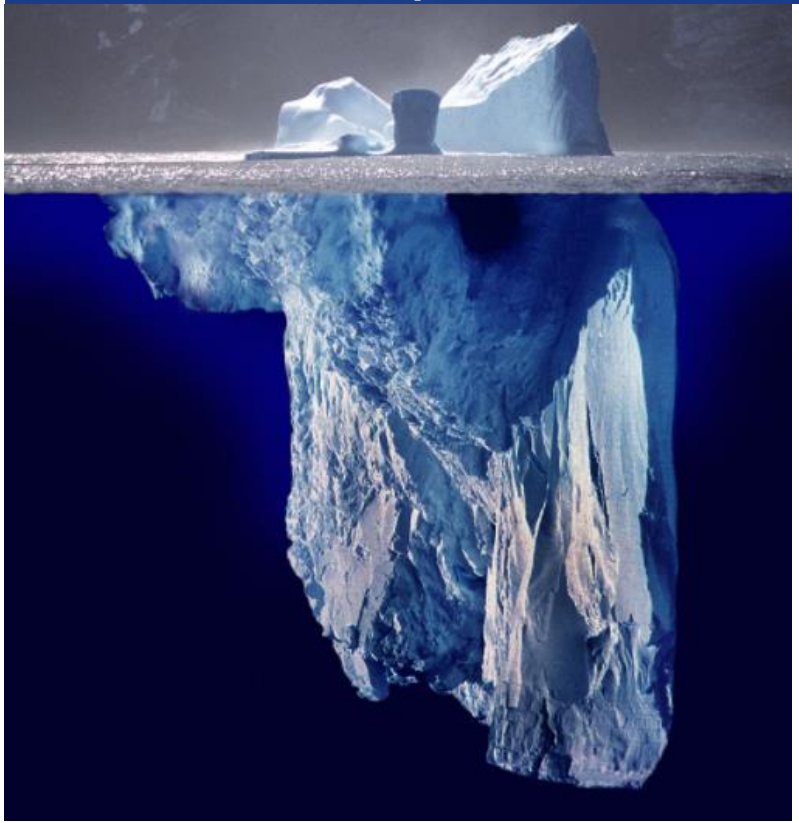
*Source: "Protecting Innovation through Trade secrets and Patents: Determinants for European Union Firms" EUIPO

Trade secrets versus patents: economic importance of trade secrets

Use of trade secrets and patents by industry



Trade secrets versus patents: economic importance of trade secrets



If the intellectual technical assets of a firm were to be seen as an iceberg, patents would be the visible part and trade secrets the submerged part.

Created by Uwe Kils

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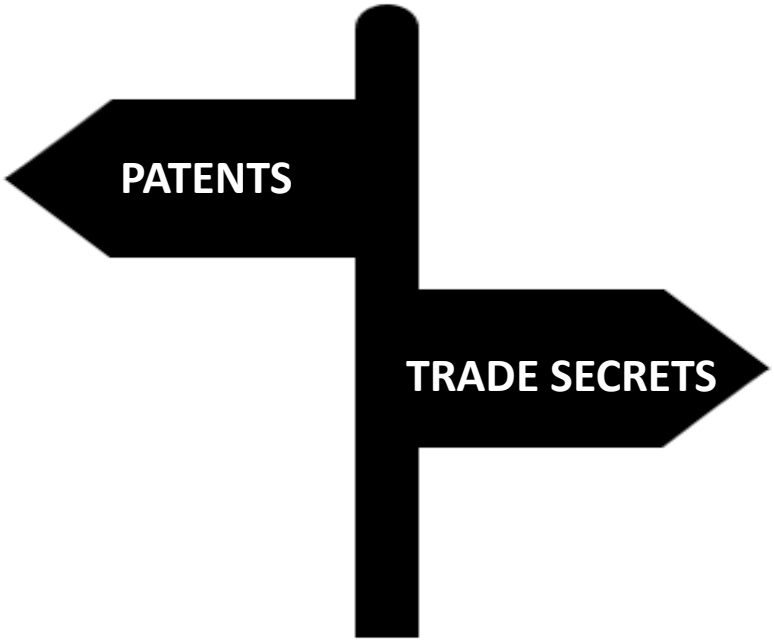
The choice: trade secrets or patents?



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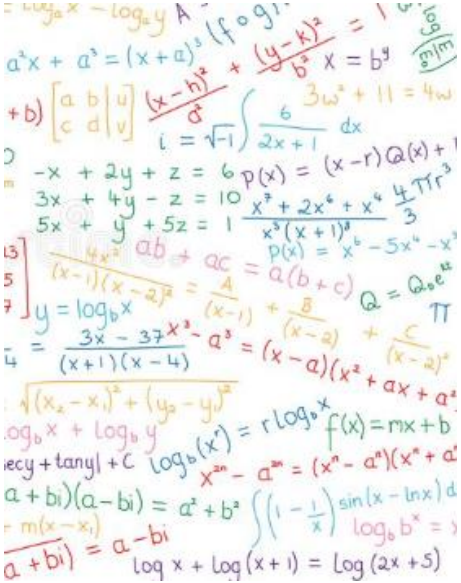
Why get a trade secret?



CLIENT
STATE CONDO I INC.
PACMAC INC.
PACMAC INC.
ASSISTCO ENERGY IND'L CORP.
BIG RED EAGLE TRADERS CORP.
GREEN KRAFT CORP.
GREEN KRAFT CORP.
GREEN KRAFT CORP.
GREEN KRAFT CORP.
ECO PLASTIC PHIL. INC.
ARK CONDOMINIUM CORP.
ROCELO BUCAD PROPERTY
EK HOUSEWARE CENTRE
SI-WOOK MINIMART
3 SUN TRADERS CORP.
CARLO BAUTISTA RES.
GUIHULNGAN NATIONAL HIGH SCHOOL
SAN ROQUE GENERAL SERVICES CORP.
GREEN SIAM PACKAGING CORP.
GREEN SIAM PACKAGING CORP.
SUNSHINE HOTEL
SUNSET HOTEL
BINGOMANIA
BINGOMANIA
BINGOMANIA

Why get a Patent?

You have valuable information but it is not patentable

Patentable subject matter | Non patentable subject matter

Patents | **Trade Secrets**

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Why get a trade secret?

Why get a patent?

You do not have to pay fees for a trade secret.

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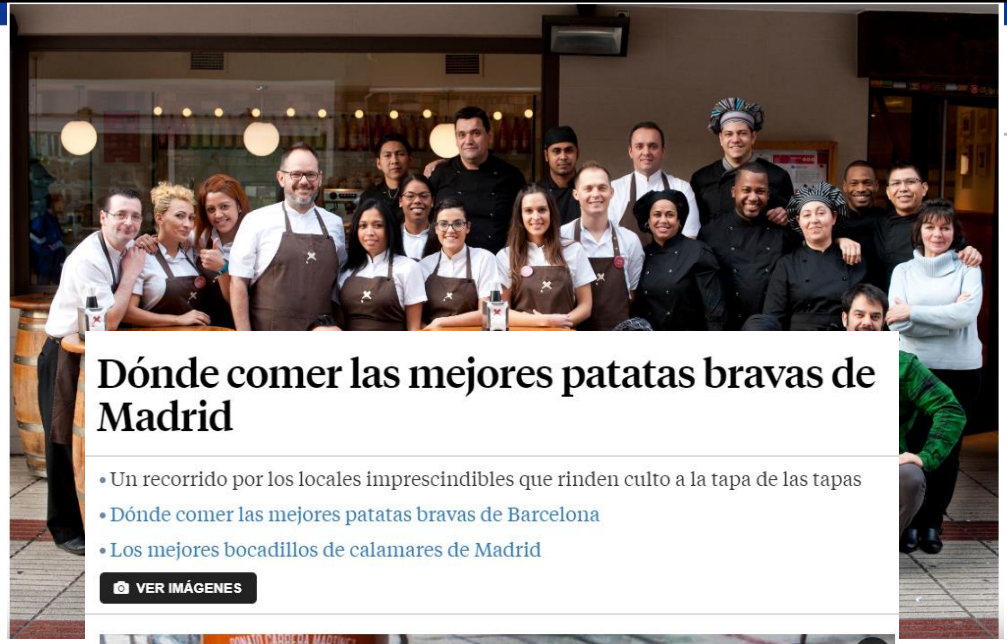
Why get a trade secret?

Why get a patent?

Trade secrets can last forever.



Dónde comer las mejores patatas bravas de Madrid

- Un recorrido por los locales imprescindibles que rinden culto a la tapa de las tapas
- Dónde comer las mejores patatas bravas de Barcelona
- Los mejores bocadillos de calamares de Madrid

VER IMÁGENES

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The innovation process: phases

R&D phase

Market

IDEA

Trade Secret

Trade mark

Trade Secret&Trade mark

Patent

1963

1983

Why get a trade secret?

If disclosed, legally or illegally, the trade secret's owner cannot prevent others from using the subject of the trade secret.

Why get a patent?

© Jose Antonio Lagier

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Why get a trade secret?

PROTECTION

Patents give SMEs protection and monopoly for a specific time.

Why get a patent?

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Why get a trade secret?

It is not necessary to control secrecy and confidentiality within your company if you are protected with a patent.

Why get a patent?

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Nuestra pasión, la investigación ocular
Nuestro reto, que llegue a las personas

Español

OCULAR RESEARCH OUR CHALLENGE ABOUT US BUSINESS AREAS CONTACT

Prevention of avoidable blindness

Macular degeneration (ARMD) and other diseases of the retina are the most common cause of blindness among people over 65 years in developed countries.

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The innovation process: phases

R&D phase

Market

IDEA

Trade Secret

Patent

Trade mark

Trade mark

2005

2025

End of patent protection

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Innovation process

INNOVATION PROCESS

Acquisition of technology – commercial use

- Trade secrets
- Patents
- Copyright
- Trade marks
- Designs

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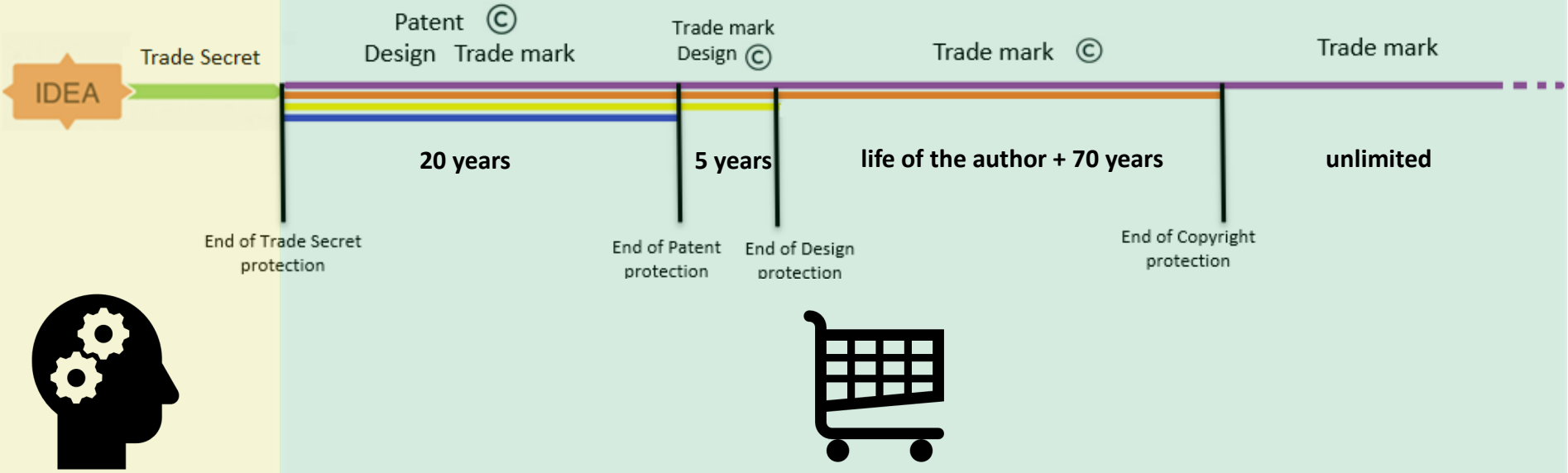
R&D phase

Market



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R&D phase

Market

IDEA

Trade Secret

Design

Trade mark

Trade Secret

Trade mark

25 years

unlimited

End of Design protection

The innovation process: phases

R&D phase

Market

IDEA

Trade Secret

Trade mark

Patent

US Patent for Aspirin (1900)
(Source: Bayer AG)

UNITED STATES PATENT OFFICE.

FELIX HOFFMANN, OF ELBERFELD, GERMANY, ASSIGNOR TO THE FARBEN FABRIKEN OF ELBERFELD COMPANY, OF NEW YORK.

ACETYL SALICYLIC ACID.

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HOW DOES IT WORK?

The information must be:

– **commercially valuable** because it is secret, ✓

– be known only to a **limited group of persons** ✓

and

– be subject to **reasonable steps taken** by the rightful holder of the information to keep it secret, including the use of confidentiality agreements for business partners and employees. ✓

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PRECAUTIONARY MEASURES

1. **Patent or trade secret**?

2. **Restricting access** to a limited number of persons.

    - Restricting access to buildings
    - Confidential documents
    - IT security

3. **Confidentiality agreements within employees' contracts.**

4. **Confidentiality agreements with business partners** whenever disclosing confidential information.

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EXAMPLE I: NON-DISCLOSURE AGREEMENT (NDA)

Legally binding contract between parties that requires them to **keep certain information confidential.**

(!) A trade secret is **treated differently** from merely **confidential information**

EXAMPLE II: CYBERSECURITY

Cybersecurity protocols to protect valuable trade secrets.

What is a reasonable ‘cyber’ effort?

Cybersecurity technology and case-law are continuously evolving. However, if you possess any trade secret information that is stored or communicated electronically, we recommend, as a minimum, the following:

EXAMPLE II: CYBERSECURITY

- Appropriate access protections.
- Limit the people who have access.
- Train your employees and agents.
- Appropriate ‘BYOD’ policy and technology.
- Restrict departing employees’ access.
- Monitor and improve your cybersecurity efforts periodically.
- Revisit confidentiality agreements with third parties (reflect cybersecurity protocols).

LAWFUL ACQUISITION - UNLAWFUL ACQUISITION

Trade secret protection confers on owners the right to **prevent** the information lawfully within their control from being:

- **disclosed,**
- **acquired** or
- **used**

by others **without their consent** in a manner **contrary** to honest commercial practice.

LAWFUL ACQUISITION

Article 3 of the Directive

LAWFUL ACQUISITION

Article 3 of the Directive: Lawful acquisition

(a) independent discovery or creation;

(b) observation, study, disassembly or testing of a product or object that has been made available to the public or that is lawfully in the possession of the acquirer of the information who is free from any legally valid duty to limit the acquisition of the trade secret;

(c) exercise of the right of workers or workers' representatives to information and consultation in accordance with Union law and national laws and practices;

(d) any other practice which, under the circumstances, is in conformity with honest commercial practices.

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REVERSE ENGINEERING

PROPERTY RIGHT

TRADE SECRET = PROPERTY RIGHT

They can be **assigned** or **licensed** to other persons.

The holder of a trade secret has the right to authorise a third party to access and use the trade secret information.

Conditions / Difficulties:

- **Non-disclosure or confidentiality agreement**
- **Reasonable steps to keep that information secret**

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UNLAWFUL ACQUISITION

Article 4 of the Directive

UNLAWFUL ACQUISITION

Article 4 of the Directive: Unlawful acquisition

Whenever carried out by:

(a) unauthorised access to, appropriation of, or copying of any documents, objects, materials, substances or electronic files, lawfully under the control of the trade secret holder

(b) any other conduct which is considered contrary to honest commercial practices.

UNLAWFUL ACQUISITION

Article 4 of the Directive: Unlawful acquisition

By a person:

(a) having acquired the trade secret unlawfully;

(b) being in breach of a confidentiality agreement or any other duty not to disclose the trade secret;

(c) being in breach of a contractual or any other duty to limit the use of the trade secret.

UNLAWFUL ACQUISITION

Article 4 of the Directive: Unlawful acquisition

(!) It shall also be considered unlawful whenever a person, at the time of the acquisition, use or disclosure, knew or ought, under the circumstances, to have known that the **trade secret had been obtained directly or indirectly from another person who was using or disclosing the trade secret unlawfully.**

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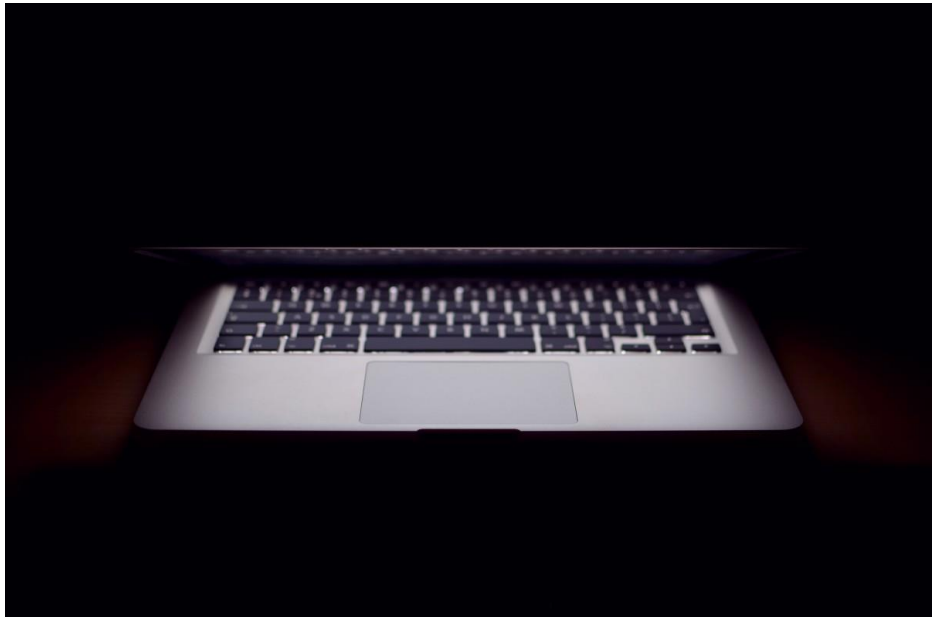
UNLAWFUL ACQUISITION



Industrial espionage

Commercial espionage

Breach of confidence

Inducement to breach

Use or disclosure by a third party

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ENFORCEMENT

Most countries provide for remedies in **criminal, administrative, commercial** and/or **civil** law, in particular, tort law, contractual law and specific legislation on unfair competition.

Remedies:

- **damages**
- **injunctions**
- **criminal penalties**

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ENFORCEMENT

The EU adopted a **Directive on the Protection of Trade Secrets**

on 27 May 2016

- Harmonises the **definition of trade secrets;**
- Defines the relevant **forms of misappropriation;**
- Clarifies that **reverse engineering** and **parallel innovation** must be guaranteed;
- Harmonises the **civil means** through which victims of trade secret misappropriation can seek protection.

ENFORCEMENT

Civil means through which victims of trade secret misappropriation can seek protection, e.g.:

- **stopping the unlawful use and further disclosure;**
- **removal of the goods from the market;**
- **right to compensation for damages.**

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ENFORCEMENT

THE BASELINE OF TRADE SECRETS LITIGATION IN THE EU MEMBER STATES

1. REGULATORY FRAMEWORK ON THE PROTECTION OF TRADE SECRETS
2. PROCEDURAL RULES BEFORE NATIONAL COURTS ON THE PROTECTION OF TRADE SECRETS DURING LEGAL PROCEEDINGS
3. TRADE SECRETS HOLDERS' PERCEPTION
4. PRECAUTIONARY MEASURES TAKEN BY OWNERS OF TRADE SECRETS TO PROTECT SECRECY
5. REMEDIES
    1. Civil Action
    2. Criminal
    3. Administrative

LINK

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Approved by owner	-		
Authors	-		
	-		
Contributors	-		
	-		

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0.1	DD/MM/YYYY		
0.1	DD/MM/YYYY		
0.1	DD/MM/YYYY		