

# INFORMATION LITERACY

aka How to survive your PhD



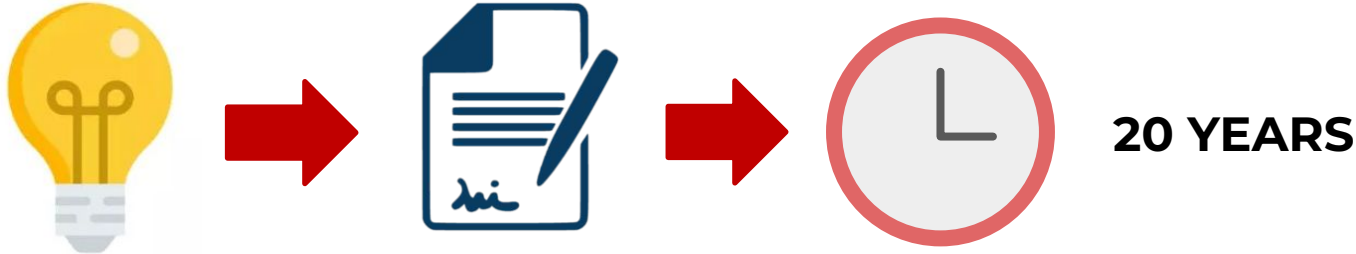


# **Patent Literature as a source of information**

# Patent literature as a source of information

A patent is a right granted by a government to an inventor giving him the right to stop others, from making, using or selling the invention without his permission.

Inventions become public domain after 20 years, as it lapses, there is no possibility of renew. The patent becomes freely replicable by anyone.



# Patent literature as a source of information

To be patentable an invention must meet the following criteria:

## **NOVELTY:**

it must never have been made public in any way

## **USEFULNESS:**

it must have some practical utility and be capable of industrial application

## **NON-OBVIOUSNESS:**

it must involve an inventive step

# Patent literature as a source of information

An invention is not patentable if it is:

- A discovery
- A scientific theory or mathematical method
- An aesthetic creation, literary, dramatic or artistic work
- A scheme or method for performing a mental act, playing a game or doing business
- The presentation of information or a computer program



# Patent literature as a source of information

## PATENTS – CHEMISTRY

80% of world new information in chemistry *sensu lato* is published in research articles or patents.

Patents are a source of original scientific information in the fields of applied sciences.  
70 – 90 % of the information in patents hasn't ever published anywhere (WIPO, 2002)

Source: Chemical Abstracts Service

# Patent literature as a source of information

## WHY SEARCHING FOR PATENTS?

- To have access to brand new information
- To avoid duplication of research activity
- To check the novelty of your invention
- To know the state of the art in a determined technological sector
- To avoid filing patents without requirements

# Patent literature as a source of information

## WHERE TO SEARCH

### **Bibliographic databases:**

Reaxys, Scopus, Adisinsight...

### **Patent databases:**

United States Patent and Trademark Office (US patents)

Espacenet (European patents)

### **Scientific search engines:**

Google patents, Lens.org



# Patent literature as a source of information

## HOW TO SEARCH

- Use free text searching (keywords)
- Search for a **patent number** (e.g. US4148102, EP54596, WO9802986...)
- Search for patent assignees (the person(s) or corporate body to whom all or limited rights under a patent are legally transferred)

Search with a patent classification:

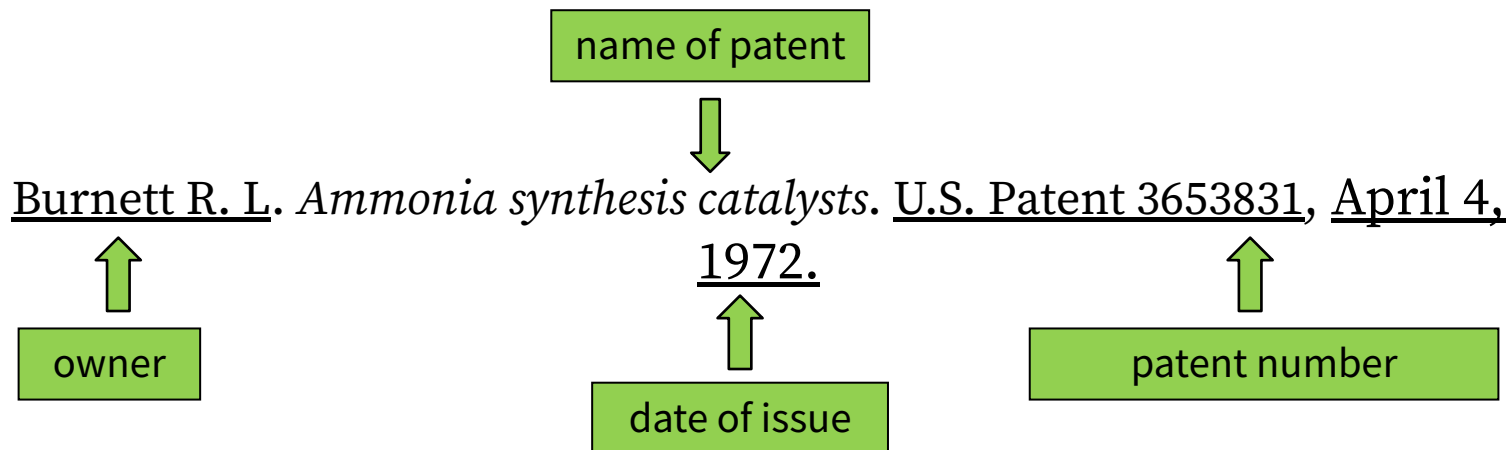
- IPC (International Patent Classifications) in almost all the patent databases
- USPTO classification for US patent databases

# Patent literature as a source of information

## HOW TO CITE

Basic information:

- Name(s) of the patent owner(s)
- name of patent
- Patent number
- Date



# Patent literature as a source of information

## PATENTS – STRUCTURE

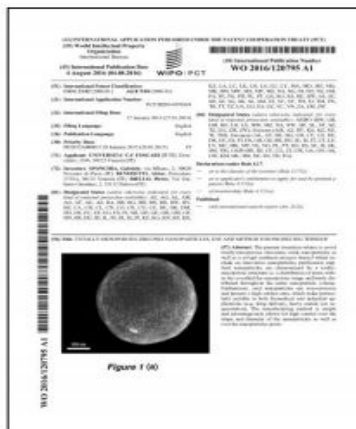
Patents often are not so detailed as research articles, because their purpose is not to communicate a scientific research but the legal protection of an invention.

Despite this, patents hold useful scientific information:

- Abstract
- Citations
- Descriptions/specifications
- Claims
- Drawings

# Patent literature as a source of information

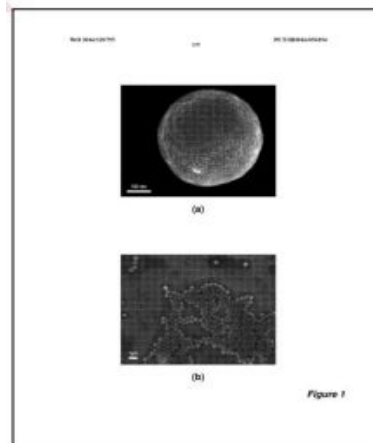
## PATENTS – STRUCTURE



Abstract and  
citation >  
bibliographic  
description



Description



Drawings



Claims

# Patents - Drugs

The patent of a drug, that is the exclusive brand of the pharmaceutical company, lasts 20 years and throughout this period, the pharmaceutical company that developed the drug can market it "exclusively" (legge CEE 1768 of 1992)

Why?

The life of a drug begins a long time before its commercialization (it could takes years) with the following steps:

activity analysis

effectiveness analysis

tolerability

clinical trials

registration

placing the new drug on the market

# Patents - drugs

If the drug is patented the company that invested time and money in the research can gain profits from its exclusive commerce for a limited period of time.

At the expiry of the patent coverage, other companies are authorized to produce and market the same product as an equivalent and sell it at a lower price, having not invested in the research and development phase

However the concept of patentability in the pharmaceutical sector lends itself to ethical criticisms linked to the importance that the drug has for human health

# Patent- Unipd

*«L'Ateneo, attraverso la Commissione Brevetti di Ateneo supportata dal Servizio Trasferimento di tecnologia, segue le procedure per lo sviluppo, l'amministrazione e la protezione di brevetti basati su ricerche prodotte al suo interno, in conformità con il Regolamento brevetti e in armonia con il Codice della Proprietà industriale, emanato col D.L. 30/2005.»*

The University promotes the economic valorisation of the know-how developed within it and the transfer of technology from the university world to that of businesses. Among the tools available is the patent, the purpose of which is to legally protect the result of innovative research, giving the owner the right to exclude third parties from producing, marketing or importing products derived from the invention.

# Patent- Unipd

*Ufficio Terza Missione e Valorizzazione della Ricerca*

*Settore Innovazione, trasferimento tecnologico e rapporti con le imprese*

- advice to researchers for procedures for the development, administration and protection of patents based on research produced within Unipd
- assistance of external specialists in the field of patenting
- assistance in entering into research contracts with external bodies and companies (economic exploitation of the know-how generated)

<http://www.unipd.it/brevetti>



# Patent- Unipd

Database of University Patents:

this database collects information on patents owned by the University of Padova:

on the [www.knowledge-share.eu](http://www.knowledge-share.eu) website

You can also check <https://www.unipd.it/brevetti/trova-brevetto>

University of Padova's patents regulations

[https://www.unipd.it/sites/unipd.it/files/2024/Patent%20Regulations\\_EN\\_UNIPD\\_2023.pdf](https://www.unipd.it/sites/unipd.it/files/2024/Patent%20Regulations_EN_UNIPD_2023.pdf)

<http://www.unipd.it/brevetti>

# Focus on... Patents and doctoral thesis

- Patent request must be submitted before the discussion of the thesis: even the simple declaration of the subject of the patent during the discussion invalidates the evaluation process of the patent.
- The period required by agencies to evaluate subjects and accept communications from submitters takes at least 18 months.
- [Patent info at UNIPD](#)
- Embargo (partial) on Doctoral Theses



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