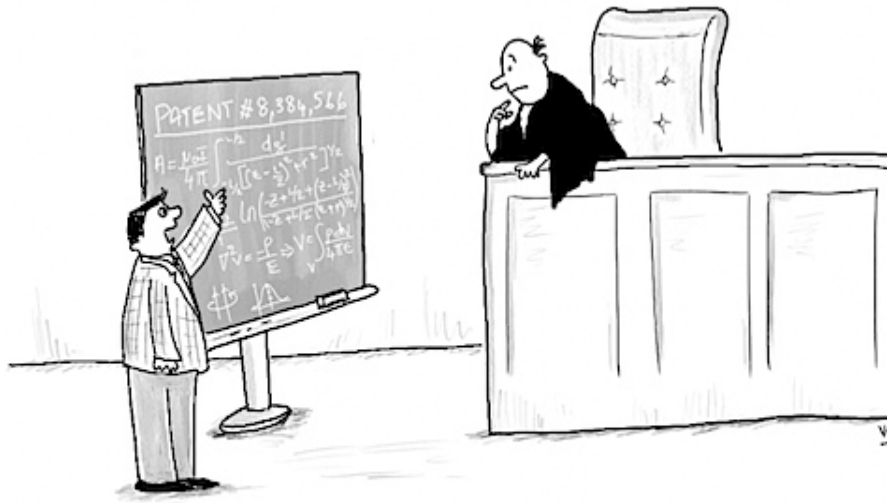


**WELCOME TO ...**



*"So you see your honor, it's obvious."*

© Legally Drawn & Vasanth Sarathy, 2009

**Inventing the future:  
The importance of  
inventive and innovative  
activity in maintaining  
competitiveness**

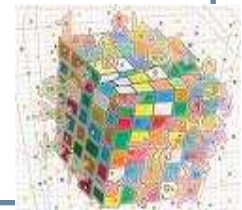
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**WIPO Training of Trainers Program on Intellectual Property  
and Small and Medium Sized Enterprises  
Warsaw, Poland  
November 22 to 25, 2010**

**Larysa A.Kushner**

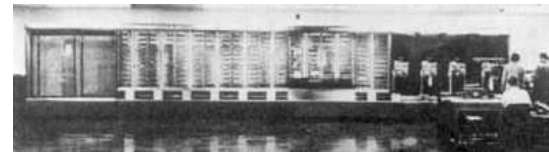
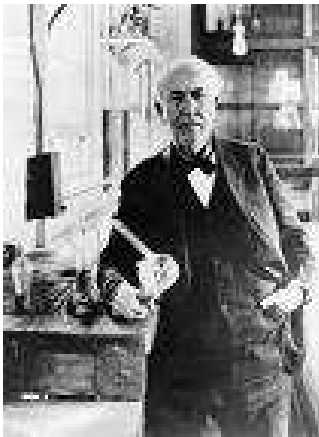
# Overview

1. Innovations and protection of competitive advantages
2. Basics on of invention and patent
3. How to obtain patent protection
4. Patent management



- 1. Innovations and protection of competitive advantages**

What do you imagine when you hear the word “patent”?  
How it relates to **your business**?



"...A business enterprise has two basic functions:  
marketing and **innovation**.  
Marketing and innovation **produce result**;  
all the rest are costs.

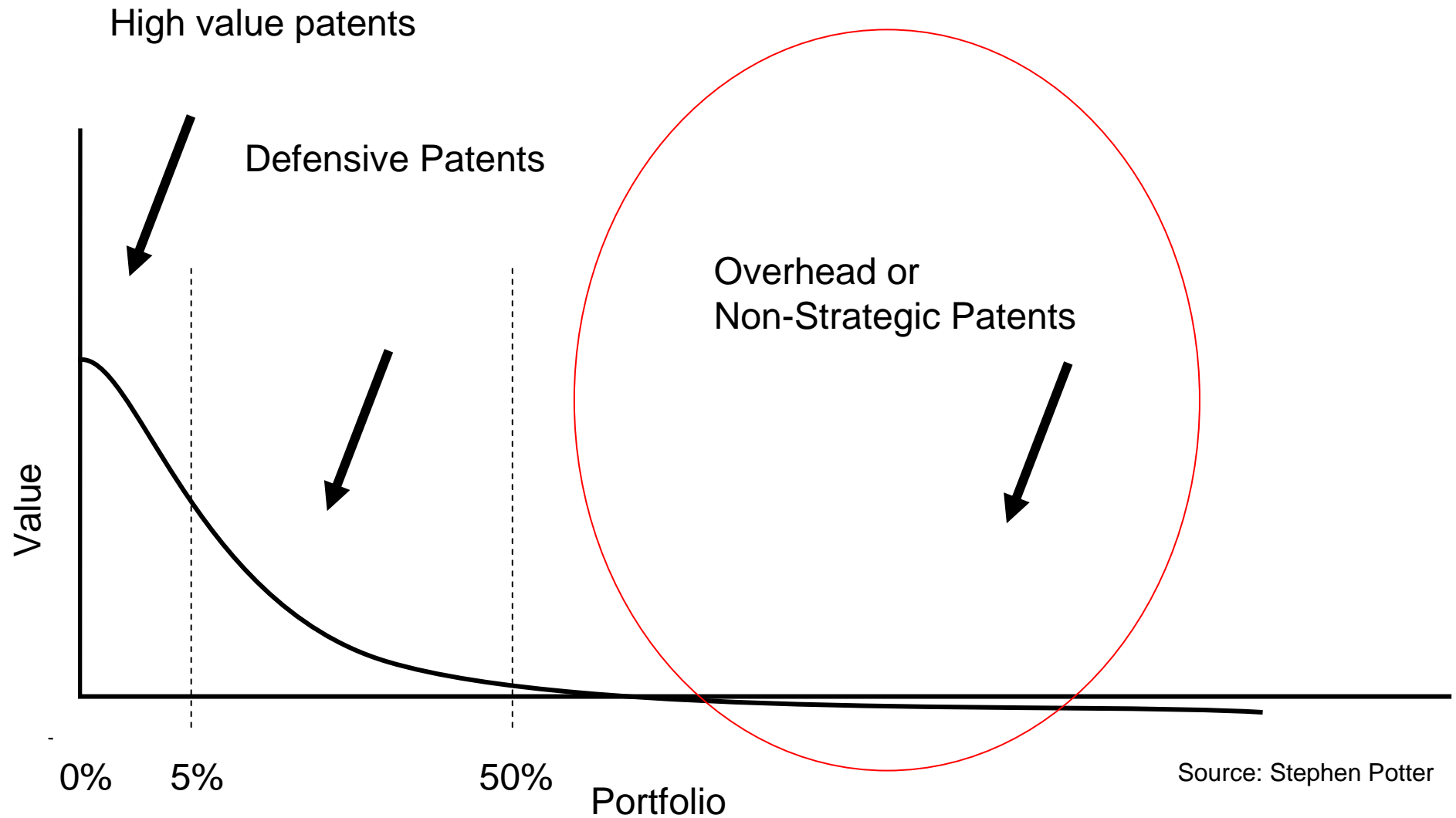
**Peter Drucker**

- **“Invention”** - a solution to a specific problem in the field of technology
  - **Functionality** v. appearance/esthetic elements
    - a useful feature or a performance attribute of an invention, technology or product (new or improved one)



- Patents - **economic tools**
  - Turn technical know-how into **tradable asset**:
- Competitive edge, market power and earning more money
- Add New Revenue Stream
- Raise funds and attract potential investors
- Bargaining Chip for Securing “Freedom to Operate”
- Strategic Partnerships, Mergers and Acquisitions

# In reality however most patents are.... worthless



Source: Stephen Potter



...nevertheless some have considerable value

**Cases:**

- **Opener for sparkling wines**, invented in 2000 by the Argentine Hugo Olivera, until then a manufacturer of mechanical spare parts, as a technical solution for the challenge of uncorking bottles of sparkling drinks
- The invention is currently patented in 25 countries and the product is actively exported by **Descorjet S.A.**



- **Breathable rubber shoesole**, invented by Mario Moretti Polegato as an attempt to make shoes more comfortable and healthy
- **GEOX company** is nowadays the biggest Italian shoemaker oriented in further innovation



## Cases: strategy might be different...

### Sony Corporation

- In 1946 a small enterprise of some 20 staff members repairing phonographs
- In 1952 the founder of the enterprise came across patent information on an invention of the Bell Laboratories: the transistor
- Obtaining a patent license from the patent holder, Western Electric (WE) of the United States of America
- In 1955 production of the first transistor radio and marketing of the new product
- Enabling of the small enterprise to enter the global market of electronics
  - Renamed as Sony Corporation



# Strategic considerations before patenting

Need for cost-benefits analysis of patent protection prior to initiating the process:

- Commercial potential of the invention
- Significant costs for obtaining and maintaining patents:
  - (i) application fees and other prosecution fees to be paid to the patent Office;
  - (ii) the costs relating to patent attorneys;
  - (iii) the costs of translation where an application is filed with the foreign patent Office the official language of which is different;
  - (iv) the costs of maintaining patents after grant



- Efforts to be made to successfully commercialize the invention



## Strategic considerations before patenting

- Is there a market for the invention, the technology or products incorporating it?
- What are the alternatives to the invention, and how do they compare with your invention?
- Is the invention useful for improving an existing product or developing a new product? If so, does it fit in with your company's business strategy?
- Are there potential licensees or investors who will be willing to take the invention to market?
- How valuable will the invention be to your business and to competitors?
- Is it easy to "reverse engineer" your invention from your product or to "invent around" it?
- How likely are others, especially competitors, to invent and patent what you have invented?
- Do the expected profits from an exclusive position in the market justify the costs of patenting?
- Will it be easy to identify infringements of the patent rights and are you ready to invest time and financial resources for enforcing your patent(s)?

## Other legal options might be available and be used for protection of your innovation:

- Utility models
- Confidentiality (Trade secrets)
- Contracting (“Non Disclosure” and “Know-how”)
- Short innovation circle to maintain the lead time
- Supporting services (e.g., sales and services)
- Technical means of protection (e.g., secret keys, identification codes, passwords etc)

*Stubbyglove”*

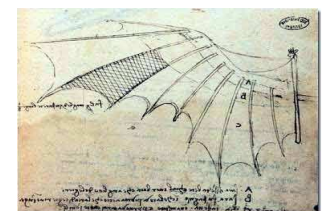


- **Let's discuss it on a practical example...**  
take a look at Exercise 1

## **2. Basics on of invention and patent**

**Patent** is a document, issued, upon application, by a government office (or a regional office acting for several countries), which

- describes an invention and
- creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the owner of the patent

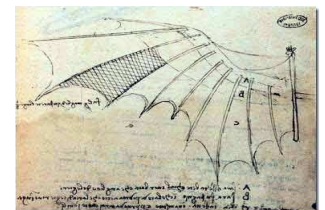




# What can be patented

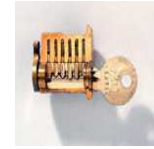
Inventions that are :

- **new** to the world
  - no previous public notice
  - world/national novelty
- **inventive** (i.e. not an "obvious" solution to a specialist in the field)
- susceptible of **industrial application** (useful)
- Differences in national and regional patent systems



# What can be patented

- **Process**
- **A machine**
- **An article of manufacture (manufacture):**
- **A composition of matter**



The most important exceptions from the patentable subject matter:

- **Biotech inventions**
- **Computer programs and business methods**

# What can be patented

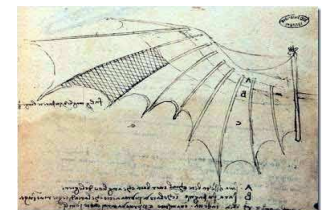
Poland is member of the EPO on 1 March 2004.

The following are **not** considered to be inventions for the purposes of granting European patents (Articles 52,53 of the EPC; Articles 28, 29 of the Act of 30 June 2000 on Industrial Property Law ):

- Mere **ideas** not reduced to practice
- **Software** as such
- (but algorithms that achieve technical results)
- **Business methods**
- Medical therapies, plant varieties, **etc.**
- ...

# How does the patent application/patent look like?

- **Bibliographic information**
  - Inventor, proprietor, date of filing, technology class, etc.
- **Abstract**
  - Around 150 words as a search aid for other patent applications
- **Description**
  - Summary of prior art (i.e. the technology known to exist)
  - The problem that the invention is supposed to solve
  - An explanation and at least one way of carrying out the invention
- **Claims**
  - Define the extent of patent protection
- **Drawings**
  - Illustrate the claims and description

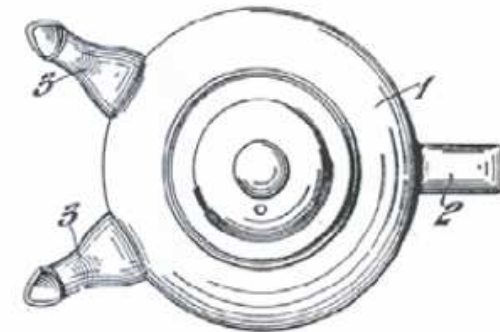


## Structure of description

- Prior art
  - *Teapot with one spout*
- Drawback of prior art
  - *Time-consuming*
- Problem to solve
  - *Reduce filling time*
- Solution
  - *Provide a second spout*
- Advantage of the invention
  - *The time needed to fill multiple cups is reduced*

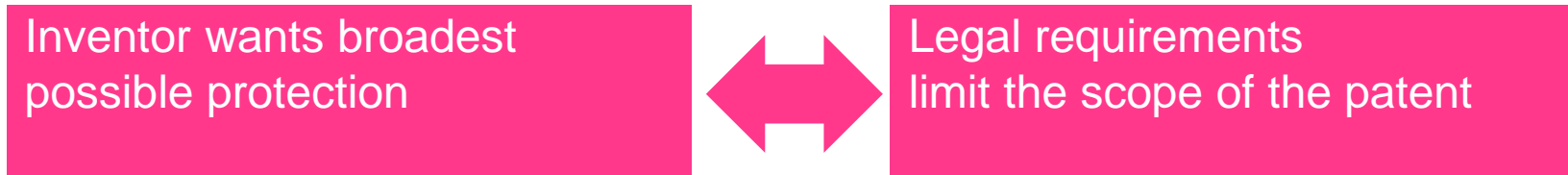


*Fig.1.*



*Fig.2.*

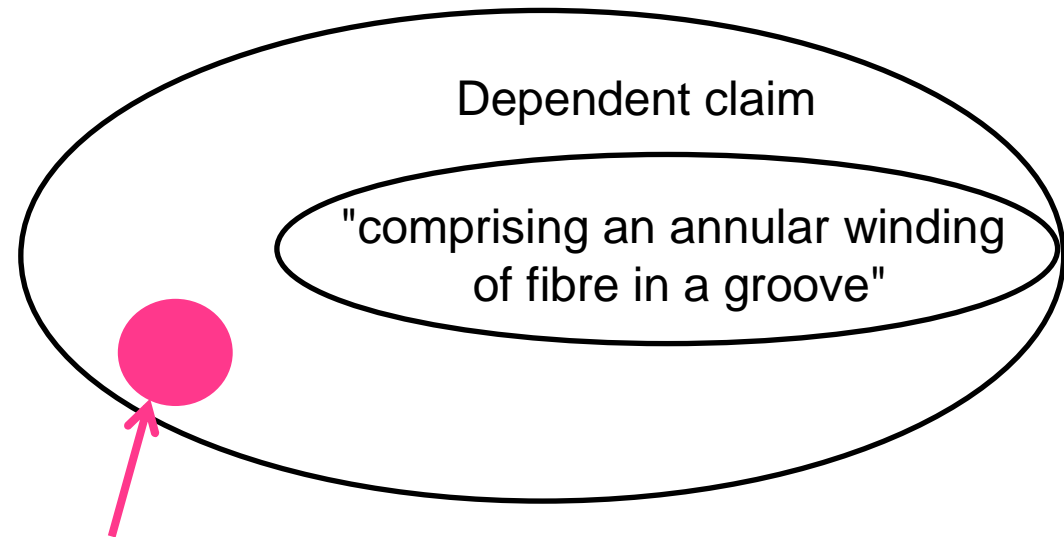
# Patent claims



Claims:

1. A wheel
2. The device of claim 1, comprising an annular winding of fibre in a groove

Independent claim ("a wheel")



Prior art identified by patent examiner or competitor

## What NOT TO DO when considering filing a patent application



- No publication **prior to filing**  
e.g. no article, press release, conference presentation/poster/proceedings or blog entry



- No **sale** of products incorporating the invention prior to filing



- No lecture or presentation prior to filing except under a **non-disclosure agreement (NDA)**



- Seek **professional advice** soon!
- **File before others do!**

## Problem areas to consider

- **Ownership**
  - Inventor  $\neq$  Owner
- Employment
- Remuneration
- Commissioned R&D
- Publicly funded R&D
- Collaborative R&D



## What rights does a patent confer?

1. “Right to exclude” - right to prevent third parties from commercially exploiting an invention without authorisation (making, using, offering for sale, or selling the invention, importing)
  - not a ‘right or freedom to use’ the patented invention
2. Right to assign or transfer ownership of a patent and to conclude licensing contracts
  - Maximum term of patent protection is 20 years  
Poland: supplementary protection right are available for medicinal products and plant protection products may be granted
  - Territorial nature of patent rights
  - Patent is enforceable from the date of issue and is presumed to be valid



- **Let's discuss it on a practical example...**  
take a look at the case (exercise 2)

### **3. How to obtain patent protection**

## 0. Search

### Not obligatory, but strongly recommended

- A professional **prior art search** is an essential part of the process to determine patentability
- It also provides with valuable information:
  - helping to anticipate possible objections at the patent examination stage;
  - revealing any potential infringement on other people's patents;
  - providing information on other patents in that field, (i.e. the competition), on how useful the granted patent would be from a commercial angle, and whether it would be necessary to 'license in' patents owned by others to practice the invention;
  - helping the applicant to decide whether to modify the claims to avoid infringement

# Patent granting procedure

## 1. Filing an application

## 2. Patent Office:

- Examination as to form (formal examination)
- Search
- Examination as to substance (substantial examination)
- Opposition might be available
- Publication
- Granting a patent and issuing a certificate of grant
- Possibility to appeal the decision

## 3. Renewal or maintenance fee

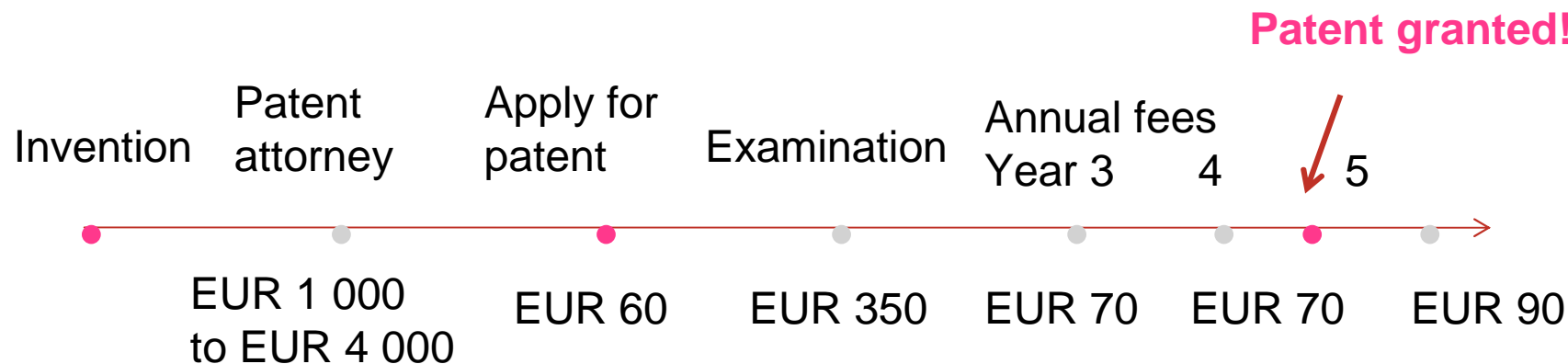
\* A granted patent has *no guarantee of validity*



## Where to apply for a patent

- **National patent offices**
- **European Patent Office**
- **Via the Patent Cooperation Treaty**
- **There is no such thing as an international patent!**

## Cost of a national patent application: Germany



**Total: EUR 1 700 - EUR 5 100**

(depending on complexity of patent and extent of applicant's preparation!)

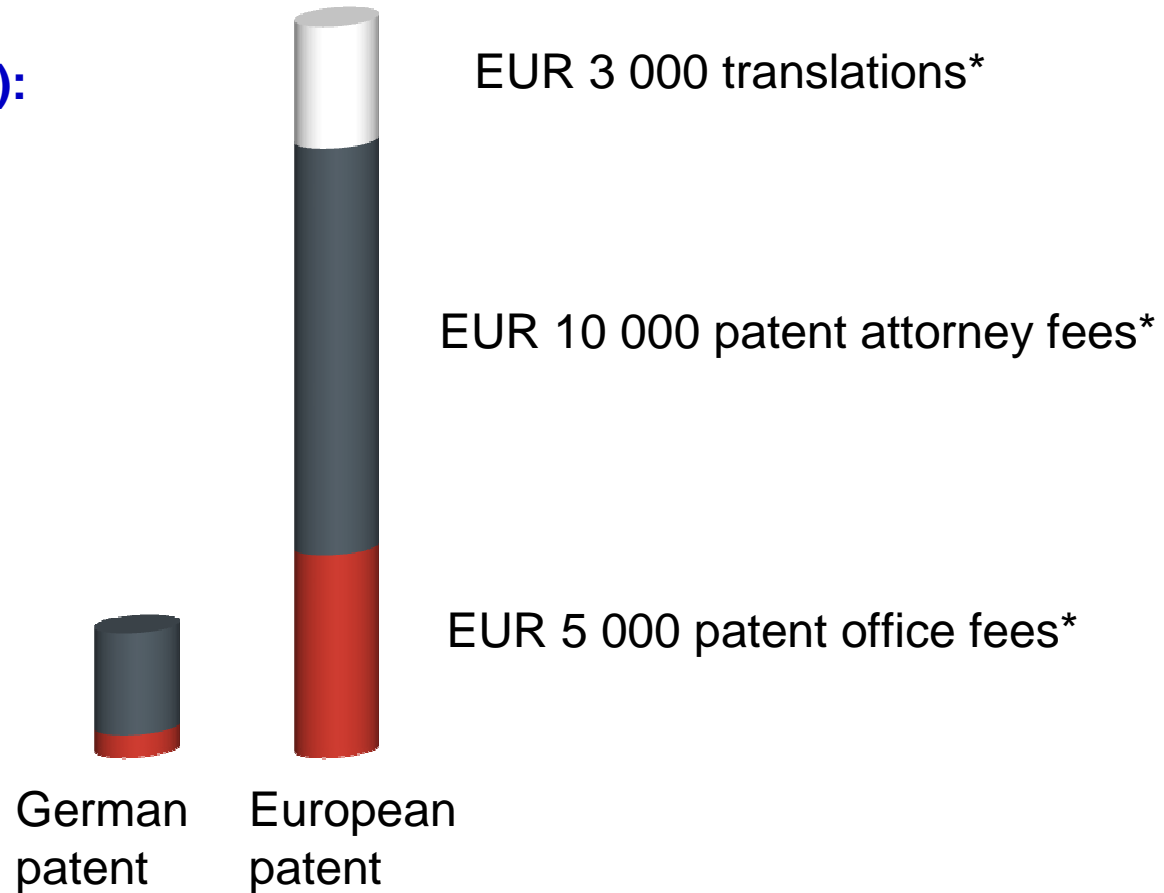
**Poland:** 550,00 PLN for patent application;  
Renewal fees: for the first protection period - 480 PLN,  
for the 4th year of protection - 250 PLN  
for the 4th year of protection - 1550 PLN

Source: EPO materials

## Cost of a European patent up to grant

### Protection in (e.g.):

Germany  
United Kingdom  
France  
Italy  
Spain  
Switzerland



Estimated cost. Actual cost depends very much on the specifics of the individual case.  
The total cost of obtaining a typical Euro-direct patent (validated in 6 countries, with 10 claims on 3 pages, 11 pages of description) was about €30,000

Source: EPO materials



# Patent Application Costs

The cost of a patent application depends on a number of factors, such as:

- Field of technology
- Nature of the invention
- Length of the application
- Number of claims
- Hourly rate of the patent agent, and total time to prepare and prosecute the application
- Fees charged by the draftsman for preparing any drawings
- Number of countries to be covered
- Route used for filing in other countries
- Translation costs of foreign filings
- Number and nature of objections raised by the patent examiner, and whether there are any opposition proceedings or appeals

## **4. Patent management**

# Patent management

- **Patent strategy**
  - Offensive/defensive
  - Internationalisation
  - Kind of exploitation: licensing or own use
- **Patent information**
  - Keep abreast of technology
  - Avoid infringing patents
  - Understand the competitive landscape
- **Communication**
  - Compile convincing evidence that your patents are valuable
  - Inform investors and banks, clients and prospective employees
- **Maintenance**
  - Pay renewal fees, observe deadlines
  - Strengthen important patents and get rid of ones with no value

**Thank you for your attention!**



**Any Question?**

WIPO's website for SMEs :

[www.wipo.int/sme](http://www.wipo.int/sme)

Contact address: [larysa.kushner@ehu.it](mailto:larysa.kushner@ehu.it)