

A grayscale line-art illustration of a large, ornate building with a dome and many windows, serving as a background for the text.

# COGSTEPS

## Startup 101 bootcamp

### IP Management

# Outline

- **Intellectual Property (IP) - Classification**
- **Employee inventions**
- **Patent strategy**

# IPR

## Intellectual Property Rights

### **Intellectual Property (IP) (“Geistiges Eigentum”):**

Rights concerning intangible assets, like Ideas, know-how, inventions, artistic creations

- IP is not protected generally – only certain types are protected by certain laws: patent law, utility model law, design law, trade marks (for all, the IP has to be registered at least) and copyright (protection starts by creation) ...
- IPR is regulated by national laws: **territoriality principle**

## Importance of intellectual property

- Increases funding for innovative projects - without IP many innovative projects would not be profitable because anyone who wanted could simply copy the results
- Protects small innovative firms
  - W. L. Gore & Associates (Gore-Tex®)
    - Founded by the Gore family in the basement of their house in 1958
    - PTFE (Teflon®) related high-tech products
    - Patent protection and strong trade marks (Gore-Tex®)
    - Now has 8,000 employees
  - Start-Ups in technical fields – IPR's are important for investors
- Needed to release IP into the public domain under controlled conditions. Linux (GPL - GNU General Public License): improvements must be under GPL too!

# Classification of Intellectual Property Rights

- patents, registered designs and brands, copyright
- properties, differences and similarities

## The different types of IP

Legal right	What for?	How?	Law
Patents	New inventions	Application and examination	Patent law AT: Öst. Patentgesetz Europe: EPC
Copyright	Original creative or artistic forms	Exists automatically	Copyright law AT: Öst. Urheberrecht Berne Convention, WIPO Copyright treaty
Trade marks	Distinctive identification of products or services	Use and/or registration	Trademark protection law AT: Öst. Markenschutzgesetz EP: Community Trademark Regulation (CTMR)
Registered designs	External appearance	Registration	Registered design law AT: Öst. Musterschutzgesetz EP: Community Designs Regulation (CDR)
Trade secrets	Valuable information not known to the public	Reasonable efforts to keep secret	-

## What is a patent?

A patent is a property right for inventions of new technical products, apparatus or processes.

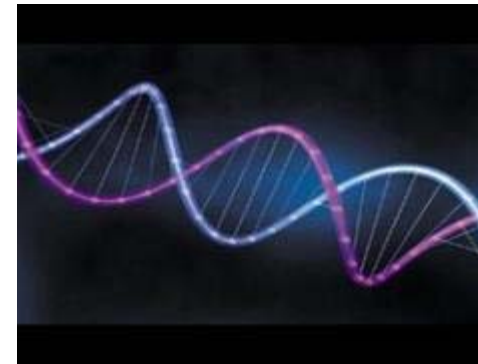
***Art. 52 (1) EPC (European Patent Convention):*** *European patents shall be granted for any **inventions**, in all fields of technology, provided that they are **new**, involve an **inventive step** and are **susceptible of industrial application**.*

- **Product patent:** protects tangible goods independent of the manufacturing process
- **Process patent:** protects the application of a process and goods manufactured using the process

## Rights conferred by the patent

- **Right to exclude** others from making, using, offering for sale, selling or importing infringing products in the country where the patent was granted
- **Sell these rights** or conclude **licensing contracts**
- For up to **20 years** from the date of filing of the patent application

**Example:** PCR – method: patented in 1985 by Cetus and sold in 1991 to Hoffman-La Roche for 225 Mio. Euro



- Private, non-commercial use and scientific research is not forbidden
- The patent **does not grant the right to use the invention**



# Patent

- Patent application at patent office
- Application procedure incl. search (novelty, inventive step)
- Territoriality principle
- Duration of protection: maximum 20 years from filing date

## What is a Utility Model?

- „**Small patent**“, like a patent it protects technical inventions (in AT) but without search and examination
- no bearing on granting
- Does not exist in every country, differing laws in different countries
  - ⇒ DE: no utility model for processes
  - ⇒ AT: utility model for apparatus and process possible
  - ⇒ Different durations (e.g. Austria 10 years, Argentina 15 years)
- Requirements :
  - **Novelty** (but: grace period of 6 months for **own publications**)
  - **Industrial application**
  - **Inventive step**

*Patent application can be converted into a utility model and vice versa*

## Selected countries in which utility model protection is available

### Europe:

- Albania
- Austria
- Bulgaria
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Poland
- Portugal
- Slovakia
- Slovenia
- Spain
- Turkey

### ROW:

- Argentina
- ARIPO (African Regional Intellectual Property Organization)
- Australia
- Brazil
- Chile
- China
- Hong Kong
- Indonesia
- Japan
- Malaysia
- Mexico
- Philippines
- Russia
- South Korea
- Taiwan
- Ukraine
- Uruguay



## Different names for **utility models** and patents

- Austria and Germany
  - Gebrauchsmuster
- Australia
  - innovation patent
- China
  - invention patent  
(~ regular patent)
  - utility model patent
- Indonesia
  - simple patent
- Ireland
  - short-term patent
- Japan
  - utility model
- USA
  - utility patent  
(~ regular patent)
  - no utility models available
- Malaysia
  - utility innovation

## Utility model

- Utility model application at patent office
- Application procedure incl. possible search (no bearing on granting)
- Not available in all countries
- Duration of protection: maximum 10 years from filing date (in AT)

## 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.

## How is copyright generated?

- **Generated by creation**
- **No filing of an application** or deposition required
- **Worldwide protection** according to national laws
- **Duration of protection:**
  - Up to 70 years after the death of the author / the last author
  - Database: up to 15 years after the creation or publication respectively

## What is protected by copyright?

- **Literary** works
  - Including computer programs (source code) together with manual
- Works of **music**
- Works of **fine art**
- **Cinematographic** works
- **Adaptations**
- **Collections**
  - Including databases – if they represent a specific intellectual creation due to the selection or arrangement of their content

*The work has to possess a certain degree of **individuality***



## Exclusive exploitation rights of the author:

The author has the exclusive right for:

- **Reproduction:** make copies of the work
- **Distribution:** offer to the public or to put into circulation
- **Rental and lending**
- **Broadcasting:** make a work accessible by broadcasting
- **Recitation, performance and presentation**
- **Right to place at disposal**

*Every party may reproduce single copies for private use.  
(§ 42 (1) Austrian copyright law)*

The copyright is **non-transferable**, but the author may grant an exclusive licence or an exploitation right to third-parties:

### **Permission to use the work :**

- The author grants third-parties a license to use the work for single or all exclusive exploitation rights of the author.

### **Exploitation right:**

- The author grants an exclusive right to use the work.
- Details (temporal and local limitations, limitations of kinds and instruments of exploitation) have to be regulated by an exploitation rights agreement. The agreement is also binding to the author.
- Exploitation rights are hereditary and alienable.
- It is also possible to grant exploitation rights for future work.

## Copyright / exploitation right and employment status

Basically the author of a work owns the exploitation rights. However, works made during official duty, are in objection to the basic rule of employment law, that the success of work belongs to the employer.

Possible granting of exploitation rights in:

- Individual contracts (employment contracts)
- collective agreements

### Constant jurisdiction in Austria:

The purpose of an employment contract is to provide the employer with the creative work of his employees → this includes the granting of exploitation rights of work, made during official duty, because the employer could not use the work result otherwise.

# Copyright

- No application needed
- For individual intellectual creations
- Generated by the act of the creation of the work
- Non-transferable but inheritable
- Right to grant exclusive exploitation rights (Werknutzungsrecht) or permission to use the work (Werknutzungsbewilligung)
- Duration of protection: until death of the (last) author + 70 years

## What is a trade mark?

Trade marks are signs which distinguish the goods and services of one business or company from those of another

They have the following functions:

- origin
- quality
- advertising



Quelle: Google.com



Quelle: Apple Inc.

Only signs that can be represented graphically can be trade marks



Quelle: ibm.com

## The value of trade marks

A trade mark enables a company to receive more money for a product compared to the sole class designation.





















→ **An intangible value can be assigned to every trade mark**

Problem: different, extensive methods for the rating of trade marks exist, producing differing results!

The estimated value of the trade mark Coca-Cola for example ranges from 0.2 to 85 billion USD depending on the rating model.

 The Coca-Cola logo, featuring the brand name in its iconic red, cursive script.

## BrandZ™ Top 100 Most Valuable Global Brands 2019

	Brand	Category	Brand Value 2019 \$Mil.	Brand Contribution	Brand Value % Change 2019 vs. 2018	Rank Change	Country of Origin
1		Retail	315,505	4	+52%	2	
2		Technology	309,527	4	+3%	0	
3		Technology	309,000	4	+2%	-2	
4		Technology	251,244	4	+25%	0	
5		Payments	177,918	5	+22%	2	
6		Technology	158,968	4	-2%	0	
7		Retail	131,246	3	+16%	2	
8		Technology	130,862	4	-27%	-3	
9		Fast Food	130,368	4	+3%	-1	
10		Telecom Providers	108,375	3	+2%	0	

Source: <http://brandz.com>

## Trade mark protection

### Nice Classification (trade marks):

Goods and services for Community trade mark applications are classified. Very well-known marks enjoy protection beyond all classes.

→ Exercise a right of prohibition, prohibit the use of the same or similar symbol for the same or similar goods and services.

- **word marks**
- **figurative marks (logos)**
- **combination trade marks**
- **numerical trade marks**
- **three-dimensional trade marks**
- **colour trade marks**
- **sound trade marks**



## Trade mark protection

→ Austrian Patent Office / European Union Intellectual Property Office (EUIPO): Search for similar marks and law test (prohibition of deception)

### **Excluded from registration are signs, that for example:**

- are or include national coat of arms, national emblems or similar
- have no distinctive character
- consist solely of signs and descriptions, which are common in general language use
- offend law and order or morality
- are suitable to deceive the public about type, nature or geographical origin of the goods or services

*Art. 7 (1) Council Regulation on the Community trade mark*

## Trade mark protection

### Examples for reasons of cancellation:

- Collision with a trade mark of earlier priority
- Collision with a not registered trade mark, for which the owner already achieved secondary meaning
- Conversion to class designation (due to inactivity of the trade mark owner)
- Nonuse: everybody can apply for cancellation due to nonuse (> 5 years)

## Protection of trade marks

- Registration at patent office necessary
- Classification in classes of goods/services
- Examination of the similarity (does not influence granting)
- Territoriality principle (Art. 6 Paris Convention)
- Duration of protection: 10 years from filing date on, prolongable indefinitely (essential: use!)

## Design patent („Geschmacksmuster“)

Protects the outer appearance of a commercial product

### Requirements

- **Novelty**
- **Individual character**



Quelle: samsung.com



Quelle: apple.at

### **Registration (drawing, photography or sample) at:**

- **National:** Patent Office
- **EP:** Office for Harmonization in the internal market (OHIM)
- **WIPO:** The Hague System for International Registration of Industrial Designs

**Designs are obtained for specific product classes  
(Locarno classification)**

## Design protection

- Has to be registered at patent office
- Classification in product classes
- Worldwide novelty
- Territoriality principle
- Duration of protection: 5 years + 4 x 5 years prolongation possible

## Know-how („Betriebsgeheimnis“)

- Technical or commercial knowledge which is
  - **secret** and
  - **substantial**



Quelle: the coca cola company

In legal relations Know-how is treated like IPR.

If the knowledge is published it no longer falls in the category Know-how.

→ Dissemination only under a **non-disclosure agreement** (NDA)

## Some IP found in a mobile phone

### Trade marks:

- Made by "Apple"
- Product "iPhone"
- Software "iOS"

IP

### Patents:

- Data processing programs
- Integrated circuits
- Chemical components
- Fingerprint sensor
- Display components

### Copyrights:

- Software code
- Instruction manual
- Ringtone
- ...

### Trade secrets:

?

### Designs (some of them registered):

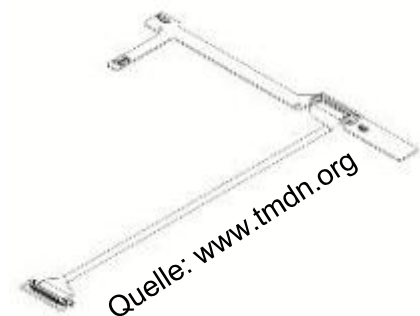
- Form of overall phone
- Arrangement of buttons in oval shape
- Three-dimensional wave form of buttons
- ...



Quelle: www.apple.at



Quelle: www.tmdn.org



Quelle: www.tmdn.org

# Outline

- **Intellectual Property (IP) - Classification**
- **Employee inventions**
- **Patent strategy**



## Definition of employee invention

- matter of the invention has to be part of the business field of the company and whether
- ...the work of the employee was his/her duty
- ...the employee generated the idea to the invention because of his/her job within the company
- ...the generation of the invention was facilitated by using the experience or the resources of the company
  - university: has to be proved; in most cases an invention is an employee invention

## How does an employee invention look like?

- The term employee invention does refer to a patentable invention
- A patent application is not necessary
- Attention: legal term „employee“ has to be considered (e.g. CEO's of PLCs, people with service contracts, trainees)
  - university: master students without a contract are **not** employees – opting-in required

## Problems & grey areas of university inventions

- Publication rights vs. confidentiality obligation of employees
- Obligation to pay inventor remuneration can not be assigned to third parties
- Employees having employment contracts with two (or more) different universities (temporary employment)
- Students are not covered by UG
- No legal provision of „joint inventions“
- State rules under EU aid do not allow to transfer IPR for free

# Outline

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## Drawing up a patent strategy:

- Criteria and deadlines of the patent application process starting with the patent specification and ending with the granting of a patent,
- advantages and disadvantages of different patent application procedures (countries, regions),
- financial and legal effects of patent applications

## Where to apply for a patent

- **National patent offices (e.g. AT, DE)**
  - National patent **valid only in the country where it is granted**
- **Supra-national (here: European Patent Office):**
  - After granting of patent: transition to national patents in designated member states

### General:

- **Non-residents** can also apply for a patent
- One year of "**priority**" for subsequent applications



## Where to apply for a patent

- Via the **Patent Cooperation Treaty (PCT)** prior to patent offices
  - Just one application for up to 152 countries (direct or within 12 months after the priority date)
  - After the initial application phase, the international application can lead to multiple national patent examination procedures (new application) until 30-31 months after priority date (e.g. choice of countries to file in)
  - **Advantage: decisions with cost implications can be delayed**



There is neither an “international patent” nor a “world patent”

## Example: AT – Patent application

- **Filing** (*Priority*), confirmation of receipt, demand for payment of fees, formal check
- **Patent search**
- **Preliminary notice** (after about 12 months), deadline for reply
- **Publication of filing** (after 18 months)
- **Grant** (after approx. 2-3 years), certificate, fees, annual fees; within 4 months everyone can raise an objection

*Priority date:* date of first filing

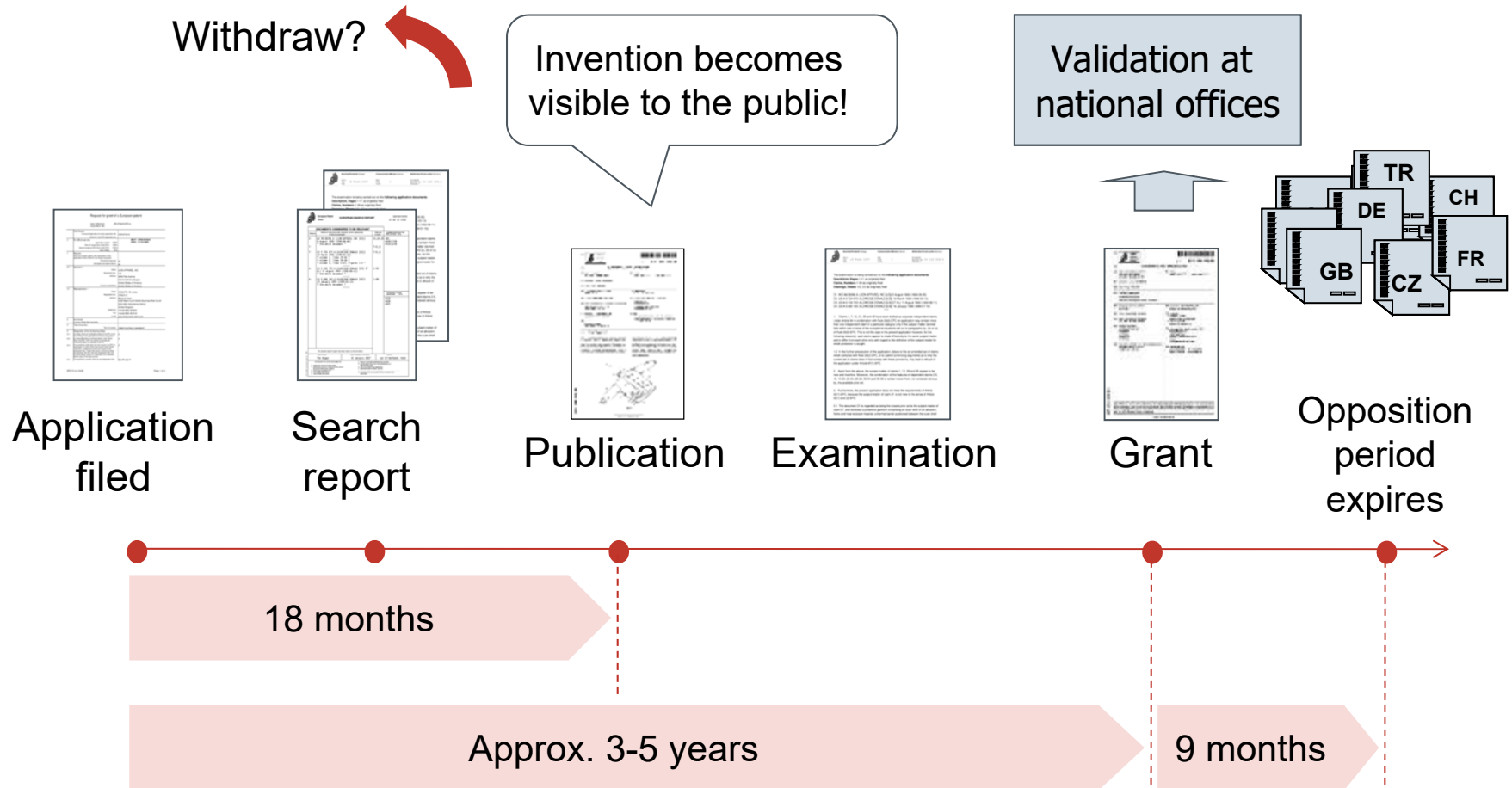
*Priority year:* within the first year after filing the patent can be filed in other countries; protection in the additional countries uses also at the priority date



## European Patent Application

- **Registered** at the European Patent Office (EPO) in Munich, The Hague or Berlin (confirmation of receipt, payment of fee, formal check, designation of member states)
- **Central Search** (search report after about 6 months)
- **Central Examination** (apply for up to 6 months after publication)
- **Publication of filing** (after 18 months)
- **Central Grant** (within 9 months everyone can raise an objection)
- **Translation of claims** into English, French, and German
- **Transition to national patents in designated member states** (“Validierung”) (Sometimes translation to the national languages required, payment of publication fee)

# The grant procedure before the EPO

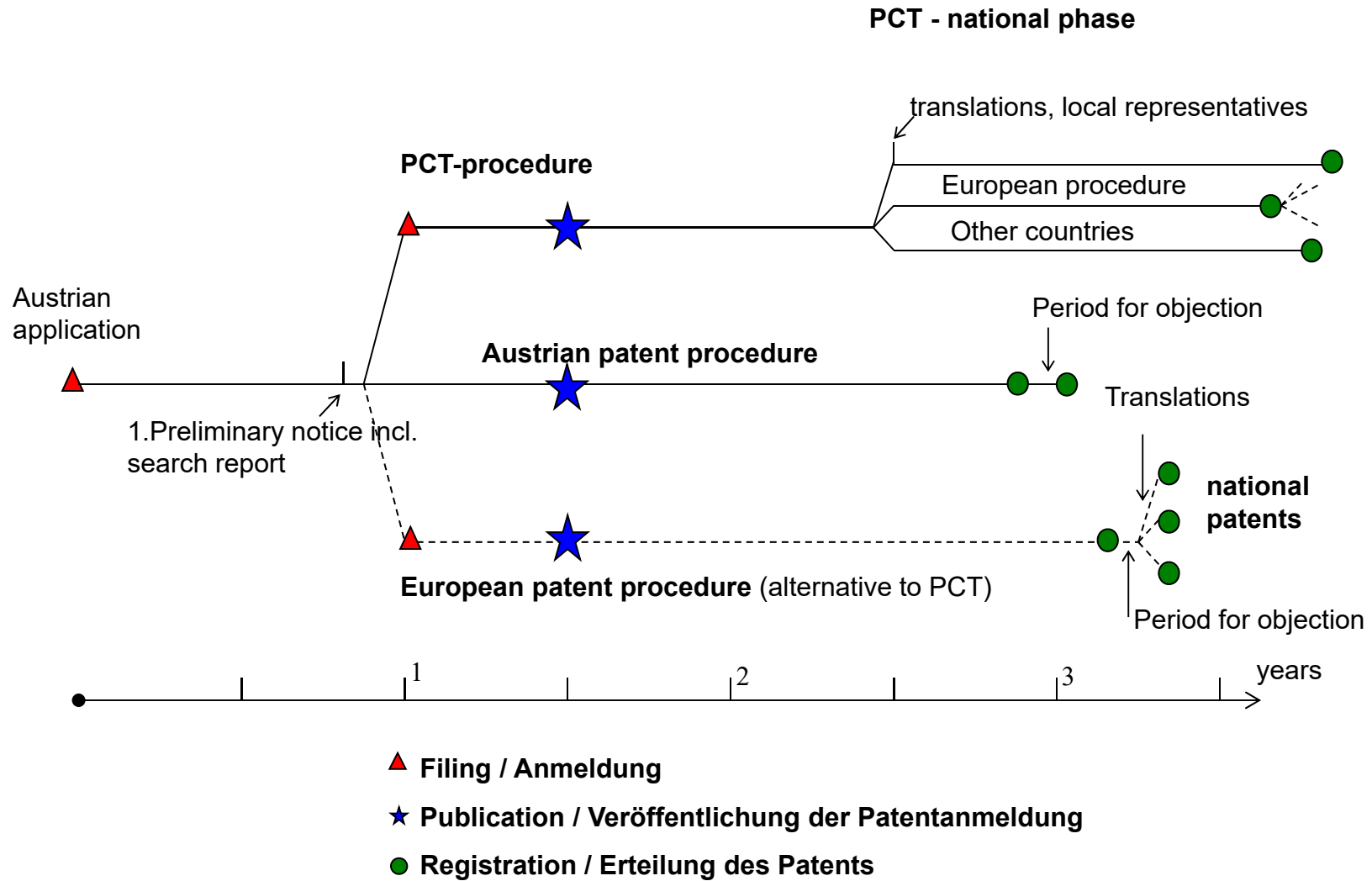


## PCT – Patent application

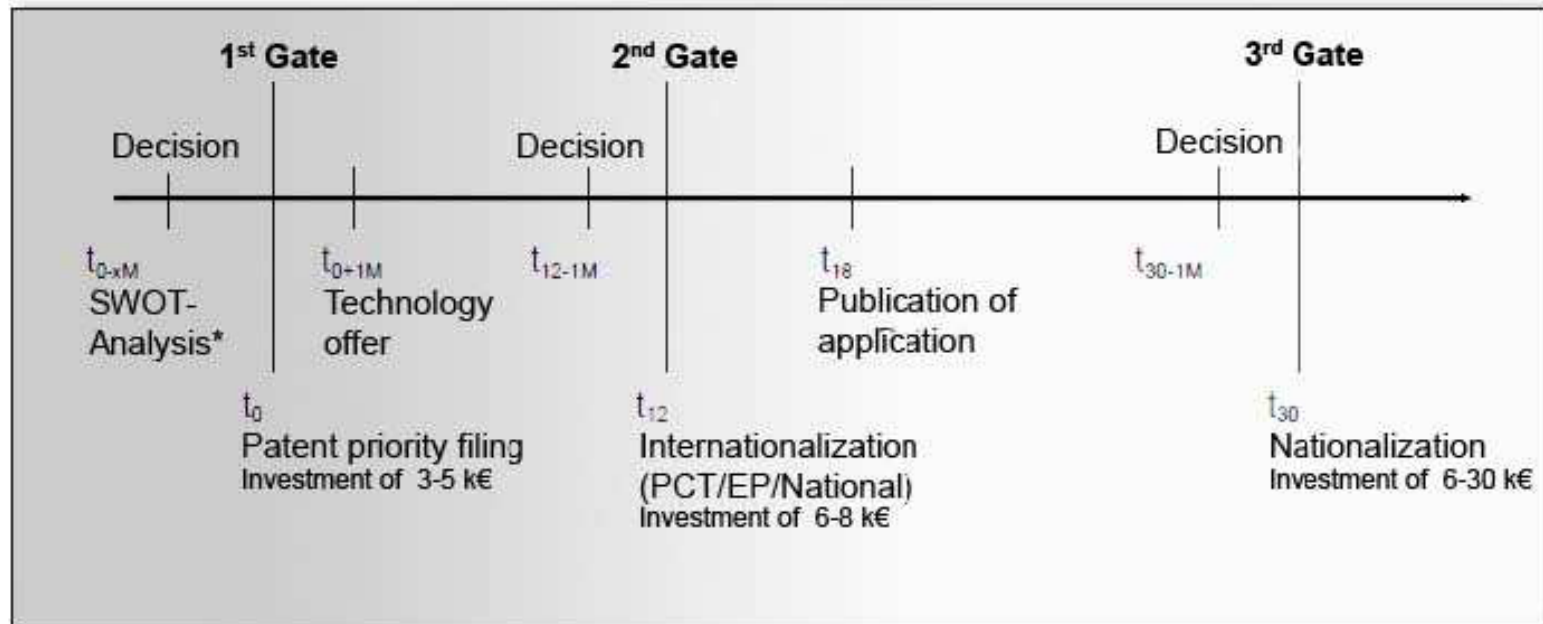
According to the **P**atent **C**ooperation **T**reaty

- **Application** at WIPO, EPO or at national patent offices
- Possible patent protection in 152 European and non-European countries with one application
- Central preliminary search report
- Optional: central preliminary examination
- **Transition to national applications within approx. 30 months** (“Nationalisierung”) after priority date (national phase)

Advantage of PCT filing: Postponement of high costs



## Stage Gate Process



- $t_0$  Patent priority filing
- $t_{12}$  End of priority year: 12 months after  $t_0$
- $t_{30}$  End of nationalization period: 30 months after  $t_0$
- $xM$  x months, depending on the case
- $t_{240}$  Expiration of patent protection: usually after 20 years (240 months)