



Intellectual Property Rights

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17 May 2021

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# PoLiMeR: International





## Contents



- Introduction
- Overview of IP rights
- Trademarks
- Patents
- Questions





### Mimetas Intellectual Property Rights

- 20 different countries
- 50 different national laws
- at least 7 international laws/treaties





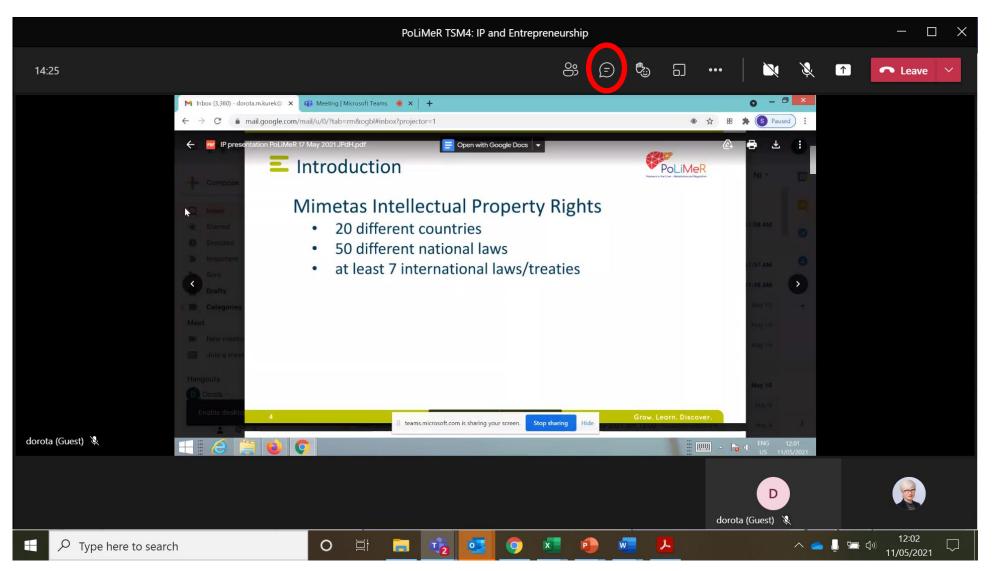
### Typical Dutch Mimetas patent is governed

- Dutch Patent Act
- Dutch Civil Code
- Dutch Code of Civil Procedure
- Treaty of Paris (1910)
- European Patent Convention
- Patent Coorporation Treaty
- TRIPS Agreement (WTO)
  - Trade-Related Aspects of Intellectual Property Rights
- •



# **Chat: Interaction**









What do think about when hearing the term Intellectual Property?





- 2004 MSc Chemistry & Physics Utrecht University
- 2008-2014 patent attorney
- 2015-... IP Manager Mimetas
- IP Manager activities
  - Take care of everything patent and trademark related
  - External patent attorneys
  - Advice the MT on IP strategy
  - Extract IP from research
  - Educate/Train

## Intellectual Property Rights (1)



- Patents
- Trademarks
- Copyright
- Industrial Designs
- Know how

## Intellectual Property Rights (2)



- Plant varieties
- Geographical indications
  - Gouda Holland
  - Parmigiano Reggiano
  - Champagne
  - Schwarzwälder Schinken
- Database structure
- Chip topographies





## 'Creations of the mind'







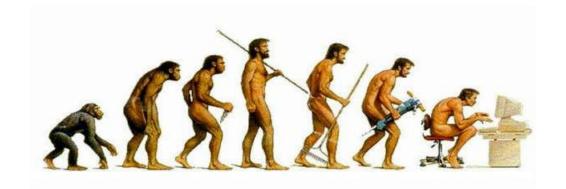
#### Why IPR's?

#### **Stimulating progress**

- Make your invention available for public;
- time limited monopoly.

#### Monopoly is against free market

• Exception → Laws and regulations; A lot of laws and regulations



## Intellectual Property Rights



### Property = Confusing

Property	IP
Material	Non-material
Not limited in time	Limited time
Exclusive	infinitely sharable
Theft	Infringement





- A patent grants the applicant the right to exclude others from using the patented invention
  - 'Using' generally means any commercial activity
  - Monopoly
  - 20 yrs





Recognizable signs, designs and expressions 4 world famous examples













#### **Creator of an original work**

• Not idea, but expression of an idea

#### Automatically when work is created

Prove to be the first

#### **Duration until 50 -100 yrs after death**

• 70 yrs in NL





#### Anne Frank wrote 'Het Achterhuis'

- Died 1945 Bergen Belsen
- Copyright ends on 31 dec 2015

#### Otto Frank edited the tekst of 'Het Achterhuis'

- Died 1980
- Copyright ends on 31 dec 2050

#### **Anne Frank Foundation - Amsterdam**

'Het Achterhuis' is copyright free since
 1 jan 2016

#### Anne Frank Fund – Basel

- Copyright holder of some versions
- Copyright until 2050







Esthetics, visual design

**Requirement: novelty** 

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## Chat: Find the Right Right



### What IP rights are associated with this car?







#### What IP rights?

Trademark → name and symbol.

Design → shape and visual appeal.

Patents → working parts; engine, suspension.

Copyright → car's owner manual, images, software.

License → Car is modified by Konig, a German tuner







- IPR → publicly available
- Know how → trade secret
  - Coca Cola Recipe Secret since 1886
  - Google search algorithm
  - KFC's spice formula
- Often a choice when
  - Reverse engineering is improbable
  - Technological advancement is limited

## = Importance IP Mimetas



No other company is allowed to produce or use organoplates

Unless they are allowed to, by us

No other company is allowed to use OrganoPlate® for their products

Applies only in related fields/goods

Know how; Some of our technology is a trade secret

Copyright on papers, reports, even contracts

• Arises when 'idea' is expressed; no registration or application required

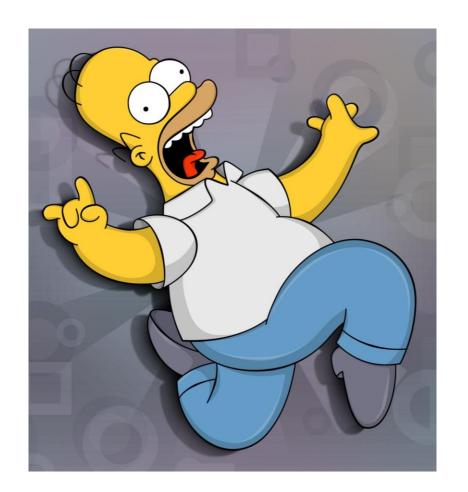




Not one systematic law
IP rights are usually national rights
Every IP right has its own law
Sometimes multiple laws for one right because of treaty

#### **Example: patents in The Netherlands**

- Dutch Patent Act
- European Patent Convention
- Patent Coorporation Treaty
- Treaty of Paris







- Introduction
- Overview of IP rights
- Trademarks
  - Interactive
- Patents
  - Explanatory
- Wrap up & Questions

### **Trademarks**



#### Trademarks can be a

Name/word/phrase → OrganoPlate<sup>®</sup>

• Logo



• Color → KPN green

• Sound → MGM Lion

• Picture/movie → KLM swans 1995





## **Trademarks**



- 5 yr duration
- Unique IPR
  - (unlimited) Extension possible
  - Active maintenance
    - Guard
    - Use
- Risk: Generic trademark
  - Aspirin

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• Once a Bayer trademark



> 100 yrs

# Trademarks - Similarity



- When does a Trademark infringe?
  - Trademark commercially used
  - Confusion
    - Strength of trademark
    - Too similar in sound or appearance?
    - Related Products?

# Trademarks - Similarity



- When does a Trademark infringe?
- When are trademarks considered similar?

- Drinks BV
  - Beverages/Cola
  - When would Coca Cola feeling threatened?

- Coca Cola
- Pepsi Cola
- Caco Cola
- Koning Cola

X

Y

X

?



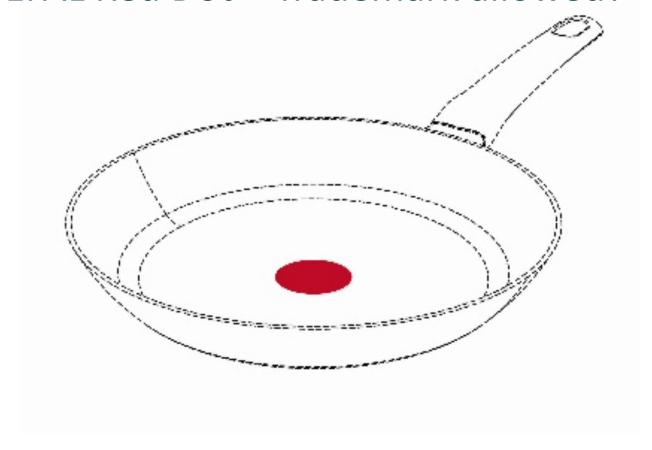


- Flossies for dog treats and Flossbone for edible dog chews.
- Alair for medical devices for the therapeutic treatment of pulmonary diseases and Holaira for medical devices for the treatment of obstructive lung diseases.
- My Zen Tea and Zen Tea Traders for tea





### TEFAL Red Dot – Trademark allowed?







### Trademark allowed in UK?



### THE ROYAL BUTLER





- Structure and wording of a patent document
  - Claims
- Requirements patentability
- Process of obtaining a patent
- Applicant and/or inventor

### = Patents: format



• Patent = legal document → prescribed format

- Patent Applications need to have:
  - Claims → scope of protection; legal core
  - Description
  - Drawings

## Legal effect patent



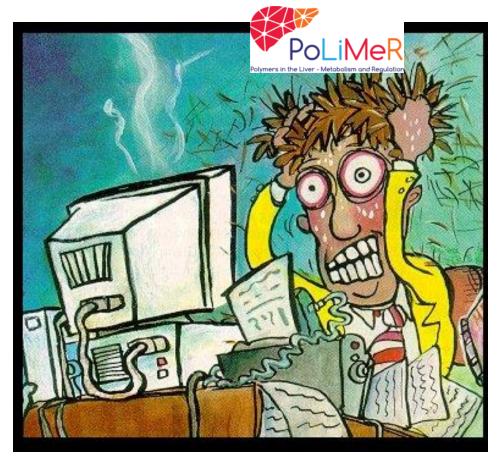
#### Art. 53 lid 2 Rijksoctrooiwet 1995

'The exclusive right shall be determined by the contents of the claims in the patent specification, and the description and the drawings shall serve to interpret those claims.'

'Het uitsluitend recht wordt bepaald door de conclusies van het octrooischrift, waarbij de beschrijving en de tekeningen dienen tot uitleg van die conclusies'.

### Patents

- Claims → scope of protection
- Applicant must disclose the invention
  - Disclose as little as you can
  - Seek maximum protection
- How?
  - → Claims worded as wide and abstract as possibly allowed.
  - → Effect: when normal people read a claim:







- Claims worded as wide and abstract as possibly allowed.
- Example
  - A bike/bicycle

• A vehicle comprising sitting means, steering means, at least one wheel and driving







- In case vehicle claim not granted, subclaims or fallback positions
- Example
- A vehicle comprising sitting means, steering means, at least one wheel and driving means for driving the wheels, wherein
  - Sitting means is a saddle
  - Steering means is a handlehar
  - Driving means are pedal





### = IP Awareness



- Requirement: a skilled person should be able to imitate or construct the invention from the patent specification
- "The person skilled in the art should be presumed to be a skilled practitioner in the relevant field of technology, who is possessed of average knowledge and ability and is aware of what was common general knowledge in the art at the relevant date."
  - Patent attorney is not a skilled person
  - Judge is not a skilled person
  - CEO is not (always) a skilled person
- Who is?
  - Inventor
  - You







#### A patent will be granted if

- Novelty
- Inventive step or non-obviousness, and
- Industrial applicability

can be established...

... with respect to existing knowledge

• → Prior Art/State of the Art





Art.2 lid 1: 'Inventions that are new, that involve an inventive step and that are susceptible of industrial application shall be patentable'.

'Vatbaar voor octrooi zijn uitvindingen op alle gebieden van de technologie die nieuw zijn, op uitvinders-werkzaamheid berusten en toegepast kunnen worden op het gebied van de nijverheid.'

## What can be patented?



#### **Excluded**

- Methods of treatment, diagnostics and surgery
- Scientific discoveries
- Inventions contrary to the 'order' public' or morality
  - Method to exterminate a people
  - Nuclear missile as such
  - But..., defence is ok and heavily patented

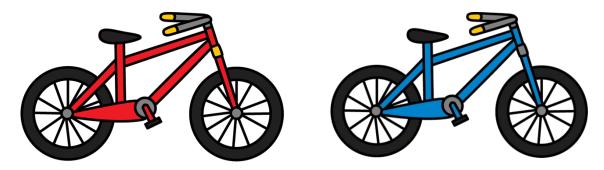




#### Invention is novel when not publicly known on date of filing

#### **Example:**

- Red bike is known
- Paint the red bike blue?
- $\rightarrow$  new!



An invention cannot be a bit novel or almost novel





- What problem does your 'invention' have when offering a blue bike for a yellow one?
  - Obvious to paint a yellow bike blue
- No inventive step in painting a yellow bike blue
- Inventive step: when invention is not known from or suggested in any combination of prior art/general technical knowledge
- Also seemingly small problems in your research!





#### **Obviousness/inventive step is complex**

#### A rule (there are many more):

• When in your research a problem is encountered and solved, that might be a good indication of inventive step

Example: adult stem cells differentiate if cultured in medium containing FCS and antibiotics

Solution: add growth factors, wnt, etc

Problem solved

### Industrial applicability



Means practically executable

Usually just a formal rule to exclude stuff like perpetuum mobile or youth potions





#### **Granting patents is done by**

- Governments
- International Treaty Organization
  - European Patent Office (EPO)

Laws, regulations, EU directives

Different countries have different interpretations of novelty and inventive step

Specialist to find your way → patent attorney





#### Usually this does not work:

I. Applicant

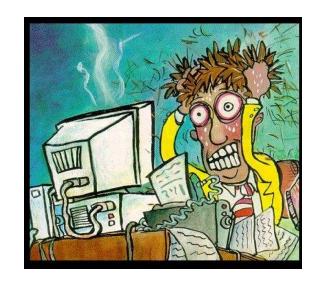
Patent application

Government
Patent
Examiner

II. Government
Patent
Examiner

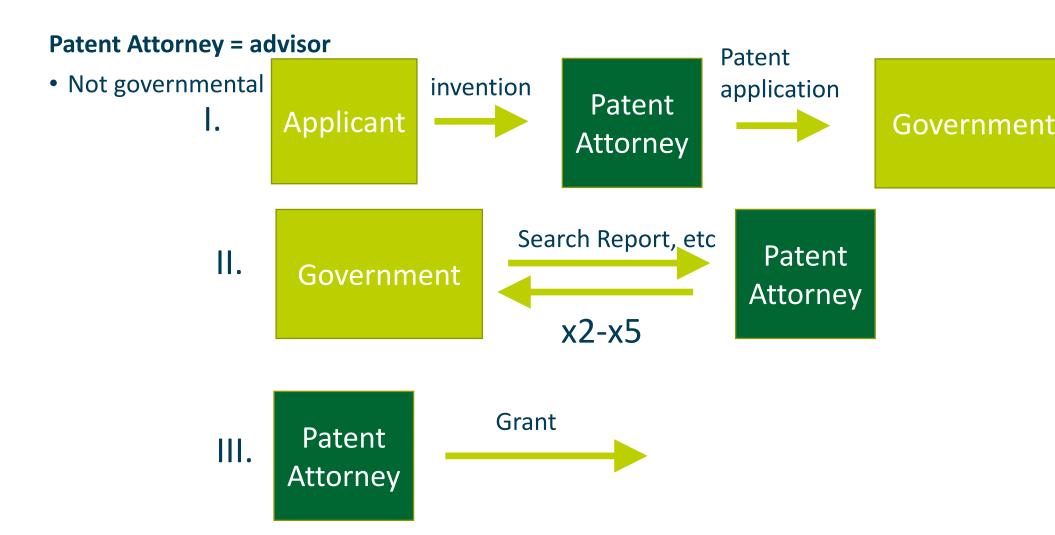
Examination report Deficiencies, deadlines

Search report,





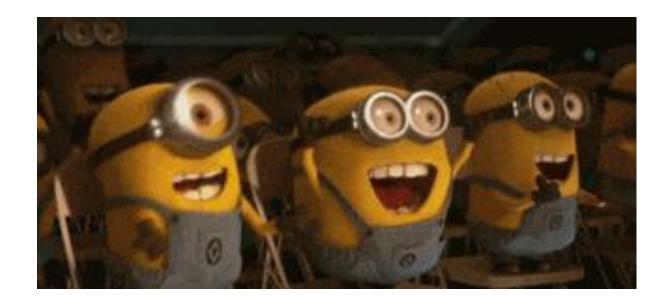




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- Nice example of complexity of patent law: Do you as researchers have the right to file patents?
- Much used road to Dutch patent is
  - File a European or International application
  - After grant register the patent in The Netherlands
- European Patent Convention (EPC)
- Art 60(1): The right to a European patent shall belong to the inventor or his successor in title. If the inventor is an employee, the right to a European patent shall be determined in accordance with the law of the State in which the employee is mainly employed;





Art 12(1) ROW95.

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'Where the invention for which a patent application has been filed has been made by a person employed in the service of another person, the employee shall be entitled to the patent unless the nature of the service entails the use of the employee's special knowledge for the purposes of making inventions of the same kind as that to which the patent application relates. Should the latter be the case, the employer shall be entitled to the patent.'





### What do you think obtaining a patent costs?

Give your answer in this format: 10k





#### Dutch patent application →

- Patent attorney → 6-8 k€
- Fees and taxes → 100 €
- Cheap but probably worthless on its own
- Pay taxes for 20 yrs

#### **European patent application**

- Patent attorney → 10 20 k€
- Fees and taxes → 5 k€
- Registration in selected countries → 25 50 k€
  - Translation and fees
- Renewal fees for a maximum of 20 yrs

In total 50 - 150 k€

US, China, Japan, Canada excluded





- Today was mainly about obtaining a patent
- What if someone uses your invention without permission?
  - Infringement
- Law suit
  - NL: 100 500 k€
  - US: 1 5 million USD

## Wrap Up: Importance IP



- IPRs are important in driving innovation, commerce and design
- Complex because of all the national laws and rules that apply
- Complex because different companies have different interests
  - Attorney
  - But, good to have own knowledge/experience

#### Mimetas

- Patents make up 95% of cost and time
- Patents and trademarks have financial importance
  - As assets; important for investors
  - Licenses
  - Marketing
- Researchers are important in the inception of (patentable) inventions the patent application process





# Questions???