



# From R&D to economic value: the role of Intellectual Property

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## Steven Van Hoof



- PhD in Chemistry - Postgraduate in Business Administration
- 10y experience in research in university and industry
- 15y experience in technology transfer and business development: IP, spin-off, industrial collaborations,
- 12y Hasselt University
- 2y imo-imomec - imec - EnergyVille
- Innovation Manager / Business Development Manager

# Overview

## From R&D to economical value: the role of Intellectual Property

1. Intellectual property strategy - patents, copyright or trade secrets?
2. From scientific result to patent - picking up the opportunities!
3. How to benefit from a patent portfolio?

**Intellectual property strategy:**

**Patents, Copyright or Trade Secret?**

# IP: Introduction

## Intellectual property rights (IPR)

Wat is **intellectual property**?

- Creation of the mind, a product of human intellect
- No tangible asset!

Why are there **rights** applicable?

- A fair balance between individual and public interest
  - Exclusive rights (= a monopoly) to acquire a strong market position
  - But limited in time and geography
- Distinction between economic rights vs. moral rights





# IP: Introduction

## Intellectual property rights (IPR)

### Important concepts:

- Exclusive vs non exclusive
- Freedom of competition
  - By default, you are free to copy others
  - This freedom is limited through IPR
- Freedom to operate
  - By default, you are free to develop, make, sell, ... products without liability towards others
  - This freedom is limited through IPR

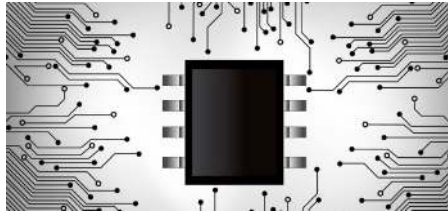
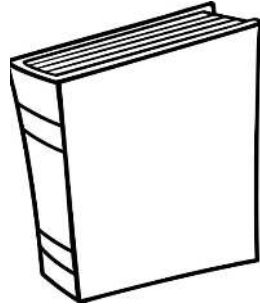
**COMPETITIVE  
ADVANTAGE**



# IP: Algemene inleiding

## Types Intellectual property rights (IPR)

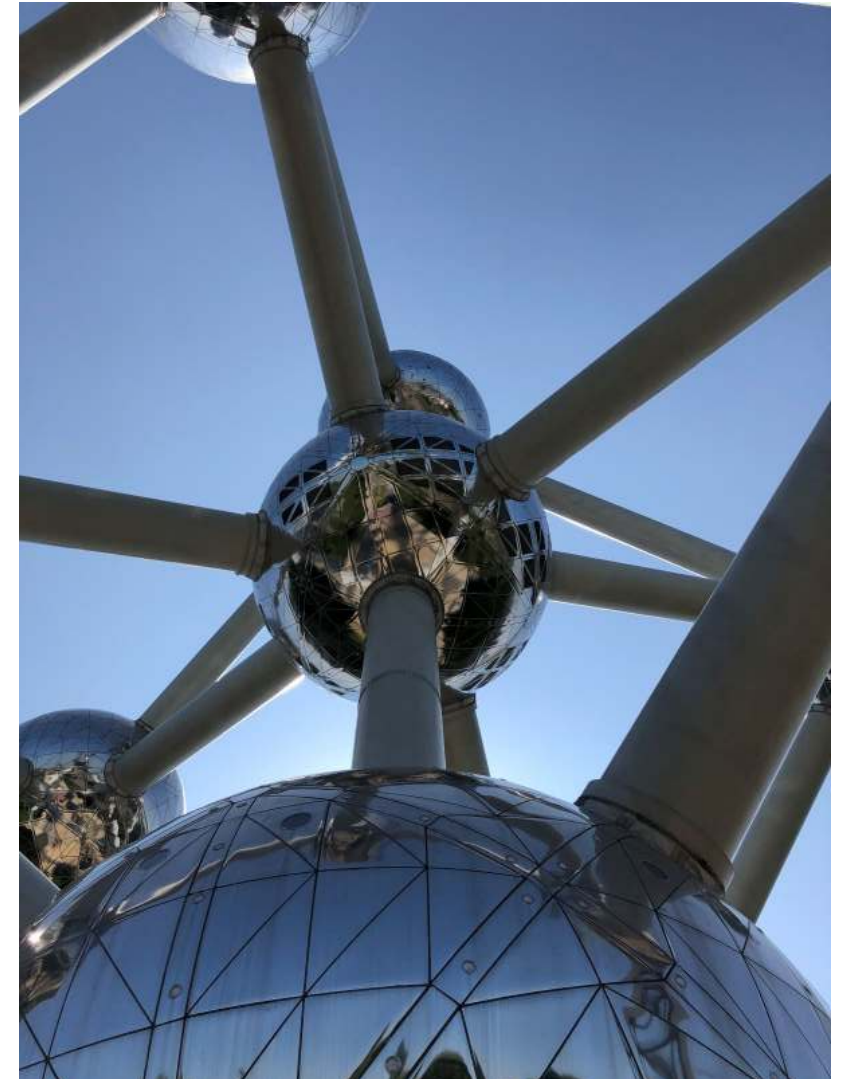
- Copyright
- Patent rights
- Chips rights
- Design rights
- Trade mark rights
- Database rights
- Plant variety rights



# Types Intellectual Property Rights (IPR)

## Copyright

- Wat is protected?
  - Legislation: “**Literary and artistic works**”
  - Extremely wide range of creations: basically all objects!
- Requirements for protection?
  - The **original expression** of an idea
    - Original: the author’s own intellectual creation
      - Aesthetic merits are irrelevant
    - Expression: not the idea itself
      - NOT PROTECTED: The idea to magnify an iron crystal 165 billion times
      - PROTECTED: The specific design of the Atomium (Brussels, Belgium)
  - No formal requirements
    - No registration required
    - Burden of proof on the copyright owner
    - ©
- Duration: up until 70y after death of the author (EU)

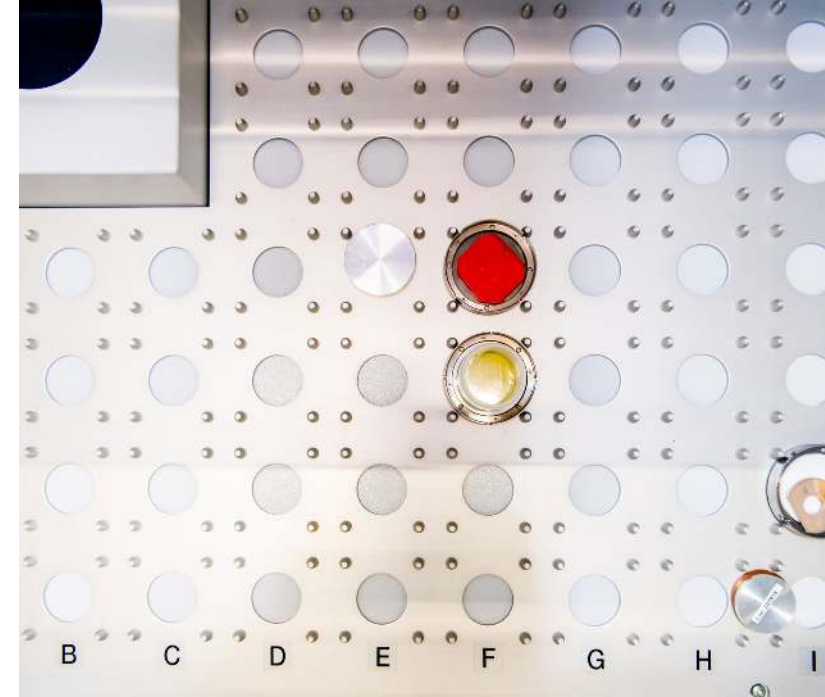




# Types Intellectual Property Rights (IPR)

## Patent rights

- What is protected?
  - Legislator: “**An invention**”
  - Wide range: any technical solution to any problem!
- Requirements for protection?
  - Novel, inventive and susceptible to industrial application
    - **Novelty**: state of the art?
    - **Inventive step**: non-obvious for a person skilled in the art?
    - **Industrial application**: to be made or used in some kind of industry?
  - Formal requirements
    - A patent application has to be filed
    - A patent office will review the requirements and (not) grant the patent
    - Procedure is expensive and lengthy...
- Duration of protection: up 20 years after the filing date



# Types Intellectual Property Rights (IPR)

## Trade Secret

- Protection of information which:
  - Is a secret, in the sense that it is not generally known or readily accessible; and
  - Has commercial value because it is a secret; and
  - Has been subject to reasonable steps to keep it secret.
- The **acquisition, use** or **disclosure** of such secret information in a manner contrary to honest commercial practices by others is prohibited!
- Protection by non-disclosure or non-disclosure agreements (NDA).



# Intellectual Property strategy

## Copyright, Patent or Trade Secret?

In scientific research and development – what is the best strategy?

| Type         | +  | -   | Application   |
|--------------|--|---|---|
| Copyright    | <ul style="list-style-type: none"><li>- Cheap</li><li>- Automatic</li><li>- Long duration</li></ul>        | <ul style="list-style-type: none"><li>- No protection of idea</li></ul>   | Typically for scientific publications, books, lectures, but also software |
| Patent       | <ul style="list-style-type: none"><li>- Protection of the idea</li></ul>                                   | <ul style="list-style-type: none"><li>- Formal procedure</li><li>- Expensive</li><li>- Limited duration</li><li>- Publication</li></ul> | New materials, new devices, new processes, new algorithms, ...            |
| Trade secret | <ul style="list-style-type: none"><li>- Cheap</li><li>- Full control</li><li>- Unlimited in time</li></ul> | <ul style="list-style-type: none"><li>- No scientific publications</li><li>- Higher risk</li><li>- Extra measures (eg. NDA)</li></ul>   | Non-patentable results<br>Extra info not in a patent/publ.<br>Recipes     |

# Types Intellectual Property Rights (IPR)

## Patent rights

### [Aiko Solar wins patent litigation case against Maxeon in Netherlands](#)

*By Emiliano Bellini on May 24 2024, 10:53am*



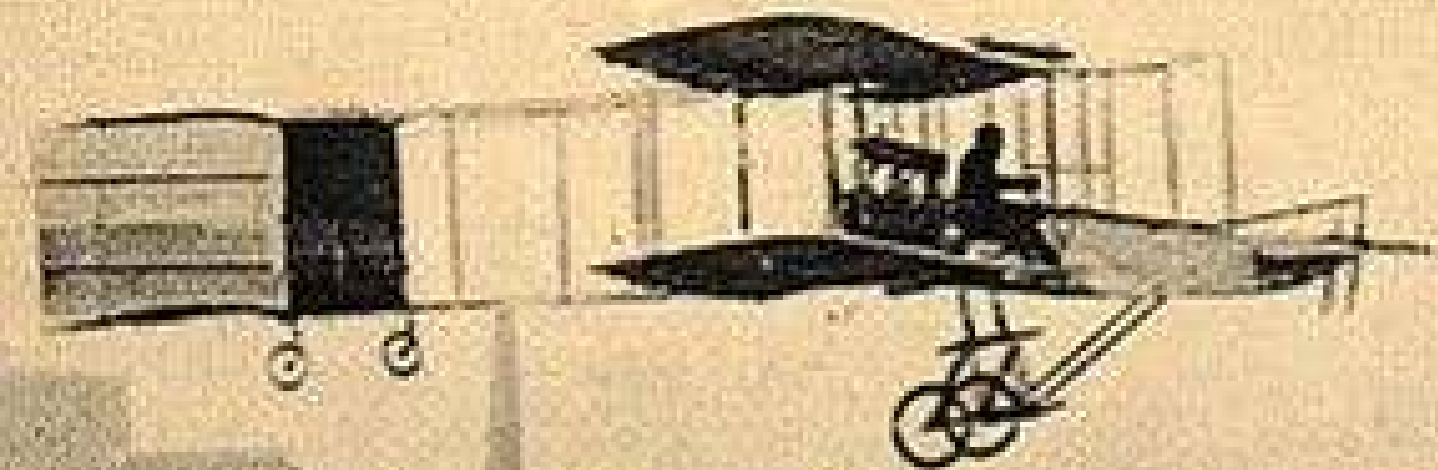
Aiko Solar has won a patent litigation case against Maxeon Solar Technologies in a Dutch court. The judge has ruled that Aiko Solar did not infringe upon Maxeon Solar's EP2297788B1 patent for back-contact (BC) solar cells.

**From scientific result to patent:**

**Picking up the opportunities!**



**INVENTION !!**



# Picking up opportunities!

## From scientific result to patent

- When to go for patent protection? There could be various triggers:
  - Exceptional (unexpected) scientific result
  - Market potential
  - Competitors' activity
  - Spin-off creation
- What should not be a reason to go for patent protection:
  - For curriculum vitae
  - Vanity



# Picking up the opportunities

## From scientific result to a patent

- Structural support required, embedded in organization



Knowledge Transfer Team

Tech Transfer Office

Innovation Managers

Invention  
disclosure form

Analysis

Valorisation  
panel

Patent  
funding



IP Team

(Application) Sector

Business Development

Inventor portal

Analysis

Patent  
board

Patent  
funding

# How to benefit from a patent portfolio?

# How to valorize a patent portfolio

## Exploitation strategies

- Patents constitute a **competitive advantage** for commercial activities
- Limited impact on other research institutes  
**‘Research Exemption’**
- Patents are intended to **support** commercialisation
- Should thus be made available to **entities with commercial activity**
- Different **modus operandi** possible





# How to valorize a patent portfolio

## Different ways of technology transfer

- Collaboration with companies
  - Background knowledge in projects
  - Might included or exclude commercial use of the IP
  - User rights define the pricing of the project
  
- Transfer of ownership
  - Company becomes owner of the IP
  - No limitations of use of the IP
  - Return often as a lump sum or shares (spin-off)
  
- License
  - Research institute remains owner of the IP
  - Right to use the IP exclusively/non-exclusively
  - Limitations in scope/region might apply
  - Return often as a fixed fee or royalty (% on revenue)



# THANK YOU

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