



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

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- 15y experience in technology transfer and business development: IP, spin-off, industrial collaborations,
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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

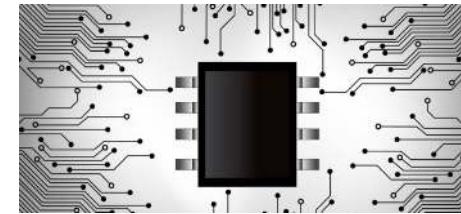
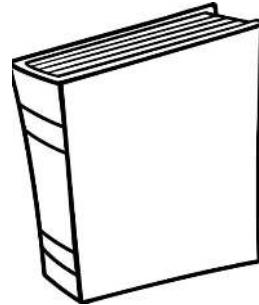
**COMPETITIVE
ADVANTAGE**



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

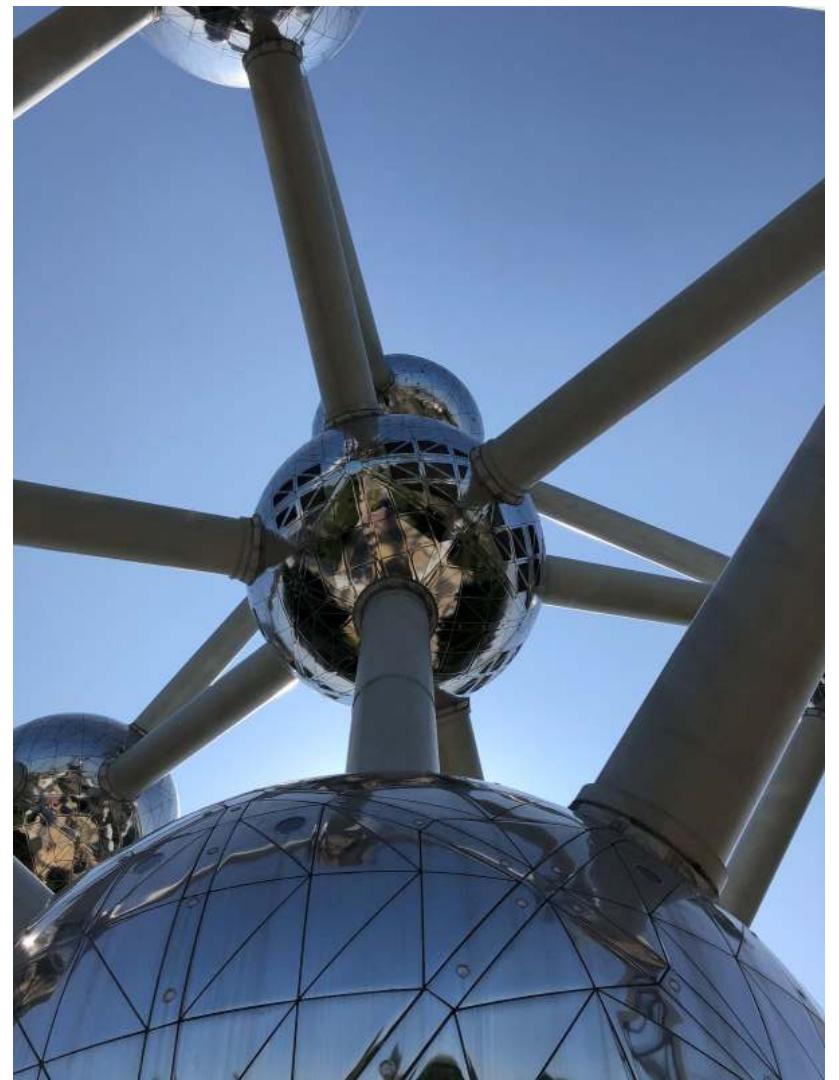
- Wat is protected?

- 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
 - ©

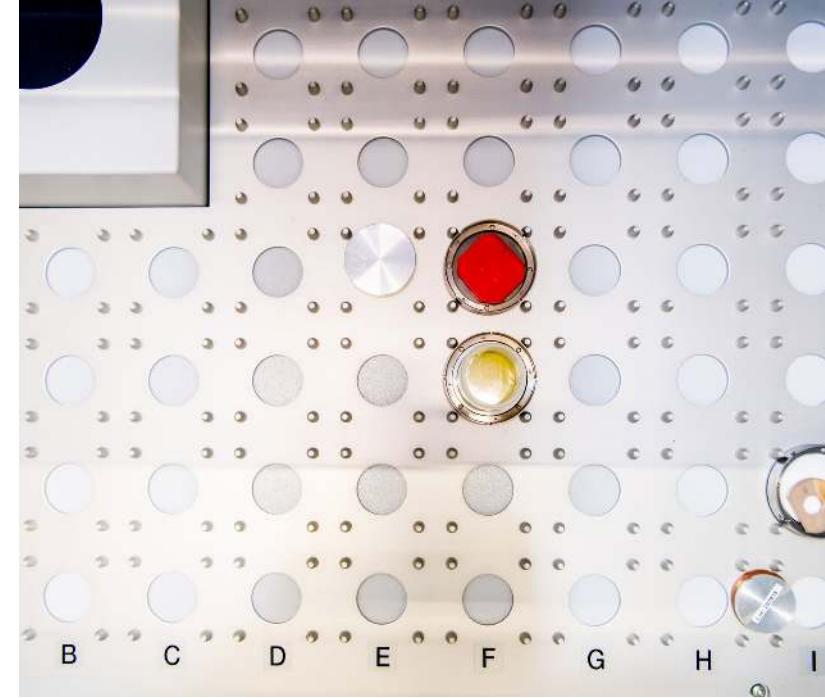
- Duration: up until 70y after death of the author (EU)



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?

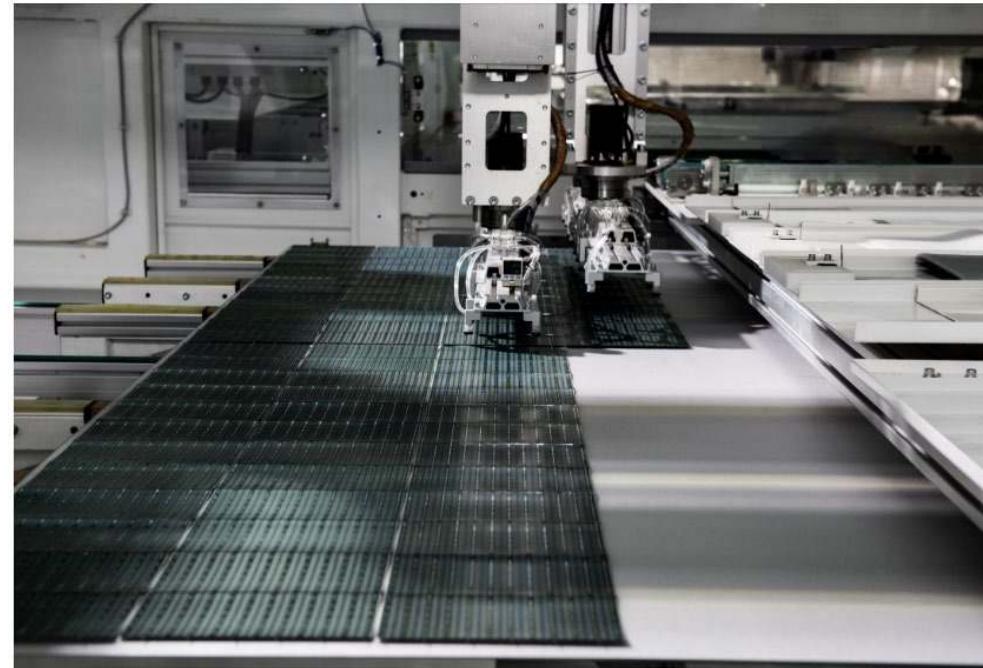
Type	+ 	- 	Application
Copyright	<ul style="list-style-type: none">- Cheap- Automatic- Long duration	<ul style="list-style-type: none">- No protection of idea	Typically for scientific publications, books, lectures, but also software
Patent	<ul style="list-style-type: none">- Protection of the idea	<ul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

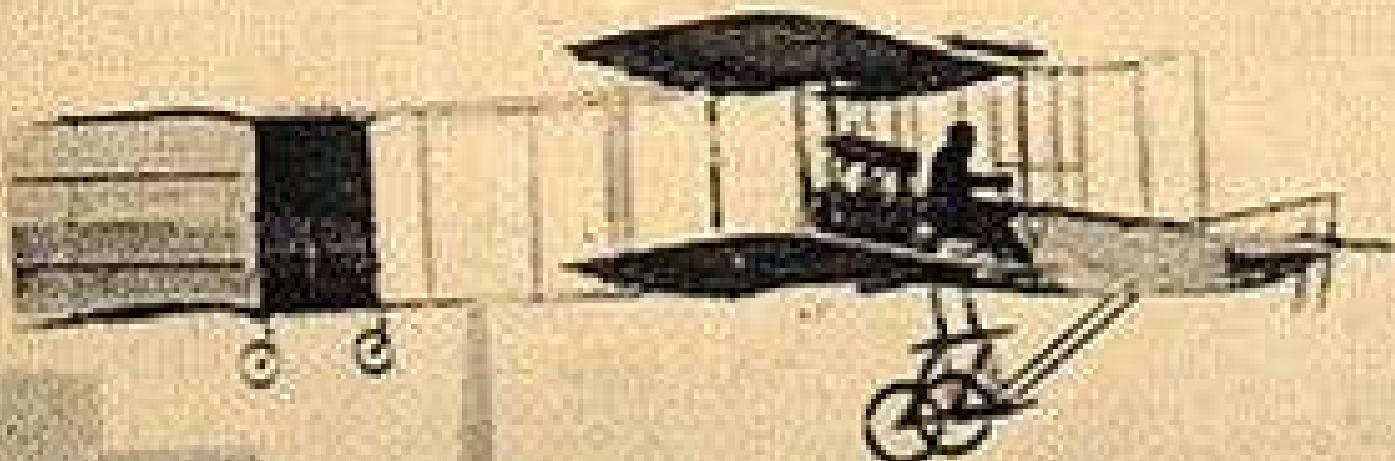


Aiko Solar has won a patent litigation case against Maxeon Solar Technologies in a Dutch court. The judge has ruled that Aiko Solar did not infringe upon Maxeon Solar's EP2297788B1 patent for back-contact (BC) solar cells.

From scientific result to patent:

Picking up the opportunities!

INVENTION !!



Picking up opportunities!

From scientific result to patent

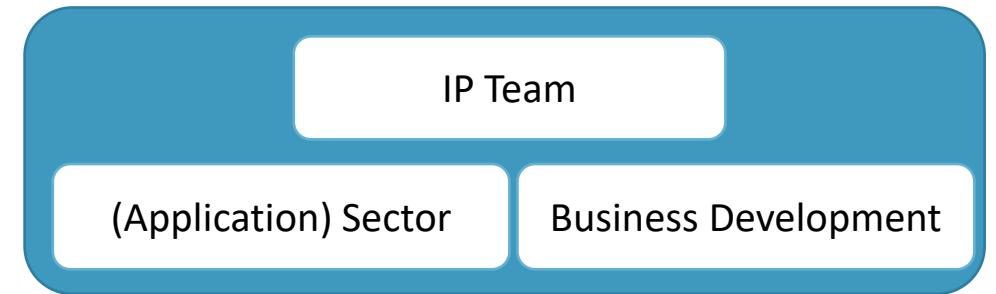
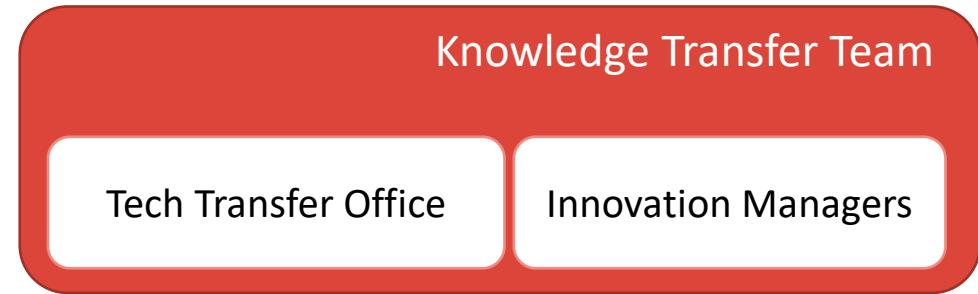
- When to go for patent protection? There could be various triggers:
 - Exceptional (unexpected) scientific result
 - Market potential
 - Competitors' activity
 - Spin-off creation
- What should not be a reason to go for patent protection:
 - For curriculum vitae
 - Vanity



Picking up the opportunities

From scientific result to a patent

- Structural support required, embedded in organization



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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