

IP Law and Sustainability

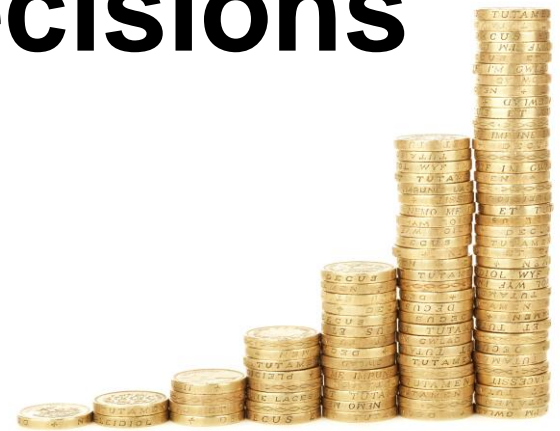
6th Inclusive & Sustainable Finance
Research Conference | Nov 16th, 2021



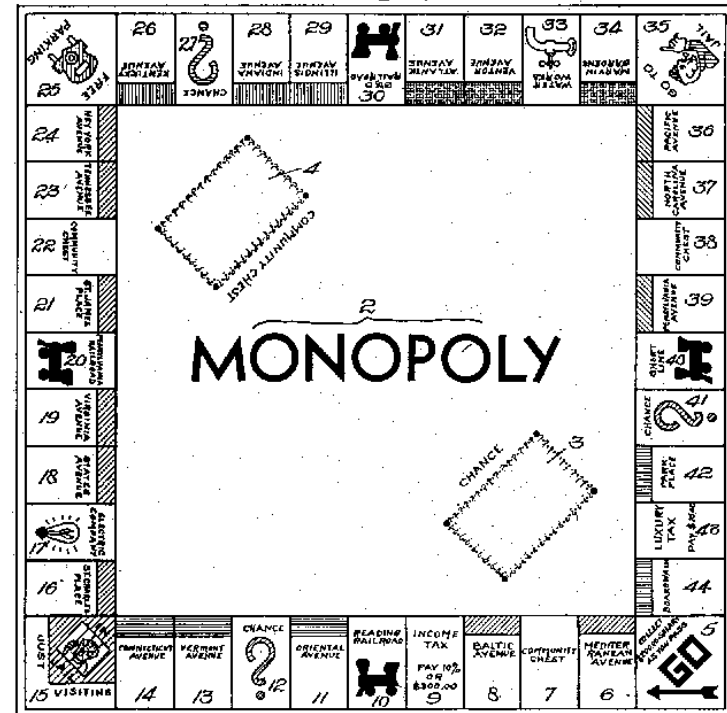
1. How does the patent system affect investment decisions in general?
2. How does patent law treat green technologies?
3. What can the patent system do to increase sustainability?

1.

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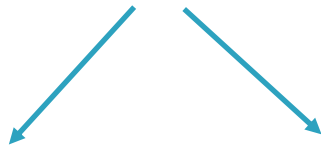


Enhancing R&D investments: Prospect



Prospect of a monopoly incentivizes to invest in R&D

Direct Tech Investment (R & D incentives)

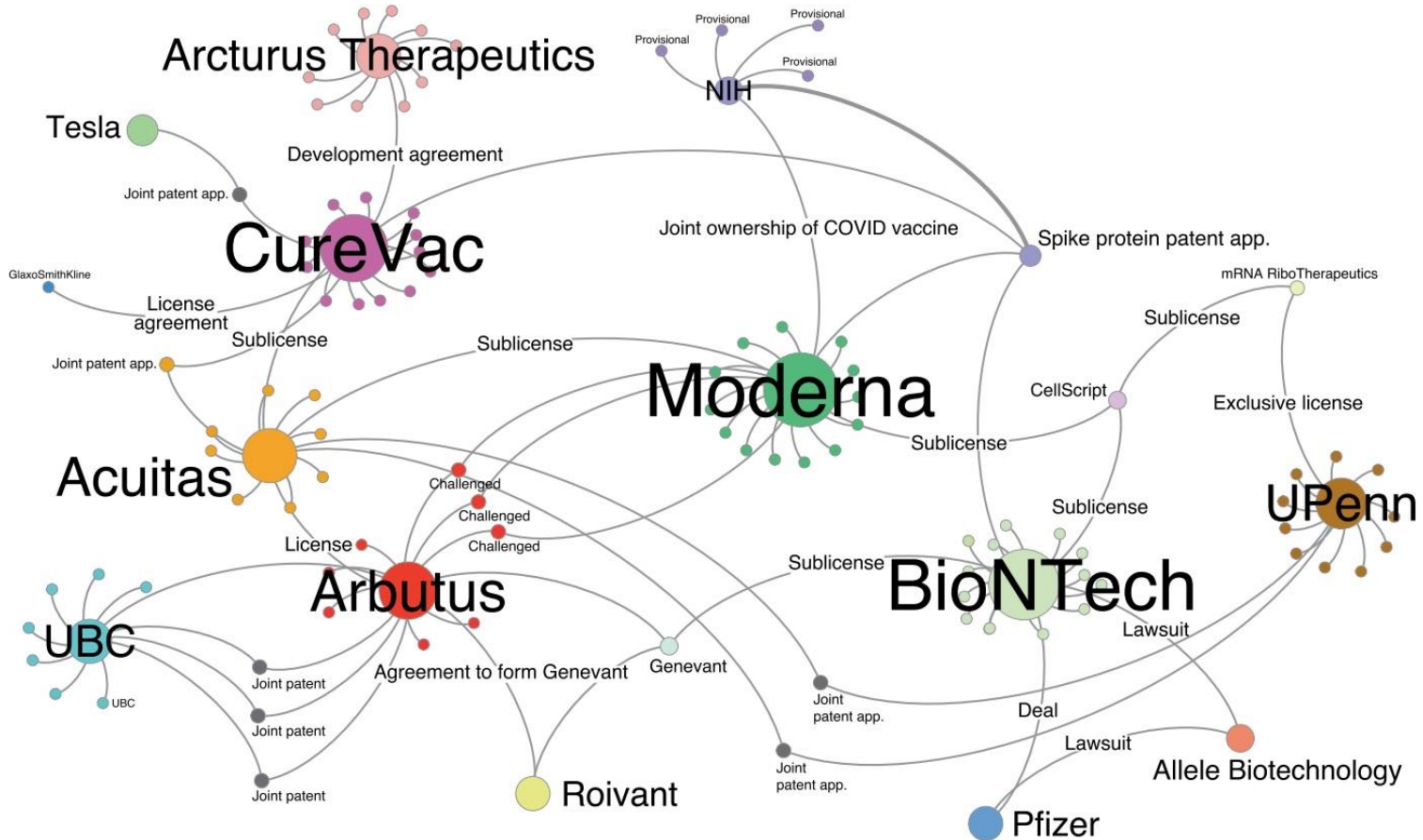


beneficial effects

blocking effects

Indirect Tech Investment (signaling effects)

Signaling Effects: Attracting Cooperation Partners

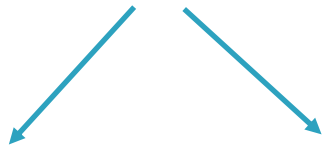


Gaviria/Kilic, Nature Biotechnology, Vol. 39, May 2021, 546



See Haeussler/Harhoff/Mueller, *Research Policy* 43 (2014), 1286

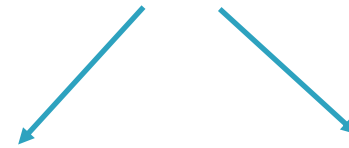
Direct Tech Investment (R & D incentives)



beneficial effects

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Indirect Tech Investment (signaling effects)



*attracting
cooperation partners*

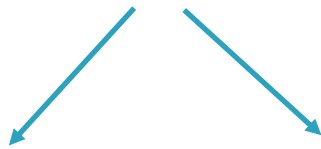
*attracting
funding*

2.

How does patent law treat green technologies?



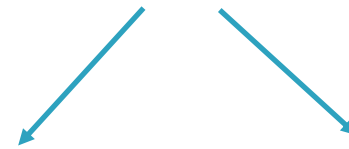
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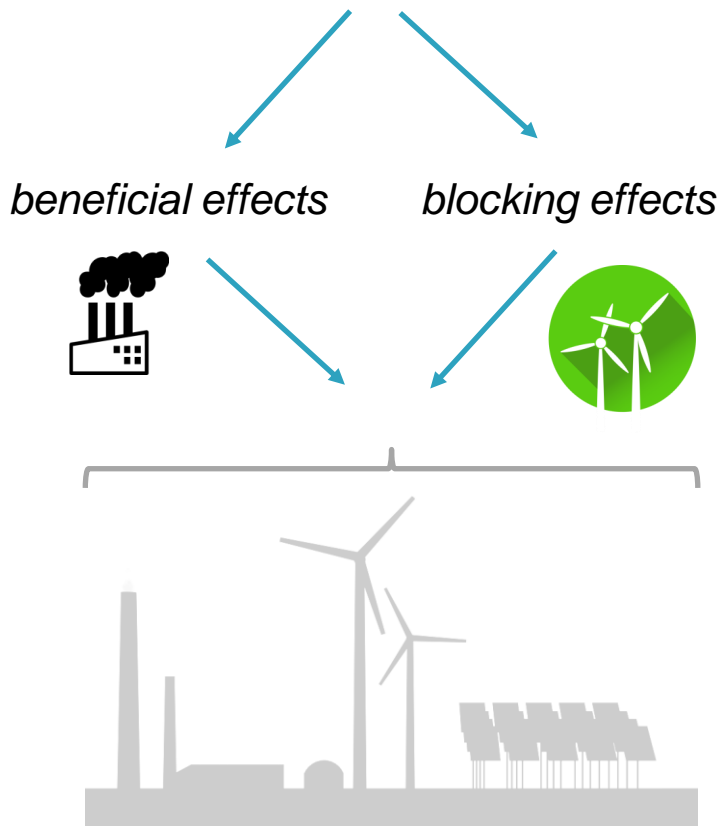
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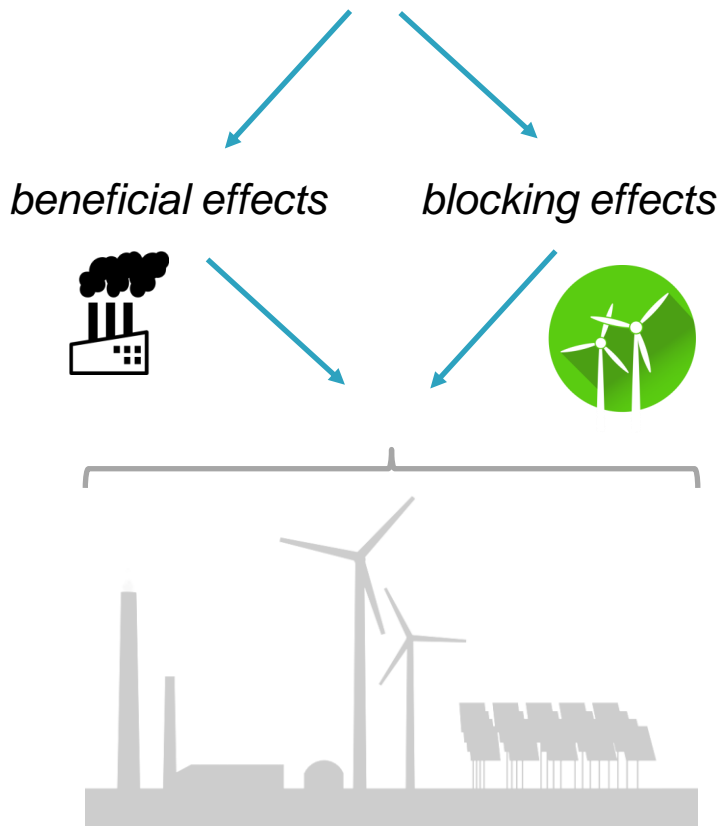
„European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.”

Art. 52(1) EPC

Direct Tech Investment (R & D incentives)



Direct Tech Investment (R & D incentives)



Indirect Tech Investment (signaling effects)



Cooperative Patent Classification (CPC)

Code	Section
Y02A	Adaptation to climate change
Y02B	Buildings
Y02C	Capture and storage of greenhouse gases
Y02D	ICT aiming at the reduction of own energy use
Y02E	Production, distribution and transport of energy
Y02P	Industry and agriculture
Y02T	Transportation
Y02W	Waste and wastewater
Y04S	Smart grids



3.

**What can the patent system
do to increase sustainability?**



1. Reducing the Incentives to Invest in R&D in/of Non-Sustainable Technologies



Denying patentability of non-sustainable technologies?

- problem of assessment
- character of exclusive right (private enforcement)
- better: regulatory law



a) Expending the patent scope or term for green technologies (protection)

- Expending the protection creates more blocking effects
- Additional incentive mechanisms might be better patent-external



b) Reducing blocking effects (implementation)

- Exception to infringement based on sustainability
- No patent infringement if implementor can demonstrate that his/her product is “greener” than the existing products



Can sustainability assessments within finance build upon a classification of a technology as sustainable by a patent office?

- Patent examiners are highly qualified technical experts
- For example: funding for the implementation of a Y02-classified sustainable technology is prima facie sustainable?

Conclusion

1. The main goal of the patent system is to increase direct incentives to invest in R&D. However, patents can also create blocking effects detrimental to investments in R&D.
2. Both negative and positive effects apply to sustainable and non-sustainable technology investments.
3. The patent system can reduce blocking effects detrimental to sustainable technologies by establishing a “green technology” exception in the law on patent infringement.
4. Patents can impact technology investments also indirectly due to their signaling effects. Various initiatives try to intensify these positive effects for green technologies.
5. A linkage between green classifications by the patent offices and the taxonomy for sustainable finance needs to be discussed.

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