

European IP Helpdesk

Stay ahead of the innovation game.

European IP Helpdesk Webinar: Technology Transfer Dr. Christian Hackl

Senior IP Advisor Oct. 26, 2022





European IP Helpdesk

- Service initiative of the European Commission
- Addressing current and potential beneficiaries of EUfunded projects, researchers and EU SMEs
- Free-of-charge first-line support on intellectual property (IP)
- Hands-on IP and innovation management support
- International pool of IP experts from various thematic fields
- Unique cooperation scheme with the Enterprise Europe
 Network: 44 ambassadors from 27 EU countries





confidential treatment of individual IP questions





frequent updates from the world of IP and innovation



practical IP knowledge through high-level publications



Events

info point at key networking events and conferences



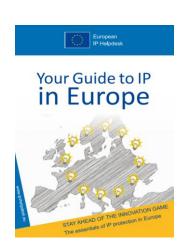


The EC IP Helpdesks





EC IP (SME) Helpdesk Hub – Gateway to Information













- E-learning modules & more
- Guides / Topic, country, sector-specific factsheets / Infographics
- Case studies



Patent Protection for EU funding Beneficiaires

19 JAN 2022 TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Medical Technologies

14 JUN 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Green technologies

17 NOV 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries -Biotechnology

16 MAR 2022

TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Artificial Intelligence

□ Live streaming available



TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries - Digital communication



An IP training series offered by the European Patent Office and the European IP Helpdesk







From Lab to Market – IP & successful TT Training series

02 NOV

TRAINING AND WORKSHOPS

EU - Webinar CIOPORA coop: Enforcement practices for Plant Variety Rights in the EU

Live streaming available

03 NOV

TRAINING AND WORKSHOPS

EU - From Lab to Market - Successful Technology Transfer Journeys - Case: fos4x

Live streaming available

10 NOV

TRAINING AND WORKSHOPS

EU - Webinar: Effective IP and Outreach Strategies Help Increase the Impact of

Research and Innovation

Live streaming available



INFO DAYS

Horizon IP Scan - Info Session

2022

Live streaming available



TRAINING AND WORKSHOPS

EU - Webinar: IP in Business collaborations

for SMEs and Start-ups

Live streaming available



TRAINING AND WORKSHOPS

EU - Webinar: IP in EU funded projects with a special focus on MSCA

Live streaming available



TRAINING AND WORKSHOPS

EU - Webinar EPO Coop: Patent protection for EU funding beneficiaries -Biotechnology



TRAINING AND WORKSHOPS

EU - Webinar: Freedom to Operate

Live streaming available



Registration: <u>www.ec.europa.eu/ip-helpdesk/lab_market</u>



Ambassador Scheme

- Cooperation scheme with the Enterprise Europe Network (EEN): 44 ambassadors – 27 countries
- Building IP capacities among European SMEs
- Overcoming language barriers
- Making the topic more accessible
- Exchange and feedback from ambassadors on needs of SMEs
- Local awareness and training events





Further learning opportunities:

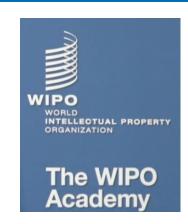
- **European IP Helpdesk Ambassadors and EEN**
- **EUIPO learning portal**
- **EUIPO** Ideas Powered for business website
- **WIPO Academy** / Diagnostics
- The Ideas Powered for business SME Fund
- **IPA4SME**
- **Horizon IP Scan**
- (IP Booster)
- **Horizon Results Booster**
- 10. LeadershIP4SMEs
- 11. EPO Academy
- 12. 4IPCouncil













leadersh











Your product





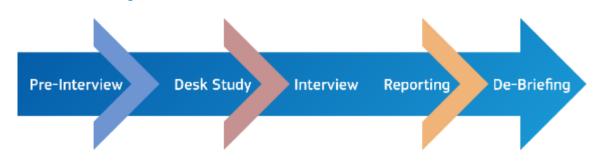


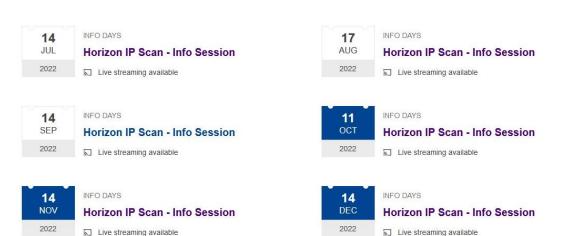
Technology Production products. If you run a technology- related service, but do not manufacture any product, select 'Services' Click to select



Horizon IP Scan

IP Support Service for SMEs in Collaborative EU-funded Research Projects













Thank you!

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- training@iprhelpdesk.eu
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Today's speaker

Dr. Christian Hackl



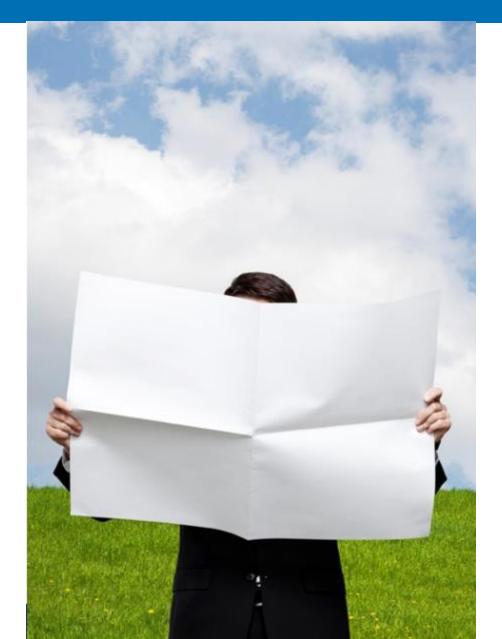


- Managing Director of TUM-Tech GmbH (for 20 years)
- Assistant Professor at the Chair for Technology and Innovation Management (Technical University of Munich: TUM)
- Regular lecturer for the European Patent Office (EPO) / European Patent Academy and the EU-IP Helpdesk
- Author of several publications, e.g. case studies on usage of IPR by companies
- Co-Founder and Managing Director of a start-up (renewable energy)



Roadmap

- I. What is Technology Transfer?
- II. Stages of Technology Transfer
- III. Actors + Assistance
- IV. Case Studies





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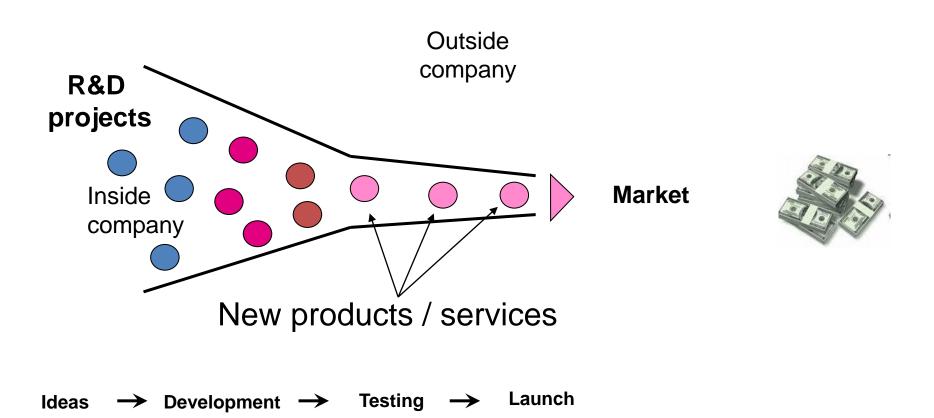


I. What is Technology Transfer?

"Technology transfer is the process of transferring (scientific) ideas / findings or technologies from one organization to another for the purpose of further development and commercialization."

Based on definition of AUTM (Association of University Technology Managers)

Closed Innovation

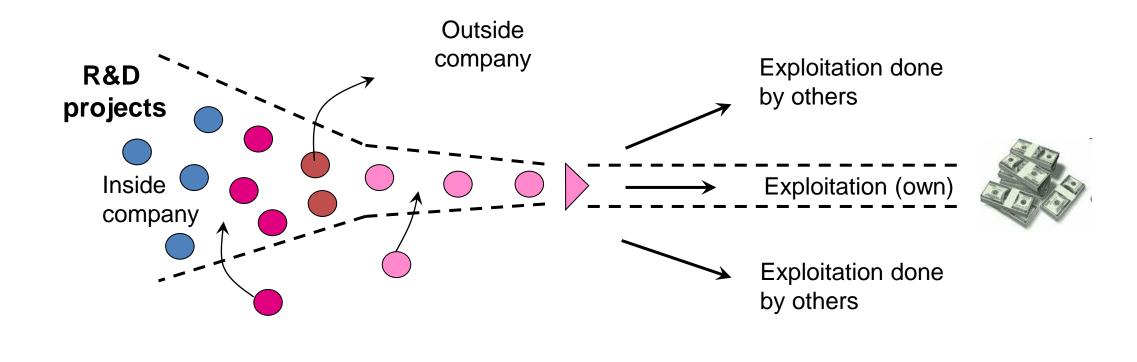


Commercialisation

Open Innovation

Ideas

Development →



Launch

2022

Testing



Technology - Transfer

Technology Provider "supply"

Supply-oriented

Demand-oriented

Technology Recipient "demand"

Types of Partnership:

University ← → Company

Company ← → Company

Company ← → University

University ← → University



Examples for Technology Transfer

- Perceptual audio coding technology
 - Fraunhofer Institute for Integrated Circuits



- Formula of carbohydrates and electrolytes to stimulate fluid absorption...
 - University of Florida



- Method for rating web pages objectively and mechanically, effectively measuring the human interest and attention devoted to them
 - Stanford University





Advantages of Technology Transfer

Reasons for collaborating with a partner:

- Access a technology / know how
- Share risks / costs
- Speed up product development
- Reduce time-to-market
- Generate profits
- Access new markets
- Commercialise ideas



Barriers to Technology Transfer

Potential problems for technology transfer:

- Missing information on available technologies / know-how
- Missing information on available potential partners
- Missing infrastructure / skills to adapt technology / know-how
- Missing funds
- Missing (common) interests
- Missing communication / trust

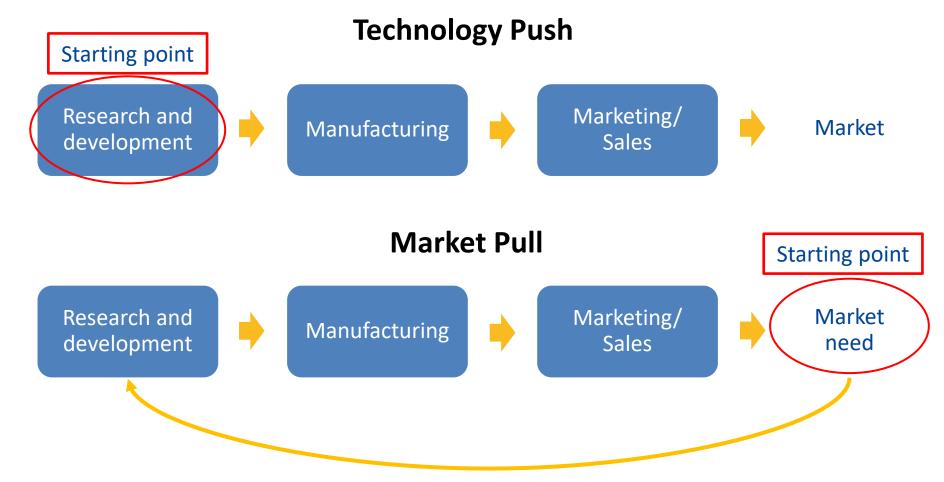


Why do universities engage in Technology Transfer?

- Universities can only cover first part (research) but not later stages (commercialization)
- Licensing revenue
- Regulations
- Reputation of university / researchers (attract talents and money)
- Economic development



Technology Push vs Market Pull (I/II)





Roadmap

- I. What is Technology Transfer?
- **II. Stages of Technology Transfer**
 - Search for technology
 - II. Screening of technology
 - III. Contractualisation
- III. Actors + Assistance
- IV. Case Studies





Information as basis for Tech Transfer

- Challenge: lack of information:
 - Potentially relevant technology / know-how
 - Owner of potentially relevant technology / know-how
- Lack of information in 2 directions:
 - Supply-oriented: who is interested in a certain technology (recipient/demand)
 - Demand-oriented: who is offering a certain technology (offer/supply)
- Support is coming in 2 forms:
 - Tools
 - Actors



Information as basis for Tech Transfer

Finding relevant information is key

- Use specific tools to identify potential partners
- Use patent information
- Using these tools range from easy to complex (specialists available)



https://worldwide.espacenet.com



Espacenet: free access to over 110 million patent documents



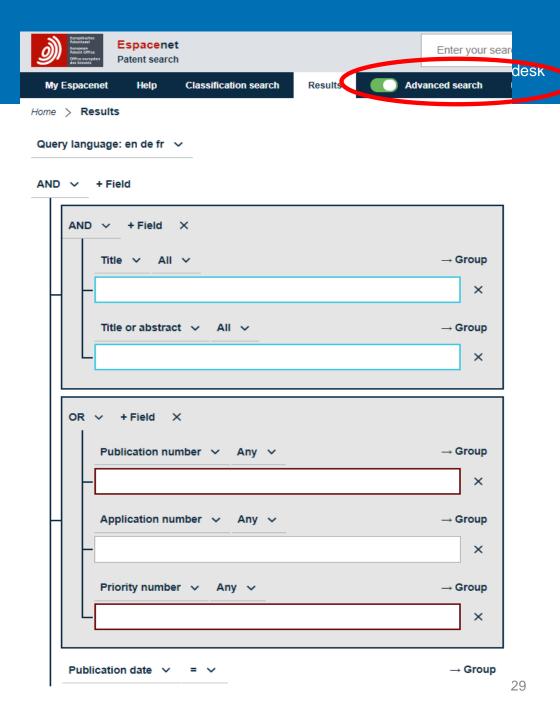


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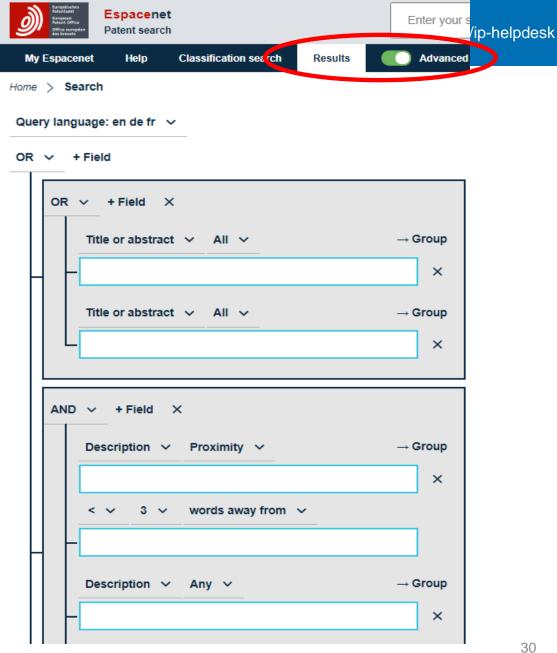
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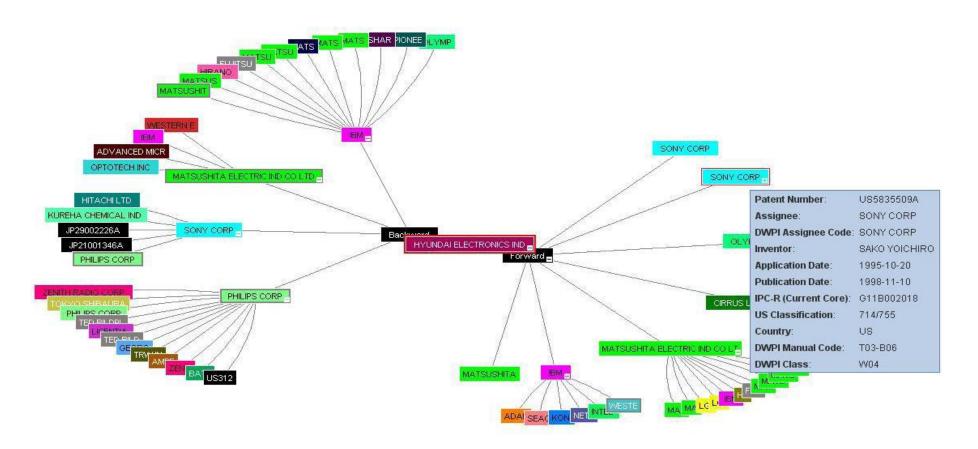






Information gathering

Example of tools: Forward and backward citations





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Screening of technology

2 main criteria for evaluation (of potentially interesting technology for you):

- 1. Legal
- 2. Market



Screening of technology – 2 main perspectives

Technology
Provider
"supply"

Technology Recipient "demand"

Is it possible to go for patent (IP) protection? (new, inventive, commercial application)

Legal

Is there valid IP-protection?

Does it make sense to go for patent (IP) protection?

Market

Does the protected technology/know-how meet your business needs? Is there "good" IP-protection ("good"= fitting business needs)?

Webinar on IP-Assessment



Screening of technology

What (other) topics would you evaluate (focus: demand-side)?

- Legal
- Market
- Technology
- Finance
- Fit to business (strategy)

Webinar on IP-Assessment









Screening of technology – IP Valuation

Once a potential partner (supply or demand) has been identified, one critical step is to assess the value of a technology, through the value of intellectual assets.

Coming soon: Webinar on IP Valuation



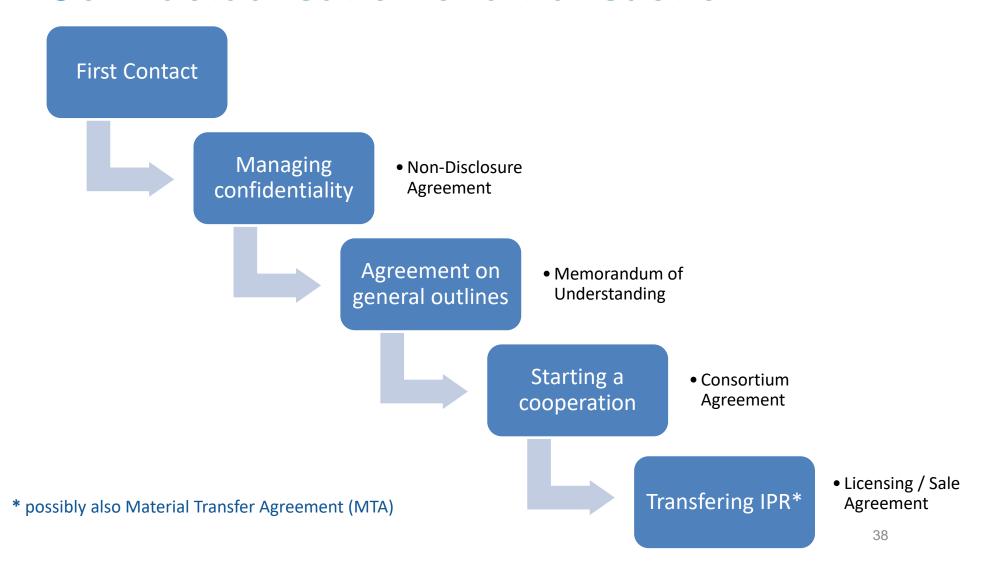
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Contractualisation of a transaction





Contractualisation of a transaction – Non Disclosure Agreement (NDA)

- Sometimes called a Confidential Disclosure Agreement (CDA)
- Legal document between two or more parties
- Agrees that information will be held confidential for a specific period of time
- Should describe how confidential information is identified, handled and stored
- Generally includes a clause about information becoming public knowledge



Contractualisation of a transaction – Memorandum of Understanding (MoU)

- Also named "Letter of Intent" (LoI)
- Documents the intent of two or more parties
- (Mostly) legally non-binding
- Documents main terms (goals, roles, responsibilities, financial obligations) of negotiations
- Often first step towards final contract



Contractualisation of a transaction – Consortium Agreement

- Agreement between two or more partners to collaborate collectively
- Defines roles and responsibilities among consortium partners
- Should explicitly describe how project results (IPR) will be shared and commercialized (including responsibility)
- Should document background IP and ownership



Contractualisation of a transaction – Material Transfer Agreement (MTA)

- A legal agreement that governs the transfer of tangible materials between two organizations
- Defines the rights of the originator of the materials and ownership of any derivative works
- Usually used with biological samples (but also with material samples or chemicals)
- Can be used for transfer between universities, industrial partners or research centers



Options for transfer of IPR

- Transfer of Ownership
 - Selling IPR to other entity
 - One-time transaction
- License
 - Allowing an other entity to use IPR
 - No transfer of ownership
 - Ongoing partnership
- Spin-off
 - Part of existing organization (e.g. student of faculty of university) form a new and independent entity
 - IPR (held by existing organization) form important constituent of spin-off;
 therefore, access rights for IPR have to be defined



Transfer options - an IP license

Indirect exploitation of intellectual property

 Licensing agreement: the owner of IP (Licensor) grants the Licensee the right to use the IP

The Licensor maintains the ownership of the IP



Transfer options - an IP license

- Indirect exploitation of intellectual property
- Licensing agreement: the owner of IP (Licensor) grants the Licensee the right to use the IP

The Licensor maintains the ownership of the IP

Webinar on Commercialisation and Licensing



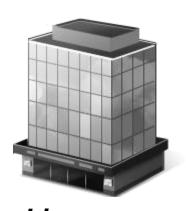
Transfer options - an IP license



Licensor
IP owner (e.g. university, company, individual)

Permission to use IP

Payments



Licensee (e.g. company)



Splitting rights in a partnership

A key issue...

- Determines the subsequent options for Technology Transfer
- Determines the possible profitability of the project

...But the priorities diverge:

- Academic: desire to publish, often owner of the IPR
- Industry: secrecy and commercialization; desire to be unique user of the IPR



Splitting rights in a partnership – joint ownership in IPR

No common European legal concept of joint ownership

Patents in Europe (in general)

- Right to exploit the IP for your own benefit without accounting to the others
- But cannot grant a licence or assign interest of the IP without the consent of the other owners
- → You can use the IP yourself but cannot authorize others to use it without the consent by all co-owners



Splitting rights in a partnership – manage ownership in IPR

Prior to the start of the project: Consortium Agreement

- Definition of the background and IPR of each partner
- Access to the background IPR during and after the project
- Protection and exploitation of the results:
 - Secrecy or patent application?
 - Who is in charge of the application, the extension and the renewal of the rights?
 - Which part of the revenues goes to which partner?



Managing ownership - conclusion

- Splitting the rights in a partnership is a crucial point
- The more you discuss and set-up the repartition of the rights in advance, the better will go on the cooperation with your partners

→ Don't hesitate to dedicate time to discuss this issue - it is not lost time, it ensures the future success of the cooperation



Roadmap

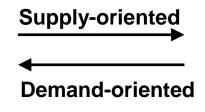
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Professionals experienced in different aspects of Technology Transfer

Technology
Provider
"supply"



Technology Recipient "demand"

Transfer Experts

- Technology Transfer Offices
- Regional actors
- Consulting companies
- Specific programes/service initiatives



Actors & Assistance - where can I go to get information and help?

Professionals experienced in different aspects of technology transfer can be found in ...

- Technology Transfer Offices (University or Public Research Organisations)
- Regional actors (e.g. innovation centers, chambers of commerce, incubators)
- Consulting companies specialized in technology transfer
- Specific programes/service initiatives like the European IP Helpdesk



Technology Transfer Office

- Typically a (small) office set up by a university or research center to manage the protection and commercialization of technologies developed by its staff (supply oriented)
- Will usually perform technology marketing and licensing activities
- May also support start up efforts. Some TTOs may even manage seed capital funds



Regional actors (Innovation Center, Technology Park or Incubator)

- Typically established by a region / state to foster innovation and support public /private research initiatives
- Principally concerned with connecting actors with resources and the communication of new technology opportunities
- May have experts available to provide advice (development of business plans, start up funding, etc.) but usually does not work with very early stage technologies



Consulting company

- May have been created by university or research organization (spin-out) or established by former university TT managers
- Usually staffed with specialists who have different technical backgrounds (scientific expertise, IP expertise, business development, etc.)
- Usually offer full range of services (IP protection, market assessment, marketing, etc.), can work demand-oriented
- Will generally receive some type of compensation upon signing of successful license agreement



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Case study: fos4x (TTF case studies)

https://www.epo.org/learning/ materials/sme/innovationcase-studies/technologytransfer-case-studies_de.html

Seminar: Nov 3rd fos4x Registration:

https://intellectual-propertyhelpdesk.ec.europa.eu/newsevents/eu-lab-market-successfultechnology-transfer-journeys-casefos4x-2022-11-03 en

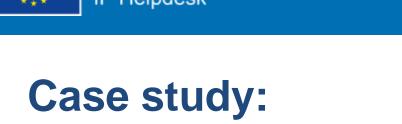


PO TECHNOLOGY TRANSFER CASE STUDIES | FOS4:

Sensors for blades – stress reduction for wind turbines

Encouraged by an IP-savvy university institute director with an entrepreneurial spirit and positive feedback from industry sponsors, a team of young researchers decided to bring their fibre optic measurement technology to market. Access to the university's patent portfolio and research facilities, together with the business experience acquired by one of the co-founders, paved the way to the creation of fos4X. The young company decided early on to focus on applications for wind turbines, and their patents turned out to be crucial in a market of mostly large players. The company was acquired in 2020 by PolyTech on the basis of its innovative technology and IP portfolio.





(SME case studies)

https://www.epo.org/learning/materials/sme/sme-case-studies.html

Orcan Energy



EPO SME CASE STUDIES | ORCAN ENERGY

Recycling waste heat to cool down the planet

A renewable energy company founded in 2008, Orcan Energy offers standard components for heat power generators that recycle waste heat by turning it into electricity, using the Organic Rankine Cycle (ORC), a process similar to that used in steam engines. Having started as a spin-off from the Technical University of Munich (TUM) in Germany, Orcan now has 65 employees. Patents are important, because the risk of Orcan's standard components being copied is high. Eight early patents were filed by the TUM and then subsequently acquired by Orcan. Ownership of these patents was vital in order to attract funding. Orcan co-operates with other companies, but simplifies patent management by avoiding joint ownership. It has a detailed patent protection strategy and understands when to file a patent application and where to file it.

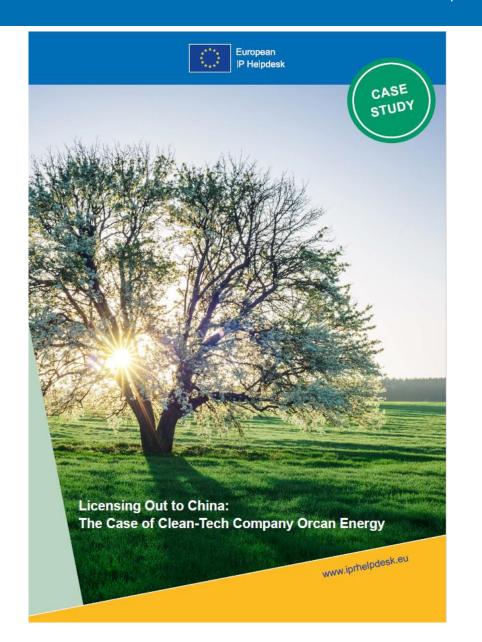




Case study II: Orcan Energy

http://iprhelpdesk.eu/news/case -study-orcan-energy

https://intellectual-propertyhelpdesk.ec.europa.eu/regionalhelpdesks/european-iphelpdesk/europe-casestudies_en





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