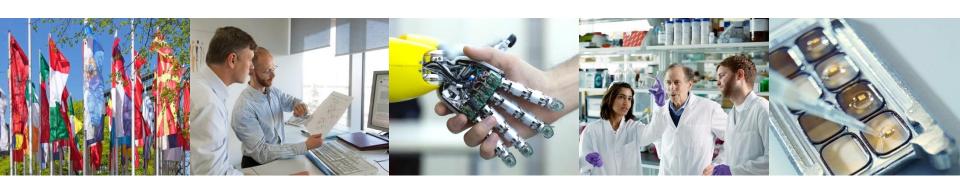


The Role of Institutions in the Commercialisation of Research Results

How the EPO and the EPA support innovation in universities



Contents

The European Patent Office

Patent information

European Patent Academy and awareness-raising events

Our mission

As the patent office for Europe, we support innovation, competitiveness and economic growth across Europe through a commitment to high quality and efficient services delivered under the European Patent Convention.



Today ... an area with some 700m inhabitants

38 European member states

Belgium • Germany • France • Luxembourg • Netherlands Switzerland • United Kingdom • Sweden • Italy • Austria Liechtenstein • Greece • Spain • Denmark • Monaco Portugal • Ireland • Finland • Cyprus • Turkey Bulgaria • Czech Rep. • Estonia • Slovakia Slovenia • Hungary • Romania • Poland • Iceland Lithuania • Latvia • Malta • Croatia • Norway Former Yugoslav Rep. Macedonia San Marino • Albania • Serbia

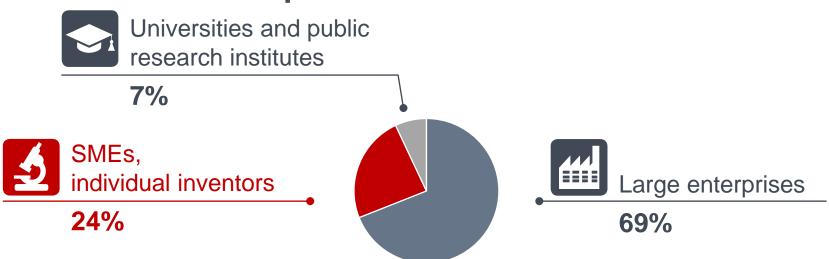
Two European extension states
Bosnia and Herzegovina • Montenegro

Four validation states

Republic of Moldova • Morocco • Tunisia Cambodia



SMEs and universities are important actors for innovation in Europe



The evaluation is based on a representative sample of patent applications treated by the EPO in 2017.

It refers to the European Commission definition of SMEs (2003/361/EC). Data available in government and commercial databases as well as on company internet sites are analysed to allocate the applicant to one of the four categories. Depending on the company policy, the cross-ownership criteria can be difficult to evaluate. To ensure that the results remain statistically significant, no analysis per country or industrial sector is provided.

IPR ownership and revenue per employee by firm size

Of IPR owners of IPR compared with non-owners of IPR

Large companies

+ 4.0%

SMEs

+ 31.7%

Total

+ 28.0%

High quality search and opinion as early as possible



Deliverables

- Search reports and thorough written opinions assessing the patentability of the invention
- Top-up searches at the start of substantive examination to source documents published after the initial search



Objectives

- Identify as early as possible the documents most relevant for subsequent prosecution
- Enable the applicant to assess the merits of the invention early on

Get it right the first time!

Timeliness, an integral part of quality

Search reports

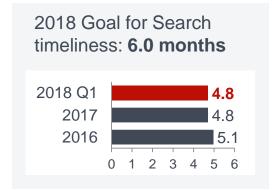
Delivering search reports within 6 months of receipt

Examination time

Reducing examination times to just **12 months** on average by 2020

Opposition time

Completing oppositions in **15 months** on average by 2020







Source: EPO data - Quarter 1 2018.

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Publication

- Patent applications are published on Espacenet, 18 months after the date of filing (or earliest priority date)
- The search report is also published
- Third parties can submit observations at any time prior to grant



Over 100 million patent documents are accessible to the public on epo.org/espacenet

The public can use patent documents to ...

- Find out what technology already exists and build on it
- Keep track of what other inventors and companies are doing
- Avoid infringing other people's patent rights
- Check out where an invention is patented,
 and where it is not



Largest prior-art databases in the world



World's largest collection of documents

- Over 1.3 billion technical records of patent and non-patent literature
- Over 50 million patent documents of Asian origin
- Over 3 million standards-related documents



CPC¹ becoming the world standard for refined classification



EPOQUE search tool: a benchmark used by examiners worldwide

In 48 patent offices, including Australia, Brazil and China



Machine translation from 31 languages into English

Cooperative Patent Classification: classification system for patent documents jointly developed by the EPO and the US Patent and Trademark Office.

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European Patent Academy

The European Patent Academy is an institution of the European Patent Organisation which **coordinates** the EPO's **external training activities**.

Foundation

Set up by decision of the Administrative Council dated 17 June 2004 (former International Academy integrated). The European Patent Academy has been operational since January 2005.

Mission

Promoting and supporting education and training in patent-related Intellectual Property (IP)

IP Program (DG 5.4.4)

Responsible for the European Patent Academy's programme strategy, planning and content.

Five areas:



Academia



Innovation Support



Institutional Strengthening



Professional representatives



Judicial training

Support to universities, TTOs and research centres

- IP lectures, workshops, conferences
- Training and lecturing on demand
- Individual NPO awareness and training activities
- Pan-European Seal programme
- Associations and networks
 - providing experts
 - IP session or workshops
 - financial contribution

Training packages on offer

- IPR workshop for researchers: "From research to business"
- IP management workshop based on CMR case studies
- Study visit scheme
- Online IPR course for researchers

From research to business Workshop upon request

- Format: one or two day workshop
- In cooperation with universities, TTOs, Research institutes or NPO
- The European patent system: facts and figures
- Introduction to intellectual property rights + exercises
- Steps towards a granted patent
- Idea? Think patents (respecting timeline is crucial/coverage of patent) + exercises
- Searching for patents: introduction to espacenet + exercises
- From inventions to successful spin-off: case studies
- Ways of IP exploitation

Products – IP teaching material



- IP Teaching kit
 - IP Basics
 - IP Advanced Part I
 - IP Advanced Part II
 - IP Search tools
 - IP Management
- Course Design Manual
- CMR case studies

Products – CMR Case Studies

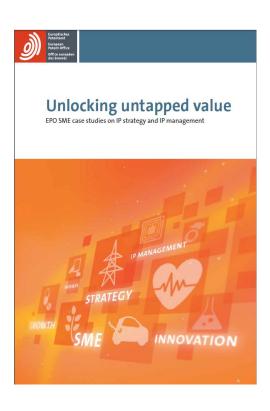
 Academic analysis of 8 very different situations of IP exploitation in industry and academia

Produced with University of Berkeley and its California
 Management Review in co-operation with the EPO

Summer 2013



The EPO SME case studies



Demonstrate that European SMEs:

- Can create strategic value from patents
- Need to know when and how to use patents to support their business
- Will benefit from the Unitary Patent and Unified Patent Court

<u>www.epo.org/sme</u> – download of case studies

Lithoz



ERO CHE CACE CTUDISC LITHOT

3D printing opens up a new chapter for ceramics

A spin-off from the Vienna University of Technology (TU Wien), Lithoz specialises in the 3D printing ladditive manufacturing) of high-performance ceramics. Thanks to the university's far-sighted IP strategy, this Austrian company is able to offer complete systems comprising lithographic printers and materials. Staff are encouraged to develop – and are rewarded for coming up with – new and patentable ideas. For Lithoz, not every invention has to be ground-breaking to be worth patenting, and the company is now focusing on building up its own patent portfolio to strengthen its market position.



- A university spin-off success story:
 - TU Wien developed 3D printing technology in co-operation with *dental* company Ivoclar...
 - BUT secured exploitation rights for <u>non-dental</u> applications enabling the start-up formation
- International expansion facilitated by Ivoclar's broad patent portfolio
- Lithoz is now growing its own patent base though innovation and acquisitions

Marinomed

- Flexible licensing models
- IP specialist early in R&D
- Negotiation
- Litigation as last resort
- Trademarks



EPO SME CASE STUDIES I MARINOMED

Using red algae to fight the flu

Founded in 2006, Marinomed is an Austrian biopharmaceutical spin-off from the Veterinary University of Vienna. The company's main technology platform is based on the natural polymer Carragelose, which is isolated from red algae and is active against respiratory viruses. As a drug discovery company, Marinomed is heavily dependent on patent protection. It has three main patents, which have been validated in almost 100 countries, and a trade mark registered in around 50 countries. The company actively manages its patent portfolio and grants licences for its technology. Marinomed has experienced infringement of its patents, but was able to resolve the cases without going to court.



Products – Awareness material



Brochure: Research? Think patents

Research? Think patents

- a summary of why IP matters to researchers
- targeting mainly researchers



Products – e-learning offer for researchers

 Online IPR course for researchers in cooperation with EPO in three sessions "From research to business" upon request

- A four-hours self-paced training course:
 - "Think patents: the value of patent documentation for innovation and research"
 - Includes three case studies from research results: use patents!
- e-learning centre at the EPO: https://e-courses.epo.org
 Webinars

EPO Research programme

- Financial support to high quality research projects (100.000€)
- Encourages more academic research on the role of patents in the European economy
- Yearly selection of new projects
- Selection process involves review process by external academic scholars
- Open to scholars from various disciplines: economics, law, management, and data sciences
- Launched: 1 March 2017

Raising awareness - European Inventor Award

- Honours outstanding inventors
- Five categories and an international jury of experts
- Popular Prize
- Held each year in a different city in Europe
- 14th edition in June 2019





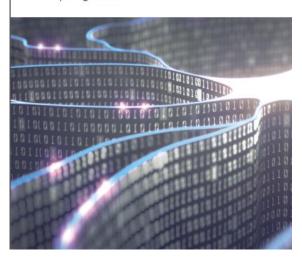
A major event with worldwide media impact



Patenting Artificial Intelligence

One-day conference at the EPO

30 May 2018 European Patent Office, Munich epo.org/Al2018

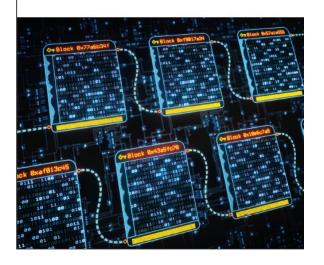




Patenting Blockchain

One-day conference at the EPO

4 December 2018 European Patent Office, The Hague epo.org/Blockchain2018



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