Introduction to Managing Intellectual Property (IP)

Dr. Wolfram Meyer
Malta 15.02.2011
Disclaimer

- Management of Intellectual Property is complex and full of pitfalls. It cannot be covered within this talk. Do not rely on just this talk or any general advice.

- **Always** get specific advice from your local **IP specialist**.

- The presenter has taken all reasonable care to ensure that the content of the presentation is accurate. The opinions of the presenter expressed herein do, however, not necessarily state or reflect those of the EPO, and no responsibility can be taken for the consequences of error.
Outline:

• Changing role of universities
• What is intellectual property (IP) about
• Patent strategy
Mission of the University: traditional role

**ACCUMULATION OF KNOWLEDGE**

**KNOWLEDGE TRANSFER**
to society through: publications, lectures, conferences, sharing of research materials, exchange of researchers and students
Mission of the University: new role

**ACCUMULATION OF KNOWLEDGE**

**KNOWLEDGE TRANSFER**

to society through: publications, lectures, conferences, sharing of research materials, exchange of researchers and students

**ECONOMIC DEVELOPMENT & COMPETITION**

sponsored research, global collaboration, licensing technology to industry, university spin off

IP and innovation management
Traditional University-Industry relationship

Researchers create science ...not products

Companies manage IP for profit and competitive advantage

From Basic Research to Products on Shelves
Licensing income of US universities

The **patent and innovation management** of leading US universities creates a licensing income of millions of dollars per year!

US universities collect on average **3%** of the research budget from licensing royalties compared with **1.1%** in Europe.

=> many European university lack this resource: how can this be countered?
Important constraint...

totally new products and services hardly are successful in short time
may need new business strategies to enter the market

Edward B. Roberts and Charles A. Berry,
“Entering New Businesses: Selecting Strategies for Success”
Sloan Management Review,
Spring 1985 pp 3-17
Mission of the University: new role

IP and innovation management

• Patenting at a university does not necessarily mean prohibiting other scientists from using the invention!

IP and innovation management means that the university is free to choose who to charge for using the invention, and how much. e.g. let other universities use protected invention for free and charge companies a small license fee

• IP enables creativity to be protected
• IP clearly establishes ownership
• IP will attract investment and funding for innovative projects
• IP is an essential business asset in the knowledge economy

=> License fees can be used to finance further research!
University Spin-Off

OXFORD CATALYSTS

Prof. Malcolm Green
Dr. Tiancun Xiao
Integrating IP and innovation management

- Without the IP management the spin off Oxford Catalyst would have probably failed
Patent and Business

Is my invention new?

Which type of IP?

Which solutions already exist?

Am I free to use or do I infringe someone’s patent?

Do you think you can make a profit?

Who are my competitors, or potential partners and what do they do?

What’s going on in a specific technical field?

Is there a need (market) for the technology?

Is now the right time to file a patent?
IP Exploitation: Patenting of chemical aspects

Patents:
- method to roast & grind
- decaffeination process
- freeze-dried product
- caffeine contg. composition
- isolation from natural product
- ...
Which rights do you get for a patent?
IP Exploitation: Patenting of chemical aspects

Patents:

- Prevent others from making, using, offering for sale, selling or importing infringing products in the country where the patent was granted
- Sell these rights or conclude licensing contracts
- For up to 20 years from the date of filing of the patent application

A patent is a prohibitive right
Remember the general criteria for a patentable invention

- Industrial applicability
- New / Novelty
- Essentially differ from that which is already known = inventive step
Which other IP rights do you know?
IP Exploitation: A broader view on innovation

Trade marks:
• Made by "Nescafe"
• Product "Nescafe Gold"

(registered) Designs:
Shape of the jar
Screw cap of container

Trade secrets:
details of granulation

Copyrights:
Instruction manual

Patents:
method to roast & grind
decaffeination process
freeze-dried product
caffeine contg. composition
isolation from natural product
...
# Overview of intellectual property

<table>
<thead>
<tr>
<th>Legal right</th>
<th>What for?</th>
<th>How?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patents</td>
<td>New inventions</td>
<td>Application and examination</td>
</tr>
<tr>
<td>Copyright</td>
<td>Original creative or artistic forms</td>
<td>Exists automatically</td>
</tr>
<tr>
<td>Trade marks</td>
<td>Distinctive identification of products or services</td>
<td>Use and/or registration</td>
</tr>
<tr>
<td>Registered designs</td>
<td>External appearance</td>
<td>Registration*</td>
</tr>
<tr>
<td>Trade secrets</td>
<td>Valuable information not known to the public</td>
<td>Reasonable efforts to keep secret</td>
</tr>
</tbody>
</table>
Managing Intellectual Property
Patent Strategy
Why apply for a patent?

To:

• Provide insurance for one’s invention and investments in developing technology

• Prevent others from patenting the invention and secure one’s place in the market

• Attract investors for further development, and to hold on to current investors

• Sell the patent rights in the future as a single commodity or business

• Marketing value
Which Type of Patent?

**National** patent can be used:
- For protection in the home country market or in a few countries
- As a basis for extending protection to other countries or regions

**International** patent applications can be used:
- For protection in many countries and for extending the pre-publication period (up to 30 months)

**Regional** patent can be used:
- For protection in a number of countries in the same region at a lower cost
Managing Intellectual Property (IP)

When and how?

Filing Country A (e.g. Malta)

<table>
<thead>
<tr>
<th>0</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

International PCT (+30/31)

Regional EPO

EPO Grant

Country X (e.g. GB)

Country Y (e.g. PL)

Country Z (e.g. FR)

Country A (e.g. Malta)

Publication

Country X (e.g. GB)
Priority

Within 1 year from filing you can:

- File your application in other countries with inclusion of priority established in the first country of filing the application

For patent applications this means that:

- Novelty is valid from the application filing date of the first country
From idea to market:

... all this needs to be managed according to a clear university policy and strategy for IP!

... IP rights are an issue for academia

The objective of patent management and exploitation activities is to realize innovations leading to successful new products or services on the market,
- to foster creativity and inventiveness at the university
- to support, manage and protect IP for the benefit of the university’s research
- to educational enterprise and its inventors

Failure to properly consider IP issues can lead to frustrating and costly problems in terms of time, opportunity and money.

=> realistic and efficient management of IP issues is important
Patent management

• Patent strategy
  – Offensive/defensive
  – Internationalisation
  – Kind of exploitation: licensing or own use

• Patent information
  – Keep abreast of technology
  – Avoid infringing patents
  – Understand the competitive landscape

• Communication
  – Compile convincing evidence that your patents are valuable
  – Inform investors and banks, clients and prospective employees

• Maintenance
  – Pay renewal fees, observe deadlines
  – Strengthen important patents and get rid of ones with no value
What not to do when considering filing a patent application

• No publication prior to filing  
  e.g. no article, press release, conference presentation/poster/proceedings or blog entry

• No sale of products incorporating the invention prior to filing

• No lecture or presentation prior to filing  
  except under a non-disclosure agreement (NDA)

• Seek professional advice soon!
• File before others do!
Discover the world of patents and explore the IP landscape!

www.epo.org/patents/learning/e-learning.html
Watch our movie: