



TIPS

TRANSPORT R&D
FOR INNOVATION



The TIPS project is supported by the European Commission through the Seventh Framework Programme for Research and Technological Development / Coordination and Support Actions (CSA)

Potential, rules and enforcement of IP

Which IP right should be used?



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Enterprise and industry





CONTENT:

- 1. Introduction – Industrial Property, Intellectual Property (IP) and Intellectual Assets**
- 2. Growing importance of intellectual property**
- 3. Tools to protect intellectual property (patent, UM, designs and trademarks)**
- 4. Strategic use of IP data in R&D**
- 5. Enforcement of IP**
- 6. IP in practice: lessons from the survey of Czech SMEs**
- 7. Summary**



Industrial Property

Inventions
Brands, logos
Designs

Patents, Utility Models
Reg. Trade Marks
Industrial Designs

These are **registered rights**. Their inventor, creator or designer has no rights until they make a registration. Others can check if these rights exist, and who owns them, by looking at the register.



Intellectual Property (IP)

Inventions	Patents, U. Models
Brands, logos	Trade Marks
Designs	Industrial Designs

Musical, dramatic, literary &
artistic works
Database
Reputation/ Goodwill

Authorship Rights
(Copyright)
Database Rights
Unregistered Trade
Marks

These rights are **unregistered** – they exist from the moment the works are created. The registered and unregistered rights together are called **Intellectual Property**.



Intellectual Assets

Inventions

Patents, U. Models
Trade Marks

Brands, logos

Industrial Designs

Designs

**Musical, dramatic,
literary & artistic
works**

Authorship Rights
(Copyright)

Databases

Database Rights

**Reputation /
Goodwill**

Unregistered
Trade Marks

**Know-how
Trade secrets
Confidential
information**

Restrictive
covenants
Confidentiality
agreements

The formal registered & unregistered rights, when combined with this third group of „soft IP“, are known collectively as **Intellectual Assets**.

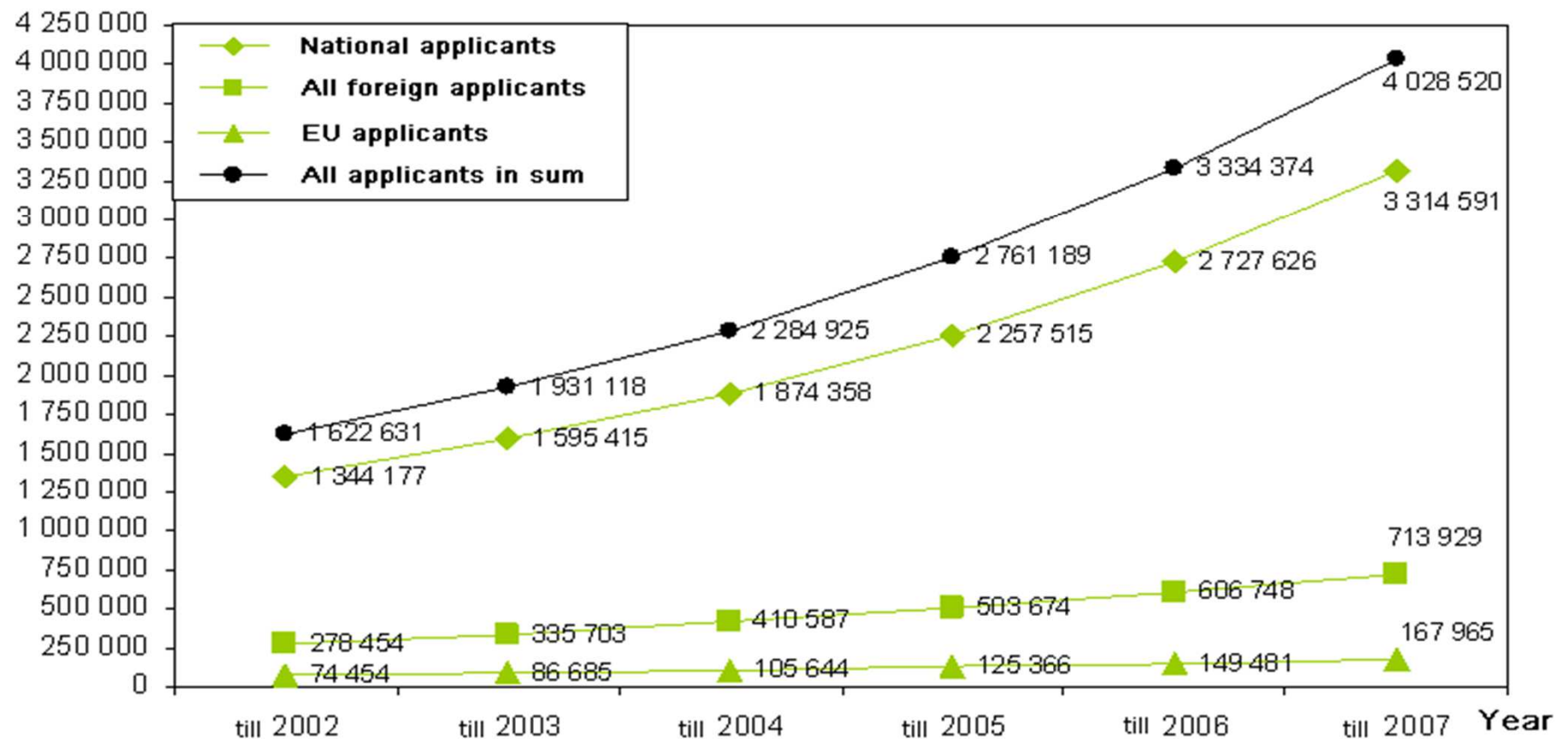
Why is IP important?

1. IP enables creativity to be protected, and clearly establishes who owns what.
2. IP can be sold and/or licensed.
3. It can be a key negotiating tool –a „deal-maker“.
4. IP will attract investment.
5. IP appears as an asset on the company accounts, even if other parts of the business get into trouble.
6. IP is a source of information and knowledge. It enables further technological development based on ideas (both protected and unprotected) that were published and made available to public.

Global Patent Warming

Dynamics of patent application in China (2002-2007)

Number of applications





Variety of tools to protect IP rights:

FORMAL (STATUTORY):

patents (utility models), industrial designs, reg. trademarks, copyright.

INFORMAL (NON-STATUTORY):

- Secrecy
- Fast, flexible innovations
- Complexity of a design
- Complementary services
- Special production or selling capacities
- Specific pricing policy
- Special relationships with customers or suppliers
- Specific work contracts with employees



Patent rights

Patents protect technical inventions which solve technical problems

- *chemicals, products, equipments and apparatus, processes and methods*

Patent requirements:

A patentable inventions must be:

1. Novel/New (Not already been disclosed to the public)
2. Contain an inventive step
3. Usefulness (e.g. Capable of industrial application)



Utility Model – not quite a patent

The Utility Model:

- Is an exclusive right
- Grants protection for up to 10 years
- Covers products but not methods/processes
- Protects minor inventions
- Can be converted to a patent application
- May be granted without examination
- Fees for application and maintenance are cheaper than patents
- May be also sold or licensed



What are Designs

Designs protect: "The outward appearance of a product or part of it which results from lines, contours, colour, shape, texture, materials and/or its ornamentation" (Office of Harmonization for the Internal Market "OHIM")

Designs do not protect:

- the technical function of the product
- the product itself
- the capacity of a sign to be distinctive

Term: Registered Designs: 5 years renewable 4 times => maximum of 25 years (Note: Registration needs to be filed within 1 year of disclosure to the public)
Unregistered Designs: 3 years



What is a Trademark

- A trade mark is a sign, or a combination of signs, which distinguishes the goods or services of one enterprise from those of another.
- May be registered ® or unregistered TM
- Helps consumers to recognise and decide on goods and services based on their reputation and quality
- Term: up to 10 years, renewable for 10 years for life of trademark

Trademarks and Brand Recognition

Brand Recognition:

"A brand is a collection of perceptions in the mind of the consumer."



One product – many IP rights



image © NOKIA®

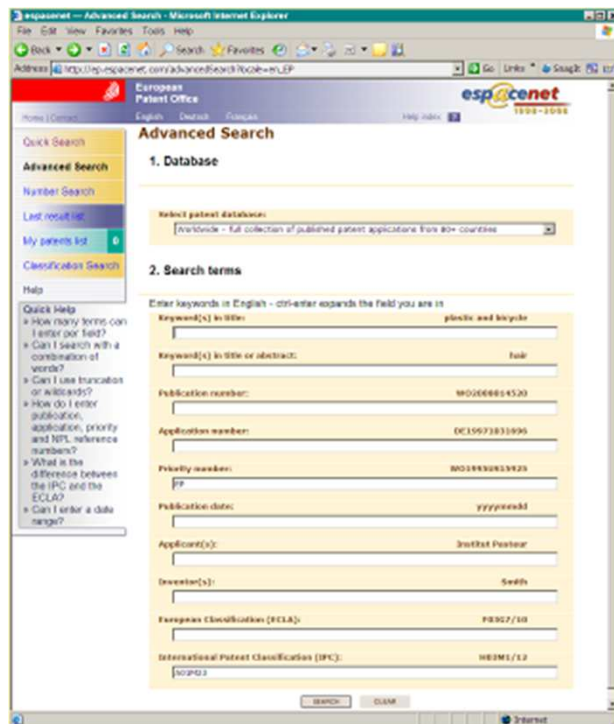
- **Registered design** – phone shape
- **Trade mark** - "NOKIA" & start-up tone
- **Copyright** - software, ringtones & images
- **Patents** – technology to operate and produce
- **Trade secrets** – technical know-how kept „in house“ and non-published



Not only protection: strategic use of IP data

- 1. Patent register and databases are unique sources of research information, a large part of which has never been published elsewhere. Data is publicly available (e.g. <http://ep.espasnet.com>).**
- 2. A substantial part of information contained in patent applications is not protected and, therefore, can be used by everyone for free.**
- 3. Patent databases may serve as a tool of business survey, leading to new customers, suppliers or new partners. It also may alert on competitor's steps (i.e. advanced competitive intelligence).**
- 4. Exploiting IP information is completely independent and separated from patent ownership, licensing and IPR enforcement.**

The esp@cenet database has over 65 million documents!



<http://www.epo.org/patents/patent-information/free/espacenet.html>

Various levels of IP strategies

4. Strategic (long-term) approach to IP
(case „Apple“ or „Xerox“)
3. Exchange strategy (profit-oriented)
(case „Sony vs. Samsung“ in 2004)
2. Defensive strategy
(case „Mobil Chemical and the plastic bags of early 80’s“)
1. Non-strategic



IP in SMEs Practice

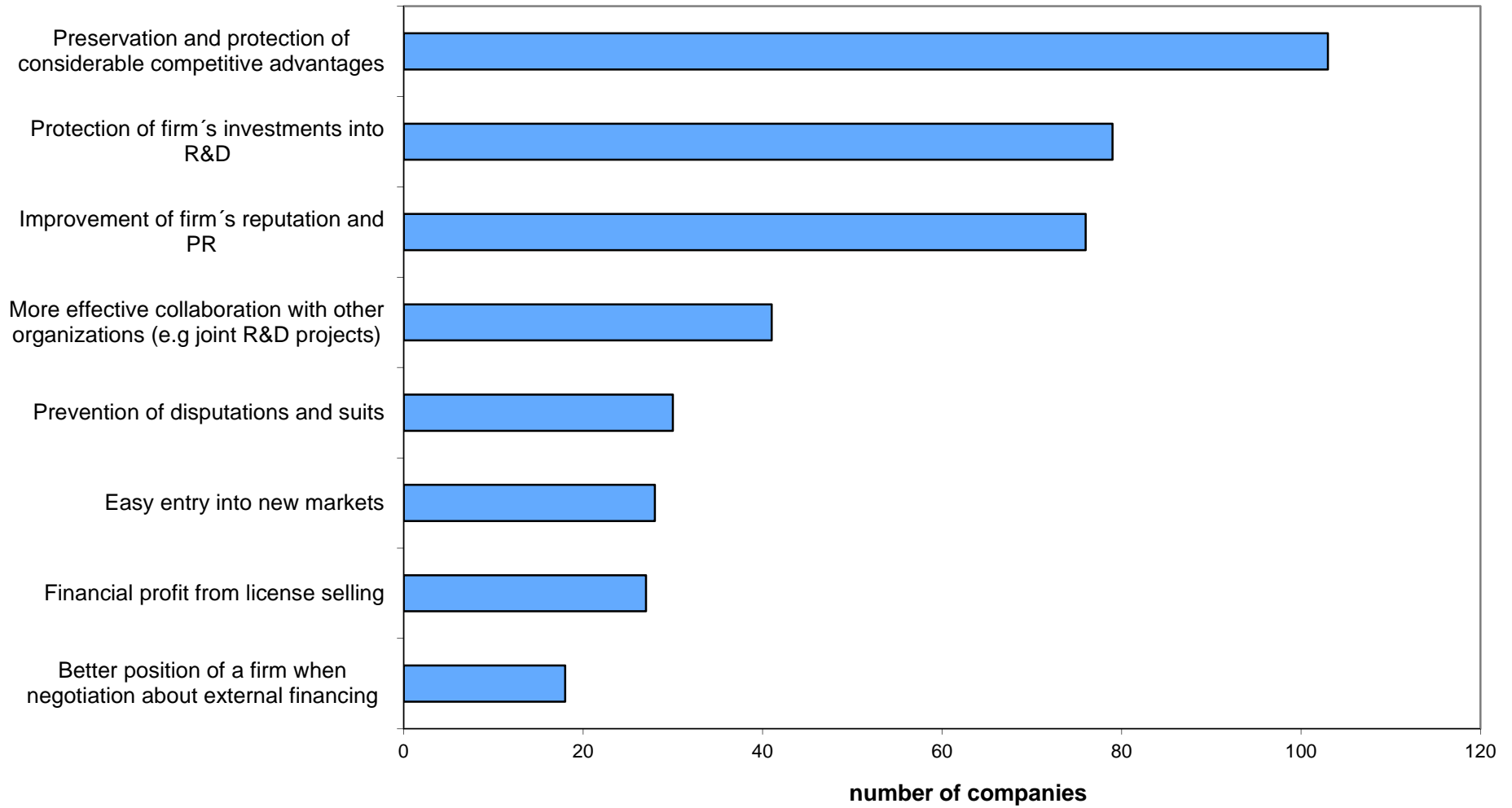
Empirical Research of the Technology Centre ASCR (2011-2012)

- **What is the importance of IP (and other intangible assets) for Czech SMEs?**
- **What is the policy the SMEs apply toward their IP?**
- **Which IP tools and/or strategies are used, in which sectors and why?**
- **What is the real importance of patents for SMEs?**

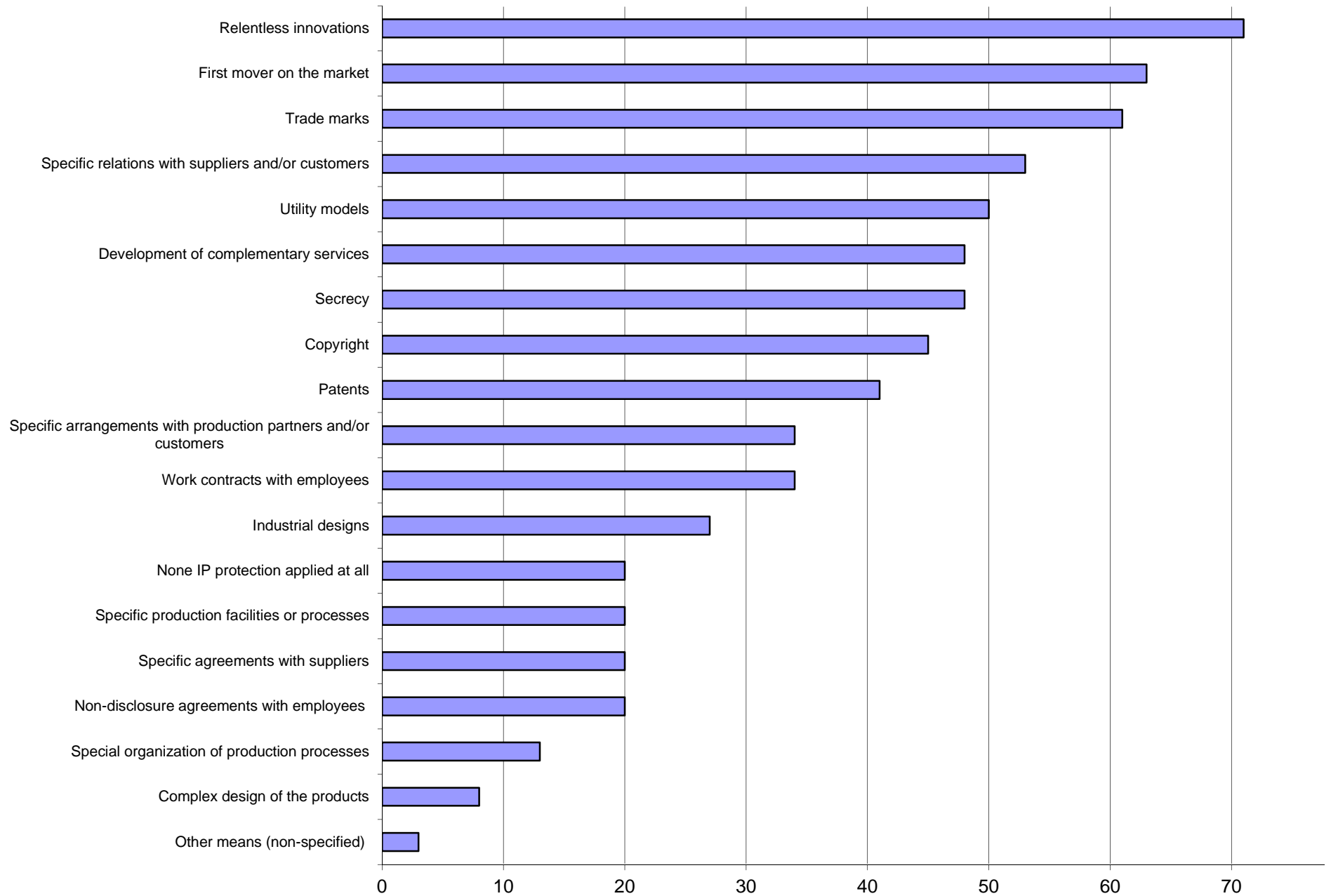
Assets the SMEs value most (in 1 to 5 scale)

- Reputation of a firm 4,5
- Qualification of the employees 4,3
- Working and social climate in a company 4,3
- Loyalty of the employees 4,3
- Motivation of the employees 4,2
- High quality technical hardware 4,0
- Financial sources and reserves 3,7
- Agreements with suppliers and/or customers 3,3
- Effective organization of production processes 3,1
- Secret know-how and processes 3,0
- Lists of customers 2,9
- Marketing experience and strategies 2,7
- Production buildings, offices and labs 2,6
- Advertisement campaigns 2,3
- External know-how 2,3
- **Patents and utility models owned by a firm 2,2**
- **Registered trade marks 2,1**
- Unprotected product designs 1,8
- **Registered industrial designs 1,8**
- **Licensing from other parties 1,5**

Why firms protect their IP?



Various tools that SMEs use to protect their innovations



Industrial sectors in which patents are frequently used

"New technologies and materials" (nano-and microtechnology)	84 %	(n =19)
Biotechnology	71 %	(n = 7)
Pharmaceuticals and cosmetics	54 %	(n =13)
Ecology	54 %	(n =11)
Alternative and renewable energy sources	53 %	(n =13)
<hr/>		
Automotive, aerospace and rail industry	42 %	(n =21)
Electrical industry	41 %	(n =22)
Engineering	38 %	(n =47)
Food and agricultural production	38 %	(n =13)
Chemical, rubber and plastics industry	31 %	(n =13)



Sectors in which patents are seldom used

Textile industry	30 %	(n =13)
Consultancy, financial, and education services	16 %	(n =25)
Metallurgy and mining industry	14 %	(n =19)
Information and communication technology (ICT)	11 %	(n =36)
Construction and building industry	6 %	(n =18)
Paper production and printing industry	0 %	(n =6)

Why you go for a patent?

	Number of companies
• Protection against copying and imitations	60
• Contribution to the firm's IP and reputation	39
• Patent fencing of potential competitors	31
• Prevention of potential suits	28
• Direct financial profit from the use of patents within the firm	26
• More effective cooperation with other companies	15
• Financial profit from patent licensing	13
• Other reasons (non-specified)	7

Remark: Only actively patenting firms (97) were examined

Conclusions from the survey I

- Firm reputation, human skills, motivation & loyalty, and stimulation working climate are the key values for SMEs. Registered IP represents substantially lower value. Secret know-how is valued more than registered IP.
- Speed and flexible relentless innovations are the most frequently used tools the SMEs apply to protect their innovations.
- Larger firms tend to apply formal (statutory) IP means more frequently than SMEs.
- Patents are widely used in a few sectors only (e.g. „new technologies“, biotechnology, pharmaceutical industry, environmental protection, alternative and renewable power production).

Conclusions from the survey II

- The reasons why firms apply for patents are highly complex. Various strategic motivations dominate over purely defensive reasons.
- There are many sectors in which patents are seldom used (e.g. ICT, textile, paper, building, food, metallurgy and KIBS).
- Our results indicate that the current state support that persuades SMEs to apply for patents (and other formal IP tools) is probably flawed and shall be re-considered.



Summary: Key Rules for a Success

- You don't have to be an expert – there are plenty out there!
- Register rights – if you don't own it or you can't protect it! Be proactive!
- Prevention is better than cure.
- Use layered defence – don't rely on one single IP tool.



Internet Resources:

- <http://www.wipo.int/portal/index.html.en> (WIPO)
 - WIPO SME Portal
<http://www.wipo.int/sme/en/index.jsp>
- <http://www.ipr-helpdesk.eu> (IPR Helpdesk)
- www.china-iprhelphelpdesk.eu China IPR Helpdesk
- www.asean-iprhelphelpdesk.eu ASEAN IPR Helpdesk
- www.epo.org (European Patent Office)
 - EPO SME Case studies
<http://www.epo.org/focus/innovation-and-economy/sme-case-studies.html>



Business Support on Your Doorstep



Thank you for your attention.

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