

The future of the Patent system in Europe
Background and Purpose

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On the use of patents

- About 36% of patents are not used by their applicants either for commercial and industrial applications or for licensing.
- Smaller firms are more likely to use their patents. The share of unused patents by small firms is about 20% while the share of unused patents by large firms is about 41%.
- The most frequent case of unused patents is that large firms, with sizable R&D budgets, produce by-product innovations that they patent but do not exploit either internally or through licensing.
- More science-based patents are less likely to be used, as implied by the natural distance between more scientific research and applications. Patented innovations that rely on users as a source of knowledge are more likely to be used.



The value of patents

- Patents are more likely to be licensed when they are owned by smaller firms. However, there is a significant higher probability of small firms of being involved in a patent litigation suit, which points to high relative value the patent has for the small companies compared to larger ones. This tendency is independent of the company's technological background.
- Belonging to a large firm reduces the probability of licensing by 14.8 %. Large firms are less likely to license even when they are willing to do so. The probability that a large firm offers a patent for licensing is about 20% lower than a small firm, while the conditional probability of an actual license is about 14% lower.
- It is estimated that today, on a scale from < 30K to >300M, the value of patents is on average 250-300K euros

Firm creation and the value of patents

- Many start-ups in biotechnology, semiconductors, instruments and chemicals use intellectual property as core asset. Quite often a patent, or possibly a group of patents, is the key element around which a start-up organizes its entire business.
- Small firms and individual inventors significantly contribute to entrepreneurial activities based on patents. This occurs especially when patent protection is broad.
- More generally, the results from our studies on patent licensing, patent use and new firms all point out that patents by small firms are more likely to be licensed, less likely to be held unused, and more likely to be used by others in new entrepreneurial ventures.
- Thus, from a policy perspective it would seem that policies that facilitate the formation of smaller technology-based firms can have reinforcing effects because these firms are then more likely to spawn new firms. But since small firms often miss the complementary assets for entering in different markets, and they are more likely to keep with their specializations.



KEY FACTORS FOR INNOVATION IN EUROPE

1. Patents matter for innovation – The level of patenting reflects the innovation performance. Taking Lisbon seriously therefore means taking patents seriously ! The European Innovation Scoreboard shows a strong correlation between patenting activity and good innovation performance. Countries with a high innovation performance are characterised by high levels of patenting and by high use of other rights, such as designs and trademarks.
2. Patents are an essential part of a business strategy – Patents protect products on the market, offer the possibility of licensing revenue and make for bargaining chips. But many companies still do not take advantage of the benefits.
3. Governments need not just ensure that the instruments are in place but also that companies know how to use them and when not to use them. Practical support is key.



Commission DG ENT: IPR Initiative

Many SMEs are still reluctant to use patents. Companies rely more on secrecy than on patents to preserve their intellectual property. Among smaller businesses, secrecy was rated as nearly twice as important as patents. Even if larger enterprises make more use of patents, they still rely more on secrecy than on patents.

Policy recommendations will be drawn up by end-2006, based on three building blocks:

1. A statistical report will analyse how companies in different sectors use IPR.
2. Our Europe INNOVA partners, who represent industry stakeholders, will report on the reasons for companies using or not using intellectual property rights, and possible policy measures in response. They will give us insight into different ways patents are used in different sectors; for example licensing with the aid of innovation agencies; seeking partnerships with big partners; or co-ownership of patents by incubators.
3. A benchmarking study on publicly-funded IPR support services was launched in January 2006. It has already identified 150 support measures used by Member States. Now it will assess their efficiency, and identify good practice.



The Patent system: Commission perspective

Lisbon 2000: Research and Innovation

crucial for competitiveness of European industry, growth, employment and social cohesion – need to promote

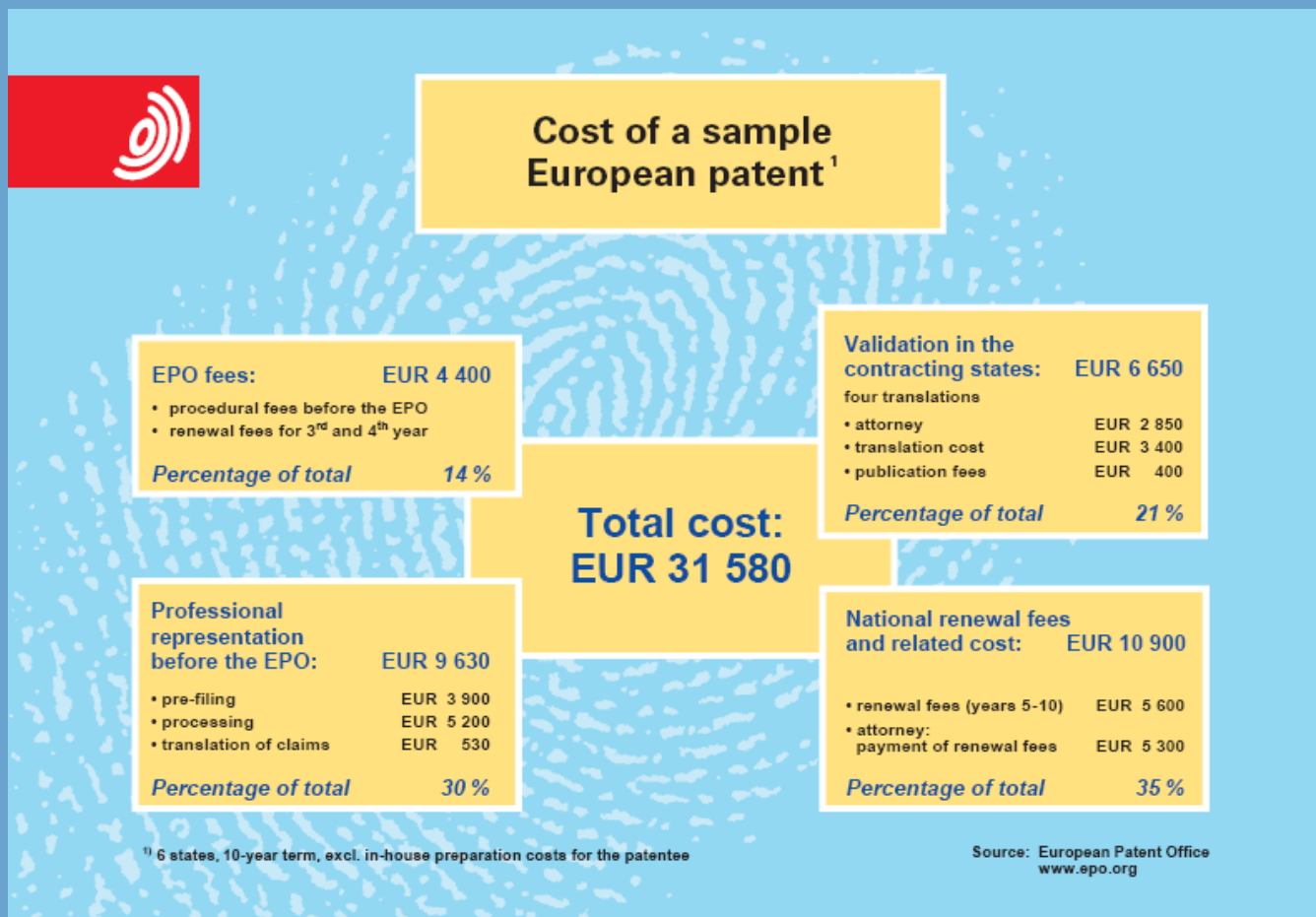
Renewed Lisbon agenda, Commission 20.7.2005: «Common Actions for Growth and Employment: The Community Lisbon Programme»

- support of knowledge and innovation in Europe,
- improvement and simplification of the regulatory framework in which business operates

Member States' National Programmes



Cost of a sample European Patent



Compared to US and Japan

Total cost (excluding R&D)

- In total, a European patent costs **EUR 40,350** – EUR 46,700 using the PCT route (international and European phase, average of 8 validation countries) and EUR 30,530 using the Euro-direct route (average of 6 validation countries). These are average figures, including pre-filing expenditure, processing and validation. Japanese companies and SMEs spend above-average budgets on EPO patents.
- For both procedures, validation costs account for one third of the total budget. US companies spend an even larger share of their total budget on validation (44% for 6 countries on average).

Cost of obtaining patent protection in the US and Japan (excluding R&D)

- For European applicants, the additional average cost per PCT patent (excluding the cost of first filing and the international phase) totals **EUR 13,270 in the US** and **EUR 9,800 in Japan**, which appears to be much less expensive. Only translation costs are higher for Japan than they are for the US (averaging EUR 2,610 for Japan compared to EUR 1,340 for the US).

Background: Industrial Property Law Commission perspective

Common EU interest

- To get the regulatory framework right to stimulate innovation and to create jobs
- Access (cost) and Enforcement (litigation)
- Right of initiative
- Facilitator



The solution: A Community patent

A major single initiative under the Lisbon agenda

- Unitary Community patent, covering the whole EU
- Available through single application to the European Patent Office
- Enforced through a single Community Patent Court
- Cost-effective, saving money for innovation
- Not mandatory – but an option for applicants

3 March 2003: Common political approach

- Jurisdiction: single Community jurisdiction
- Languages: translation of patent claims
- EPO/NPOs: partnerships on certain work
- Distribution of fees : between NPOs/EPO
- Review clause : solution not carved in stone if improvements necessary



Cost of a sample Community patent

Model	Translation costs (€)	Procedure fees (€)	Agents fees (€)	Maintenance fees (€)	Total (€)
Community Patent Agreed compromise:	4845	4300	5500	8500	23145

1. **What we mean by an "average" patent.** The current average European patent has 17 pages of description and 3 pages of claims. It designates 8 Member States and is maintained in force for 10 years. Designating more countries and/or maintaining the patent for longer incurs greater costs. It is assumed that an "average" Community patent will be the same size and will also be maintained for 10 years; however Community patents are automatically valid in the whole of the EU, so the question of designations does not arise.

2. These figures assume translation costs based on €85 for claims and €76 for description, and use estimates of procedure and agents fees given in the April 2002 paper of the Spanish Presidency. The Community patent under the agreed compromise will involve translation of the claims only into all official languages (19 translations), whereas the figure for the current "average" European patent valid in the 8 most frequently designated contracting parties requires 6 translations of the full patent specification.

3. Maintenance (renewal) fees are paid annually to maintain a patent in force. The figure of €8500 reflects the accepted estimate of the fees payable over the lifetime of a current average patent and represents the agreed ceiling for the Community patent.

Improving the European Patent

On Cost:

The London Protocol

On Enforcement:

European Patent Litigation Agreement

Translation: cost comparison Compat/EPO/LP

Model adopted	Basis of calculation	Translation costs per granted patent(€)
Translation of <u>full patent in all languages</u>	19 x full patent (19x 20 pages @ €85)	32300
<u>Current European Patent system – average patent</u> (8 designations, 6 translations)	6 x full patent (6x 20 pages @ €85)	10200
<u>Original Commission proposal</u> of 8/2000	2 x claims (2x 3 pages @ €85)	510
<u>March 2003 compromise</u> : a Community Patent with translations of claims into all languages	19 x claims (19 x 3 pages @ €85)	4845
<u>London Protocol</u> –European Patent system - average patent (8 designations)	2 x claims 2 x full translation Translation description into EN ? Claims into non-EPO languages ?	5000

Launch of dialogue with interested parties

Questionnaire 16 January 2006

- **Focus on structure of patent system in Europe**
 - (rather than substantive patent law)
- **Focus on overall legal framework**
 - (not accompanying measures (awareness raising, training etc.)

Questionnaire 16 January 2006: 5 Sections

1. Basic principles and features of the patent system
2. The Community patent as a priority for the EU
3. The European Patent System – in particular EPLA
4. Approximation and mutual recognition of national patents
5. General



Questionnaire 16 January 2006

1. Basic principles and features of the patent system

- clear and balanced substantive rules
- transparent, cost effective and accessible processes
- predictable, rapid and inexpensive resolution of disputes
- due regard to other policy interests



Questionnaire 16 January 2006

2. The Community patent as a priority for the EU

Council's Common political approach of 3 March 2003,

(Council document 7 March 2003 7159/03 PI 24)



Questionnaire 16 January 2006

3. The European Patent system and in particular EPLA

- EPLA: optional litigation system for EPC States
(EPC States: EU Member States + accession States Bulgaria, Romania + Candidate State Turkey + Switzerland + Liechtenstein + Monaco + Iceland)
- Latest draft of 7 December 2005, WPL/10/05
- European Community competences and role



Questionnaire 16 January 2006

4. Approximation and mutual recognition of national patents

Article 308 EC - Article 95 EC

For example:

- patentability criteria covered by EPC
- specific issues not specifically covered by EPC
- mutual recognition within EU

Conditions for use of Article 95 EC

Questionnaire 16 January 2006

5. General

« You and patents »



State of play - 2/6/2006

Total number of replies > 2.600

- IT big companies 28
- small companies (including some 250 ICT) 850
- Other sectors/companies, including:- non specific 82
- Industry associations 78
- Patent specialists (attorneys, agents, lawyers 385
- Other associations, including:- non specific 51
- Academic institutions 15
- Public institutions (i.e. Governments, PTOs, etc.) 33
- Citizens / individuals 170
- FFII standard answers 490
- Florian Müller standard answer 96



Next steps

- Consultation open to all
- Consultation to closed on 12th April 2006, but comments still coming-in
- Public hearing on 12th July 2006
- SF Presidency
- DE Presidency



Thank you for your attention

- http://europa.eu.int/comm/internal_market/indprop/index_en.htm