Economic Perspectives on the unitary patent protection in Europe

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‘There are some things in our strategy that you will have heard before. We make no apology for that. They would not be here if they had been done properly in the last ten years. To give some examples: it is not acceptable that because we do not have a Community patent, European companies face translation costs of around €3000 on each patent. It is thirteen times more expensive in the EU than in the US and eleven times more expensive than in Japan’ [Barroso, 2010].

In December 4th, 2009, EU industry ministers meeting in the Competitiveness Council claimed to have, at last, overcome problems that have prevented the EU patent from becoming a reality.
Main conclusions

- EU patent is key for Europe, for more reasons than mere costs of patenting....

- Suppress two of the three layers (National patents and European patents)

- Radically change the governance of the system

- Need SME-based fees
**Todays’ menu**

- A necessary reform
  - Why no EU patent for 50 years?
  - Strengths and weaknesses of the proposed agreement
  - Policy recommendations

**Figure 1: A simplified picture of the European patent system**

- Firm Z creates a new invention...
- Commercial exploitation?
  - Yes
  - Keep secret?
    - No
    - Patent it? Yes
  - No
- ...and decides to file a patent...
- ...then at the EPO
- ...if granted it must be validated, translated and renewed in the relevant member states
**Cost heterogeneity and litigation activity**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>France</th>
<th>The Netherlands</th>
<th>United Kingdom</th>
<th>Cumulative 4 EPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Instance ('000s)</td>
<td>50 to 250</td>
<td>50 to 200</td>
<td>60 to 200</td>
<td>150 to 1,500</td>
<td>310 to 2,150</td>
</tr>
<tr>
<td>Second Instance ('000s)</td>
<td>90 to 190</td>
<td>40 to 150</td>
<td>40 to 150</td>
<td>150 to 1,000</td>
<td>320 to 1,490</td>
</tr>
<tr>
<td>Total ('000s)</td>
<td>140 to 450</td>
<td>90 to 350</td>
<td>100 to 350</td>
<td>300 to 2,500</td>
<td>630 to 3,640</td>
</tr>
</tbody>
</table>

**Litigation activity (in 2004)**

<table>
<thead>
<tr>
<th></th>
<th># of patents in force</th>
<th># of EP &quot;nationalized&quot;</th>
<th># of patents litigated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>410,000</td>
<td>307,488</td>
<td>200 (nullity)</td>
</tr>
<tr>
<td></td>
<td>380,000</td>
<td>252,798</td>
<td>500 (infr.)</td>
</tr>
<tr>
<td></td>
<td>141,000</td>
<td>121,337</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>360,000</td>
<td>257,600</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>85</td>
</tr>
</tbody>
</table>

Note: Estimations apply to a patent with an amount in dispute equivalent to about €1 million.
## Institutional heterogeneity

<table>
<thead>
<tr>
<th>Institutional design</th>
<th>Germany</th>
<th>France</th>
<th>The Netherlands</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judicial system</td>
<td>Dual</td>
<td>Single</td>
<td>Single</td>
<td>Single</td>
</tr>
<tr>
<td>Specialized court</td>
<td>Court</td>
<td>Chambers</td>
<td>Chambers</td>
<td>Court</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality of proceedings</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No of judges legally qualified</td>
<td>62</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>...out of those technically qualified</td>
<td>46</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Composition of the court</td>
<td>3 or 5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Damage Assessment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Lost profits</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>ii. Licencing fee</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>iii. Infringer’s profits</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Choice for plaintiff</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
THE SEVEN DEADLY SINS OF EUROPE’S FRAGMENTED PATENT SYSTEM

- Affordability (high absolute and relative costs)
- Low quality: NPOs grant patents independently of the EPO, inducing heterogeneous quality standards
- Complexity
- Uncertainty: parallel litigations with divergent outcomes
- Lack of coherence: ‘parallel imports’ and ‘time paradoxes’,
- No coordination at EU level
- Weakness in global negotiations: PPHs

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Two official fig-leaves...

- Language regime
- Centralized patent litigation system
  - 50 years to ask advice to ECJ...

... And additional factors

- Control loss (POs)
- Financial losses (or fear of...)

Implications for patenting costs

Source: J. Danguy and B. van Pottelsberghe, 2009
### Switching money flows: by actor, with 50,000 patents under COMPAT, (€ MILLIONS)

<table>
<thead>
<tr>
<th></th>
<th>EPO</th>
<th>NPOs</th>
<th>Business sector</th>
<th>Attorn. &amp; transl.</th>
<th>Lawyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation fees EPOα, β</td>
<td>-25</td>
<td>+40</td>
<td>-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validation fees NPOsγ</td>
<td>-10</td>
<td>+10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translation costs κ, ε</td>
<td>-20</td>
<td>+129</td>
<td>-129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filing patent translationα</td>
<td>+60</td>
<td>-60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking over representationα</td>
<td>+46</td>
<td>-46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewal fees δ</td>
<td>+88</td>
<td>+88</td>
<td>-176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediary cost for maintenanceε</td>
<td>+20</td>
<td>-20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drop in parallel litigation (Harhoff, 2009)‡</td>
<td></td>
<td>+121</td>
<td></td>
<td>-121</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>+43</td>
<td>+78</td>
<td>+250</td>
<td>-270</td>
<td>-121</td>
</tr>
</tbody>
</table>

### Who resists the COMPAT (million Euro)?

With VCOM(200+)....

- **Business sector**: +250  but....
- **National Patent offices**: +78 (Germany ---)  but...
- **EPO**: +43  but....
- **Patent attorneys & translators**: -270
- **Lawyers**: -121 (DH)

Relative costs would drop drastically, and we would eventually have a coherent and attractive market for technology.
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Figure 3: Relative patent costs (cumulated cost per million capita, €s)

... and weaknesses

- **Fragile** agreement, very cautious, conditional
- Only solid agreement is about **EPN/fee split**
- **three languages** agreement only under enhanced cooperation
- An **additional layer**: National; European; EU
- **Financial sustainability** (fears from start) of EEUPC
- **Governance failure**: NPOs control
- **No regime for SMEs** or YICs

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Thank You For Your Attention
References: (cfr. also RePEc website)


