IPR-intensive industries: contribution to economic performance and employment in the European Union

A joint study between the Office for Harmonization in the Internal Market and the European Patent Office

September 2013
Introduction: The value of intellectual property in Europe

This presentation is based on the main findings of the first ever EU-wide study on the value of intellectual property rights to the economy of the EU.

How do trade marks, designs, patents, copyrights and geographical indications contribute to employment, GDP, remuneration and trade?
# Intellectual property rights – an overview

<table>
<thead>
<tr>
<th>Patent</th>
<th>Design</th>
<th>Trade mark</th>
<th>Copyright</th>
<th>Geographical indication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUBJECT MATTER</strong></td>
<td>Invention, novelty, industrial applicability</td>
<td>Original ornamental and non-functional features of an article or product</td>
<td>Distinctive signs that distinguish one company’s goods or services from another</td>
<td>Original artistic, literary, musical, photo, cinema works; maps and technical drawings; computer programmes</td>
</tr>
<tr>
<td><strong>CONFERRED RIGHTS</strong></td>
<td>Exclusive right to make, use, and sell the patented invention</td>
<td>Exclusive right to use the design and prevent its use by others</td>
<td>Exclusive right to use the trademark</td>
<td>Exclusive right to reproduction, including making the work available to the public, distribution, rental, sale, translation and public performance</td>
</tr>
<tr>
<td><strong>BENEFITS OF RIGHTS PROTECTION</strong></td>
<td>Incentive for innovation; protection of knowledge in exchange for sharing of it</td>
<td>Incentive for innovation, design and creative work</td>
<td>Promotes differentiation and competition between brands, provides the product information</td>
<td>Promotes quality; provides consumers with product information</td>
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<tr>
<td><strong>DURATION</strong></td>
<td>Typically 20 years from filing</td>
<td>The usual maximum term is 25 years</td>
<td>Commonly 10 years from filing, but can be renewed indefinitely for successive periods</td>
<td>From 50 years to a lifetime plus 70 years</td>
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**IPR-intensive industries:** contribution to economic performance and employment in the European Union.
IPR-intensive industries are those which use a high number of intellectual property rights per employee.

More than half of European industries (321 out of 615) are considered IPR-intensive.
Methodology

In order to determine which industries are IPR-intensive, the register databases of OHIM and EPO were matched with the commercial database ORBIS.

Using this data, the number of trade marks, designs and patents per employee was calculated for each industry, and the industries which were above average according to this measure were considered to be IPR-intensive.

For more information on the methodology of the study, please visit www.oami.europa.eu.
Most IPR-intensive industries are intensive in more than one type of IPR.
Contribution of IPR-intensive industries to employment

26% of all EU jobs were directly generated by IPR-intensive industries during the period 2008-2010.

An additional 9% were generated indirectly, by industries that supply goods and services to the IPR-intensive industries, for a total of 35% of all EU jobs.
Contribution of IPR-intensive industries to employment

56.5 million EU jobs out of 218 million were directly generated by IPR-intensive industries.

20 million additional jobs were generated by these industries indirectly.

76.5 million jobs
Contribution of IPR-intensive industries to GDP

39% of total economic activity (GDP) in the European Union was generated by IPR-intensive industries from 2008-2010.

This totals over €4.7 trillion annually.
Contribution of IPR-intensive industries to remuneration

IPR-intensive industries pay significantly more than other industries, with a wage premium of over 40%.
Contribution of IPR-intensive industries to trade

Even industries producing energy are IPR-intensive.

For that reason, 88% of EU imports consist of products from IPR-intensive industries.
However, an even higher share of EU exports - 90% - is accounted for by IPR-intensive industries.
Contribution of IPR-intensive industries to employment by Member State

IPR-intensive industries directly contribute **25.9% of employment** in the EU.

Note: As Croatia was not a part of the EU at the time of the study, it is not highlighted on the following maps.
Contribution of IPR-intensive industries to GDP by Member State

IPR-intensive industries contribute 38.6% of GDP in the EU.

38.6% EU average
- above EU average
- below EU average
Contribution of IPR-intensive industries to employment by Member State – trade mark

In the EU as a whole, trade mark-intensive industries contribute 20.8% of employment.
Contribution of IPR-intensive industries to GDP by Member State – trade mark

In the EU as a whole, trade mark-intensive industries contribute 33.9% of GDP.
Contribution of IPR-intensive industries to employment by Member State – design

Design-intensive industries contribute 12.2% of employment in the EU.
Contribution of IPR-intensive industries to GDP by Member State – design

Design-intensive industries contribute 12.8% of GDP in the EU.
Patent-intensive industries contribute 10.3% of employment in the EU.
Contribution of IPR-intensive industries to GDP by Member State – patent

Patent-intensive industries contribute 13.9% of GDP in the EU.

13.9%
EU average

- above EU average
- below EU average
Copyright-intensive industries contribute 3.2% of employment in the EU.
Copyright-intensive industries contribute 4.2% of GDP in the EU.
Contribution of IPR-intensive industries to employment by Member State – geographical indication

GI-intensive industries contribute **0.2% of employment** in the EU.

They are an **important source of jobs** in several countries.
Contribution of IPR-intensive industries to GDP by Member State – geographical indication

GI-intensive industries contribute 0.1% of GDP in the EU.
Which EU Member States create the most trade marks?
Which EU Member States create the most designs?
IPR Origin – Patent

Which EU Member States create the most patents?

Applications filed during period 2004-2009 with rights granted at any time until February 2013.

IPR contribution to job creation

Jobs created in rest of EU by companies based in the Member State

1.4% Cyprus
1.1% Greece
0.9% Italy
0.9% Austria
0.6% Spain
0.6% Sweden
0.6% Denmark
0.6% Luxembourg
0.5% Portugal
0.5% Ireland
0.5% Finland

Germany 28.2%
Scotland 11.7%
UK 11.0%
France 15.0%
Netherlands 4.2%

IRP-intensive industries: contribution to economic performance and employment in the European Union
Job creation can be considered another positive IPR contribution to the European Union.
Comparing the results for the EU with those of a USA study* reveals that the contributions of IPR-intensive industries are similar.

*undertaken by the US Patent and Trademark Office

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<th>Europe</th>
<th>USA</th>
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<tr>
<td>Employment</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>GDP</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>Remuneration</td>
<td>41%</td>
<td>42%</td>
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