# 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

Published 30 September 2013



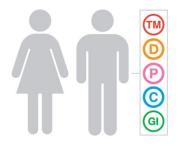




### Introduction: The value of intellectual property in Europe

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

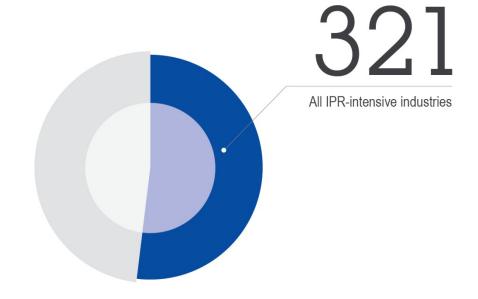
	P	(D)	TM	<b>©</b>	GI
	Patent	Design	Trade mark	Copyright	Geographical indication
SUBJECT MATTER	Invention, <b>novelty</b> , industrial applicability	Original <b>ornamental</b> and <b>non-functional</b> features of an article or product	Distinctive signs that distinguish one company's goods or services from another	Original artistic, literary, musical, photo, cinema works; maps and technical drawings; computer programmes	Product whose <b>quality and reputation</b> is linked to its geographical origin
DURATION	Typically 20 years from filing	The usual maximum term is 25 years	Commonly 10 years from filing, but can be renewed indefinitely for successive periods	From 50 years to a lifetime plus 70 years	Indefinite, no need for renewal



#### **IPR-intensive industries**

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**.

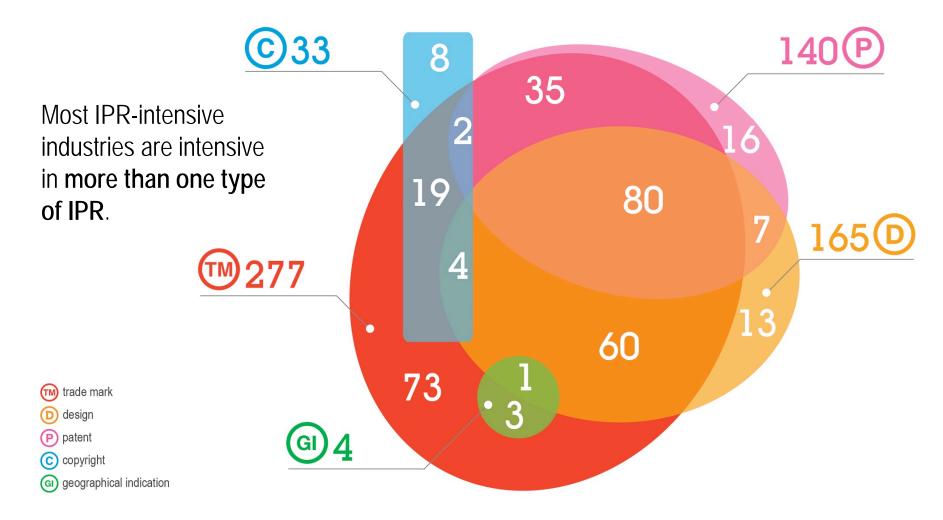
Using this data, the number of trade marks, designs and patents per employee was calculated for each industry, and the industries which were above average according to this measure were considered to be IPR-intensive.

For copyright, a standard methodology developed by WIPO was applied, and for Geographical Indications, data from DG AGRI was used.

For more information on the methodology of the study, please visit www.oami.europa.eu.



#### **IPR-intensive industries**





Contribution of IPR-intensive industries to employment

35%

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.

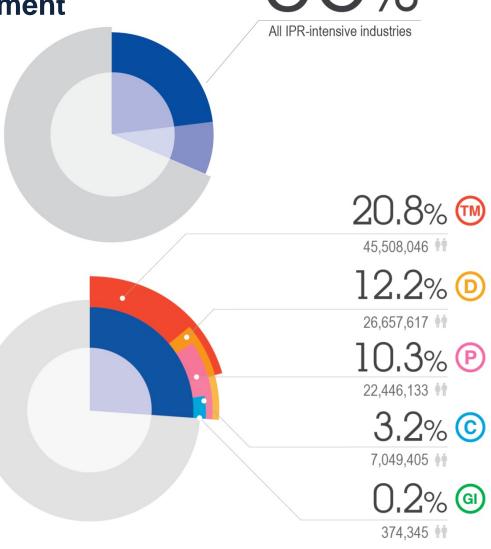


design design

P patent

c copyright

(GI) geographical indication

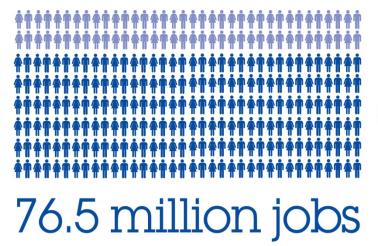




## Contribution of IPR-intensive industries to employment

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.



+20 million

56.5 million



€

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.

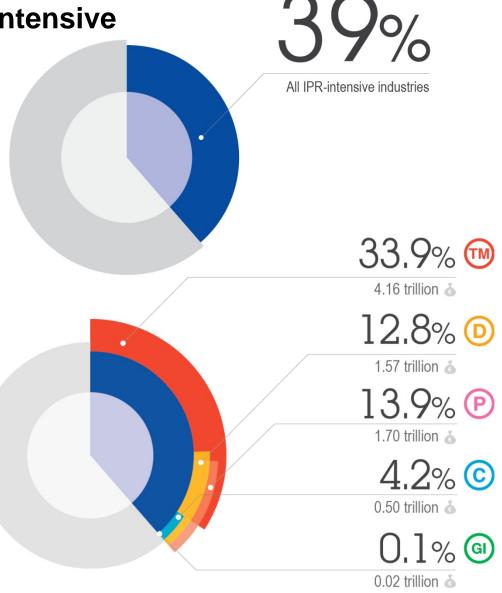
trade mark

design

(P) patent

copyright

(GI) geographical indication

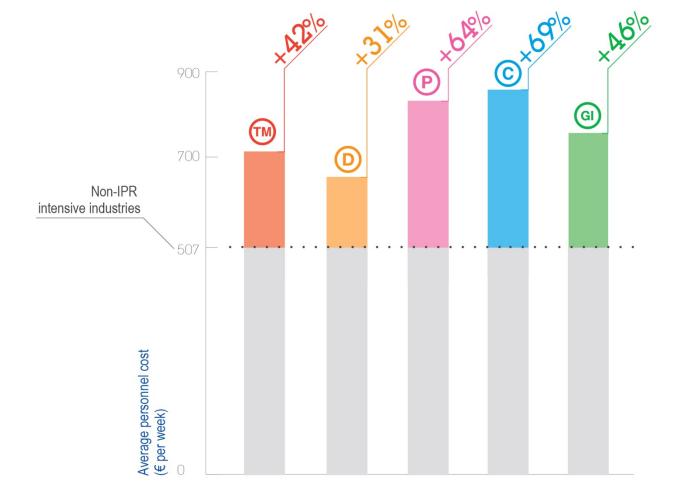


IN THE INTERNAL MARKET



#### Contribution of IPR-intensive industries to remuneration

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







patent

copyright

(GI) geographical indication

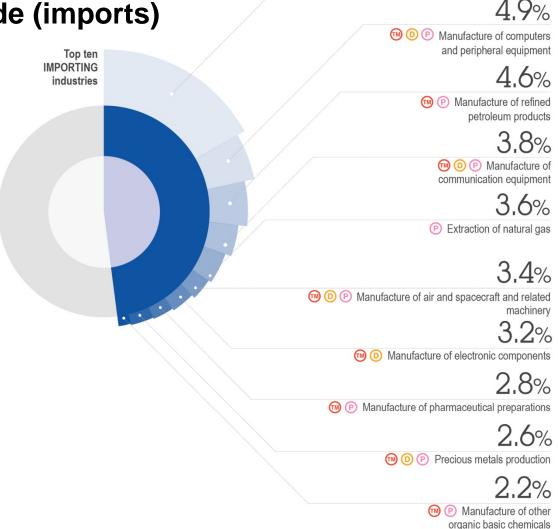




Contribution of IPR-intensive industries to trade (imports)

Even industries producing energy are IPR-intensive.

For that reason, 88% of EU imports consist of products from IPR-intensive industries.





16.9%

(P) Extraction of crude petroleum



**Contribution of IPR-intensive industries to trade (exports)** 

8.1%

(m) (D) P Manufacture of motor vehicles

6.8%

Manufacture of pharmaceutical preparations

5.1%

Manufacture of refined petroleum products

5.0%

Manufacture of air and spacecraft
and related machinery

2.8%

Manufacture of other organic basic chemicals

2.4%

Manufacture of other parts and accessories for motor vehicles

2.3%

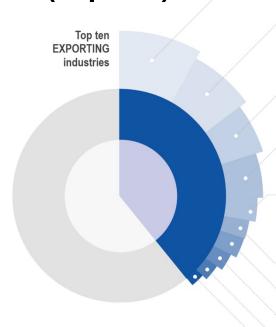
Mo D P Manufacture of instruments and appliances for measuring, testing and navigation

2.3%

2.2%

Manufacture of communication equipment

2%



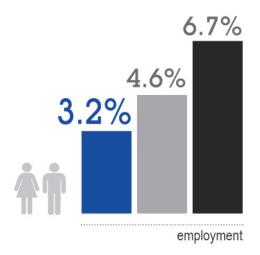
However, an even higher share of EU exports - 90% - is accounted for by IPR-intensive industries.

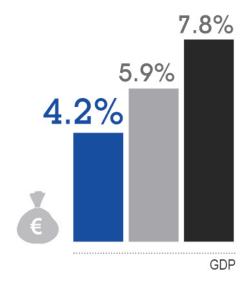
### Copyright: © WIPO vs USPTO methodologies

USPTO adaptation of WIPO methodology:very strict, only content provision,33 industries considered copyright-intensive

"Pure" **WIPO** methodology: broader definition, 49 industries considered core copyright-intensive

"Full" **WIPO** methodology: including also non-core copyright-intensive industries







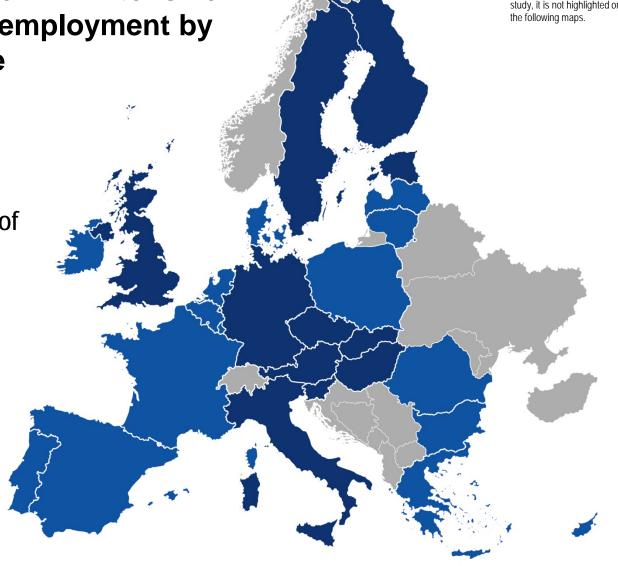
**Contribution of IPR-intensive** industries to employment by **Member State** 

Note: As Croatia was not a part of the EU at the time of the study, it is not highlighted on the following maps.

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

25.9% EU average

above EU average



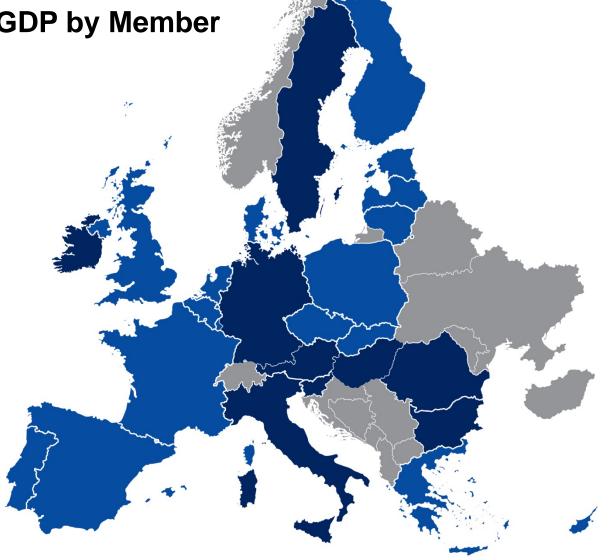


Contribution of IPR-intensive industries to GDP by Member State

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

38.6% EU average

above EU average





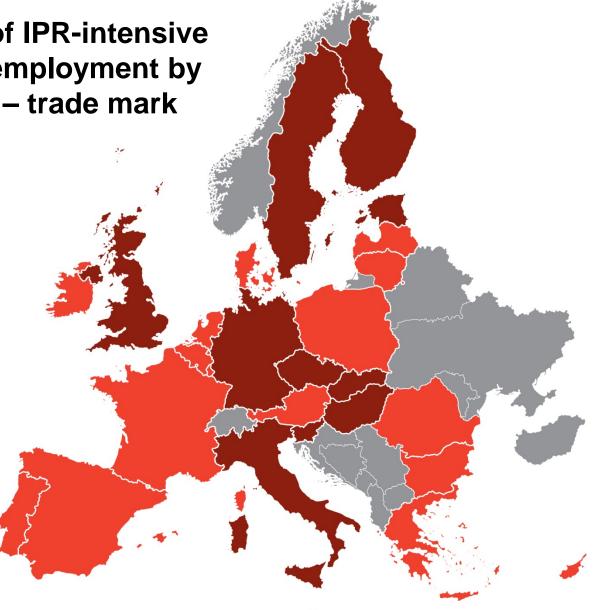
**Contribution of IPR-intensive** industries to employment by **Member State – trade mark** 

In the EU as a whole, trade mark-intensive industries contribute 20.8% of employment.



20.8% EU average

above EU average





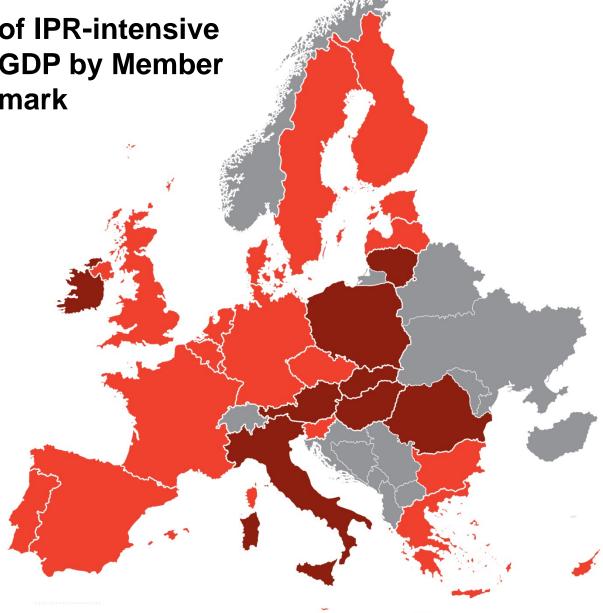
**Contribution of IPR-intensive** industries to GDP by Member State – trade mark

In the EU as a whole, trade mark-intensive industries contribute 33.9% of GDP.



33.9% EU average

above EU average





**Contribution of IPR-intensive** industries to employment by Member State - design

**Design-**intensive industries contribute 12.2% of employment in the EU.

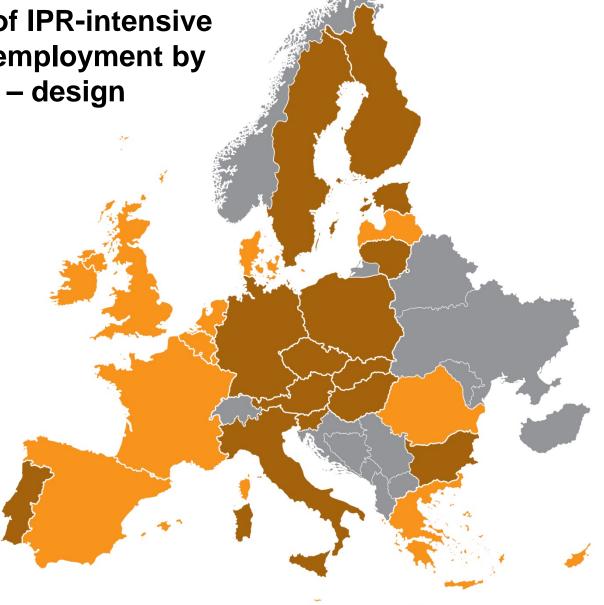


12.2% EU average



above EU average







Contribution of IPR-intensive industries to GDP by Member State – design

Design-intensiveindustries contribute12.8% of GDP in the EU.



12.8% EU average



above EU average







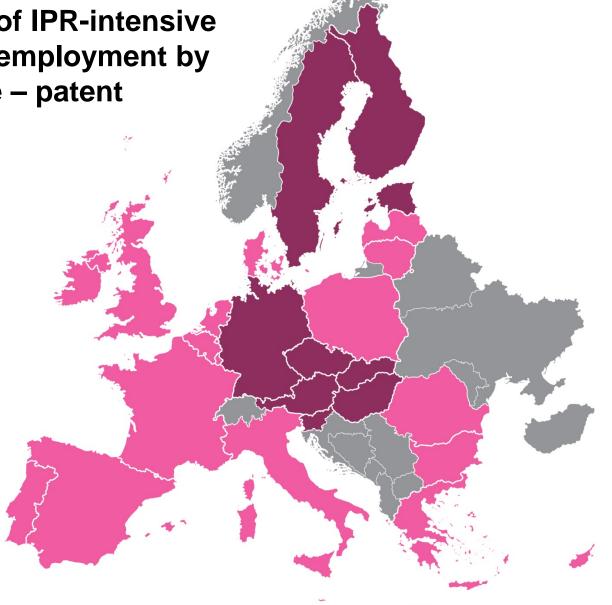
**Contribution of IPR-intensive** industries to employment by **Member State – patent** 

Patent-intensive industries contribute 10.3% of employment in the EU.



10.3% EU average

above EU average





**Contribution of IPR-intensive** industries to GDP by Member State – patent

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

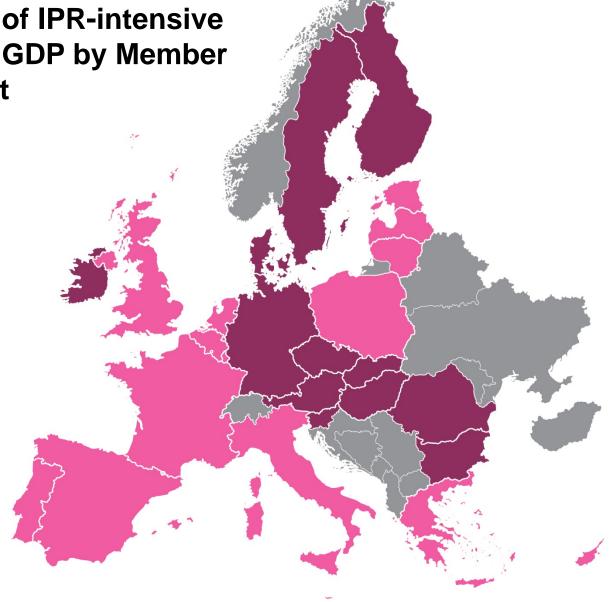


13.9% EU average



above EU average







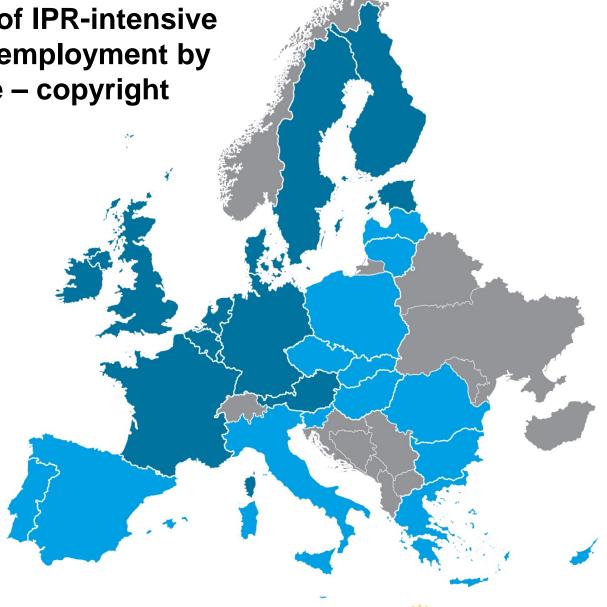
**Contribution of IPR-intensive** industries to employment by **Member State – copyright** 

Copyright-intensive industries contribute 3.2% of employment in the EU.



3.2% EU average

above EU average





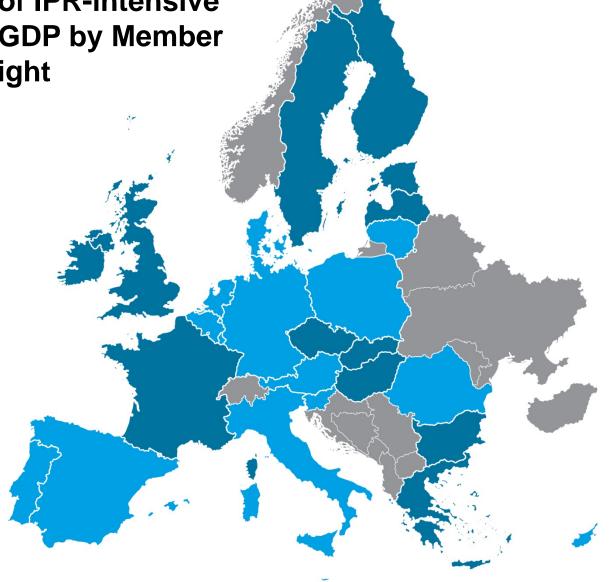
Contribution of IPR-intensive industries to GDP by Member State – copyright

Copyright-intensive industries contribute 4.2% of GDP in the EU.



4.2% EU average







**Contribution of IPR-intensive** industries to employment by Member State – geographical indication

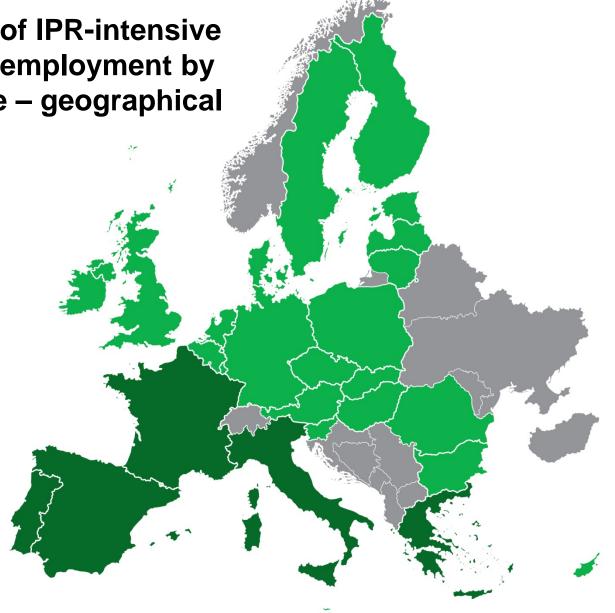
**GI**-intensive industries contribute 0.2% of employment in the EU.

They are an **important** source of jobs in several countries.



0.2% EU average

above EU average





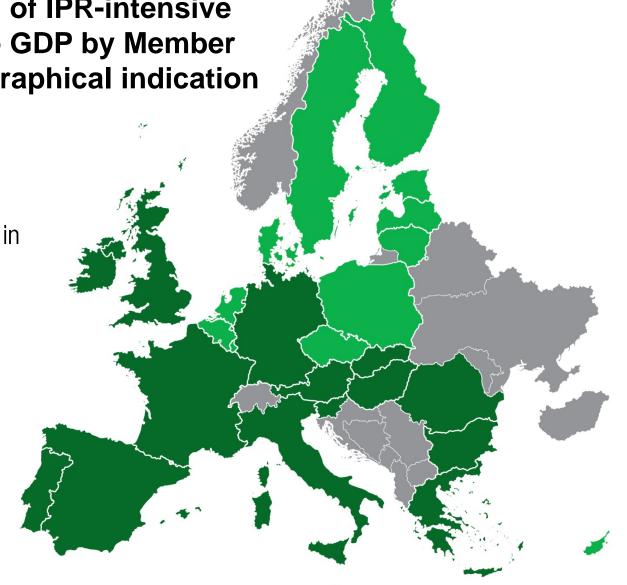
**Contribution of IPR-intensive** industries to GDP by Member State – geographical indication

**GI**-intensive industries contribute 0.1% of GDP in the EU.



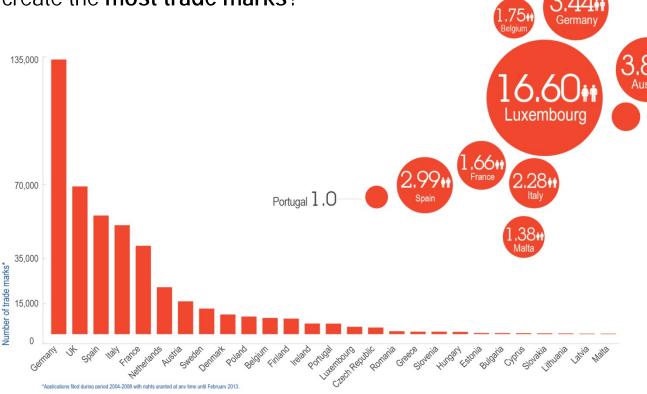
0.1% EU average

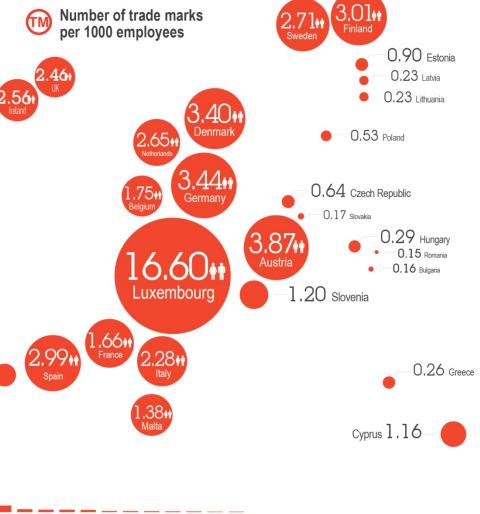
above EU average





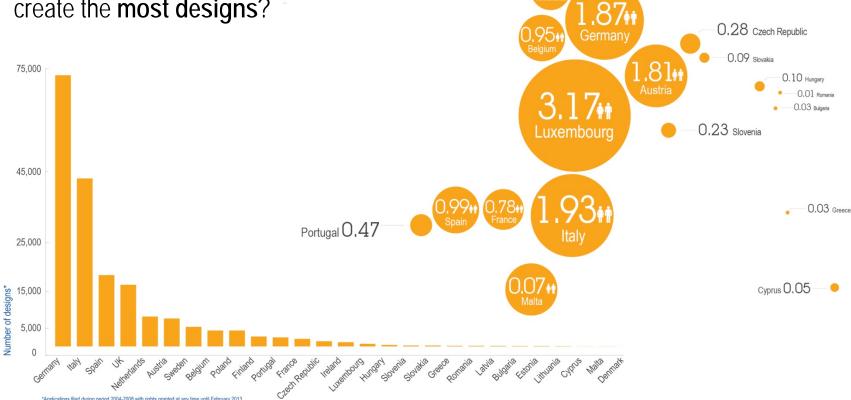
Which EU Member States create the **most trade marks**?







Which EU Member States create the **most designs**?



Number of designs per 1000 employees

0.17uk

Denmark



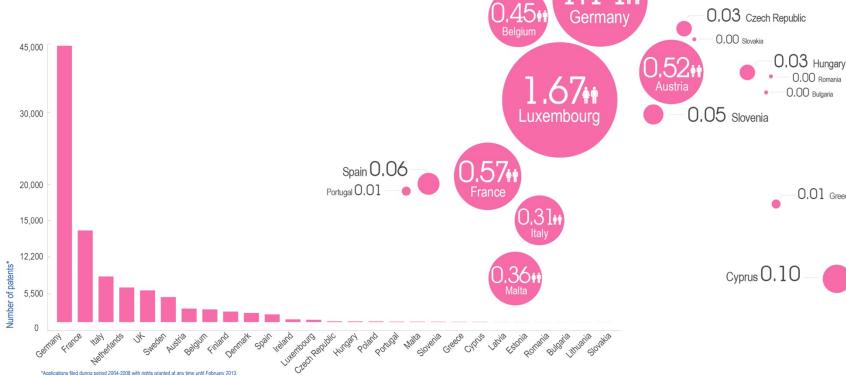
0.14 Estonia 0.13 Latvia

0.04 Lithuania

0.27 Poland



Which FU Member States create the **most patents**?



Number of patents per 1000 employees

Sweden

0.02 Estonia 0.02 Latvia 0.00 Lithuania

0.00 Bulgaria

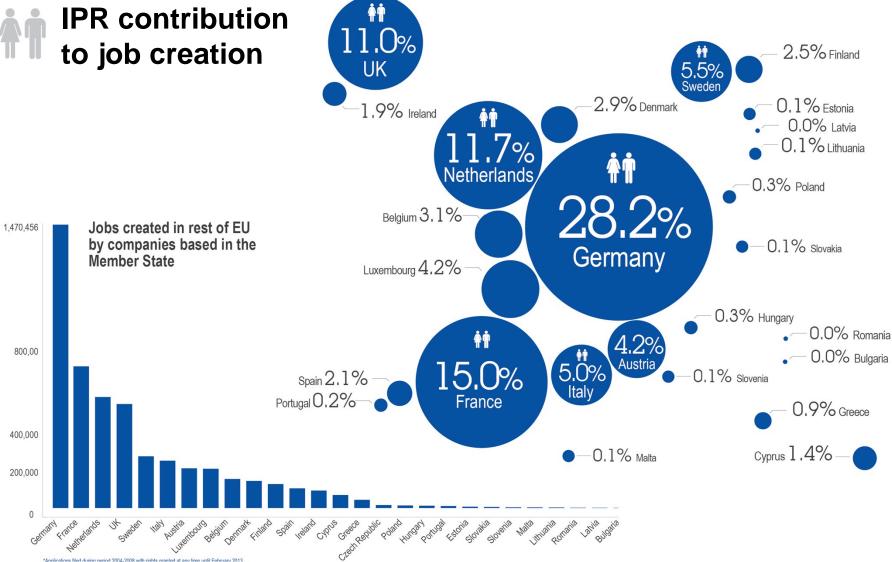
0.01 Greece

0.01 Poland



\*Applications filed during period 2004-2008 with rights granted at any time until February 2013.



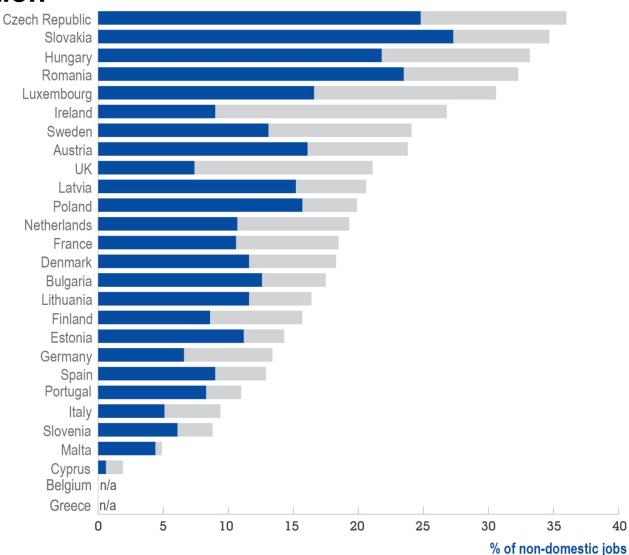




### IPR contribution to job creation

Jobs created in EU Member States by foreign companies (IPR-intensive industries)

Job creation can be considered another positive IPR contribution to the European Union.



 IPR-intensive jobs created by other EU companies

IPR-intensive jobs created by non-EU companies



#### **Comparison with** the USA

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





