

La contribución de los Derechos de Propiedad Industrial al empleo y a la actividad económica en la UE

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I. The European Patent Office

Our mission



As the patent office for Europe, we support **innovation, competitiveness and economic growth** across Europe through a **commitment to high quality and efficient services** delivered under the European Patent Convention.

European Patent Organisation

- Created in 1973
- 38 member states, including all EU
= 600 million inhabitants
- 35 nationalities, 7 000 employees
(4 200 highly specialised engineers & scientists)
= 2nd largest European public service organisation
- Self financed budget via fees
= € 2 billion in 2014



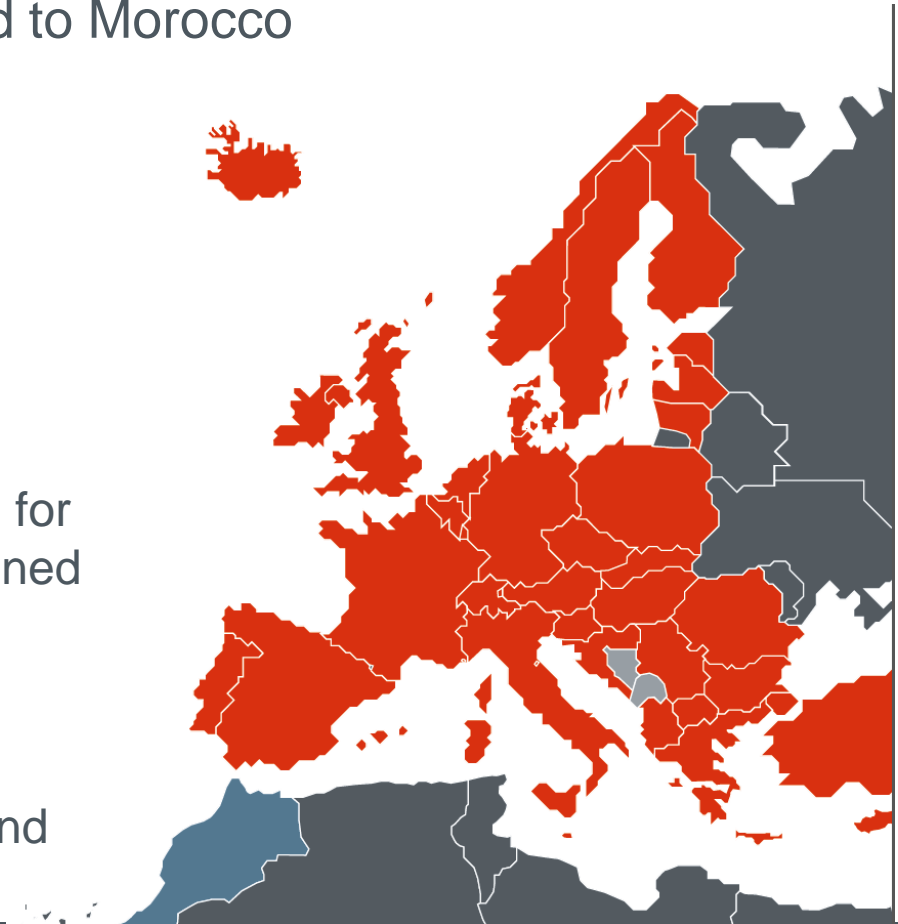
Extension of the European patent system

Validation agreement with Morocco

- In force since 1 March 2015
- European patent can be extended to Morocco

-  member states
-  extension states
-  validation state

- brings to 41 the number of countries for which patent protection can be obtained with a single European patent application
- pending ratification of two further validation agreements with Tunisia and Moldova



Vision / Objectives

- to ensure that the EPO will be able to play its role both as a **regional granting authority** and as a **key player** pursuing European interests at the global level
- to increase the **efficiency** of the Office as well as maintain or even improve patent **quality**, in a financially sustainable manner, while **controlling our costs**
- to enhance the **dissemination of patent information**
- to further develop **international cooperation**, both within Europe and at the global level, and to support the long-standing efforts to achieve normative and structural integration through the unitary patent and substantive patent law harmonisation in a **balanced manner**, recognising the interests of patent owners and of third parties

EPO global benchmark for quality

- According to a recent survey of patent professionals by Intellectual Asset Management (IAM) magazine, the EPO has been rated **number one** for **patent quality** among the world's largest patent offices
- The latest IAM benchmarking survey is based on responses received earlier this year from more than 650 corporate IP managers, non-practising entity (NPE) executives, and private practice lawyers and attorneys worldwide



III. Value of patents

An incentive for economic growth and innovation

- Incentivises **R&D and innovation**
 - New solutions for more **social welfare**
 - More choice and lower prices for **consumers**
 - Innovation as source of new **growth**
- Makes the latest technological knowledge **available to the public**
 - **Prevents duplication** of R&D
 - Helps identify **new partners**
 - Spurs **cumulative innovation**



“Standing on the shoulders of giants”

The benefits of patents (I)

For inventors, patents can:

- help **safeguard financial returns** from the commercial exploitation of the invention
- give holders **time** to recoup their development costs
- encourage **further investment** in R&D



The benefits of patents (II)

For the economy in Europe, patents are a prime source of new technical knowledge

Patents can help to:

- identify **new technological trends** and new business partners
- inspire **further inventions**
- **prevent the duplication of R&D** in industry and universities



European patents foster technical innovation, which is crucial to competitiveness and overall economic growth in Europe

Value of IP in a changing economic landscape

In a **fast, changing, global** economic environment where:

- knowledge increasingly plays a **key role** in generating new products,
- the **complexity** of new products is increasing and
- technologies are **overlapping**:



IP is turning into a strategic tool that creates maximum value from innovations.

How to create value out of patents and other IP ?

Exclusivity

➔ premium price and increased market share

Cross licencing

➔ access to technology and knowledge

Licencing

➔ generate income through royalty payments

Asset via M&A

➔ strategic partnerships (JV) and financing opportunities

Insurance

➔ secure freedom to operate and negotiation power

Macro-economic value of patents and other IPRs

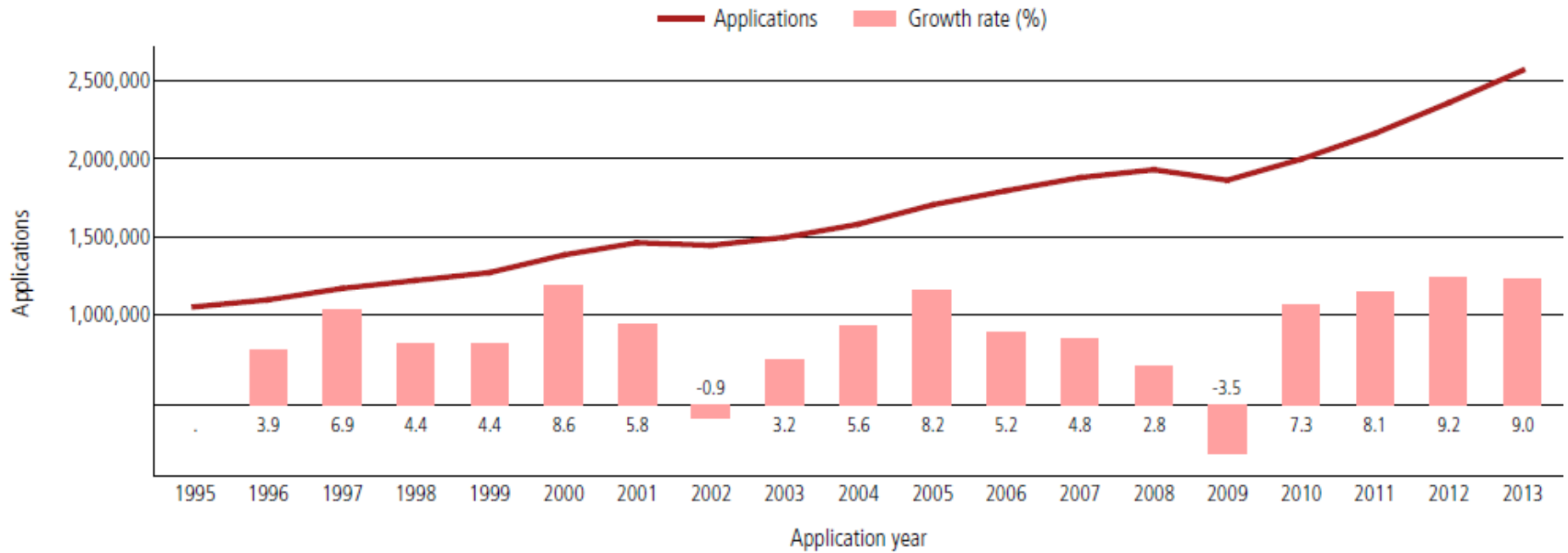
Economic indicator	Contribution of IPR-intensive industries	
	%	Value
EU employment	35%	77 million
- <i>direct</i>	26%	57 million
- <i>indirect</i>	9%	20 million
EU GDP	39%	4.7 trillion Euro
EU wage premium	+ 41%	715 Euro/week
EU trade		
- % total EU imports	88%	1.4 trillion Euro
- % total EU exports	90%	1.2 trillion Euro

Source: joint study by EPO and OHIM: **“IPR-intensive industries: contribution to economic performance and employment in the European Union”**, Industry-Level Analysis Report, September 2013



III. European patent filings/recent developments

Trend in patent applications worldwide*

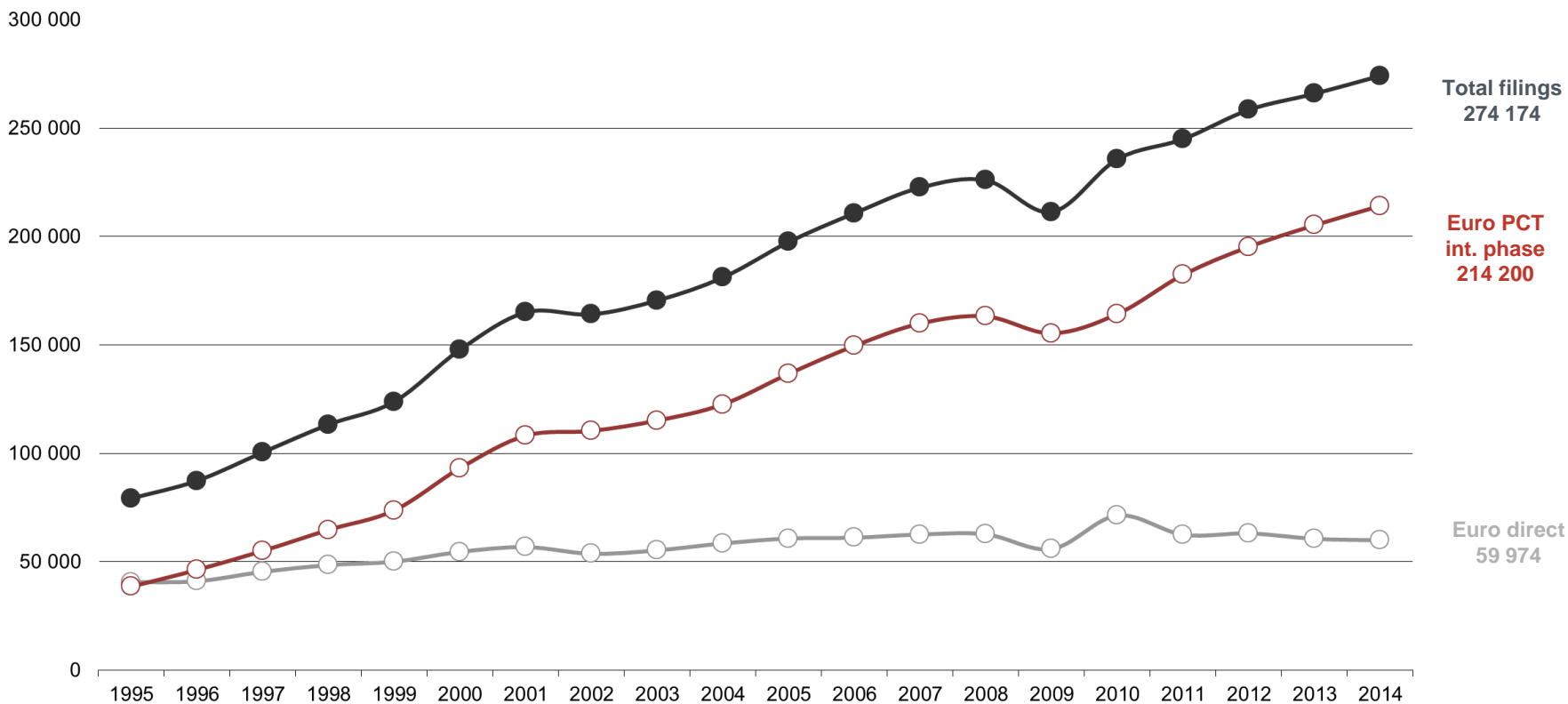


*WIPO, World Intellectual Property Indicators 2014, Figure A1

WIPO estimates cover 139 patent offices and include direct applications and Patent Cooperation Treaty national phase entry data..

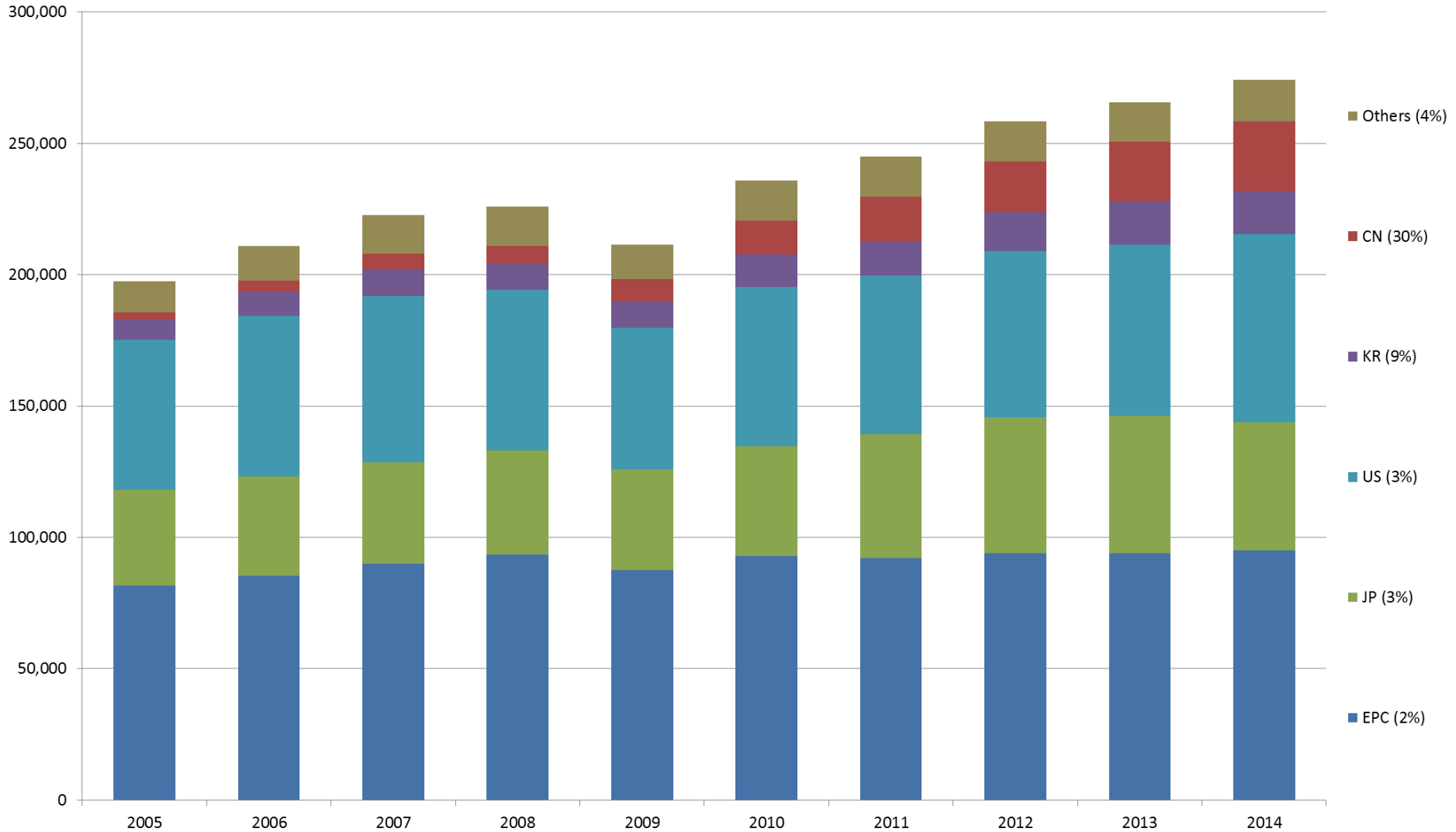
EPO filings: stable growth

European patent filings (1995-2014)



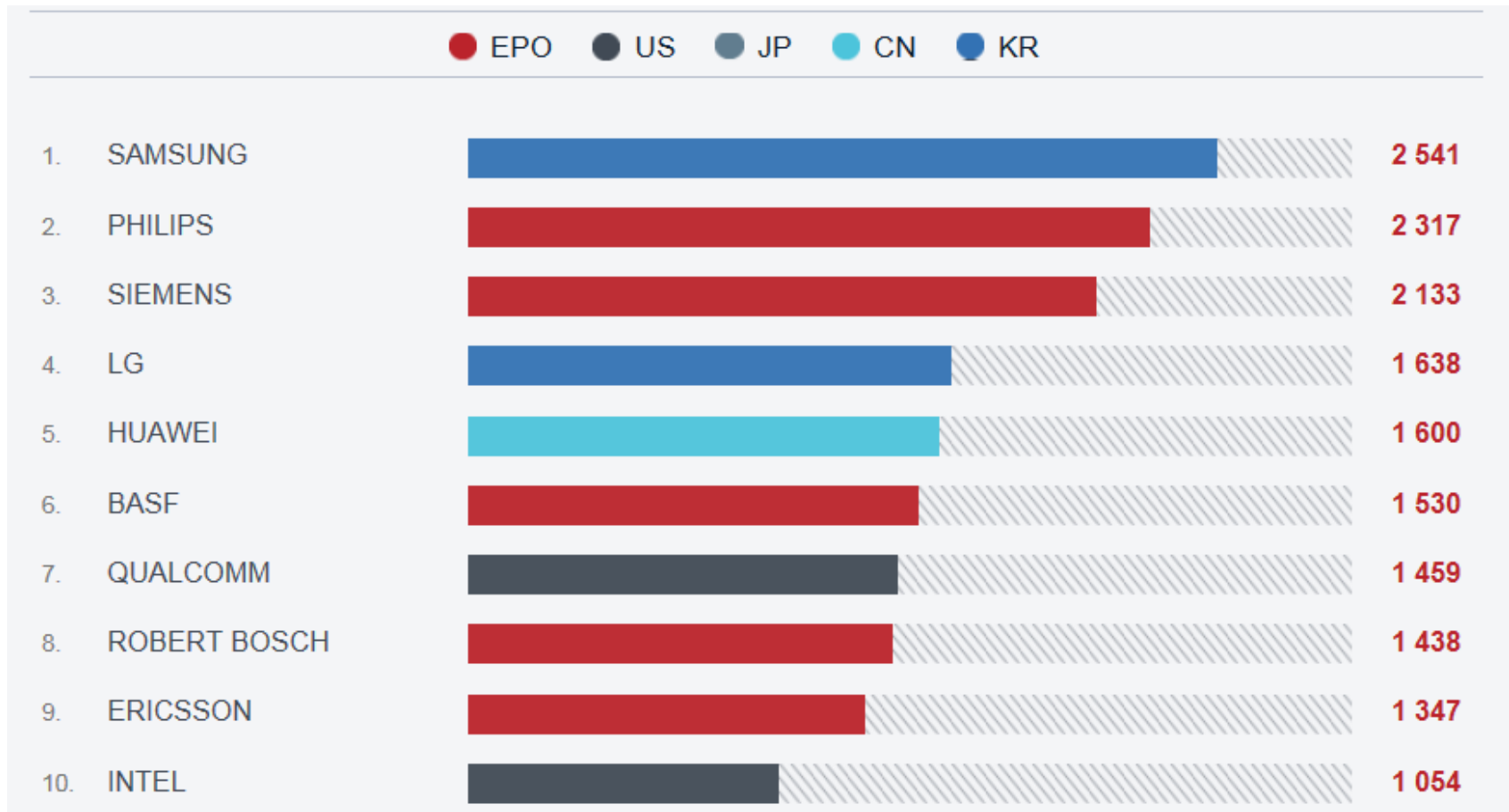
Main drivers in recent years: filings from Asia

EPO filings: geographical origin (2005-2014)
 (Average annual growth in parenthesis)



Top applicants at the EPO in 2014

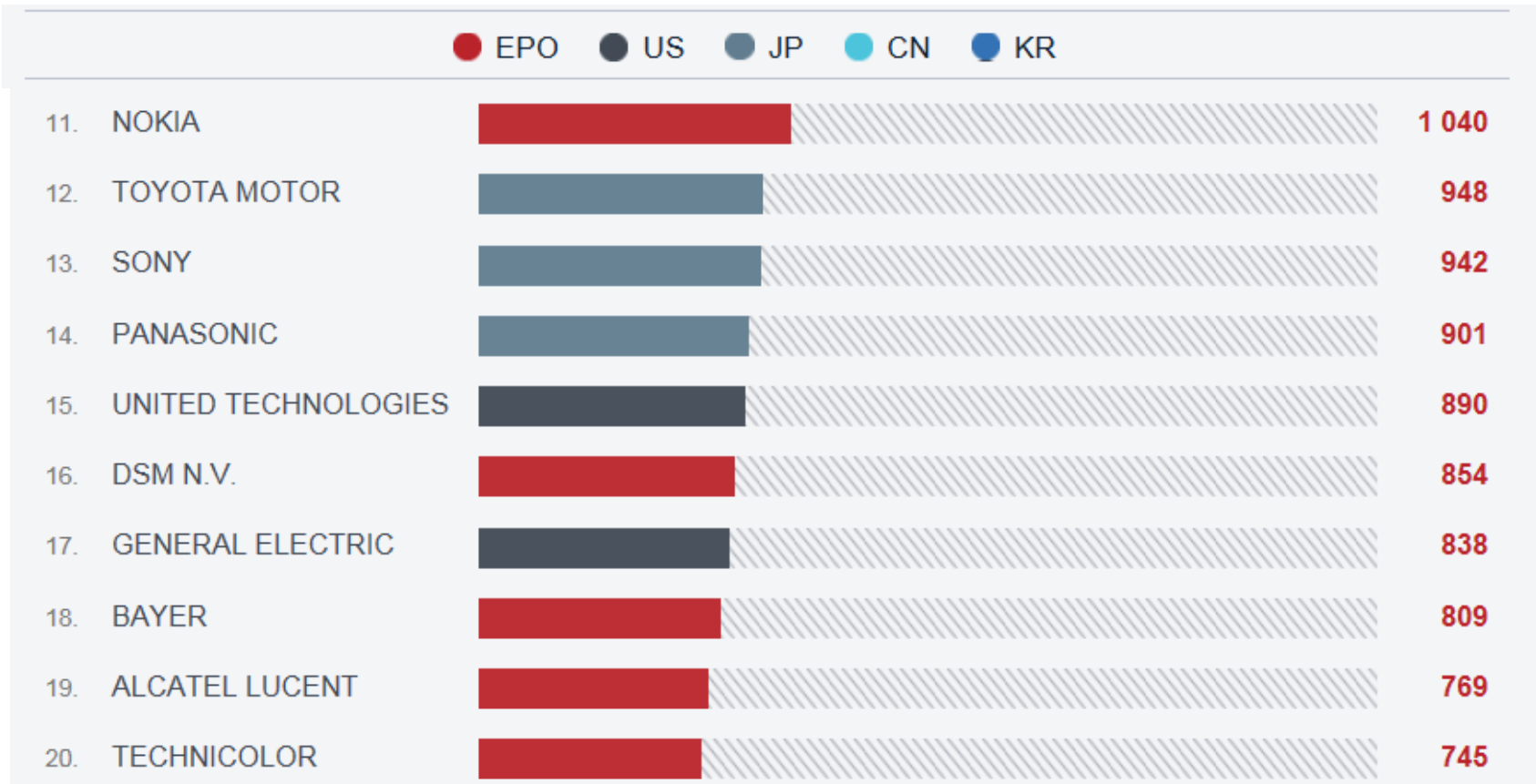
Top10



Based on European patent applications filed with the EPO.

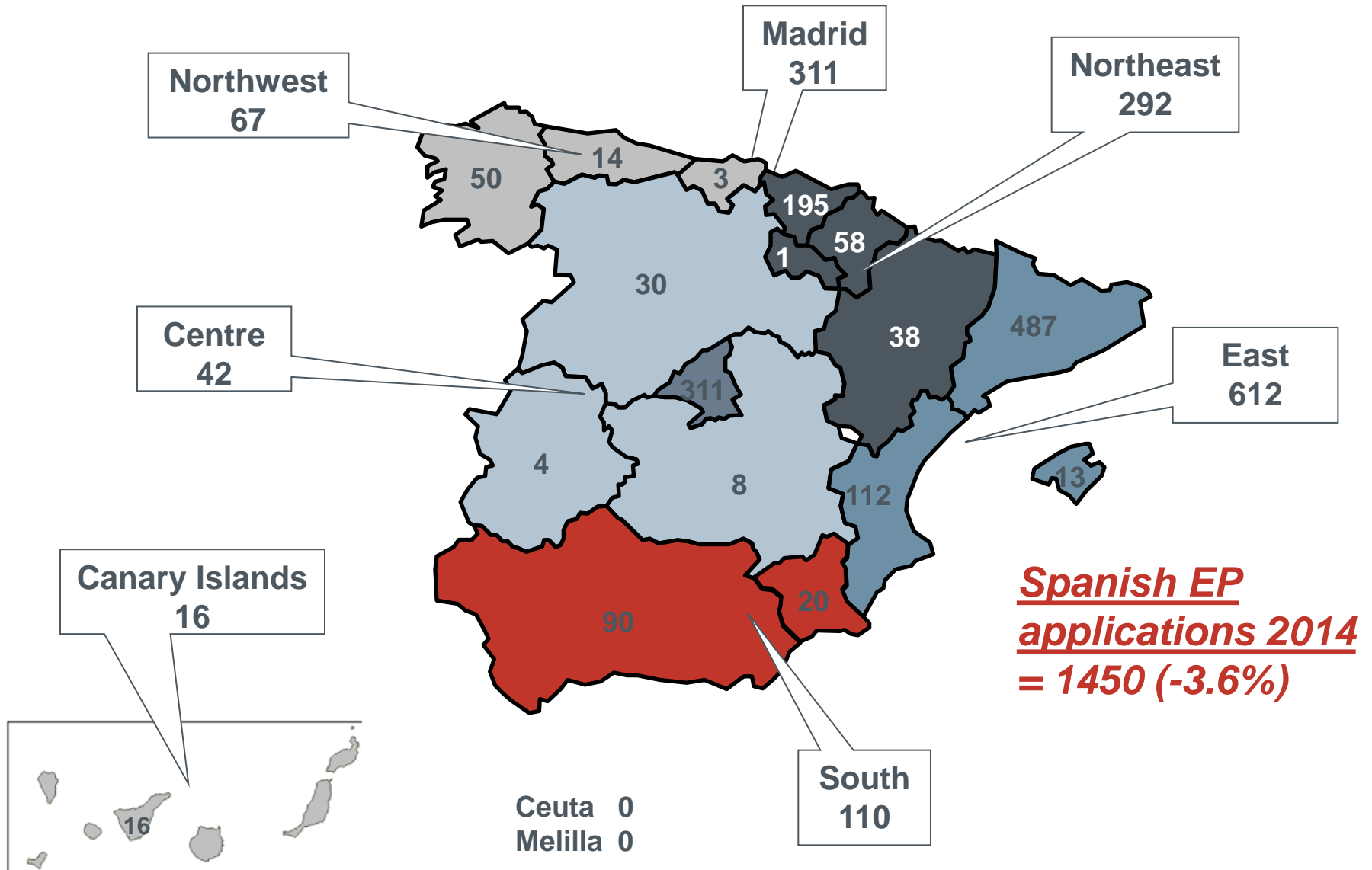
Top applicants at the EPO in 2014

Top20



Based on European patent applications filed with the EPO.

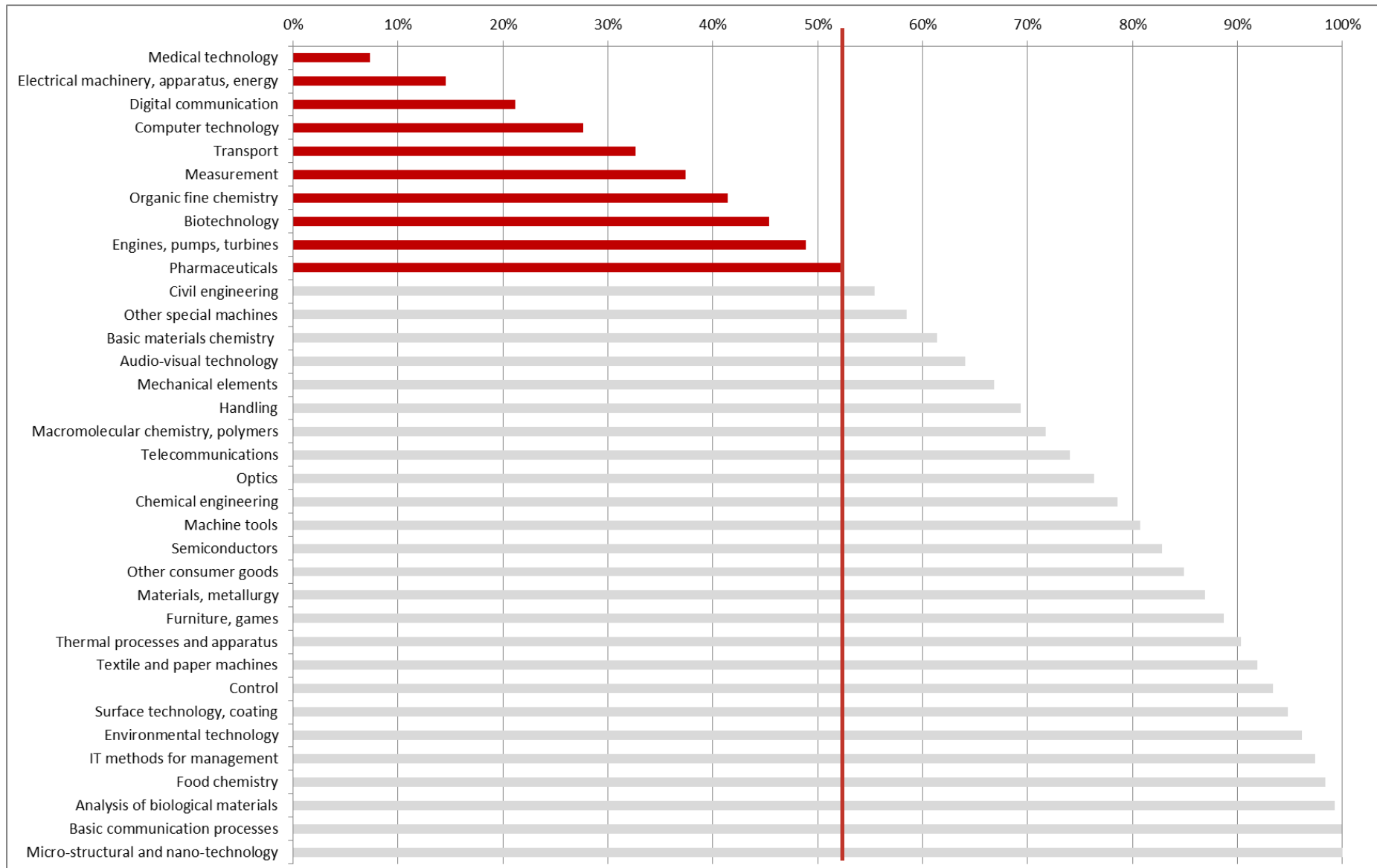
Spanish EP applications 2014: geographical distribution



Top Spanish applicants at EPO in 2014

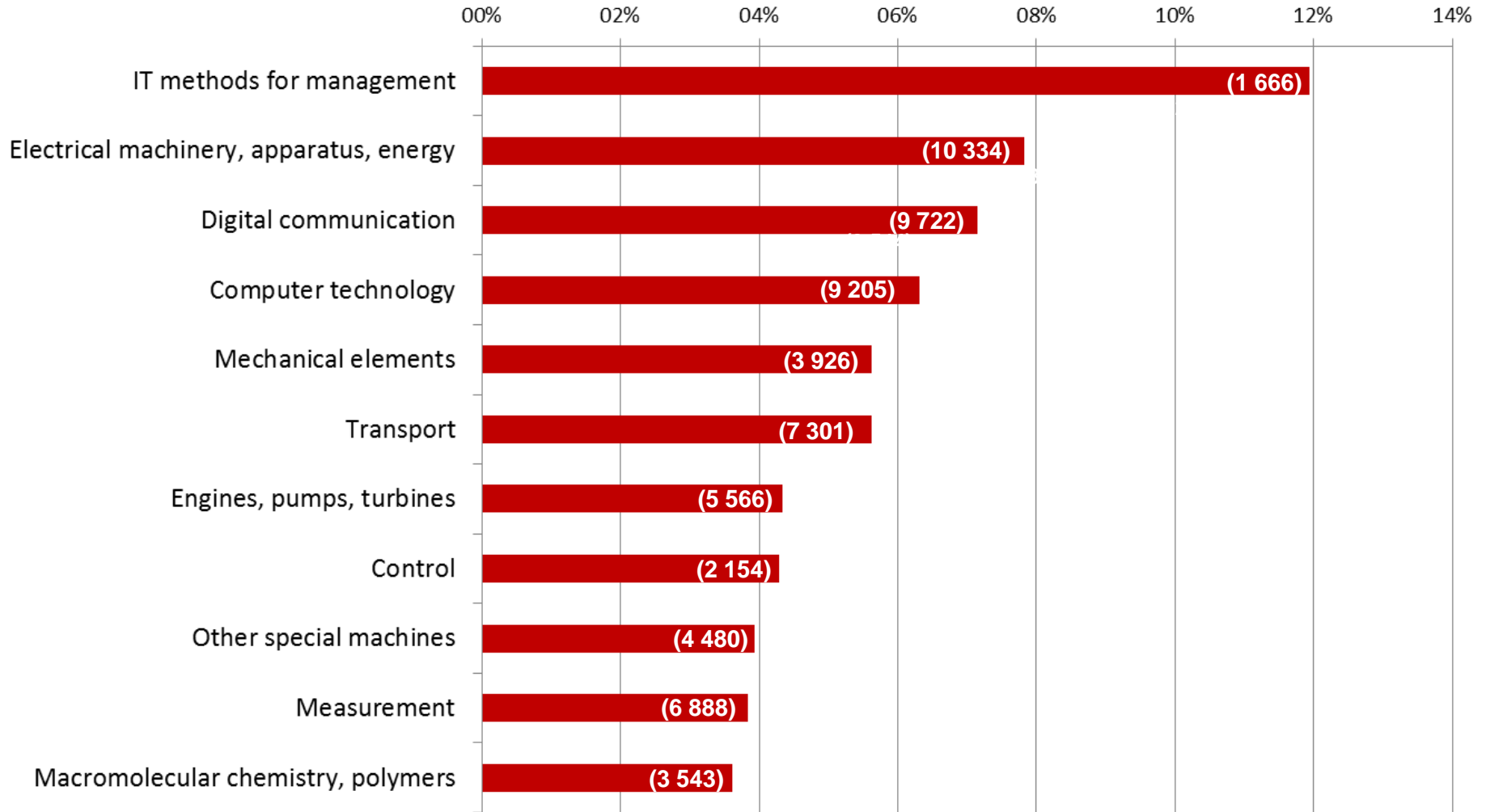
Company	Applications
TELEFONICA S.A.	46
AIRBUS GROUP	43
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC)	24
LABORATORIOS DEL DR. ESTEVE S.A.	23
GALENICUM HEALTH S.L.	21
ARCELORMITTAL SA	18
UNIVERSIDAD AUTÓNOMA DE BARCELONA	18
ALMIRALL, S.A.	17
REPSOL, S.A.	16
ACCIONA S.A.	14
ALSTOM S.A.	13
ABENGOA S.A.	11

Main drivers: leading (top 10) technologies in 2014



Main drivers: fastest-growing technologies

Average growth rate over the past three years



(In parantheses: Average number of applications in the last three years)



IV. EPO as a Global Player

EPO as a Global Player

Example 1: The Cooperative Patent Classification

- A well-managed classification system allows prior art to be properly classified and easily retrieved in the search process. The EPO has invested heavily in classification through the development of a refined classification scheme called ECLA
- EPO and USPTO joined forces and created the **Cooperative Patent Classification (CPC)**, largely based on ECLA. CPC consists of some **250 000** subdivisions and was successfully launched on **1 January 2013**.
- CPC is becoming a world standard
 - 8 Member States (AT, DK, **ES**, FI, GR, HU, SE, UK) + 3 planned in 2015 (CZ, NO, PT)
 - KIPO, SIPO and INPI Brazil started classifying into the CPC
 - Others have shown strong interest
 - Through EPO's Epoque Net system, some 45 National Offices search using the CPC

EPO as a Global Player

Example 2: Machine Translation

- The Unitary Patent and the rapidly increasing number of patent applications at international level, especially from Asia, creates a need for easy access to patent documentation in different languages.
- EPO and Google launched **Patent Translate** in 2011 - delivering translations free of charge via a single portal using EPO's Espacenet.
- 28 European languages, including **Spanish**, from/into English/German/French
- Chinese, Japanese, Korean and Russian from/into English
- > 25.000 translation requests per day in average
- 305 million different machine translations of complete patent documents accessible 'on the fly', using the current language pairs offered = 1500 years of work for 1000 translators if done manually

EPO as a Global Player

Example 3: The EPO and the PCT

- The EPO is the **world's largest PCT Authority**
- The EPO establishes around 80 000 search reports, representing almost 40% of international searches world wide
- The EPO establishes some 7 600 international preliminary examination reports, representing about 56% of all international preliminary examinations world wide
- Over 90 000 PCT applications enter the European Phase annually, representing 60% of EPO's applications

For these reasons, the EPO is constantly improving the quality of its PCT services and products and is driving efficiency of the PCT

EPO as a Global Player

Example 4: Global Dossier

“[The Global Dossier] will allow users to efficiently access all available information about all applications and patents in the participating offices, and to utilize the electronic services of the offices.”

(Global Dossier Task Force (GDTF) industry delegation statement, 1 March 2013)

Global Dossier envisages applicants and the public being able to access patent information and prosecute patents in a **federated** manner for all applications pertaining to an invention.

First Global Dossier tool implemented by the EPO in 2014 in the **European Patent Register** and **Espacenet**



V. EUROPEAN PATENT NETWORK

European Patent Network

- **Objective:** to create synergies aiming at further improving the functioning of the European patent system as a whole, whilst taking into account European diversity, by close co-operation between the EPO and its member states.
- **Principle:** If the EPO is the only central authority able to deliver patents valid for 38 member states in Europe, the role of national patent offices has to be recognised as the forefront of the European system
= a two-tier system acting in a complementary manner (*subsidiarity*).
- **Example 1:** public awareness, especially for SMEs, which are the backbone of the EU economy but often fail to realize the importance of IP rights for their business. The national Office is best placed for this task.
- **Example 2:** promotion of European patent standards in Latin America, through the cooperation agreement between the Spanish Patent Office and the EPO.

EPO's dissemination of patent information

- **Objectives:**
 - Stimulate innovation – an “ideas” resource
 - Avoid duplication – an archive of existing technology
 - Encourage investment – legal information on existing rights
- **Principle:** a number of EPO initiatives are ongoing in order to ensure an ever growing central access to patent data to the European industry. This is possible through the collaboration by the EPO member states (*complementarity*)
- **Example 1:** Federated European Patent Register: a common European entry point for register data (“one-stop-shop”) in order to reduce the uncertainty of the legal status
- **Example 2:** Data Acquisition based on Quality at Source: access via Espacenet of full-text patent data back to 1973 of all EPO member states (translatable via Patent Translate into EN, DE, FR)

Unitary Patent – Main features

- **Quality:** A **European patent**, granted by the EPO under the EPC
- **Flexibility:** An **additional option for patent owners**, alongside the existing European and national patent systems
- **Simplicity:** **Unitary effect** extends to the 25 EU member states currently participating, **in one single administrative step by the EPO**
- **Cost reduction:** Access to **strong and large geographical protection** with a reduction of **up to 70%***)
- **Legal certainty:** **Uniform litigation system through the Unified Patent Court**

*) in comparison with a corresponding European patent validated in the same member states

Unitary Patent – recent developments

- On 5 May 2015, the **CJEU dismissed the two actions** brought by Spain against the two Regulations implementing the Unitary Patent
- Now, **new impetus** on the ratification process concerning the Unified Patent Court Agreement:
 - **Seven ratifications**: Austria, France, Sweden, Belgium, Denmark, Malta and Luxembourg (Portuguese Parliament approval).
 - The **Italian government** has announced its decision to **join** the unitary patent.

Implementing the Unitary Patent

- On-going work the Select Committee is progressing very well:
- Rules: Adoption of implementing regulation
- **Renewal fees: New EPO proposal** on level of renewal fees endorsed by the MS (True Top4)
- Good Progress on the discussion of the Distribution Key.

GOAL: issuing the first unitary patent in 2016



VI. PATENTS AND INNOVATION IN ACTION

Patents and innovation: a concrete example

- The EPO seeks to promote a **culture of innovation in Europe**
- The **European Inventor Awards** - an annual EPO event to honour the work of outstanding inventors whose ideas have been patented
- Last year's finalist in the **SMEs** category were **Carles Puente Baliarda** and his team from **Spain** for their invention of fractal-based antennae for mobile phones



- **Benefits:**
 - This invention opened the doors for the “Internet anywhere” revolution with highly compact and mobile devices.
 - The impact of fractal-based antennae becomes apparent by comparing the size and capacity of a 20-year-old mobile phone with today’s devices. Early mobile phones needed antennae at least 15 cm long, but with fractal-based antennae, the size and performance of the phones are no longer confined by spatial constraints.



GRACIAS POR SU ATENCIÓN