



Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

# Recent developments at the European Patent Office

FICPI 17th Open Forum, 26 October 2017, Venice

Benôit Battistelli, President European Patent Office

# The European patent system

EPO: Independent international organisation, dedicated to patents

Some 700 million inhabitants

**38 member states**

2 extension states

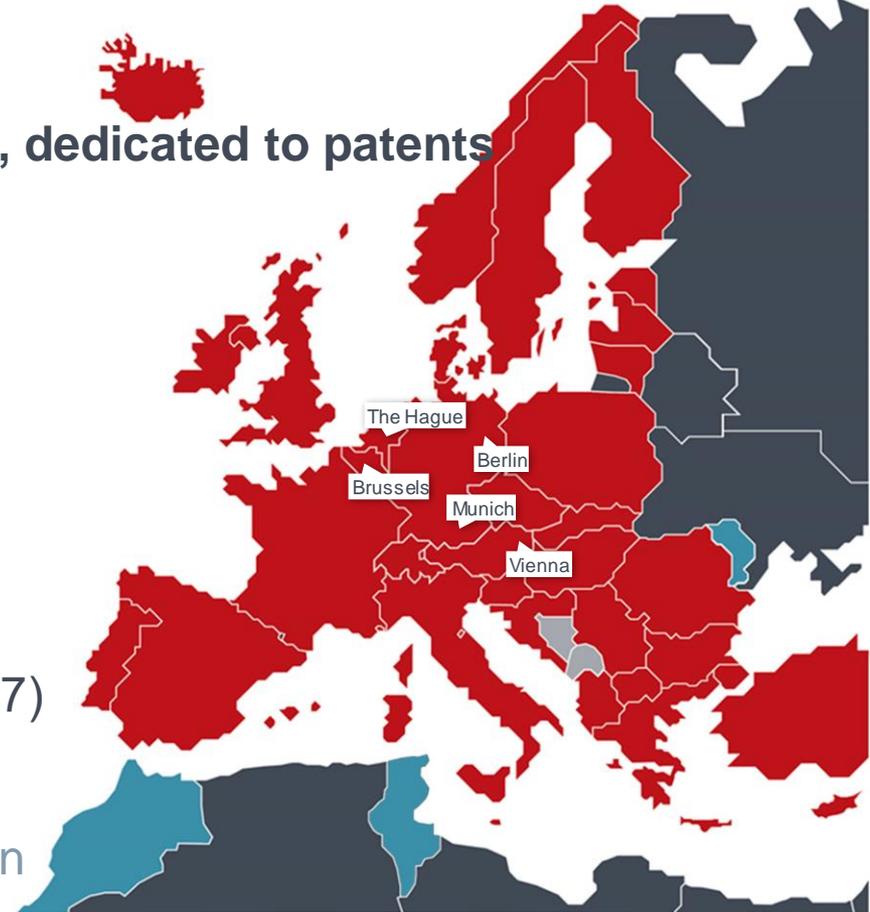
Bosnia-Herzegovina • Montenegro

**3 validation states**

Morocco • Republic of Moldova • Tunisia (1/12/17)

**Other candidates to validation:**

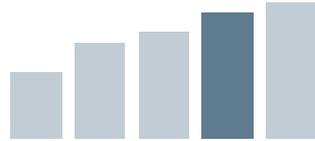
Cambodia, Laos, Brunei, OAPI, Malaysia, Jordan  
Angola



# The EPO at a glance

**2<sup>nd</sup>** largest

intergovernmental institution in Europe



**Global player**

and voice of Europe in patents



✓ Will be in charge of  
**delivering and  
administering the  
Unitary Patent**

**ISO 9001 certification:**

High-quality European patents are drivers of innovation, securing the competitiveness of the European economy



 **7 000** employees,  
of which around **4 400** highly qualified examiners



**Self-financing:**  
budget of **EUR 2.2bn**  
without any public funding

# Our Mission

*‘To Support innovation, competitiveness and economic growth in Europe’*

- Provide access to patent protection on a large geographical scale
- Grant high quality patents in Europe and beyond
- Promote access to patent information

**As any international organisation, we face multiple demands from multiple stakeholders**

- From Member States (the ‘board’) – to be profitable and a leading patent office
- From users (‘customers’) – to be efficient, cost effective, responsive and to supply high-quality, reliable products and services
- From staff – to provide a modern, engaging and attractive employer
- From international partners – to contribute to international cooperation initiatives

# The strategic importance of our mission:

## The value of IPR-intensive industries to the EU economy

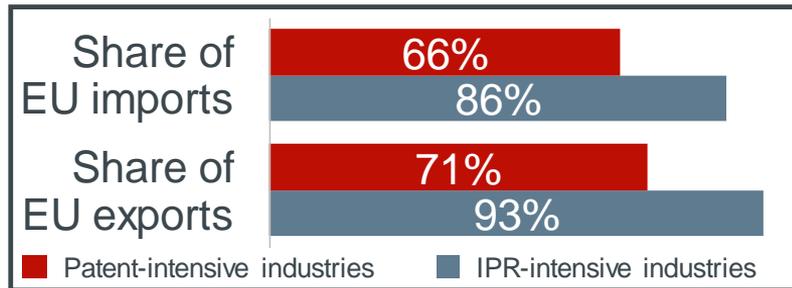
### Contribution to EU GDP



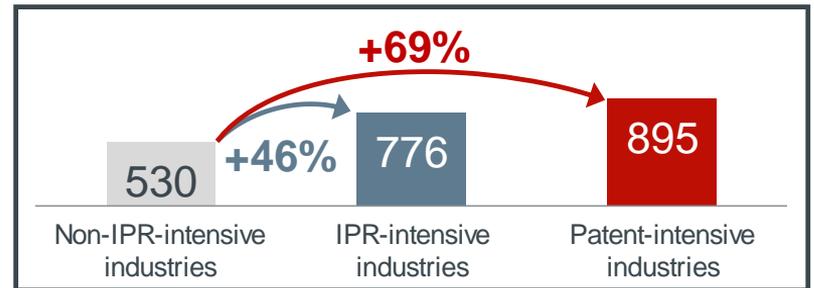
### Share of EU employment



### Contribution to EU trade



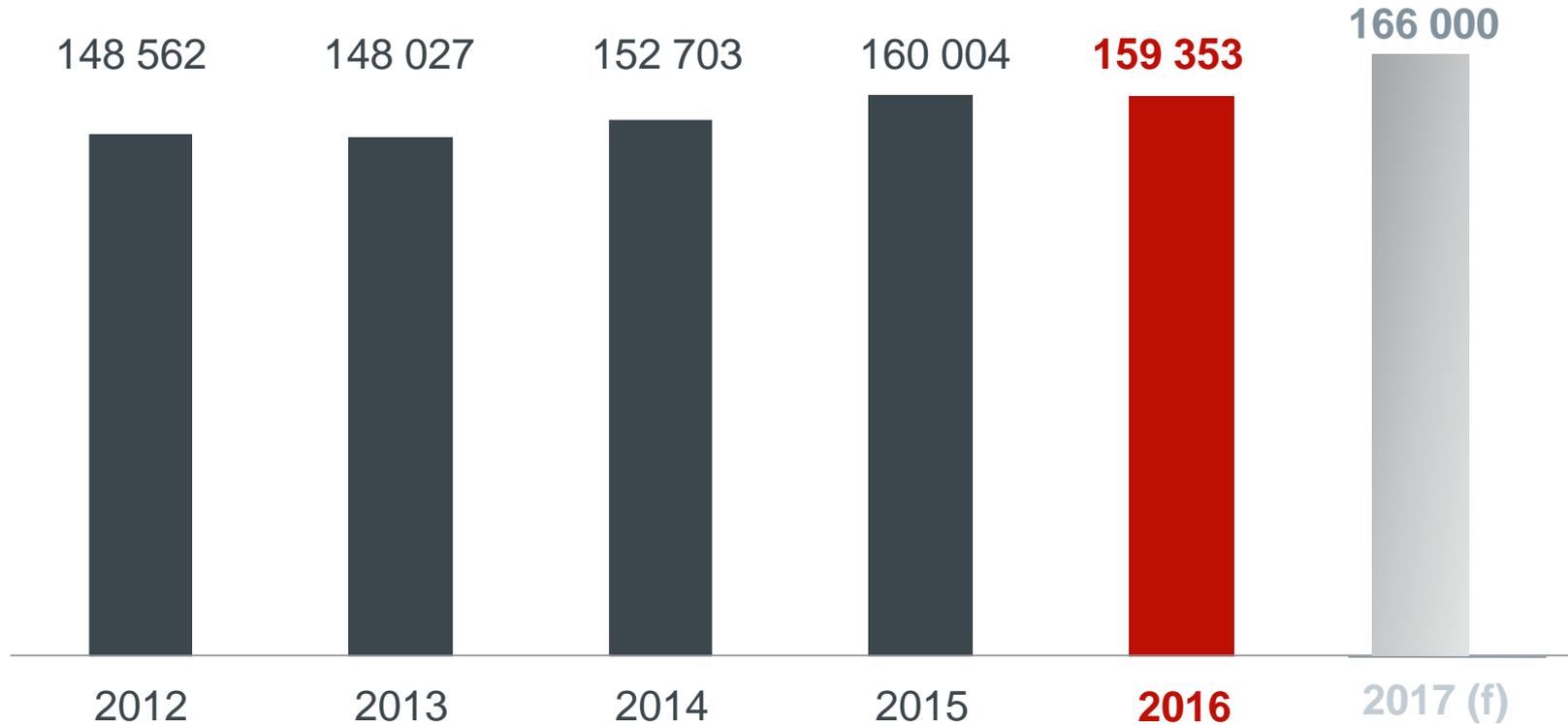
### Wage premium



Source: IPR-intensive industries and economic performance in the European Union – Joint Report 2016 from the EPO and EUIPO

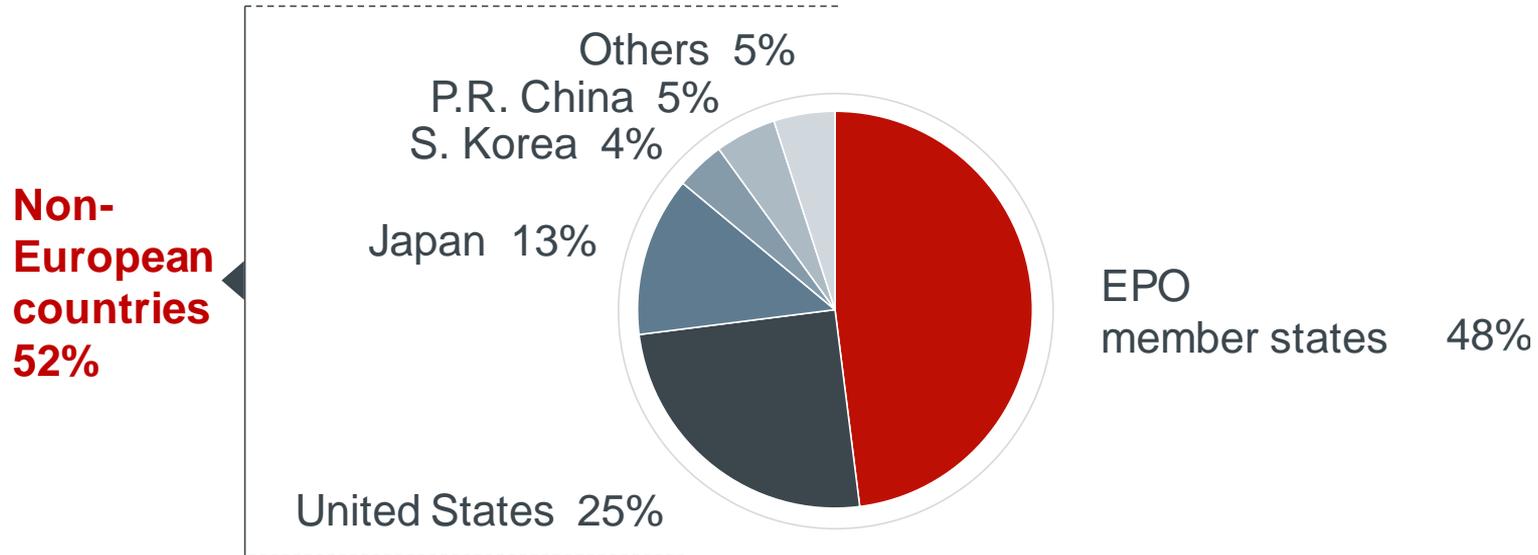
Note: IPR: IP rights: trade marks, patents, designs, copyrights, geographical indications and plant variety rights

# European patent applications\*: continuous increase



\* **Applications** are the files for which applicants have decided to request a European patent from the EPO. They are a direct measure of the explicit interest of innovating firms to assert their patent rights on the European technology market. Applications refer to direct European patent applications filed at the EPO under the European Patent Convention, plus international Patent Cooperation Treaty (PCT) filings which entered the European regional phase (becoming a European application) in the year under review.

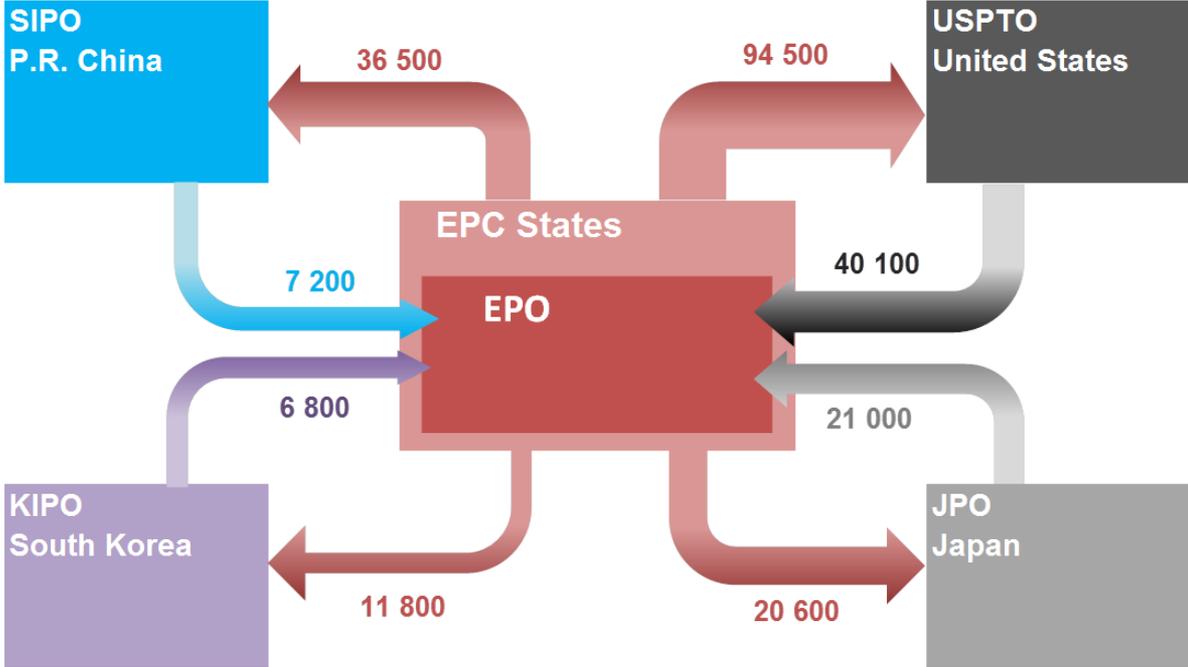
# Origin of European patent applications



## Notes:

- Analysis based on European patent applications (direct European patent applications filed at the EPO under the European Patent Convention, plus international Patent Cooperation Treaty (PCT) filings which entered the European regional phase (becoming a European application) in the year under review)
- Applications are allocated to the country of residence of the first-name applicant
- EPO: the 38 member states of the European Patent Organisation, including EU28

# Flow of patent applications between EPO and IP5 countries



- Notes:**
- Analysis based on applications received by the five largest patent offices (IP5 offices) in 2016.
  - Source of the data: IP5 Statistics Report 2016

# Top 2016 applicants

## TOP 10

		2016	Change	
1	Philips	2 568	6.9%	↗
2	Huawei	2 390	22.4%	↗
3	Samsung	2 316	-2.1%	↘
4	LG	2 313	10.6%	↗
5	United Technologies	2 067	10.6%	↗
6	Siemens	1 871	-1.2%	↘
7	Qualcomm	1 704	-0.1%	↘
8	General Electric	1 628	21.5%	↗
9	BASF	1 410	1.9%	↗
10	Robert Bosch	1 327	-11.1%	↘

● EPO member states   
 ● United States   
 ● S. Korea   
 ● P.R. China

**Note:** this analysis is based on direct European patent applications filed at the EPO under the European Patent Convention, plus international Patent Cooperation Treaty (PCT) filings which entered the European regional phase (becoming a European application) in the year under review. Statistics are based on the first-named applicant.

# Leading fields of technology

## TOP 10

		2016	Change	
1	Medical technology	12 263	- 2.1%	↘
2	Digital communication	10 915	- 1.2%	↘
3	Computer technology	10 657	2.9%	↗
4	Electrical machinery, apparatus, energy	10 293	5.1%	↗
5	Transport	8 402	3.6%	↗
6	Measurement	7 442	- 3.8%	↘
7	Engines, pumps, turbines	6 301	- 0.5%	↘
8	Organic fine chemistry	6 189	- 4.0%	↘
9	Pharmaceuticals	5 754	- 5.0%	↘
10	Biotechnology	5 744	0.3%	↗

**Note:** Based on European patent applications filed with the EPO (direct European patent applications filed at the EPO under the European Patent Convention, plus international Patent Cooperation Treaty (PCT) filings which entered the European regional phase (becoming a European application) in the year under review).

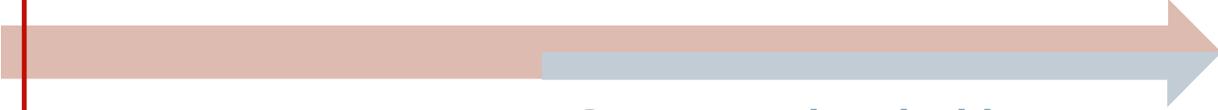
# Challenges for the EPO and the patent system

Consistent growth in demand for patents

Multidisciplinary and technically complex applications

Competitive and heterogeneous international environment

Users' expectations in terms of costs and timeliness



## Our strategic priorities

- + Improve quality
- + Increase efficiency
- + Improve timeliness
- + Control costs
- + Increase international influence

# Continuously improving quality – Our first priority

## ISO 9001 CERTIFICATION



to safeguard the quality  
of our processes

## CONSULTING WITH USERS



around the globe:  
“Partnership for Quality”  
annual meetings with users  
associations: e.g. FICPI

## SACEPO SUB- GROUP ON QUALITY



recently created with the  
objective to set a permanent  
and high-level forum to  
discuss quality related  
matters with users

## RELIABLE MONITORING



**96%** of respondents  
are “very satisfied, satisfied,  
average satisfied” (EPO User  
Satisfaction Survey)

**Global  
benchmark  
for quality**

**EPO ranked  
best patent  
office in every  
IAM survey  
since 2010**

# Quality in search and examination

4 400  
examiners

**High specialisation** and intensive training of EPO examiners – 4 400 examiners working in **divisions of 3**.

Recruitment

977 examiners recruited since 2010  
→ **of which 418 new posts**

2 year  
training  
programme

**Two year training programme** for newly recruited examiners

EPO **does not outsource** any of its core tasks – **unique amongst IP5 Offices**

no  
outsource of  
core tasks

**World's largest database** for patent searches (1 bn records)

1 bn  
records

Access to **50 million** original patent **documents from Asia**

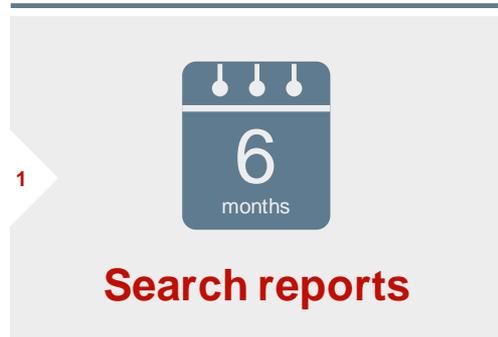
50  
million  
documents

**State-of-the-art tools** **efficient access** to patent information (e.g. Patent Translate with Google = 20.000 requests / day)

patent  
information

# Early Certainty: Speeding up our work processes

## Know what's ahead



We deliver search reports within 6 months of receipt.

**Actual Search timeliness**  
4.9 months

## Reliable rights on time



We are reducing examination times to just 12 months on average by 2020.

**Actual Examination timeliness**  
22.6 months

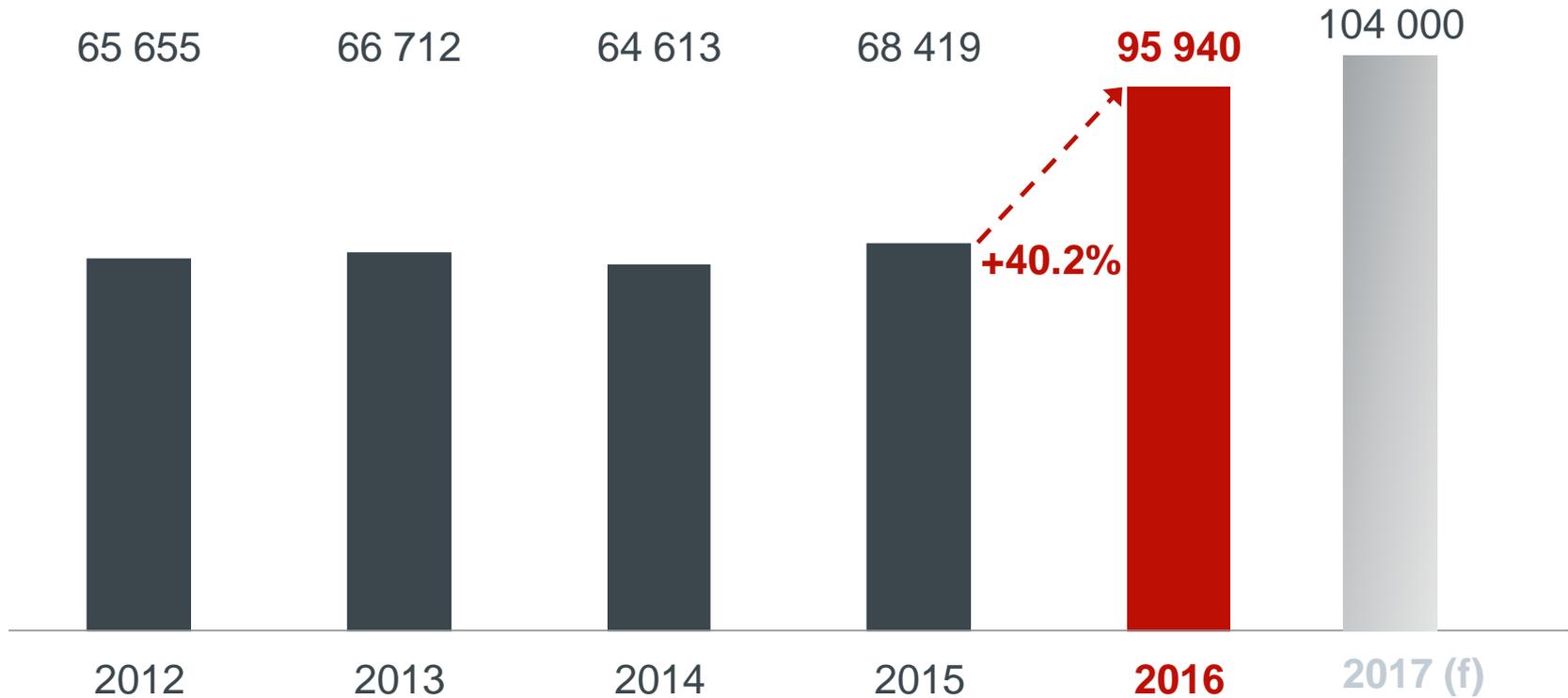
## Challenges resolved faster



We aim to conclude oppositions to newly granted patents in just 15 months on average.

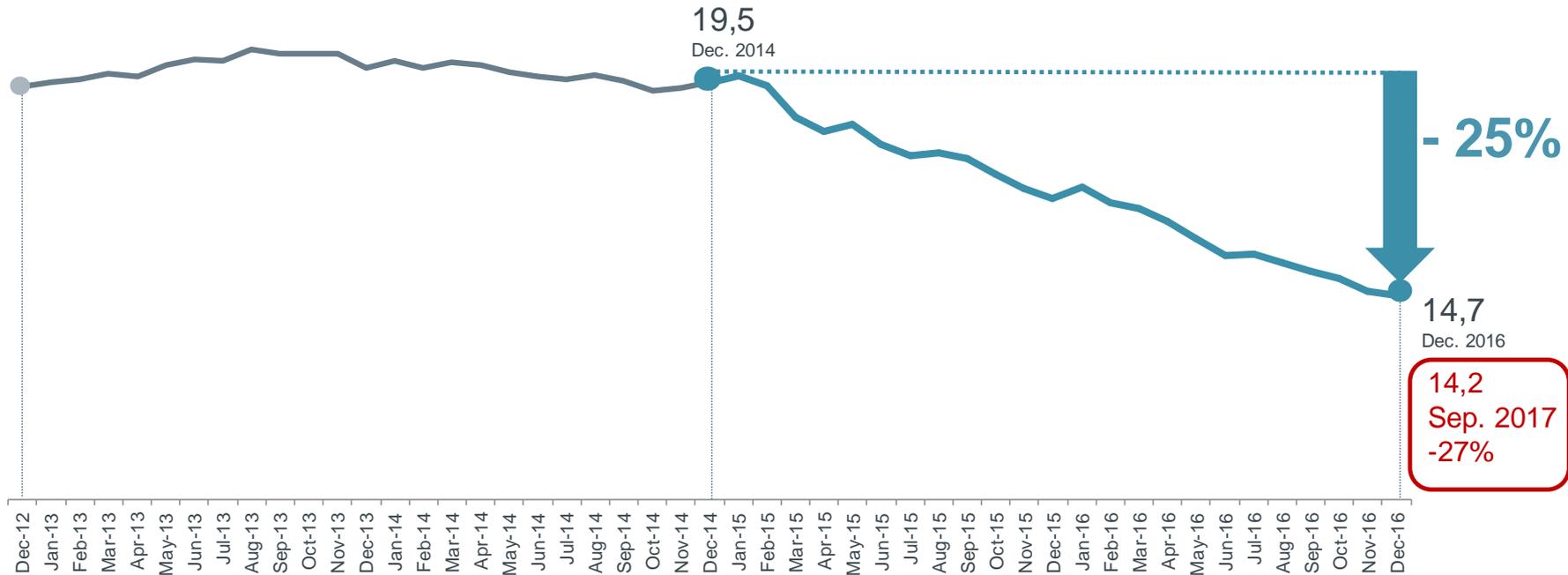
**Actual duration of oppositions**  
23.7 months

# Granted patents: an unprecedented surge



# Stock has been reduced by 25% over the last two years

Stock in months of work has decreased



# Better performance to tackle our challenges

**+8.5%**

## PRODUCTION

Search, examination, opposition

### Production increase

-  **60%** due to productivity gains
-  **40%** due to capacity increase

**2016 = 396 000 products**

1st half 2017  
**+ 4,8%**



**+40%**

## GRANTED PATENTS

Published patents



**2016 = 96 000 patents**

**-25%**

## REDUCING OUR STOCK

Search, examination, opposition

**Stock reduction in months of work  
over 2 years**



**-20%**

## REDUCING OUR COSTS

Unit cost

**3<sup>rd</sup> consecutive year of falling unit cost**



**2016 = 80% of the unit cost of 2006**

# EPO Leader in PCT

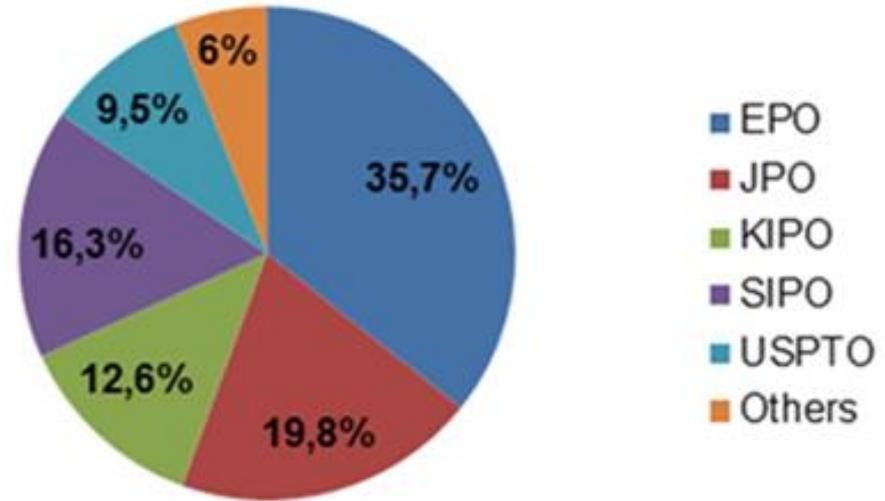
EPO ranks **1st in the world as PCT ISA and IPEA**

EPO is designated as ISA and IPEA by 143 PCT member states

≈ **80 000** International Search Reports (35,7%)

**9 100** (63%) International Preliminary Examination Reports

EPO share on PCT markets



ISRs established in 2016 (%)

# The EPO PPH programmes

- Fast track examination of applications
- EPO work products can be used at other PPH Offices  
(**IP5** + Australia (AU), Canada (CA), Colombia (CO), Mexico (MX), Singapore (SG)  
Israel (IL), Russia (RU), Malaysia (MY), Philippines (PH), EAPO, Brazil (BR))

EP

Search and/or examination reports produced by EPO accelerate applications at:

JP US KR CN CA IL MX SG AU CO RU MY PH EAPO BR

# IP5 Heads of Office & IP5 Heads/Industry meetings 2017

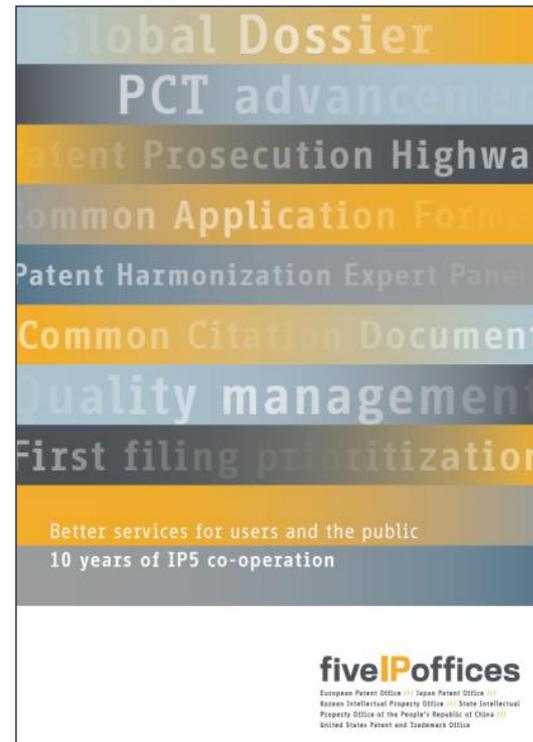
- The EPO hosted the 10th annual high-level IP5 meetings in Valletta, Malta from 30 May to 1 June
- 2017 also marked five years of co-operation with IP5 Industry (first launched by the EPO in Corsica in 2012)



# Ten years of IP5 – the results

- Global Dossier
- Common Citation Document (CCD)
- Classification
- IP5 Patent Prosecution Highway (PPH)
- Harmonising patent practices & procedures
- Statistics
- and more...

*commemorative IP5 publications prepared by the EPO and its IP5 partner offices*



<http://www.fiveipoffices.org/material/2017brochure.html>

# The EPO's priorities & future outlook

## Patent granting process:

- First priority: to continue delivering high quality / legally solid patents
- Implementation of the Quality and Efficiency Policy
- Moving towards a fully end-to-end digitalised “EPO 4.0”
- Introducing Early Certainty with enhanced flexibility
- XML filing for increased efficiency

## International co-operation:

- To harmonise the international patent system in close co-operation with other patent offices and the user community
- Validation agreements

## Preparation for the Unitary Patent

# Early Certainty with enhanced flexibility

- Early Certainty well received, but some users are requesting more flexibility:

## **User consultation: possibility to postpone start of substantive examination**

- For a duration of 3 years:
  - Upon applicant's request
  - Alignment with other IP5 offices
  - Efficient use of examiner resources
- No disadvantages for competitors or the public:
  - Examination can be triggered by filing a substantiated, non-anonymous third party observation
  - No fee for the third party
  - Postponement would occur after publication of the European search report
- Outcome of user consultation and planned decision first semester 2018

# Making XML the preferred filing route at the EPO

- The current filing systems work well: 95% online; predominately in PDF
- But challenges and costs due to OCR conversion of the PDF and paper
- Proposal to adopt DocX format well received by users and other Offices
- Technical preparations for EP and PCT filings on track
- Fee incentives to promote XML filing
- Security assurance: “what you file, is what you get”
- Entry into force 1st April 2018

# Reduction of EPO's fees

## EPO performance allows for fee reductions

- EP Fees stable since 2010 (only slight inflation adjustment)
- PCT fees not increased since 2012 (not even for inflation)
- From 2018: PCT fees will be **reduced by 5%** generating over EUR 10 million in annual savings for applicants.

# Status on progress of UP/UPC as of September 2017

## Member State preparations – Ratification of the UPC Agreement

- 14 states have ratified so far:

Austria	Estonia	Lithuania	Portugal
Belgium	Finland	Luxembourg	Sweden
Bulgaria	France	Malta	
Denmark	Italy	Netherlands	

- In addition, 4 other states have received parliamentary approval to ratify (DE, LV, SI and UK)
- UK is progressing with ratification. Ratification now expected before the end of the year.
- DE: Parliamentary approval has been obtained, but some delay will be caused by a complaint pending at the German Federal Constitutional Court.

## Preparations – Completed

- The EPO is ready to deliver the Unitary Patent
- The Unified Patent Court could start operating in 2018

# Conclusions

- ✓ EPO today: **a modern, public agency** that proved capable of reforming itself while increasing efficiency and quality

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- ✓ EPO is a **European success story** and a **global player**

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- ✓ The European patent system will continue to expand and increase its **international influence**

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- ✓ The EPO is ready for the **Unitary Patent**, a long awaited step in the natural evolution of the European Patent System



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**Thank you for your attention**