



Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

# Developments at the EPO and co-operation with China



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Director, International Co-operation

Brussels, 9 November 2016

# ***Developments at the EPO***

# Patent protection in up to 42 countries

European Patent Organisation

Founded in 1973

Independent organisation, dedicated to patents

Annual budget: 2.15 billion €(self-financed)

Some 700 million inhabitants

## European member states (38)

European extension states

Bosnia and Herzegovina

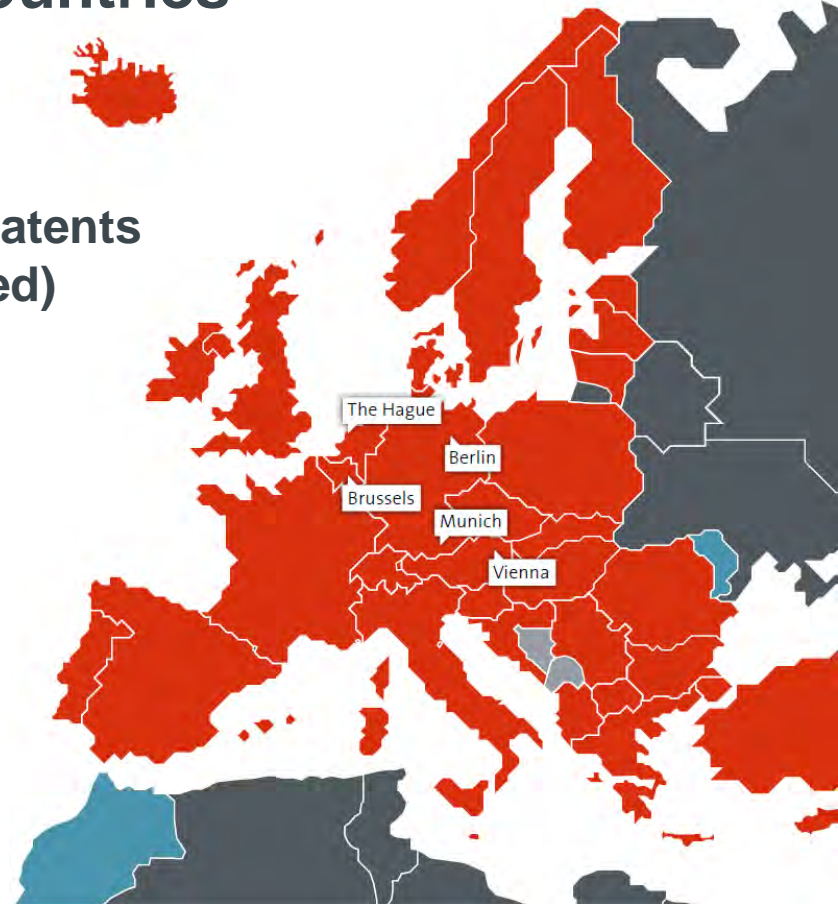
Montenegro

## Validation states

Morocco 2015

Moldova 2015

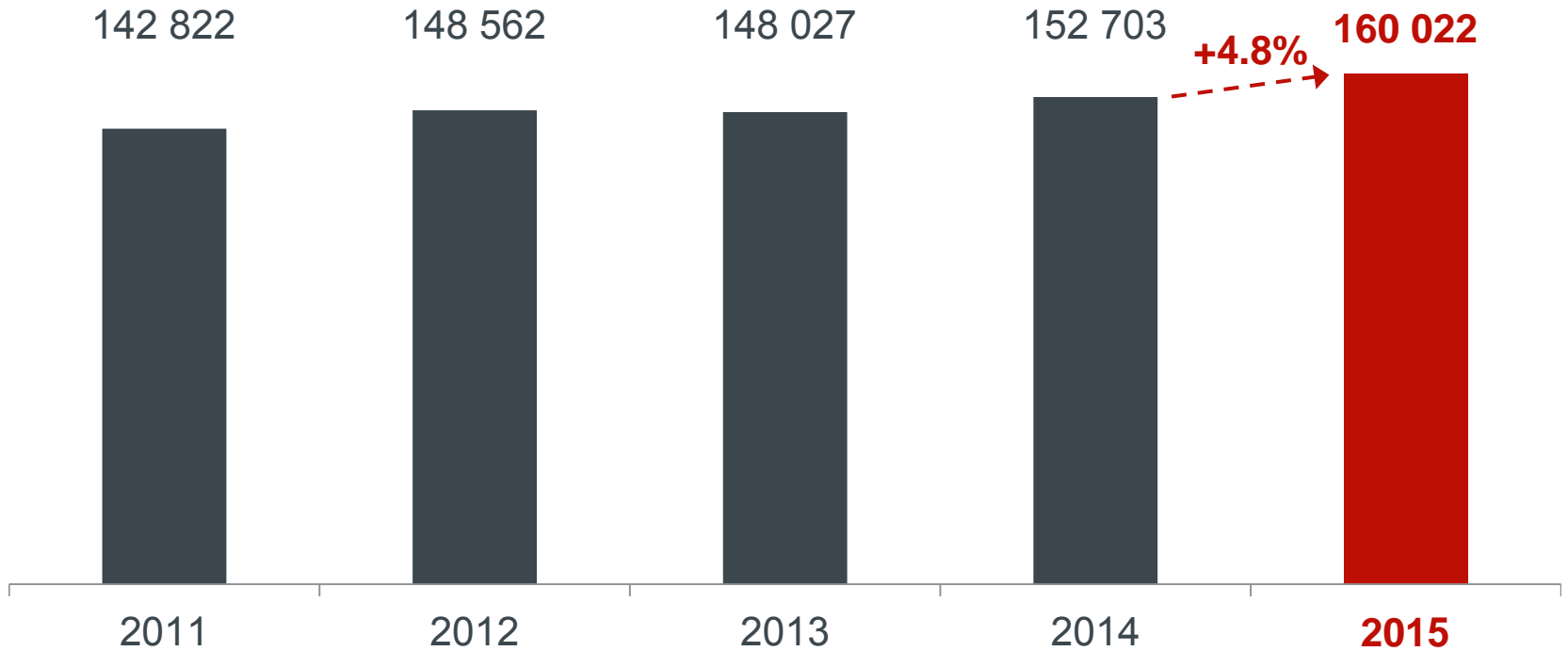
Tunisia – 2016 (TBC)



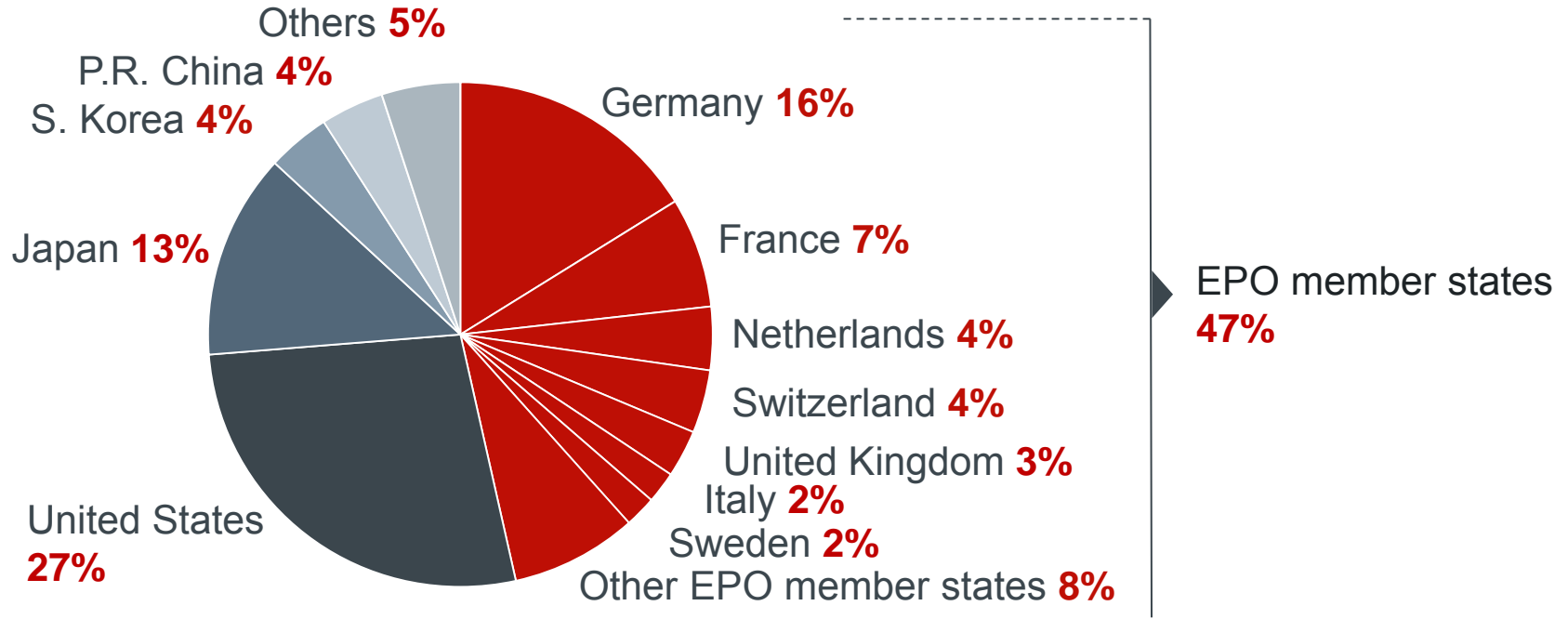
# Key facts: the EPO at a glance

- **Second largest** intergovernmental institution in Europe
- **Global player** and voice of Europe in patents
- **7000** employees, of which around **4300 highly qualified examiners**
- Will be in charge of **granting and administering the unitary patent**
- **High-quality European patents (ISO 9001 certification)** are drivers of innovation and secure the competitiveness of the European economy

# Growth of European patent applications



# Origin of European patent applications in 2015



# Flow of patent applications between EPO and IP5 countries (2014)



# Countries driving growth

## Growth champions

P.R. China	+ 22.2%
United States	+ 16.4%

## Stable applications

France	+ 1.6%
Austria	+ 1.4%
Sweden	- 0.9%

## Countries with significant growth rate

Italy	+ 9.0%
Belgium	+ 5.9%
United Kingdom	+ 5.7%
S. Korea	+ 4.0%
Spain	+ 3.8%
Netherlands	+ 3.3%
Switzerland	+ 2.6%

## Declining applications

Denmark	- 2.7%
Japan	- 3.1%
Germany	- 3.2%
Canada	- 3.7%
Finland	- 8.3%

## Growth from lower volume countries

Czech Republic	+ 27.5%
Portugal	+ 21.2%
Poland	+ 17.8%
Turkey	+ 10.9%
Israel	+ 5.0%



# Top EPO applicants 2015

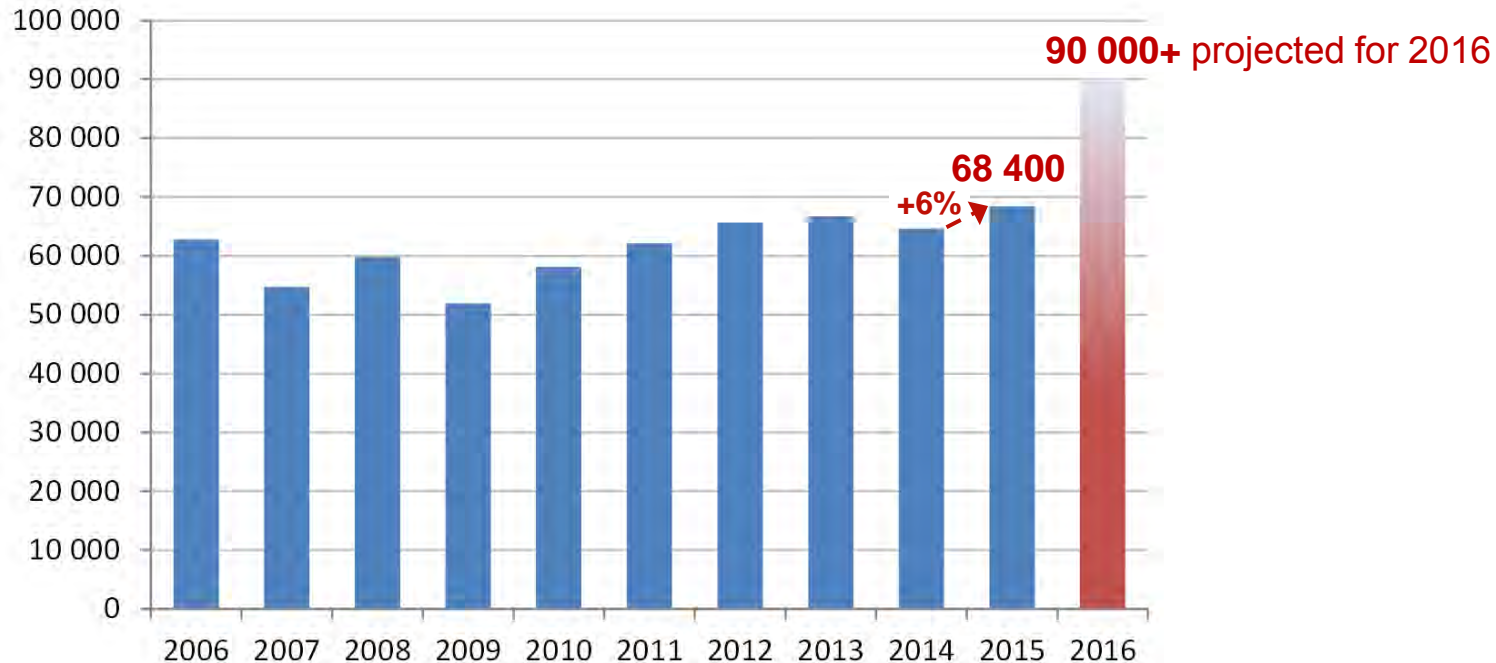
## TOP 10

		2015	Change	
1	Philips	2 402	3.7%	↗
2	Samsung	2 366	- 6.9%	↘
3	LG	2 091	27.7%	↗
4	Huawei	1 953	22.1%	↗
5	Siemens	1 894	- 11.2%	↘
6	United Technologies	1 869	110.0%	↗
7	Qualcomm	1 705	16.9%	↗
8	Robert Bosch	1 493	3.8%	↗
9	BASF	1 384	- 9.5%	↘
10	General Electric	1 316	57.0%	↗

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

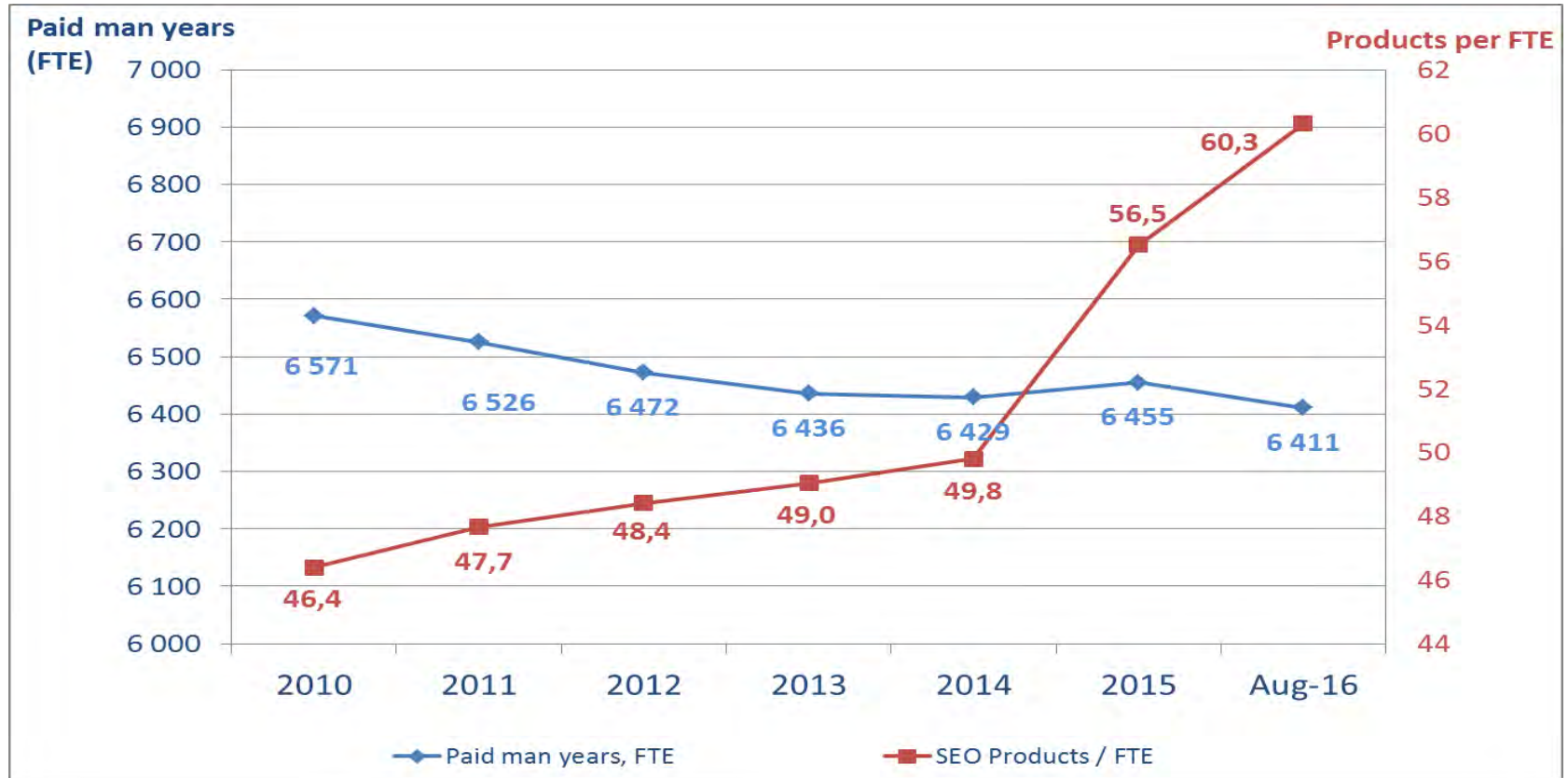
Note: Based on European patent applications filed with the EPO (direct European patent applications filed at the EPO under the EPC, plus international PCT filings which entered the European regional phase (becoming a European application) in the year under review).

# European patents granted 2006-2016



**Steep increase in grants projected in 2016:  
2/3 capacity increase, 1/3 efficiency increase**

# Record increases in productivity (latest figures)



# Quality in search and examination (I)

- **High specialisation** and **intensive training** of EPO examiners  
(4300 examiners working in divisions of 3)
- EPO does not outsource any of its core tasks
- Almost complete availability of **Asian documentation**: 27% of EPO citations are from Asia
- **Patent Translate**: used 20 000 times per day
- **Stability** in our procedures and **predictability of results**
- **State-of-the-art tools** allowing efficient access by examiners  
(e.g. new Epoque)

# Quality in search and examination (Cont.)

- **Cooperative Patent Classification (CPC):** 24 IP Offices now classifying, or intending to classify, in the CPC including, EPO, USPTO, KIPO, SIPO, INPI Brazil, IMPI Mexico, ILPO, ROSPATENT and 16 EPO Member States.
- Very comprehensive prior art coverage: over **90 million patent documents** available to examiners
- A **standards documentation** standing at almost 3 million documents
- Regular “**Partnership for Quality**” meetings with users in Europe, US, Japan, China and Korea, promoting a direct user contact

# Reduction of backlogs

## Early Certainty from Search (ECfS)

- All incoming searches are issued with written opinion within 6 months
- Backlog of searches under ECfS **was cleared in mid 2016**
- The total backlog in late files in other priority areas is planned to further decrease in 2016



**Global Stock reduced to less than 16 months**

# Early certainty – Expanded

- Launched on 1 July 2016, to respond to needs of users and ensure timeliness.
- Following success of ECfS, EPO has extended Early Certainty to Examination and Opposition.
- **Examination** - Streamlining patent practice, workflows & procedures. Supported by extended refund fees following withdrawal.
- **Opposition** - streamlined opposition procedure set to deliver decisions faster, while giving parties more time to react to summons and prepare for oral proceedings.

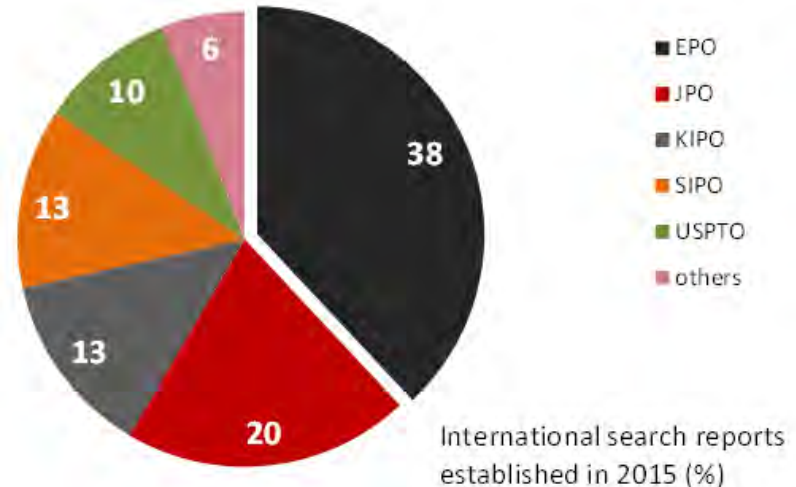


## Complete control over timeliness by 2020:

- 6 months for a search and its opinion
- 12 months on average for examination
- 15 months for a standard opposition.

# EPO and PCT

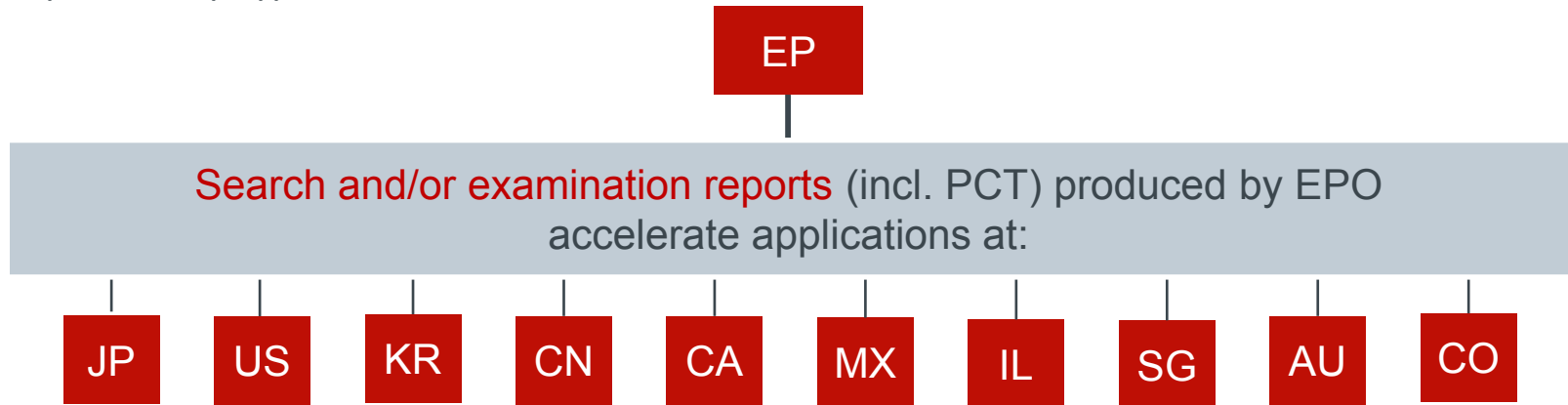
- PCT is the work-sharing vehicle of choice for the EPO
- EPO ranks **1<sup>st</sup> in the world as ISA and IPEA** (81 100 international search reports 38% and over 9 100 international preliminary examination reports 58.1% in 2015)
- EPO is ISA for **37% of US filings**
- Improving services to users:
  - **PCT Direct** extended to all ROs in July 2015
  - EPO joined **WIPO ePCT** Phase 1 on 1 Nov. 2014
  - **International search fee frozen since** April 2012 (1875€) until March 2018





# The EPO PPH pilot programmes

- Fast track examination of applications
- EPO work products can be used at other PPH Offices  
(**IP5** + Australia (AU), Canada (CA), Columbia (CO), Mexico (MX), Singapore (SG) Israel (IL))



- Rospatent, The Philippines and Malaysia will enter into force in 2017. Other PPH agreements are in the pipeline.

# Main features of the Unitary Patent

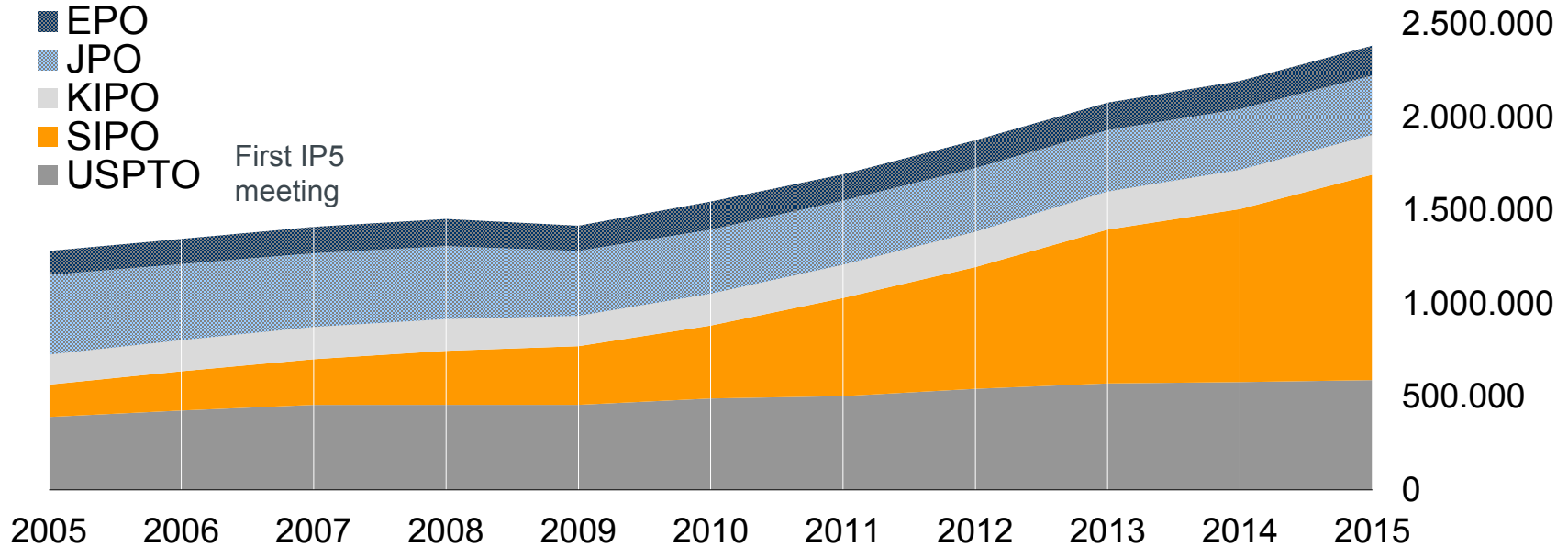
- **Quality:** A **European patent**, granted by the EPO under the EPC
- **Cost-effective:** **Attractive and business-friendly renewal fee pattern** ensuring that the Unitary Patent provides good value for money
- **Broad territorial protection:** **Uniform protection in up to 26 EU Member States** instead of protection in a few Member States only
- **Reduction of red tape:** **One-stop shop at the EPO** instead of national validation and translation requirements and fee payments with several national patent offices. Reduction of complexity and associated costs.
- **Flexibility:** An **additional option for patent owners**, alongside the existing European and national patent systems
- **Legal certainty:** **Uniform litigation system through the Unified Patent Court**

# The EPO in 2016: Progress and Outlook

- **Building further** on the solid results of 2015: **+9% production** (Jun 2016 vs. June 2015)
- Further improved results **through increased examining capacity and efficiency**
- Number of **granted patents up over 30%** (2016 projection): with maintained high quality
- **Early Certainty:**
  - Backlog in search cleared
  - all **search reports completed within 6 months**
  - Early Certainty from **Examination & Opposition** launched on 1 July 2016
  - New **streamlined opposition procedure** will enable opposition decisions within 15 months for most cases
  - By 2020 aim for **examination duration** of about one year
  - Unitary Patent: **EPO legally and technically ready to deliver**

# ***The IP5 co-operation including the EPO and China***

# Evolution of patent filings at the IP5 offices



SIPO expects a further 30% increase in filing in 2016 to 1,45 million.  
Chinese filings to the EPO increased by 22% in 2015.

## Meeting the challenge

- 2.4 million patent applications were filed at the IP5 offices in 2015
  - approx. 250 000 applications were cross-filed to two or more offices
- *IP5 co-operation is a response to the challenge*
- *Technical and procedural harmonisation among the IP5 would mean substantial savings to applicants and IP Offices*

# IP5 achievements in 2015

- EPO's **Global Dossier** (file wrapper)
  - Further elaboration of the five point “Common Vision” at Global Dossier Task Force and IP5 WG2 meetings
  - including “Alerting” function led by EPO
- Improved **CCD** citation data:
  - “enriched data” (categories, passages, claims reference) from SIPO
  - loading of 42 million patent citations from more than 2.5 million USPTO patent application citing documents from 2001-2011
  - giving a total of over 240 million citations
- Launch of newly updated IP5 website
- Continuation of **effective partnership** with users

# IP5 developments in 2016

- Work on 5 initiatives from **Global Dossier** “Common Vision”
  - EPO focus initially on Alerting, and Legal Status with SIPO
  - initial visualisations available
- Addition of **WIPO-CASE** to EPO’s Global Dossier (file wrapper)
  - inclusion of file wrappers for PCT IB, UK, IPAUS, CIPO and IL
  - access for EPO examiners for re-use of search and examination results available since June 2016
  - access to public via Espacenet for PCT IB and CIPO in November
  - inclusion of UK IPO, Australian IPO and Israeli IPO dossiers planned for early 2017
- **IP5 Statistics Report for 2015** expected November – December
  - “**Infographic**” with key results published April 2016



# EPO Global Dossier service

- IP5 file wrapper portal
- Access to IP5 patent family information
- On-the-fly machine translation from Asian languages to English
- Free of charge
- Via the European Register and Espacenet
- US data since June 2015

The image displays two overlapping patent document pages. The left page is the original Chinese version, and the right page is an English translation. Both pages show the title 'The First Office Action' and a table of references.

**Original Chinese Document (Left):**

中华人民共和国国家知识产权局  
100005  
北京市东城区建国门内大街28号  
联合知识产权代理有限公司  
丁业平

发文日:  
\_\_\_\_\_

申请号或专利号: 201180015287.X  
申请人或专利权人: G·罗伯特·柯  
发明创造名称: 用于减少废水处理

第 1 页

1. 经审查, 申请人提出的实质审查请求, 符合进行实质审查。  
 根据专利法第 35 条第 2 款的规定  
2.  申请人要求以此在:  
3.  已经审查, 申请人于 \_\_\_\_\_ 提交。  
4.  审查是针对原始提交的国际申请的。  
 审查是针对下列申请文件进行的:  
5. 本通知书引用下列对比文献 (其他):

编号	文件
1	US
2	US

6. 审查的结论性意见:  
关于说明书:  
 申请的内容属于专利法第 5 条  
 说明书不符合专利法第 26 条  
 说明书不符合专利法第 33 条

**English Translation Document (Right):**

The State Intellectual Property Office of People's Republic of China  
100005  
北京市东城区建国门内大街28号民生金融中心B座10层 北京天奥  
联合知识产权代理有限公司  
丁业平 李小芳

Issuing Date: \_\_\_\_\_

Application No. or Publication No.: 201180015287.X  
Issue No.: \_\_\_\_\_

Applicant or Patentee: White is grateful for stevechat39; G Bert  
Title of Invention: For system and the method that reduces the mud that the Wastewater treatment equipment produced

**The First Office Action**  
(PCT Application Entering the National Phase)

1. Upon the request of substantive examination of the applicant, in accordance with Article 35.1 of the Patent Law, the State Intellectual Property Office performs the substantive examination for the aforesaid application for a patent for invention.  
 In accordance with Article 35.2 of the Patent Law, the State Intellectual Property Office proceeds to examine the aforesaid application for a patent for invention on its own initiative.  
2.  The applicant requests in the basis of:  
3.  Upon examination, the aforesaid submitted by the applicant on \_\_\_\_\_, shall not be accepted for not in conformity with Rule 36.1 of the Implementing Regulations of the Patent Law.  
4.  Examination is proceeded on the basis of Chinese document or the Chinese translation of the original filing international application.  
 Examination is proceeded on the basis of the following applicant document:  
5.  The following reference documents are cited in this Office Action (the serial number(s) of which will be used to follow on examination)

No.	Document number or Document title	publication date (or application date of the conflicting application)
1	US 2008135474A1	20080612
2	US 2003190742A1	20031009

6. Conclusive opinions of the examination:  
About the description:

Example from Chinese file wrapper:  
First Office Action in the original Chinese language and the translation into English

# The EPO's Global Dossier

[← About European Patent Register](#)
[Other EPO online services](#)

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[Quick search](#)
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- WO2011129660
- About this file
- Legal status
- Federated register
- Event history
- Citations
- Patent family**
- All documents

Quick help

- [What happens if I click on the "XML" or "ST36" buttons?](#)
- [What does "patent family" mean?](#)
- [What are "equivalents"?](#)
- [What is Global dossier?](#)
- [Which types of document will I find under "Patent family"?](#)
- [What does A1, A2, A3 and B stand for after a publication number?](#)

Maintenance news

News flashes

Related links

## Patent family: WO2011129660

[Refine search](#)
[ST36](#)
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[Submit observations](#)
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Type	Publication No.	Date	Type
<input checked="" type="checkbox"/> Patent family member			
	→ <a href="#">US8780848</a>	15.07.2014	B2
	US2013028227	31.01.2013	A1
	<b>Priority number</b>	<b>Date</b>	
	US32430710	15.04.2010	
<input checked="" type="checkbox"/> Patent family member			
	→ <a href="#">KR20110115551</a>	21.10.2011	A
	<b>Priority number</b>	<b>Date</b>	
	US32430710	15.04.2010	
<input checked="" type="checkbox"/> Patent family member			
	→ <a href="#">JP2013524719</a>	17.05.2013	A
	<b>Priority number</b>	<b>Date</b>	
	US32430710	15.04.2010	
	KR2011002721	15.04.2011	
	KR20110035131	15.04.2011	
<input checked="" type="checkbox"/> Patent family member			
	→ <a href="#">CN102845117</a>	28.12.2012	A
	<b>Priority number</b>	<b>Date</b>	
	US32430710	15.04.2010	
	KR2011002721	15.04.2011	
	KR20110035131	15.04.2011	

USPTO file wrappers since **06/15**

KIPO and JPO file wrappers since **03/15**

SIPO file wrappers since **06/14**

Date	Description
14.09.2015	<a href="#">Nth Office Action (ORIGINAL)</a>
14.09.2015	<a href="#">Nth Office Action (TRANSLATED)</a>
08.05.2015	<a href="#">Claims (ORIGINAL)</a>
08.05.2015	<a href="#">Argument (TRANSLATED)</a>
08.05.2015	<a href="#">Argument (ORIGINAL)</a>
29.12.2014	<a href="#">First Office Action(PCT) (TRANSLATED)</a>
29.12.2014	<a href="#">First Office Action(PCT) (ORIGINAL)</a>
19.12.2014	<a href="#">First search (ORIGINAL)</a>
05.03.2014	<a href="#">Invention Publication (ORIGINAL)</a>

 中华人民共和国国家知识产权局

**100005**  
北京市东城区建国门内大街28号民生金融中心B座10层 北京天奥联合知识产权代理有限公司  
丁彦宇 李小芳

发文日:

申请号或专利号: 201180015287.X 发文序号:  
申请人或专利权人: 罗·罗伯特·拜特曼

发明创造名称: 用于减少废水处理设备产生的污泥的系统及方法

**第一次审查意见通知书**  
(进入国家阶段的 PCT 申请)

1. 根据申请人提出的实质审查请求, 根据专利法第 33 条第 1 款的规定, 国家知识产权局对主权利要求书进行实质审查。  
□ 根据专利法第 33 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行实质审查。  
2. □ 申请人要求以其在:

3. □ 经审查, 申请人于 \_\_\_\_\_ 受。  
4. 经审查针对原始提交的国际申请审查是针对下列申请文件进行:  
5. 本通知书引用下列对比文献:

编号	对比文献
1	
2	

6. 审查的结论性意见:  
关于说明书:  
□ 说明书不符合专利法第 26 条第 1 款的规定。  
□ 说明书不符合专利法第 26 条第 2 款的规定。  
□ 说明书不符合专利法第 26 条第 3 款的规定。

 The State Intellectual Property Office of People's Republic of China

**100005**  
北京市东城区建国门内大街28号民生金融中心B座10层 北京天奥联合知识产权代理有限公司  
丁彦宇 李小芳

Issuing Date:

Application No. or Publication No.: 201180015287.X Issue No.:

Applicant or Patentee: White is proofed for sievecut 30µ C Belt  
Title of Invention: For system and the method that reduces the mud that the Wastewater treatment equipment produced

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(PCT Application Entering the National Phase)

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□ This, according with Article 33.2 of the Patent Law, the State Intellectual Property Office proceeds to examine the aforesaid application for a patent for invention on its own initiative.  
2. □ The applicant requests on the basis of:

3. □ Upon examination, the amendments submitted by the applicant on \_\_\_\_\_ shall not be accepted for not in conformity with Rule 34.1 of the Implementing Regulations of the Patent Law.  
4. □ Examination is proceeded on the basis of Chinese document or the Chinese translation of the original filing international application.  
□ Examination is proceeded on the basis of the following applicant documents:

5. The following reference documents are cited in this Office Action (the serial number(s) of which is/are cited in \_\_\_\_\_):

No.	Document number or Document title	Publication date (or application date of the applicant application)
1	US 2008125474A1	20080612
2	US 2003190742A1	20031009

6. Conclusive opinion of the examination:  
□ The invention is not patentable.

# IP5 Global Dossier - “Future vision”

## **Alerting – EPO led**

Provide timely notification to users on file wrapper changes or status to all IP5 family members of an application

## **Legal status – SIPO led**

Agree on the sharing approach for legal status reporting of patents and applications across the IP5

## **XML Based Documents – JPO led**

Maintain focus on the increasing provision by IP5 offices of all file wrapper documents in XML

## **Applicant name standardisation – KIPO led**

Harmonise and normalise applicant names across IP5 patent document collections

## **Proof of Concept (Applicant Initiated Inter-Office Doc Exchange)- USPTO**

Demonstrate the feasibility of cross filing documents or changes over the entire IP5 using an example submission achievable in today’s IP5 legal framework

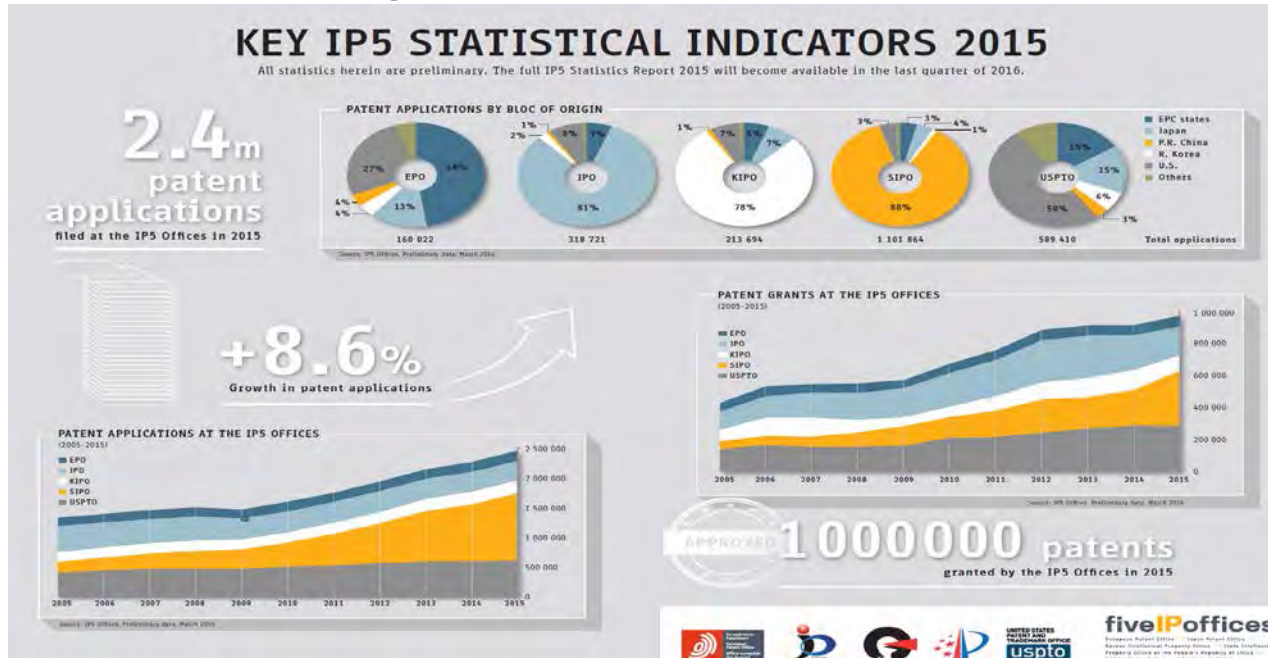
# IP5 Statistics Working Group

- Compilation of the IP5 Statistics Report
- Exchange of forecasting methodology and results
- Improvements to the exchange of statistical data between the IP5 offices
- Annual publications:
  - **Key IP5 statistical data** for previous year's statistics published every Spring as "Infographic"
  - **Full IP5 statistics report** published at the end of the year
- *Allows more informed workload planning at IP5 offices*
- *Provides more consistent view for external policymakers*

[www.fiveipoffices.org/statistics.html](http://www.fiveipoffices.org/statistics.html)

# Key IP5 figures in 2015

- The IP5 offices had a growth of 8.6% in patent applications
- Together the IP5 offices granted 1 million patents for invention



# 2017: A European year

2017 meetings with industry hosted by the EPO:

- **IP5 WG2, Global Dossier Task Force, and Industry Consultation Group** meetings  
Munich, 16-20 January 2017
- **Trilateral** meetings  
Seville, Spain, 30-31 March 2017
- **IP5 Deputy Heads**, 11-12 April 2017, Munich
- **10<sup>th</sup> IP5 Heads** and **6<sup>th</sup> IP5 Heads/Industry** meetings  
Valetta, Malta, 30 May to 01 June 2017



# EPO-SIPO bilateral co-operation

The 30<sup>th</sup> anniversary of the EPO-SIPO co-operation was celebrated in Lyon in October 2015 and Beijing in November 2016





# Main achievements of EPO-SIPO bilateral co-operation

- 1985: EPO and SIPO sign their first bilateral co-operation agreement
- 1993-2011: EPO implements several multi-million euro EU-funded projects in China to support the country's efforts to develop a modern and effective system for the protection of IP rights
- 2007: Launch of IP5 co-operation
- 2007: EPO and SIPO sign strategic partnership, upgrading their relationship from a technical to a strategic one; the partnership is reinforced in 2011
- 2012: Launch of Chinese-English component of EPO's free machine-translation service Patent Translate
- 2014: Launch of the Global Dossier service providing access to European and Chinese dossier content for a family of patent applications, and making it easier for companies filing at both offices to track their applications.
- 2015: Celebration of the 30th anniversary of the EPO-SIPO bilateral co-operation.
- 2016: Signature of a new MoU on CPC



Thank you  
for your attention!