



# The Patent Prosecution Highway at the USPTO

FICPI Forum

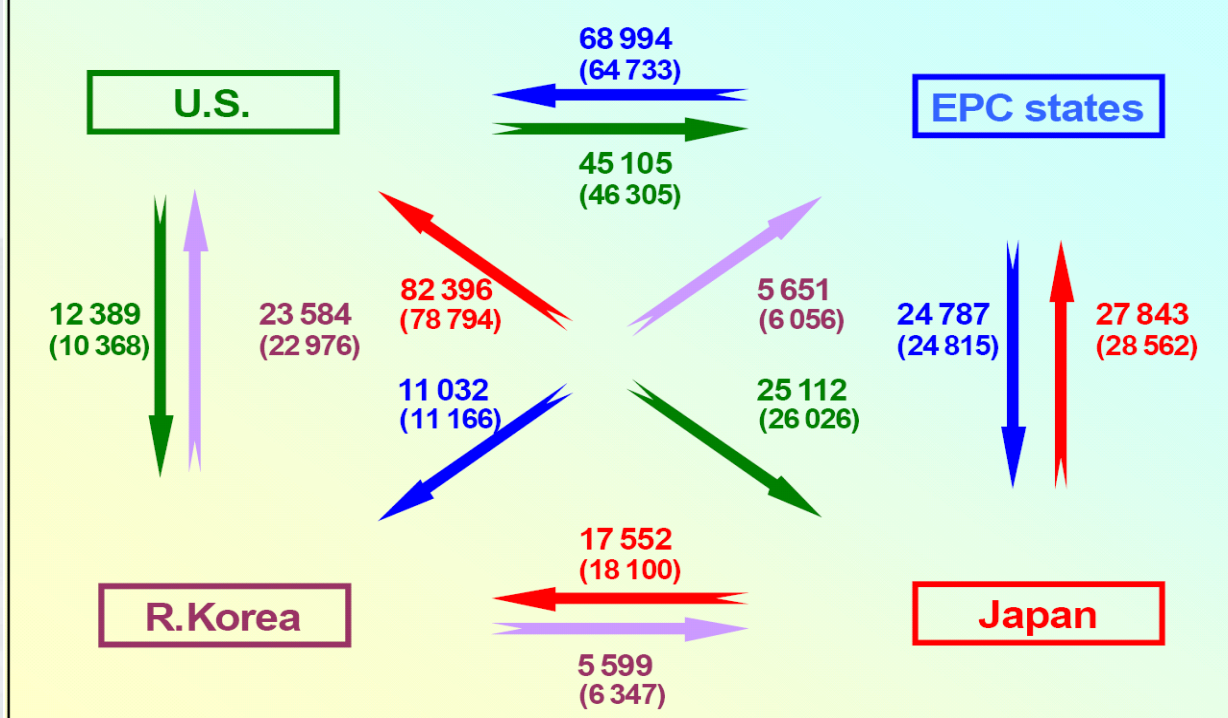
November 11, 2011  
Rome

Charles Eloshway  
Patent Attorney  
Office of Policy and External Affairs  
USPTO



# Work Sharing in Context

Fig. 3.12 FLOWS OF APPLICATIONS BETWEEN BLOCs IN 2008



- Application flows in 2008 (China omitted)
- 2007 figures in parentheses for comparison



# PPH Background

- Patent Prosecution Highway
  - Based on JPO concept
  - Intended to correct Paris Route timing imbalances
  - Final framework product of JPO-USPTO collaboration
  - Pilot USPTO-JPO PPH launch in 2006
  - First true, implemented work sharing framework



# PPH Basics

- **What is PPH?**
  - When claims are determined to be allowable in the Office of First Filing (OFF), a corresponding application with corresponding claims filed in the Office of Second Filing (OSF) may be fast-tracked for examination
- **What is the Purpose of PPH?**
  - OSF can utilize the search and examination results of the OFF thereby avoiding duplication of work and expediting the examination process in the OSF



# PPH Basics

- **Corresponding Applications—Options**
  - Paris Route PPH
    - Paris priority applications
    - PCT Bridge filings
    - Certain non-binding work product, e.g., EPO's EESR
  - PCT-PPH
    - Pilot launched January 29, 2010 among Trilateral Offices; other offices have subsequently been added
    - Positive WO/ISA, WO/IPEA or IPER



# PPH Basics

- A few more words about corresponding applications
  - Current Paris Route PPH has a built-in priority-based “one way valve”—reusable work can only flow from the office of first filing (OFF) to an office of second filing(OSF)
  - PCT-PPH slightly different, but similar concept—reuse of earlier international phase work in the national phase



# PPH Basics

- New approach: MOTTAINAI
- Expanded eligibility - de-linking priority
  - Original PPH framework based on unidirectional work flow OFF → OSF
  - New approach:
    - Eligibility based on available work from a participating office on a patent family member, regardless of order of filing
    - Will give applicants greater flexibility and increase pool of potentially eligible applications
  - Some concerns, especially forum shopping
  - Pilot began July 15 with 7 other offices



# PPH Basics

## Claim Correspondence

- All claims in the OSF application must “sufficiently correspond” to the allowable claims in the OFF application
- The participating offices recently agreed to the following definition and implementation of the claim correspondence requirement





# PPH Basics

***All claims on file, as originally filed or as amended, for examination under the PPH must sufficiently correspond to one or more of those claims indicated as allowable in the OFF.***

*Claims are considered to "sufficiently correspond" where, accounting for differences due to translations and claim format, the claims in the OSF are of the same or similar scope as the claims in the OFF, or the claims in the OSF are narrower in scope than the claims in the OFF.*

*In this regard, a claim that is narrower in scope occurs when an OFF claim is amended to be further limited by an additional feature that is supported in the specification (description and/or claims).*

*A claim in the OSF which introduces a new/different category of claims to those claims indicated as allowable in the OFF is not considered to sufficiently correspond. For example, the OFF claims only contain claims to a process of manufacturing a product, then the claims in the OSF are not considered to sufficiently correspond if the OSF claims introduce product claims that are dependent on the corresponding process claims."*

- (i) It is an option whether the narrower claims should be written as dependent claims. Each office can add the requirement to the proposed template.
- (ii) When the guideline does not explicitly refer to this point, it is regarded to allow the narrower claims are written as independent claims.



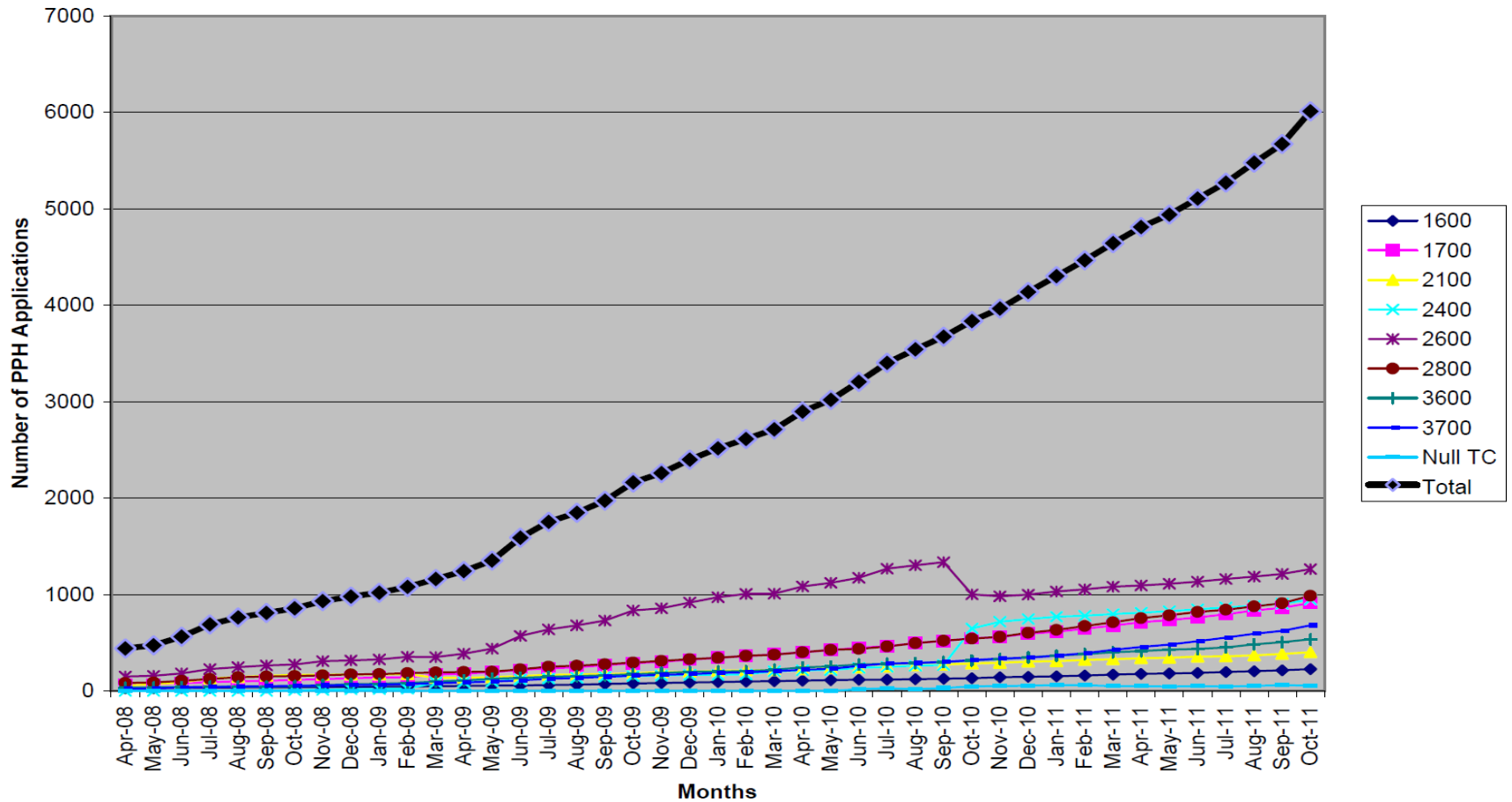
# PPH Stats—Paris Route (Select Offices)

First Office	Start Date	Requests (as of October 31, 2011)	TOTAL NUMBER OF REQUESTS
JPO	July 2006	4464 278 (Pilot) 4186 (Full)	
KIPO	Jan. 2008	811 134 (Pilot) 677 (Full)	
UKIPO	Sept. 2007	189	Total—All Offices
CIPO	Jan. 2008	98	6013
IPAU	April 2008	97	
EPO	Sept. 2008	178	
DKPTO	Nov. 2008	89	
DPMA	April 2009	59	
NBPR	July 2009	19	
HPO	July 2010	1	
Rospatent	Sept. 2010	6	
SPTO	Oct. 2010	0	
APO	Oct. 2010	0	



# PPH Stats—Paris Route

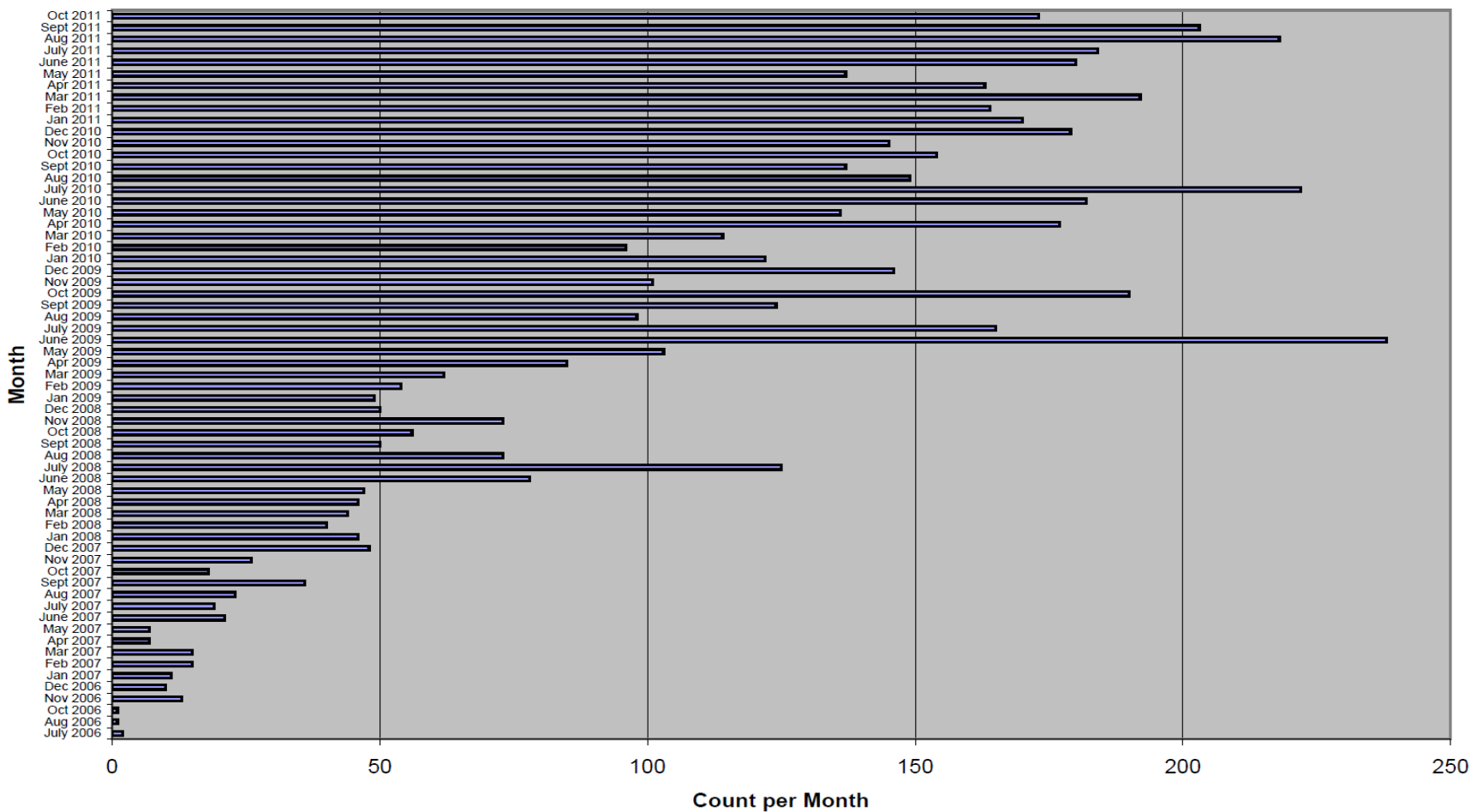
Cumulative Paris Route PPH Applications By TC and Month





# PPH Stats—Paris Route

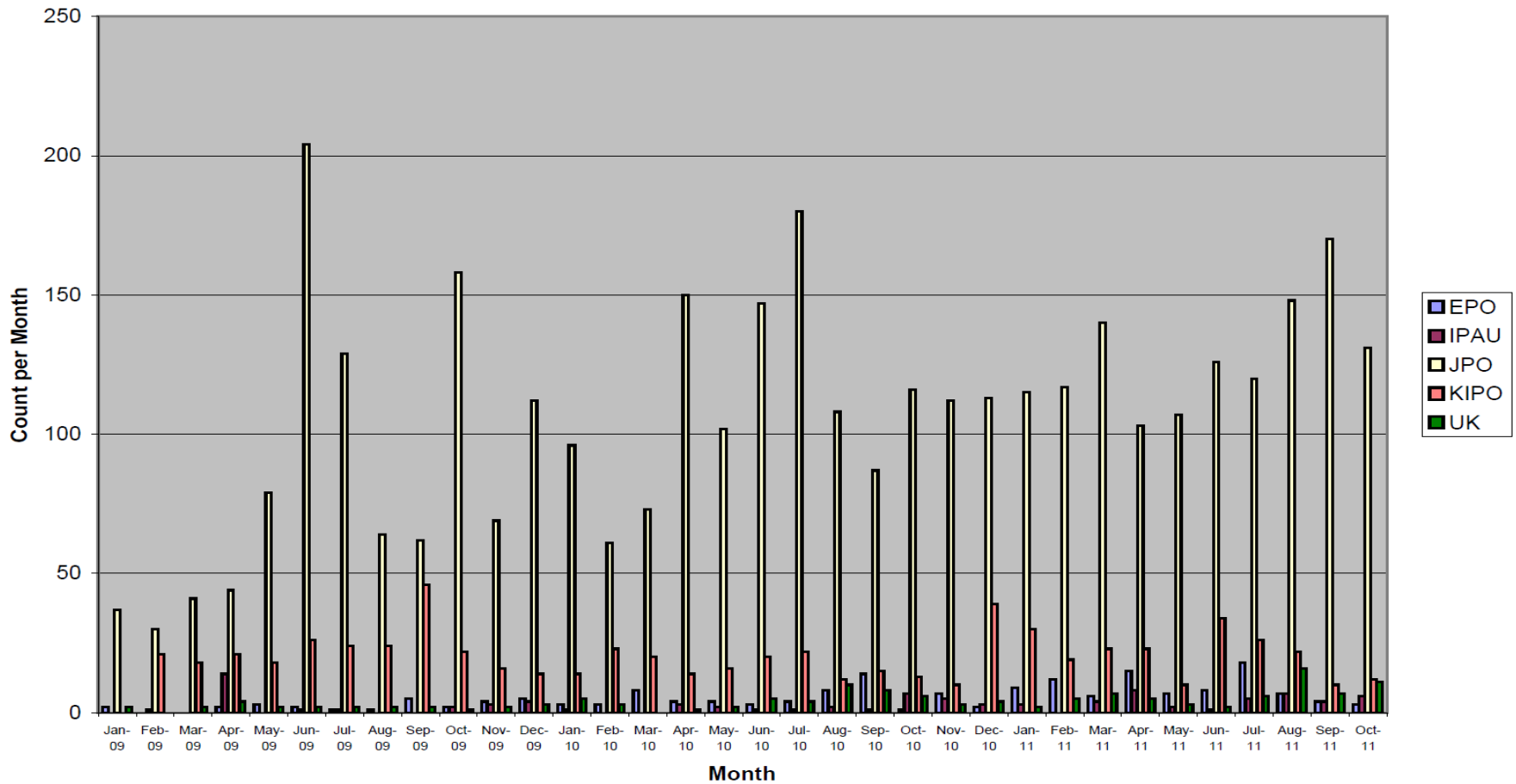
Count of New Paris Route PPH Filings by Month





# PPH Stats—Paris Route

Count of New Paris Route PPH Filings by Region and Month





# Other Data—Paris Route

## Overall Statistics for Paris Route Patent Prosecution Highway Programs

- Statistics for PPH requests filed in the USPTO under Paris Route PPH programs

As of: 10/31/2011

Number of requests to participate in the PPH Program 6,013

Number of these requests that are not eligible because a first action on the merits was mailed before the requests were considered, or cannot be granted because the request has been dismissed twice. 347

## Breakdown of applications and application data by Tech Center

	Number of Requests Filed	Days from PPH Request to Grant	Days from PPH Grant to First Action
<b>Technology Center 1600</b> Biotechnology and Organic Chemistry	227	117.65	205.96
<b>Technology Center 1700</b> Chemical and Materials Engineering	913	66.39	103.56
<b>Technology Center 2100</b> Computer Architecture Software and Information Systems	402	70.15	108.93
<b>Technology Center 2400</b> Multiplex, Networking, Cable TV, Computer Security	946	67.99	127.20
<b>Technology Center 2600</b> Communications	1,263	59.95	140.34
<b>Technology Center 2800</b> Semiconductors and Electronic Circuits and Components	988	58.19	74.16
<b>Technology Center 3600</b> Mechanical Engineering	537	48.08	89.46
<b>Technology Center 3700</b> Mechanical Engineering	681	25.42	122.62
Applications undergoing Pre-Exam without a Technology Center assignment	56	0.00	0.00

Eligible requests	<u>5,666</u>
Requests granted	<u>5,180</u>
Requests dismissed once and awaiting further action	<u>71</u>
Requests not acted upon	<u>415</u>



# Other Data—Paris Route

## Overall Statistics for Paris Route Patent Prosecution Highway Programs

- Statistics for PPH requests filed in the USPTO under Paris Route PPH programs

PPH requests received by the USPTO		6,013	Percent w/ First Action
FAs	Total	4,781	79.51%
	First Action Allowance	1,232	25.77%
	First Action Quayle	84	1.76%
	First Action Rejection*	3,097	64.78%
	(- art rejections)**	2,671	86.24%
	(- non art rejections)	426	13.76%
	First Action Restriction	368	7.70%
PPH requests for accelerated examination rejected for not satisfying PPH requirements		347	
Average period from request to FA		185.4 days	

\* First Action Rejections subsequently allowed: 1,610 out of 3,097 times

\*\* Art Rejections where U.S. Patent documents used: 2,483 out of 2,671 times

Grant Rate (Allowances / Total number of Disposals) 87.47%



# PPH Stats—PCT Route (Select Offices)

ISA	Start Date	Requests (as of August 31, 2011)	TOTAL NUMBER OF REQUESTS
JPO	Jan. 2010	473	
EPO	Jan. 2010	698	Total 2271
USPTO*	Jan. 2010	119	
KIPO	June 2010	851	
APO	Oct. 2010	7	
ROSPATENT	Oct. 2010	6	
SPTO	Oct. 2010	2	
NBPR	Jan. 2011	34	
IP Australia	Jan. 2011	69	
PRV	June 2011	9	

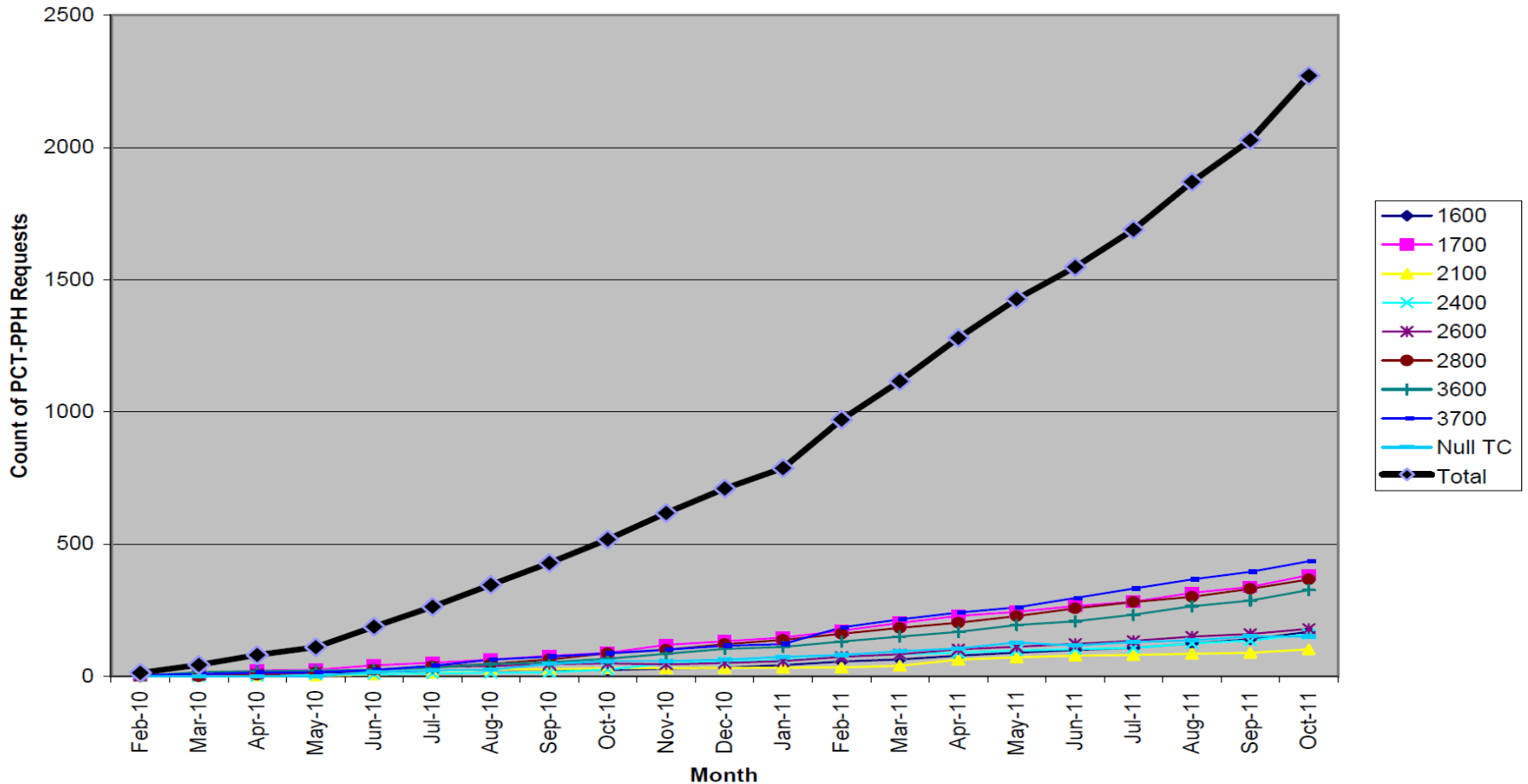
\* As part of the Trilateral PCT-PPH Pilot, each Trilateral Office implemented PPH for its own national/regional phase applications where it was the ISA/IPEA





# PPH Stats—PCT Route

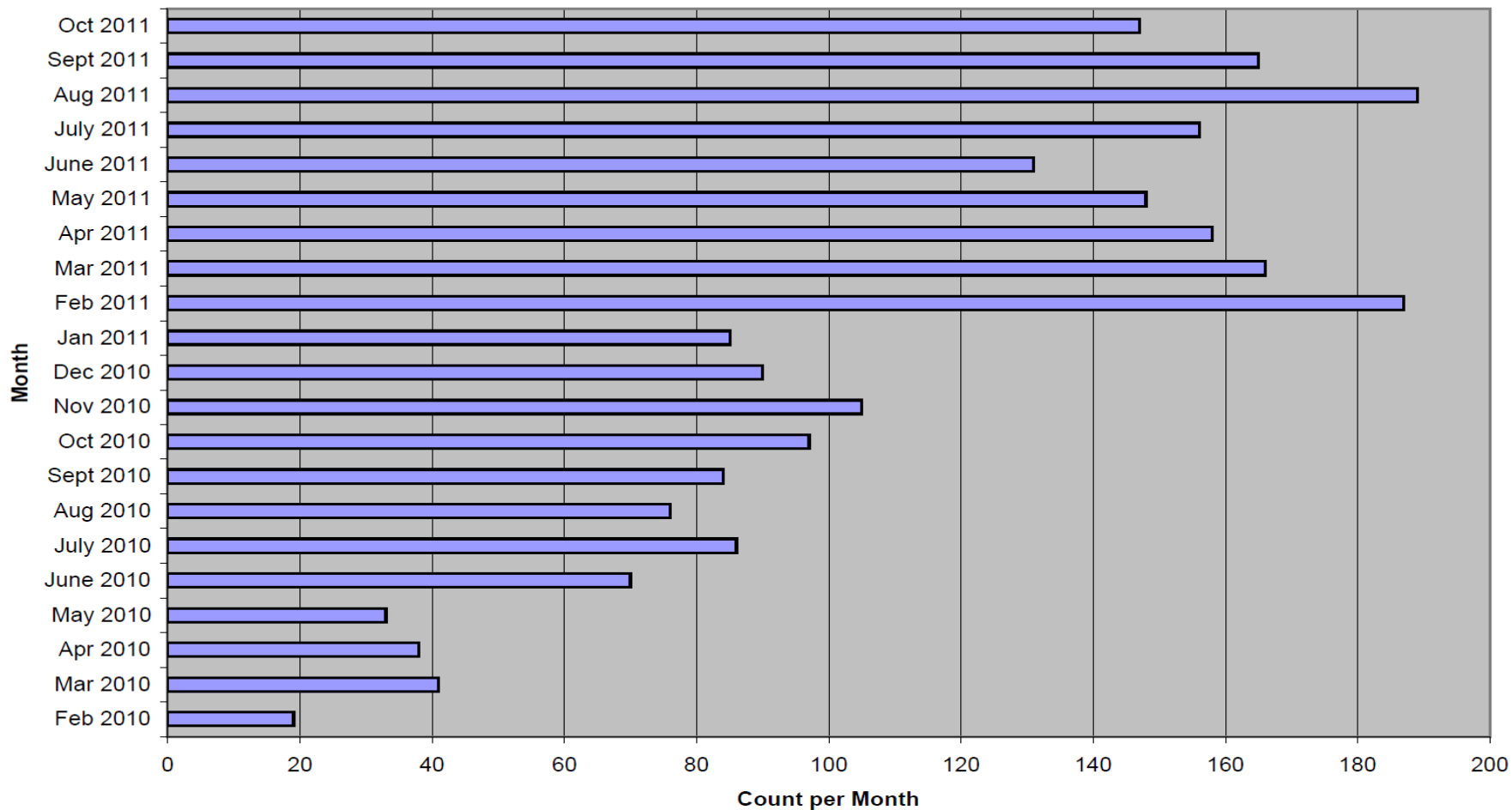
Cumulative PCT-PPH Requests By TC and Month





# PPH Stats—PCT Route

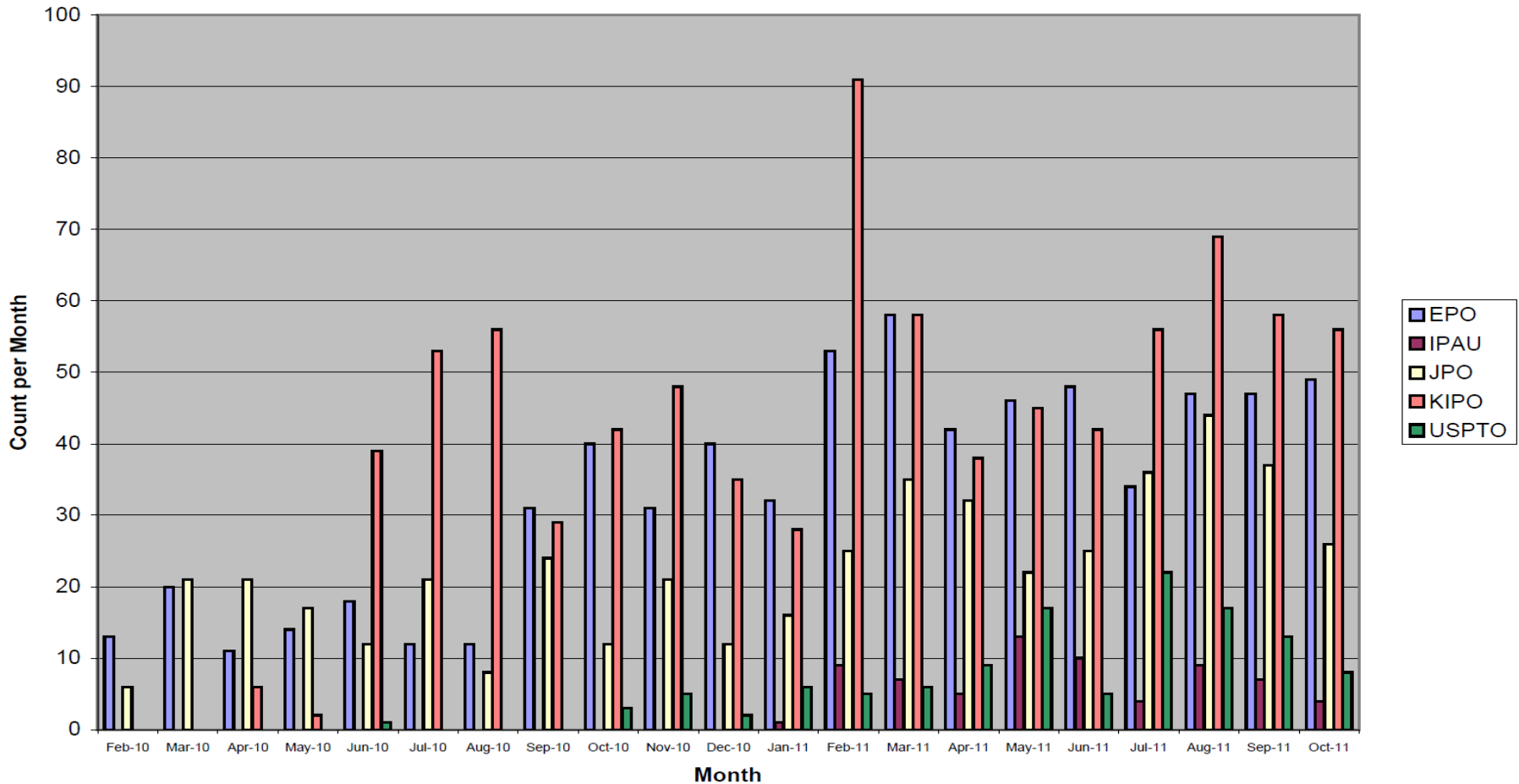
Count of New PCT-PPH Filings by Month





# PPH Stats—PCT Route

Count of New PCT-PPH Filings by Region and Month





# Other Data—PCT Route

## Overall Statistics on the PCT-Patent Prosecution Highway Program

- Statistics for PPH requests filed in the USPTO under all PCT-PPH programs

- The PCT-PPH program started on January 29th, 2010

As of: 10/31/2011

2,271

Number of these requests that are not eligible because a first action on the merits was mailed before the requests were considered, or cannot be granted because the request has been dismissed twice.

106

## Breakdown of applications and application data by Tech Center

	Number of Requests Filed	Days from PPH Request to Grant	Days from PPH Grant to First Action
<b>Technology Center 1600</b> Biotechnology and Organic Chemistry	168	115.37	109.33
<b>Technology Center 1700</b> Chemical and Materials Engineering	383	75.84	48.75
<b>Technology Center 2100</b> Computer Architecture Software and Information Systems	102	68.33	63.04
<b>Technology Center 2400</b> Multiplex, Networking, Cable TV, Computer Security	159	71.86	89.45
<b>Technology Center 2600</b> Communications	180	66.23	94.63
<b>Technology Center 2800</b> Semiconductors and Electronic Circuits and Components	367	65.22	62.71
<b>Technology Center 3600</b> Mechanical Engineering	327	68.76	59.70
<b>Technology Center 3700</b> Mechanical Engineering	435	27.40	72.25
Applications undergoing Pre-Exam without a Technology Center assignment	150	160.00	0.00

Eligible requests	<u>2,165</u>
Requests granted	<u>1,546</u>
Requests dismissed once and awaiting further action	<u>73</u>
Requests not acted upon	<u>546</u>



# Other Data—PCT Route

## Overall Statistics on the PCT-Patent Prosecution Highway Program

PPH requests received by the USPTO		2,271	Percent w/ First Action
FAs	Total	1,199	52.80%
	First Action Allowance	226	18.85%
	First Action Quayle	19	1.58%
	First Action Rejection*	755	62.97%
	(- art rejections)**	672	89.01%
	(- non art rejections)	83	10.99%
First Action Restriction		199	16.60%
PPH requests for accelerated examination rejected for not satisfying PPH requirements		106	
Average period from request to FA		122.6 days	

\* First Action Rejections subsequently allowed: 208 out of 755 times

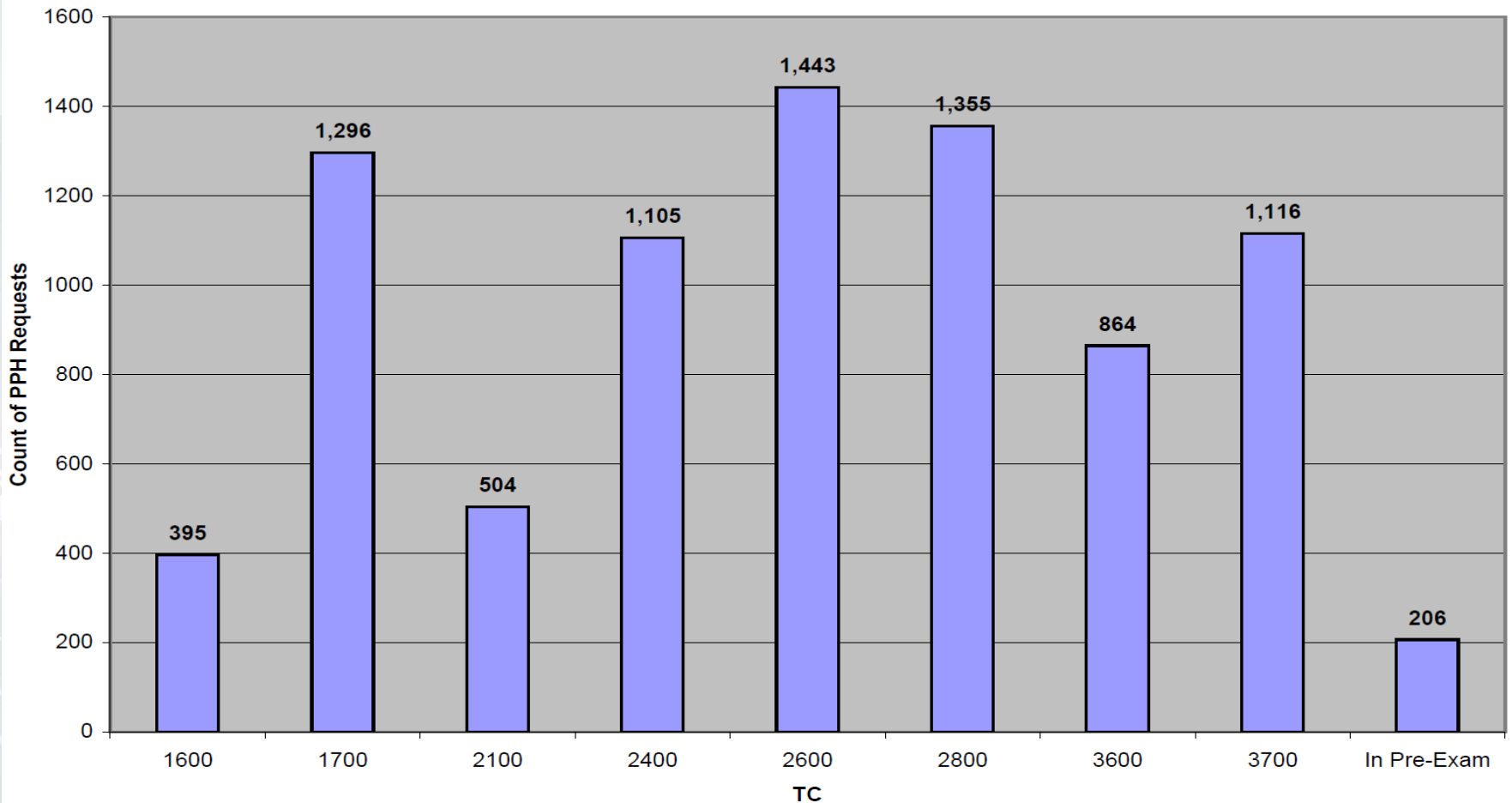
\*\* Art Rejections where U.S. Patent documents used: 640 out of 672 times

Grant Rate (Allowances / Total number of Disposals) 92.59%



# PPH Stats—Combined, by TC

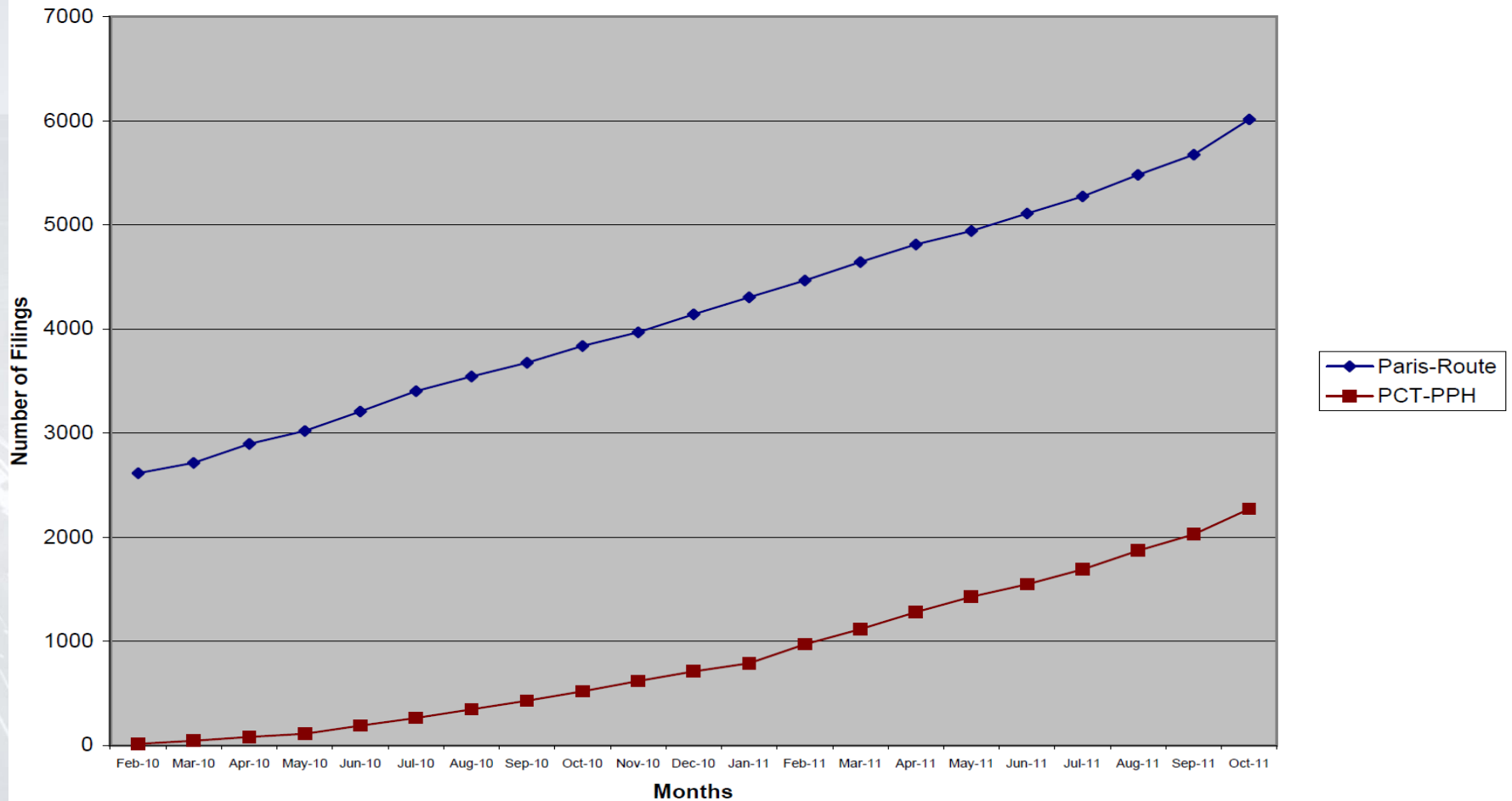
Cumulative Total of Paris-Route and PCT-PPH Cases





# PPH Stats, Cumulative

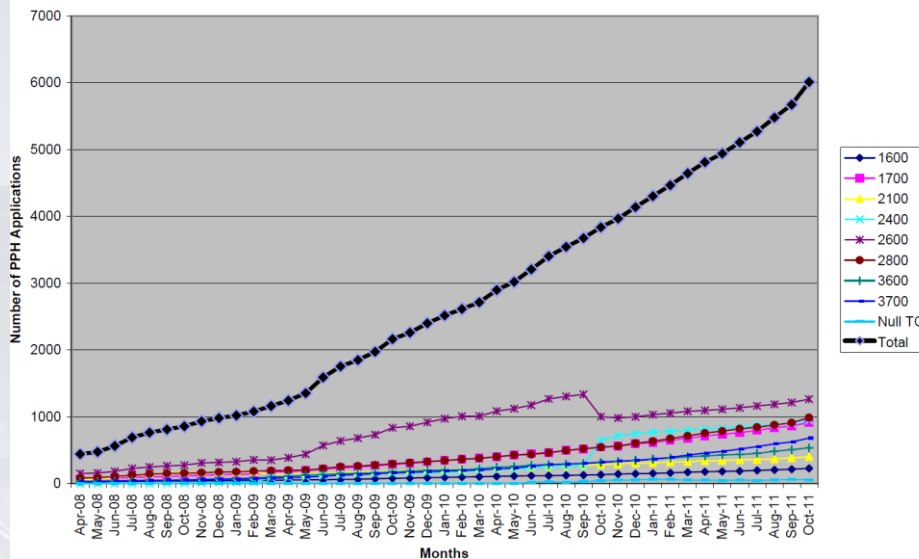
Cumulative PPH filings by PPH Type





# Comparison with PCT Growth

Cumulative Paris Route PPH Applications By TC and Month



Cumulative PCT-PPH Requests By TC and Month

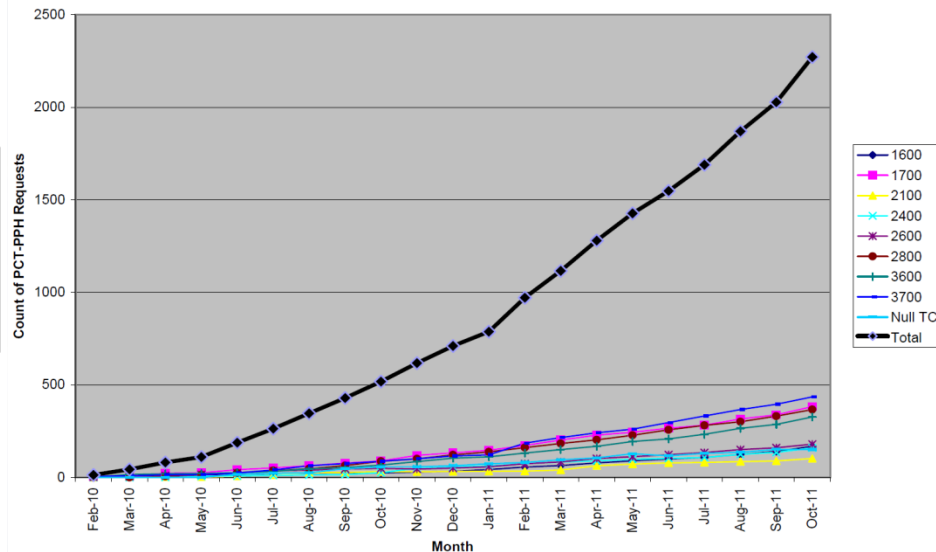
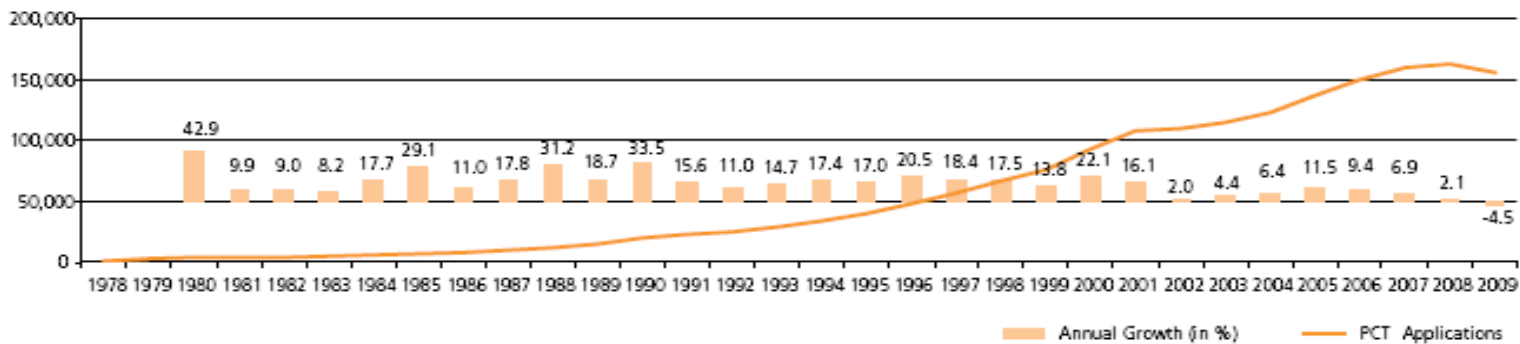


Figure 1.1. Trends in PCT Applications, 1978 - 2009



Source: WIPO Statistics Database





# PPH Data—Processing

- **Higher Allowance Rates**

## **USPTO Allowance Rates**

PPH Paris Route cases: 87.5%

PCT-PPH cases: 93%

All cases: 48% (incl. RCEs) (as of Sept. 2011)

- **Fewer Communications Needed**

## **USPTO actions per disposal**

PPH Paris Route cases: 2.13\*

PCT-PPH cases: 1.61\*\*

All cases: 2.51 (as of Sept. 2011)

\* cumulative from July 2006-June 2011

\*\* cumulative from Jan. 2011-June 2011



# PPH Data—Processing

- Reduced rates of RCE filings
  - About 11% currently
  - Overall rate = about 31%
- Reduced rates of appeal
  - About 0.3% currently
  - Overall rate = about 2.5%



# PPH Data—Quality

- Internal USPTO study of 155 First-action Allowances
  - 98% New search recorded
  - 94% Additional art cited
  - 40% Examiner's amendment/interview
- All PPH cases in random annual review
  - Allowance error rate slightly better
  - Nearly all on subject matter eligibility issues



# PPH Cost Savings Data

- Fewer office actions means fewer replies/amendments
  - Assuming reply/amendment of minimal complexity
- Average Cost Savings per Action from Using PPH = \$2086  
(Source: AIPLA Report of the Economic Survey, 2011)

So—

For each non-PPH application: ( $\$2086/\text{response} \times 2.51 \text{ actions}$ ) = \$5236 in costs

For a Paris-route PPH application: ( $\$2086 \times 2.13 \text{ actions}$ ) = \$4443 → **\$793 SAVINGS**

For a PCT-PPH application: ( $\$2086 \times 1.61 \text{ actions}$ ) = \$3358 → **\$1836 SAVINGS**

- **Notes:**
  - Does not include client overhead savings or local law firm fee savings for response to Action
  - Does not consider fewer RCEs and Appeals (see later slide)
  - Does not consider Fees/Costs for requesting PPH
    - Assumes request fees are equal to savings of client overhead
  - Assumes no government fee (USPTO eliminated fee)
  - Assumes for foreign applicants that the total local and US attorney costs equal the above average of \$2086 per action
  - Thanks to Hung Bui and Alan Kasper of AIPLA for compiling cost savings data



# PPH Cost Savings Data

- For replies/amendments of relative complexity

Average Cost Savings per Action = \$2978 - \$3889

So—

Non-PPH applications:

$$\text{Min: } (2.51 \times 2978) = \$7475$$

$$\text{Max: } (2.51 \times 3889) = \$9761$$

Paris-route PPH applications:

$$\text{Min: } (2.13 \times 2978) = \$6343$$

$$\text{Max: } (2.13 \times 3889) = \$8284 \rightarrow \text{SAVINGS} = \$1132 - \$1477/\text{case}$$

PCT-PPH applications:

$$\text{Min: } (1.61 \times \$2978) = \$4795$$

$$\text{Max: } (1.61 \times \$3889) = \$6261 \rightarrow \text{SAVINGS} = \$2620 - \$3422/\text{case}$$



# PPH Cost Savings Data

## Average Added Cost Savings for RCEs and Appeals from Fees Avoided

- Relevant USPTO Statistics (from prior slide)
  - RCE filing rates: 11% for PPH vs. 31% for non-PPH
  - Appeal rates: 0.3% for PPH vs. 2.5% for non-PPH
- Applicable USPTO Fees
  - RCEs - \$810
  - Appeals - \$1000 (\$500 Appeal and \$500 Brief)
- Cost savings – government fees only
  - RCEs – on average 20% (31% - 11%) of \$810 = \$162
  - Appeals – on average 2.2% (2.5% - 0.3%) of \$1000 = \$22

Total added savings on average = \$184



# PPH Cost Savings Data

- Hypothetical complex case (assumes high end of cost savings (\$3889 per action) and avoided RCE/appeal filing)

## Paris Route PPH Savings:

Savings on Action	\$ 1477
Savings on RCE fees	810
Savings on Appeal fees	1000
Savings on Appeal services (without oral argument)	4931

**Total savings = \$8218 per application**

## PCT Route PPH

Savings on Action	\$3422
Savings on RCE fees	810
Savings on Appeal fees	1000
Savings on Appeal services (without oral argument)	4931

**Total savings = \$10,163 per application**



# Future Plans

- **USPTO Action Plan to enhance PPH:**
  - target numerical goals
    - 4000 total requests by end of 2010 – met
    - 8000 by end of 2011 – exceeded!!
    - 400/month for 2012 - ?
  - Conduct PPH awareness campaigns, internationally and domestically





# Future Plans

- Evolution of PPH – “PPH 2.0”
  - Common framework to replace bilateral arrangements
  - Expanded eligibility (MOTTAINAI model)
  - Streamlines the PPH to make it more user-friendly, but not at the expense of work sharing benefits
  - Discussions underway



# Useful Information

- Dedicated USPTO PPH web page ([http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp)) including links to:
  - FAQs
  - PPH “how-to” and informational video
  - Downloadable information brochure
  - Question and feedback e-mail inbox
- PPH information portal site with statistics and other information from all participating offices (<http://www.jpo.go.jp/cgi/linke.cgi?url=/ppph-portal/index.htm>)



Thank you!