



# The Patent Prosecution Highway at the USPTO

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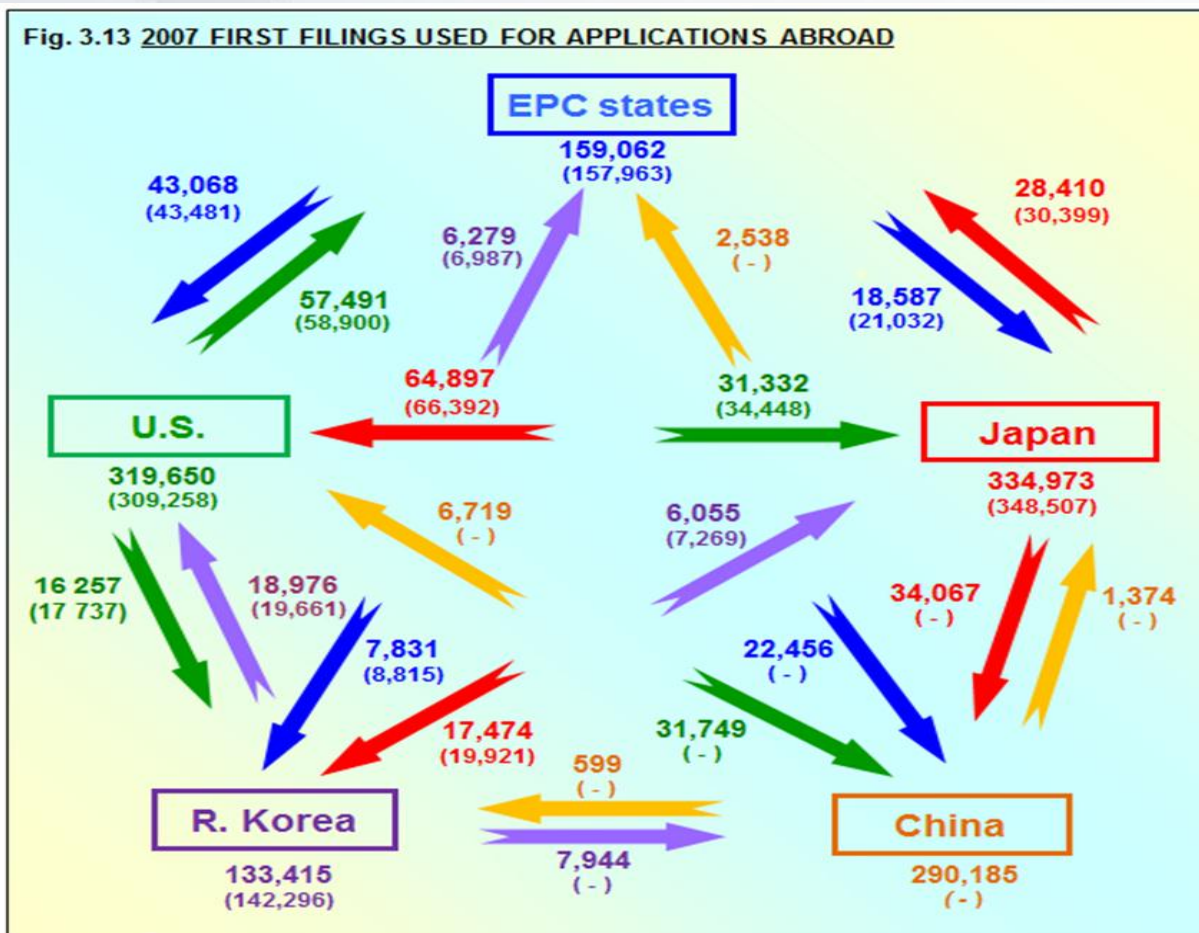


# Overview

- PPH in Context—Why are we doing this?
- PPH Background and Basics—What is it and what does it do?
- PPH Statistics and Data—How are we doing?
- PPH Cost Savings Projections—How can it improve the bottom line?
- PPH Evolution—Where are we going?
- PPH Info—Where can I find out more?



# PPH in Context



- 2006 figures in parentheses for comparison



# PPH Background

- Patent Prosecution Highway
  - Based on JPO concept
  - Intended to correct Paris Route timing imbalances for work sharing purposes
  - 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 one participating office, a corresponding application with corresponding claims filed in a second participating office may be fast-tracked for examination
- **What is the Purpose of PPH?**
  - PPH facilitates work sharing—offices can more effectively reutilize work to avoid duplication, improve processing efficiency, and increase quality
  - PPH incentivizes applicants—the promise of faster processing and earlier patentability determinations in multiple jurisdictions, plus significant cost savings, encourages applicants to participate





# PPH Basics

- **“Corresponding Applications”**
  - Paris Route PPH
    - Paris priority-linked applications
    - PCT “bridge” filings
  - PCT-PPH
    - Pilot launched January 29, 2010 among Trilateral Offices; several other offices have subsequently joined
    - Work on PCT-PPH has helped to catalyze recent discussions aimed at improving the work sharing potential of the PCT



# PPH Basics

- A few more words about corresponding applications
  - Original 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
- Concept is evolving (more on this later)



# PPH Basics

- “Indications of allowability”
  - Original concept—base eligibility on “binding” decisions on patentability
  - Effectively means no negative treatment indicated by the first office
  - Over time, eligibility has evolved to include determinations in “non-binding” work products like EPO EESR and PCT international phase written opinions





# PPH Basics

## **“Claim Correspondence”**

- All claims in the application for which PPH is requested must “sufficiently correspond” to the claims indicated allowable by the other office in the corresponding application
- The participating offices adopted 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.



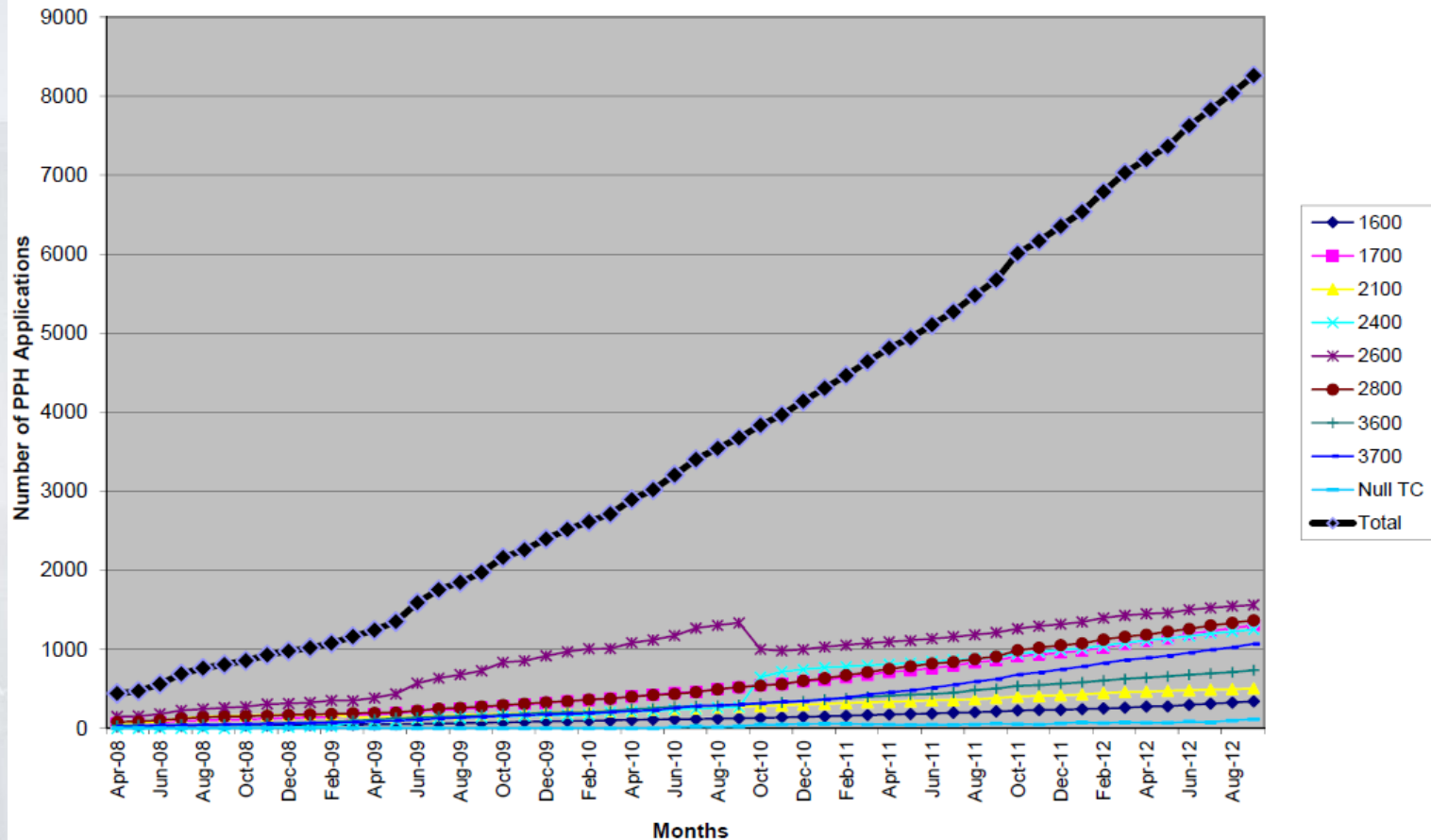
# PPH Stats—Paris Route (Select Offices)

First Office	Start Date	Requests (as of September 30, 2012)	TOTAL NUMBER OF REQUESTS
JPO	July 2006	5926 278 (Pilot) 5648 (Full)	
KIPO	Jan. 2008	1016 134 (Pilot) 882 (Full)	
UKIPO	Sept. 2007	328	Total—All Offices
CIPO	Jan. 2008	164	8284
IPAU	April 2008	175	
EPO	Sept. 2008	334	
DKPTO	Nov. 2008	111	
DPMA	April 2009	92	
NBPR	July 2009	29	
Rospatent	Sept. 2010	11	
ILPO	July 2011	7	
SIPO	Dec. 2011	74	



# PPH Stats—Paris Route

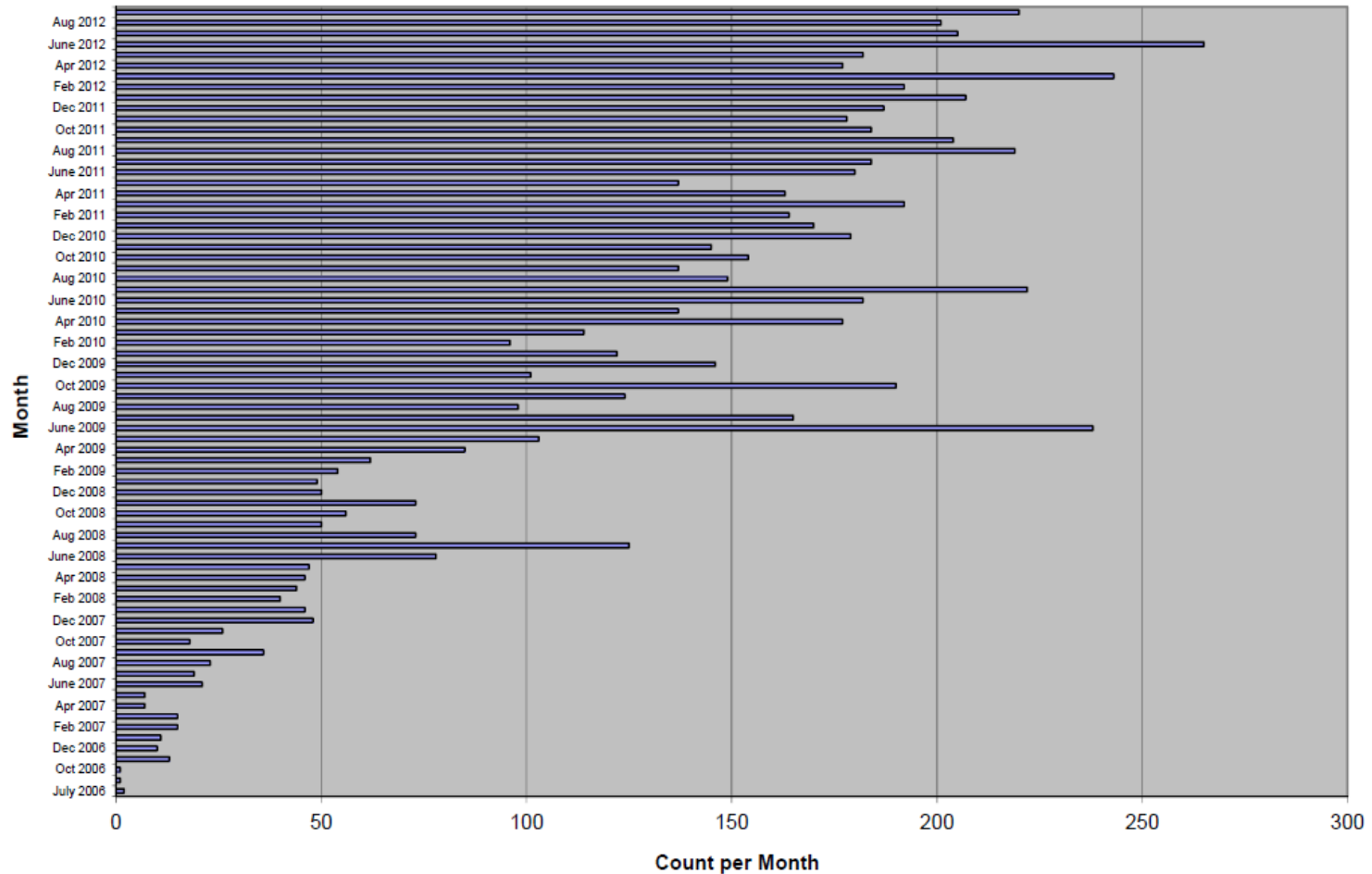
Cumulative Paris Route PPH Applications By TC and Month





# PPH Stats—Paris Route

Count of New Paris Route PPH Filings by Month

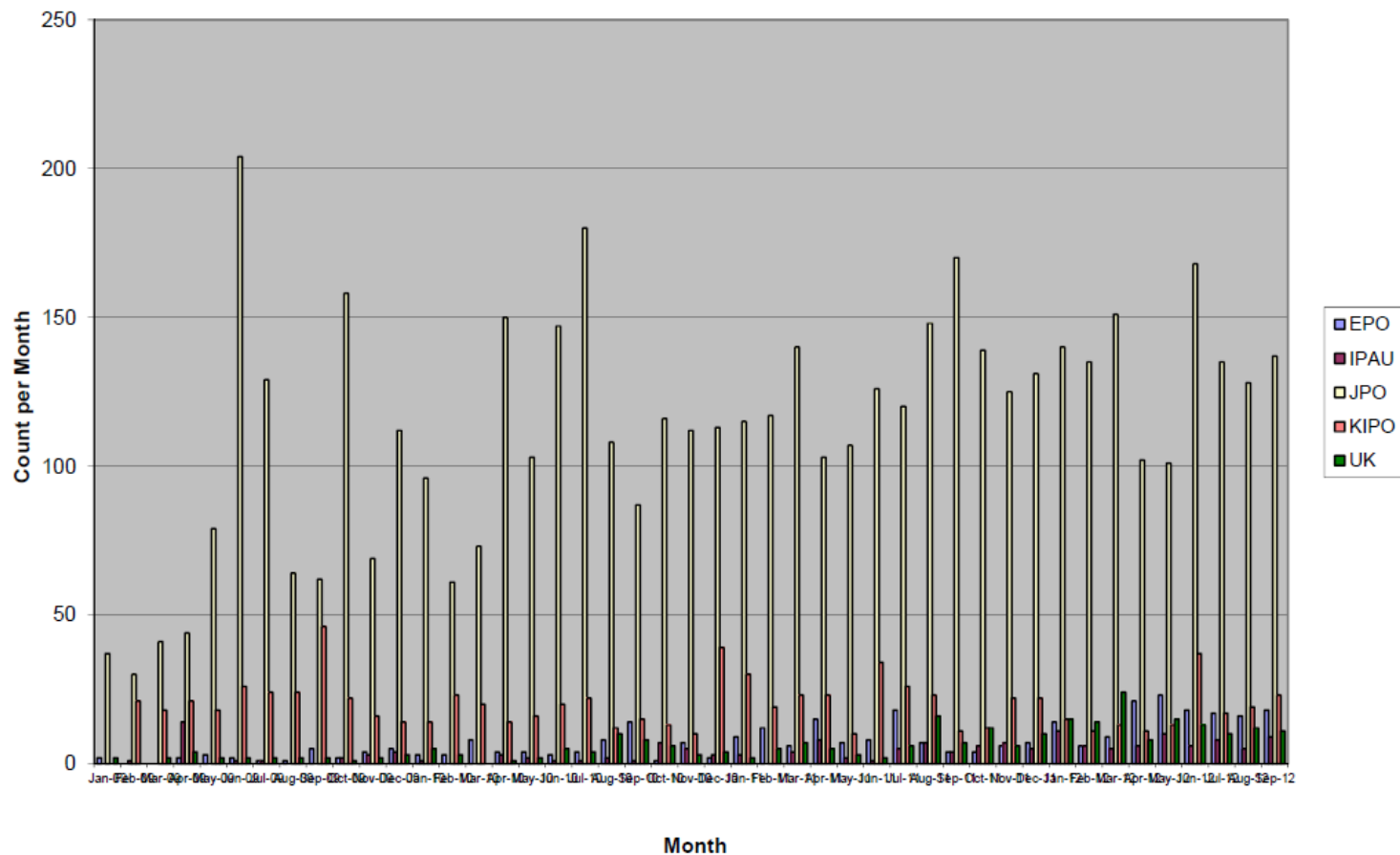






# PPH Stats—Paris Route

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: 9/30/2012

Number of requests to participate in the PPH Program 8,284

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. 518

## 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
Technology Center 1600 Biotechnology and Organic Chemistry	342	105.85	165.69
Technology Center 1700 Chemical and Materials Engineering	1,306	58.56	101.14
Technology Center 2100 Computer Architecture Software and Information Systems	507	61.88	116.57
Technology Center 2400 Multiplex, Networking, Cable TV, Computer Security	1,251	59.22	126.23
Technology Center 2600 Communications	1,562	54.89	133.68
Technology Center 2800 Semiconductors and Electronic Circuits and Components	1,369	53.34	78.44
Technology Center 3600 Mechanical Engineering	737	45.47	97.65
Technology Center 3700 Mechanical Engineering	1,070	26.09	145.23
Technology Center 4100 Patent Training Academy	24	71.50	96.71
Applications undergoing Pre-Exam without a Technology Center assignment	116	26.58	27.00

Eligible requests	7,766
Requests granted	6,967
Requests dismissed once and awaiting further action	141
Requests not acted upon	658



# 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		8,284	Percent w/ First Action
FAs	Total	6,395	77.20%
	First Action Allowance	1,665	26.04%
	First Action Quayle	110	1.72%
	First Action Rejection*	4,038	63.14%
	(- art rejections)**	3,502	86.73%
	(- non art rejections)	536	13.27%
First Action Restriction		582	9.10%
PPH requests for accelerated examination rejected for not satisfying PPH requirements		518	
Average period from request to FA		175.5 days	

\* First Action Rejections subsequently allowed: 2,163 out of 4,038 times

\*\* Art Rejections where U.S. Patent documents used: 3,251 out of 3,502 times

Grant Rate (Allowances / Total number of Disposals) 86.79%



# PPH Stats—PCT Route (Select Offices)

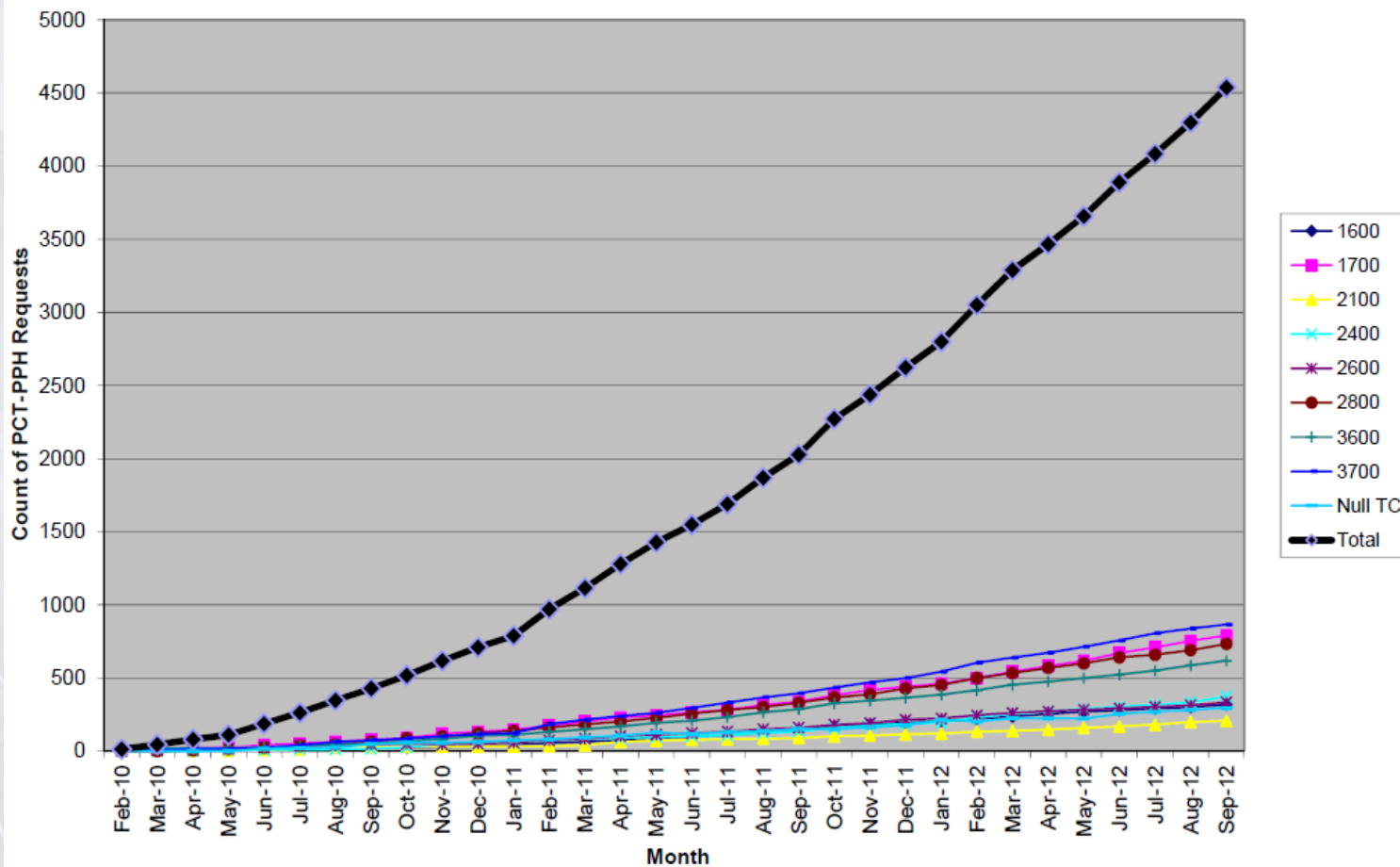
ISA	Start Date	Requests (as of September 30, 2012)	TOTAL NUMBER OF REQUESTS
JPO	Jan. 2010	851	
EPO	Jan. 2010	1342	Total 4567
USPTO*	Jan. 2010	231	
KIPO	June 2010	1679	
APO	Oct. 2010	13	
ROSPATENT	Oct. 2010	13	
NBPR	Jan. 2011	39	
IP Australia	Jan. 2011	175	
NPI	July 2011	50	
SIPO	Dec. 2011	115	

\* 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

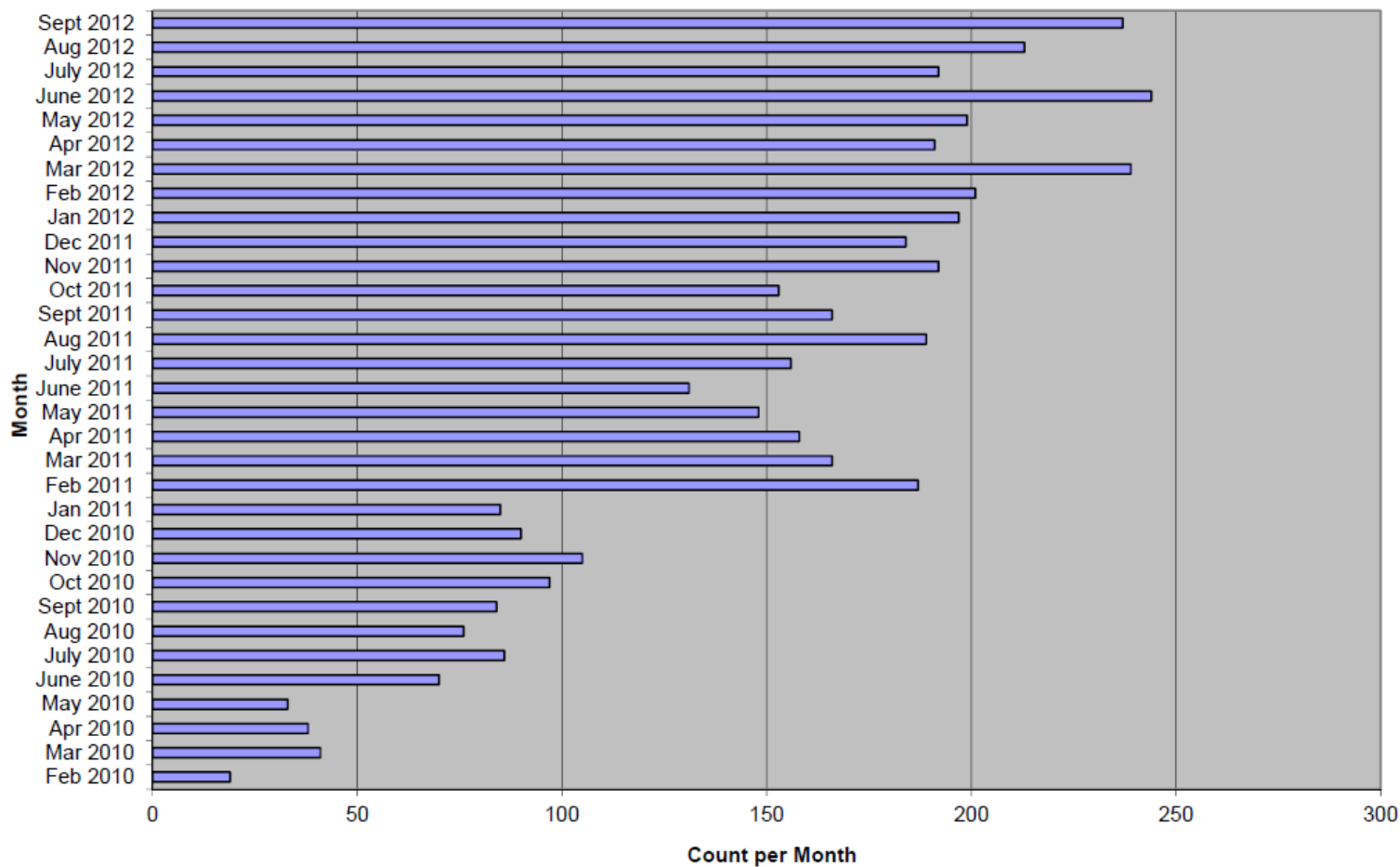






# PPH Stats—PCT Route

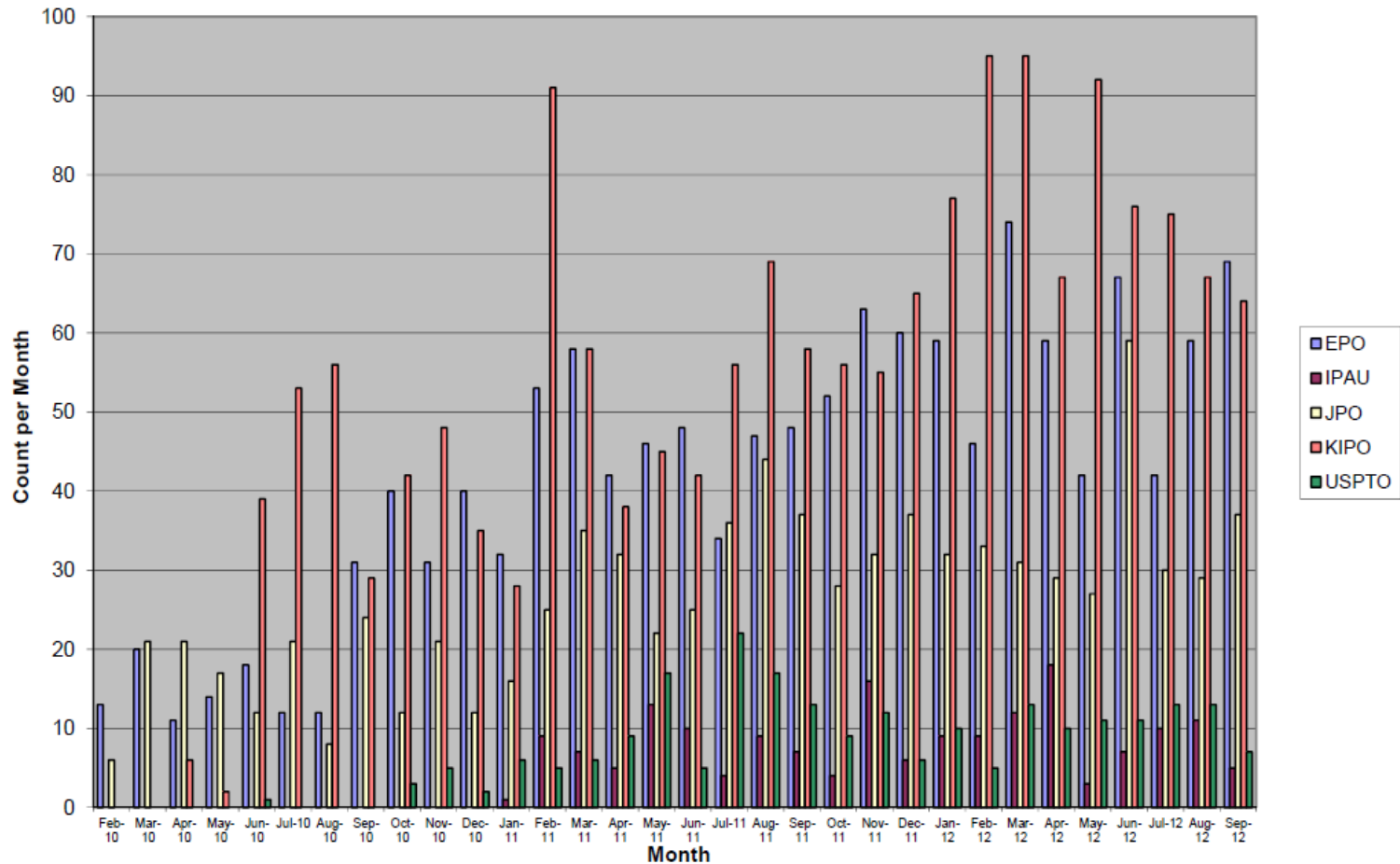
Count of New PCT-PPH Filings by Month





# 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: 9/30/2012

4,567

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.

220

## 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
Technology Center 1600 <u>Biotechnology and Organic Chemistry</u>	319	100.95	92.15
Technology Center 1700 <u>Chemical and Materials Engineering</u>	791	55.61	74.26
Technology Center 2100 <u>Computer Architecture Software and Information Systems</u>	208	50.11	101.18
Technology Center 2400 <u>Multiplex, Networking, Cable TV, Computer Security</u>	374	54.39	101.04
Technology Center 2600 <u>Communications</u>	333	57.05	96.94
Technology Center 2800 <u>Semiconductors and Electronic Circuits and Components</u>	733	54.82	88.51
Technology Center 3600 <u>Mechanical Engineering</u>	618	60.68	81.52
Technology Center 3700 <u>Mechanical Engineering</u>	866	32.01	106.51
Technology Center 4100 <u>Patent Training Academy</u>	30	27.05	83.45
Applications undergoing Pre-Exam without a Technology Center assignment	295	22.06	0.00

Eligible requests

4,347

Requests granted

3,313

Requests dismissed once and awaiting further action

185

Requests not acted upon

849



# Other Data—PCT Route

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

PPH requests received by the USPTO		4,567	Percent w/ First Action
FAs	Total	2,547	55.77%
	First Action Allowance	491	19.28%
	First Action Quayle	34	1.33%
	First Action Rejection*	1,557	61.13%
	(- art rejections)**	1,405	90.24%
	(- non art rejections)	152	9.76%
First Action Restriction		465	18.26%
PPH requests for accelerated examination rejected for not satisfying PPH requirements		220	
Average period from request to FA		152.2 days	

\* First Action Rejections subsequently allowed: 536 out of 1,557 times

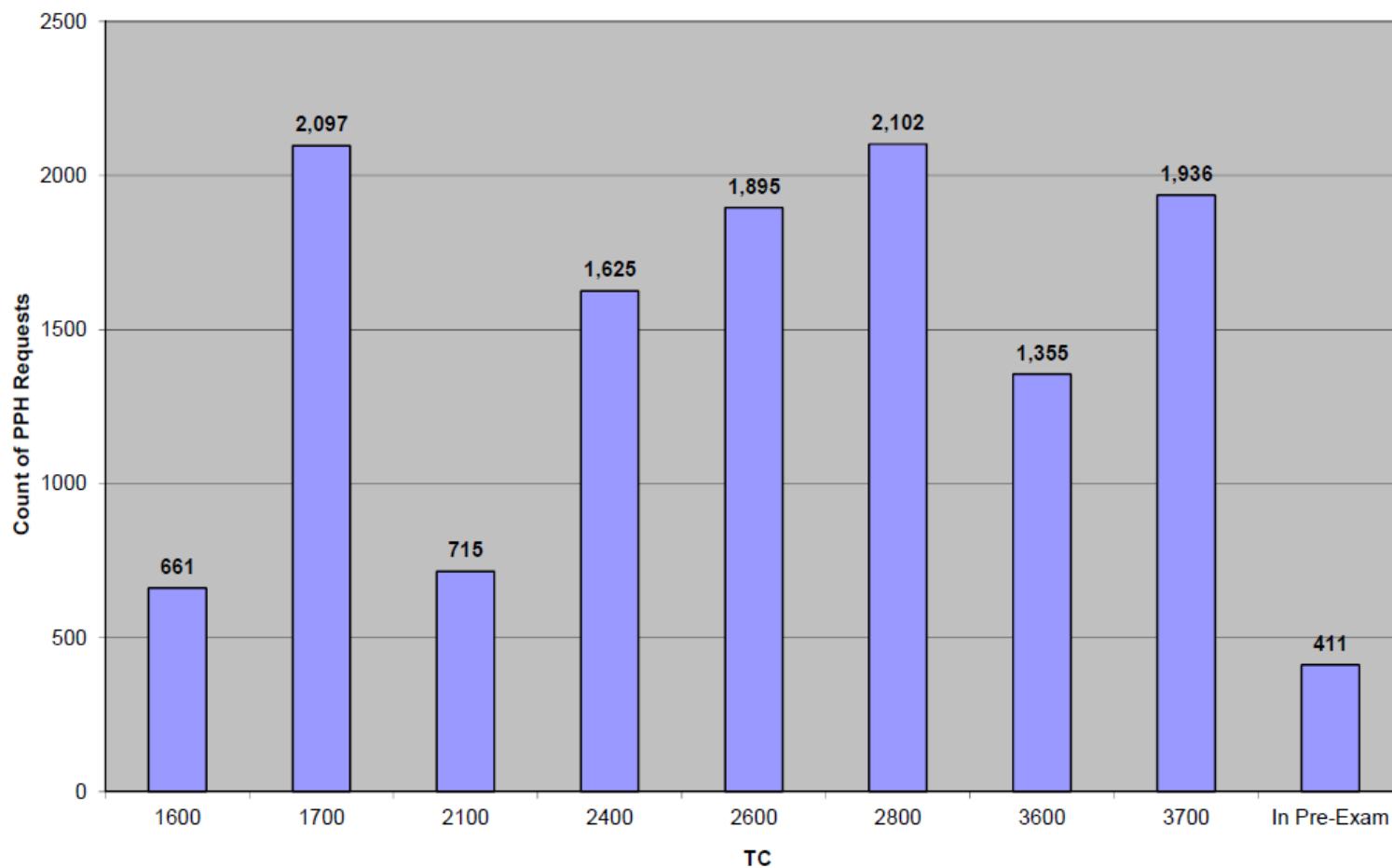
\*\* Art Rejections where U.S. Patent documents used: 1,337 out of 1,405 times

Grant Rate (Allowances / Total number of Disposals) 88.73%



# PPH Stats—Combined, by TC

Cumulative Total of Paris-Route and PCT-PPH Cases

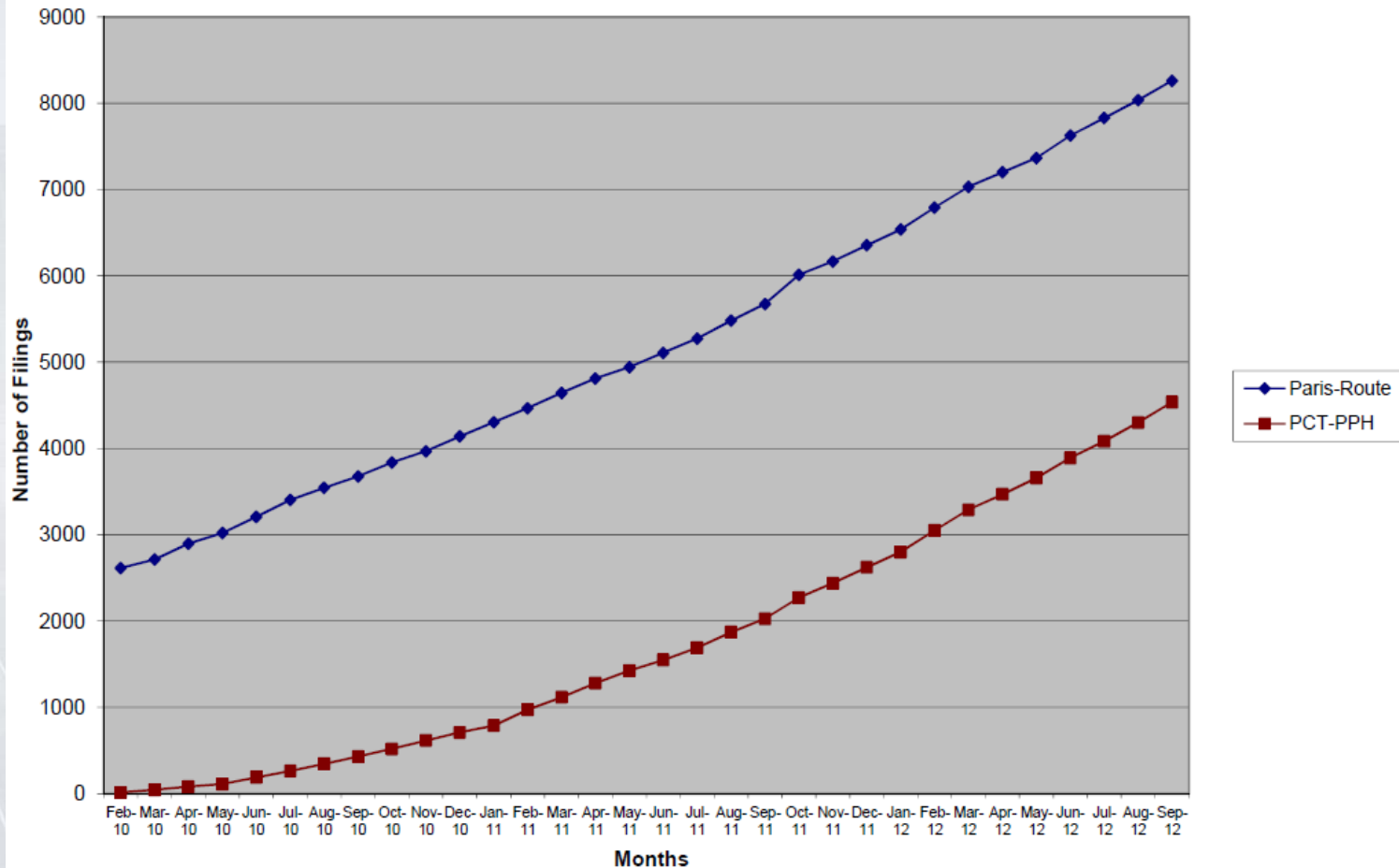






# PPH Stats, Cumulative

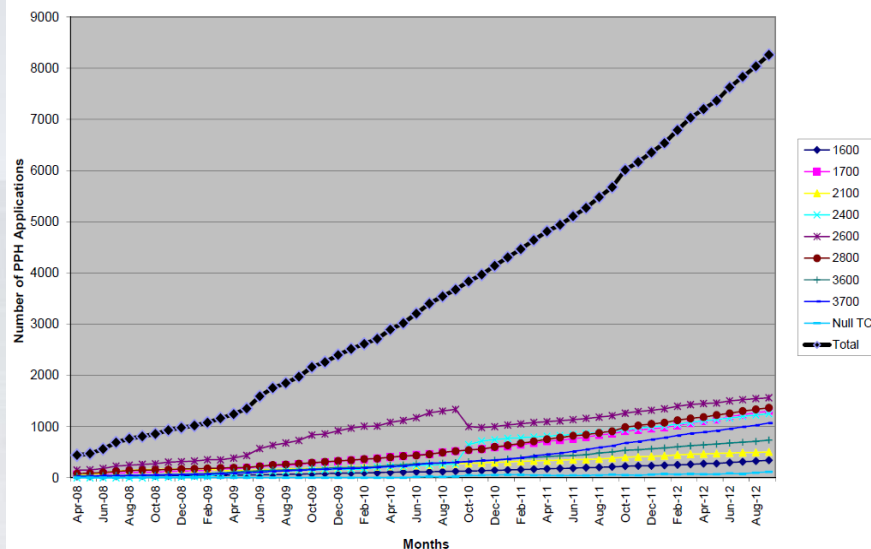
Cumulative PPH filings by PPH Type





# Comparison with PCT Growth

Cumulative Paris Route PPH Applications By TC and Month



Cumulative PCT-PPH Requests By TC and Month

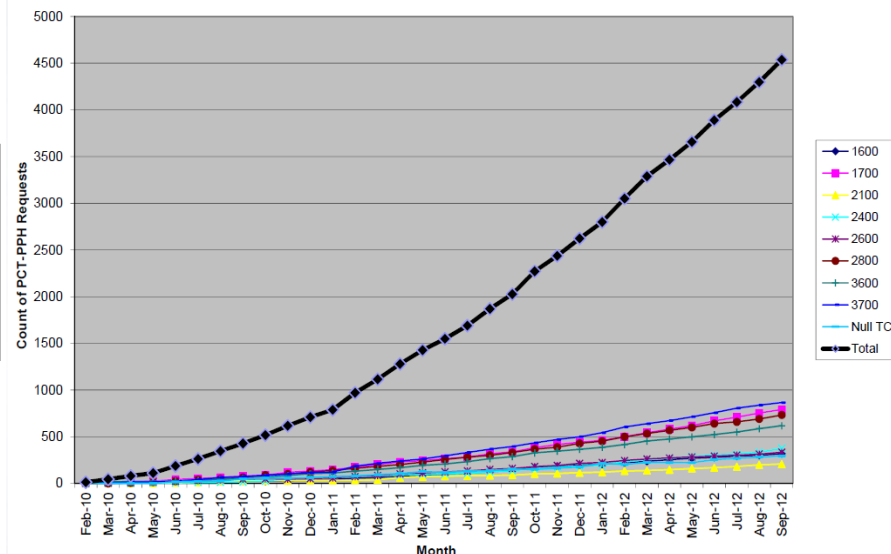
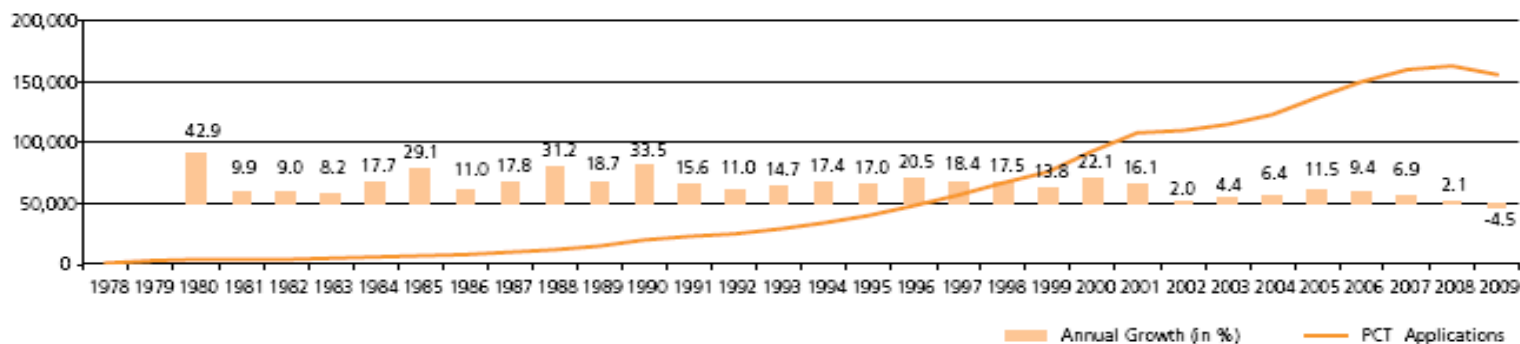


Figure 1.1. Trends in PCT Applications, 1978 - 2009



Source: WIPO Statistics Database



# PPH Data—Processing

- **Higher Allowance Rates**

- USPTO Allowance Rates**

- PPH Paris Route cases: 87%

- PCT-PPH cases: 89%

- All cases: 51% (as of Sept. 2012, including RCEs)

- **Fewer Communications Needed**

- USPTO actions per disposal**

- PPH Paris Route cases: 2.3\*

- PCT-PPH cases: 1.6\*\*

- All cases: 2.52 (as of Sept. 2012)\*\*\*

- \* cumulative from July 2006-December 2011

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

- \*\*\*factoring in RCEs, this figure is higher



# 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: ( $\$2086/\text{response} \times 2.52 \text{ actions}$ ) = \$5257 in costs

For a Paris-route PPH application: ( $\$2086 \times 2.3 \text{ actions}$ ) = \$4798 → **\$459 SAVINGS**

For a PCT-PPH application: ( $\$2086 \times 1.6 \text{ actions}$ ) = \$3338 → **\$1919 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:

Min:  $(2.52 \times 2978) = \$7505$

Max:  $(2.52 \times 3889) = \$9800$

Paris-route PPH applications:

Min:  $(2.3 \times 2978) = \$6849$

Max:  $(2.3 \times 3889) = \$8945 \rightarrow \text{SAVINGS} = \$656 - \$855/\text{case}$

PCT-PPH applications:

Min:  $(1.6 \times \$2978) = \$4765$

Max:  $(1.6 \times \$3889) = \$6222 \rightarrow \text{SAVINGS} = \$2740 - \$3578/\text{case}$



# 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 - \$930  
Appeals - \$1260 (\$630 Appeal and \$630 Brief)
- Cost savings – government fees only  
RCEs – on average 20% (31% - 11%) of \$810 = \$186  
Appeals – on average 2.2% (2.5% - 0.3%) of \$1260 = \$28

Total added savings on average = \$214



# 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	\$ 855
Savings on RCE fees	930
Savings on Appeal fees	1260
Savings on Appeal services (without oral argument)	4931

**Total savings = \$7976 per application**

## PCT Route PPH

Savings on Action	\$3578
Savings on RCE fees	930
Savings on Appeal fees	1260
Savings on Appeal services (without oral argument)	4931

**Total savings = \$10,699 per application**



# PPH Evolution

- 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, 2011 with 7 other offices; recently extended





# PPH Evolution

- “PPH 2.0”
  - Expanded eligibility (MOTTAINAI model)
  - User-friendly enhancements while maintaining focus on work sharing
    - Claim correspondence “self-certification”
    - Reduced documentation requirements
    - Use of machine translations
  - Unilateral USPTO pilot began January 2012; other offices have agreed to implement





# PPH Evolution

- PPH 2.0 continued
  - Procedural simplification is one aspect—consolidation is another
  - Need to replace the “spaghetti bowl” of bilateral highways with a single highway with multiple exits (but without toll booths!)
  - Discussions among participating offices ongoing



# 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!