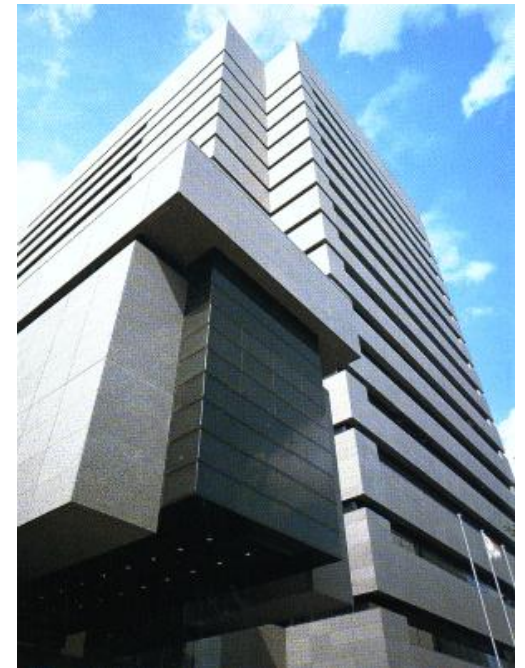


# Utilizing Claims of Granted Patents

**Masanobu UEDA**  
**Japan Patent Office**

**November 28, 2012**



# Outlines

- Points to consider in using claims of granted patents
  - Differences of claims
  - Differences of examination guidelines
- Concept of the PPH

## Points to consider in using claims of granted patents

- Patent claims in each IP Office may be different as a result of the examination
  - Inventive steps requirements
  - Description requirements
  - Consideration of experiment results submitted afterward

## Claim

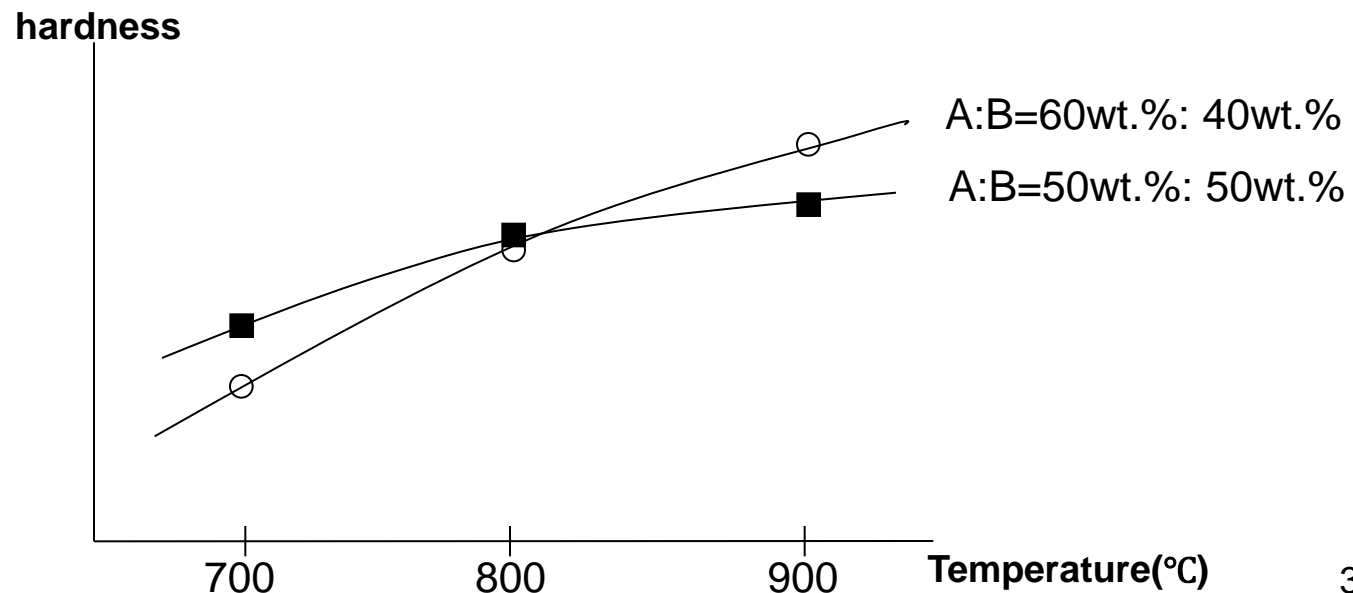
Alloy consisting of **metal A 10-90wt.%** and **metal B 90-10wt.%** hardened through heat treatment at **700 degree or higher**.

## Description

- The ratio of **metal A is 10-90 wt.%, preferably 30-90 wt.%, more preferably 50-90 wt.%. ➡ adequate hardness**

## Example

T=700, 800, 900°C  
A:B=50wt.%, 50wt.%,  
60wt.%, 40wt.%



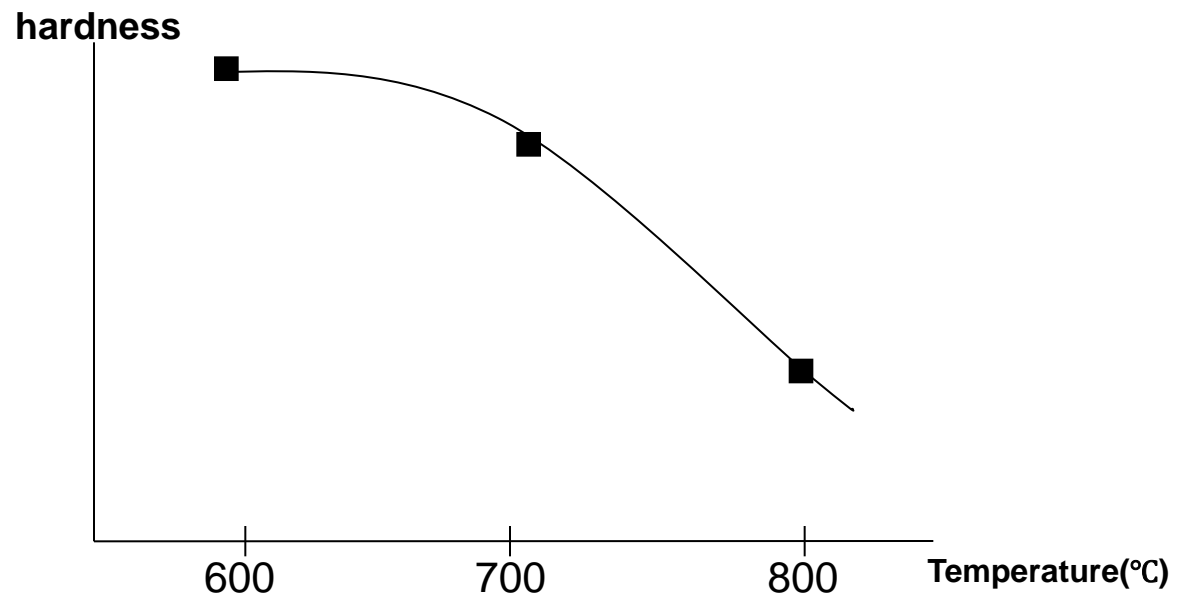
### Description

- Alloy consisting of **metal A** and **metal B** hardened through heat treatment at 800 degree or lower.
- The ratio of **metal A** and **metal B** is arbitrary.
- The hardness is favorably increased at **800 degree or lower**.

### Example

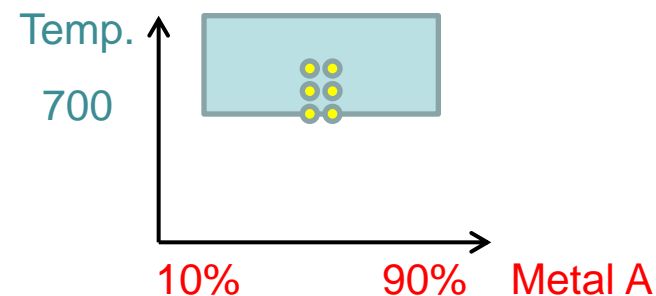
T=600, 700, 800°C

A:B=10wt.%,90wt.%



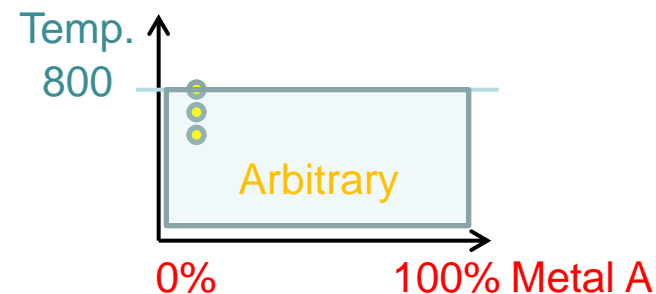
## Present Application

Alloy consisting of **metal A 10-90wt.%** and **metal B 90-10wt.%** hardened through heat treatment at **700 degree or higher**



## Cited Document

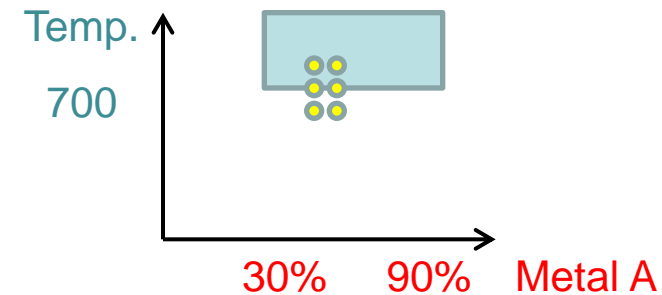
Alloy consisting of **metal A** and **metal B** hardened through heat treatment at **800 degree or lower**



## Granted Claim of Patent Office A

Alloy consisting of **metal A 30-90wt.%** and **metal B 70-10wt.%** hardened through heat treatment at **800 degree or higher**.

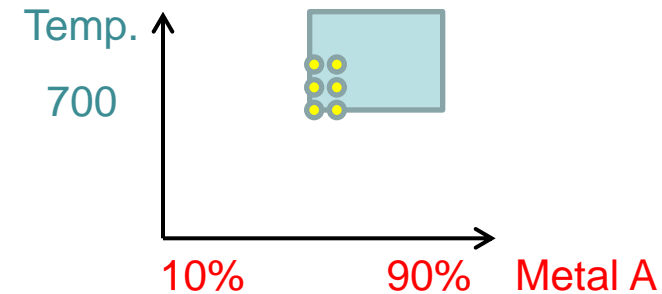
- The ratio of **metal A** is limited from 10-90wt.% to **30-90wt.%**  
(The ratio of **metal B** is limited from 90-10wt.% to **70-10wt.%**)
- The temperature is limited from 700 degree or higher.  
to **800 degree or higher**.



## Granted Claim of Patent Office B

Alloy consisting of **metal A 50-90wt.%** and **metal B 50-10wt.%** hardened through heat treatment at **700 degree or higher**.

- The ratio of **metal A** is limited from 10-90wt.% to **50-90wt.%**  
(The ratio of **metal B** is limited from 90-10wt.% to **50-10wt.%**)
- The temperature is not limited.



**➔ Difference**

- **Range of the ratio of metal A and metal B**
- **Range of the temperature of heat treatment**

### ✓ Lack of Novelty

#### Present Application

Alloy consisting of **metal A 10-90wt.%** and **metal B 90-10wt.%**  
hardened through heat treatment at **700 degree or higher**

#### Disclosure of the cited document

Alloy consisting of **metal A 10wt.%** and **metal B 90wt.%** hardened  
through heat treatment at **700 or 800 degree**



Claimed invention of the present application is  
disclosed in the cited document.



### ✓ Lack of Inventive Step

#### Present Application

Alloy consisting of **metal A 10-90wt.%** and **metal B 90-10wt.%** hardened through heat treatment at **700 degree or higher**

#### Disclosure of the cited document

- The ratio of **metal A** and **metal B** is arbitrary.
- The hardness is favorably increased at **800 degree or lower**.



A person skilled in the art would arbitrarily arrange the ratio of metal A and metal B and arrange the temperature of the heat treatment in the range of 800 degree or lower, in order to make the alloy hard, easily arriving the present invention.

### Amendment of the Claim

Alloy consisting of metal A 30-90wt.% and metal B 70-10wt.% hardened through heat treatment at 800 degree or higher.

### Argument by the applicant

- The amended claimed invention is not specifically disclosed in the cited document any more.
- The cited document does not encourage a person skilled in the art to increase the temperature of the heat treatment to 800 degree or higher.
- The present invention has found that, in the specific range of the ratio of metal A and metal B, hardness of the alloy is increased when heated at 800 degree or higher.

**➡ The amended claimed invention is novel and inventive.**

### ✓ Lack of Novelty

The same reason as that of Patent Office A

#### Present Application

Alloy consisting of metal A 10-90wt.% and metal B 90-10wt.% hardened through heat treatment at 700 degree or higher

#### Disclosure of the cited document

Alloy consisting of metal A 10wt.% and metal B 90wt.% hardened through heat treatment at 700 or 800 degree



Claimed invention of the present application is disclosed in the cited document.

### ✓ Lack of Inventive Step

#### Present Application

Alloy consisting of **metal A 10-90wt.%** and **metal B 90-10wt.%** hardened through heat treatment at **700 degree or higher**

#### Disclosure of the cited document

- The ratio of **metal A** and **metal B** is arbitrary.
- The hardness is favorably increased at **800 degree or lower**.



The logic is different from that of Patent Office A.

A person skilled in the art would arbitrarily arrange the ratio of metal A and metal B. A person skilled in the art would also suitably arrange the temperature of the heat treatment **even beyond 800 degree** in the light of the common general technical knowledge that the alloy's hardness changes according to the composition of alloy or the temperature of heat treatment. So, the present claimed invention is easily arrived based on the disclosure of the cited document.

### ✓ Noncompliant of Support requirement

Not pointed out by  
Patent Office A

Common general technical knowledge:

- The adequate temperature of the heat treatment depends on the composition of the alloy.

Fact described in the cited document:

- In case of the alloy of metal A 10wt.% and metal B 90wt.%, hardness of the alloy lowers at higher than 700 degree.

Fact disclosed in the present application:

- The hardness is confirmed only when A: B= 50wt.%, 50wt.% and A: B= 60wt.%, 40wt.% by the experiment in the description.



It is not supported that hardness of the alloy is increased through heat treatment at 700 degree or higher in all the range of metal A: metal B= 10wt.%, 90wt.% ~ 90wt.%, 10wt.%,

### Amendment of the Claim

Alloy consisting of metal A 50-90wt.% and metal B 50-10wt.% hardened through heat treatment at 700 degree or higher.

### Argument by the applicant

- The amended claimed invention is not specifically disclosed in the cited document any more.
- The cited document suggests that hardness of the alloy is decreased through heat treatment at higher than 700 degree.

To the contrary, the present invention has found that, in the specific range of the ratio of metal A and metal B, hardness of the alloy is increased when heated at 800 degree or higher.



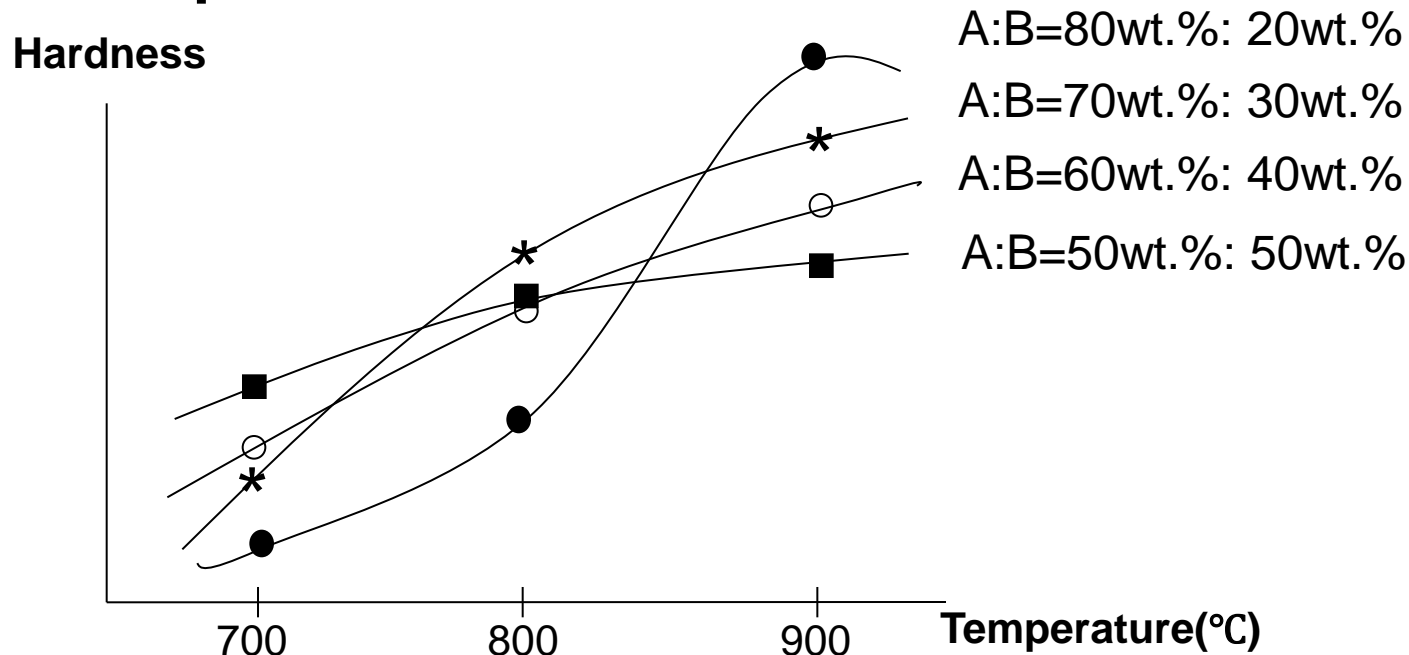
**The amended claimed invention is novel and inventive.**

# 11. Additional experiment result submitted by the applicant

## Description originally filed

- The ratio of **metal A** is 10-90 wt.%, preferably 30-90 wt.%, more preferably 50-90 wt.%.

## Additional experiment result



Metal A

## Argument by the applicant

➡ Experiment result shows that hardness of the alloy is increased through heat treatment at 700 degree or higher in the range of the ratio of **metal A 50-90 wt.%** and **metal B 50-10 wt.%** as stated in the description originally filed.

### ➤ Inventive steps

What temperature range and what ratio range are considered to involve inventive steps, considering the disclosure and the working examples?

- Suggestion in cited document
- Motivation
- Obstructive factor
- Unexpected results

### ➤ Description requirements

What temperature range and what ratio range are considered to be supported by the description?

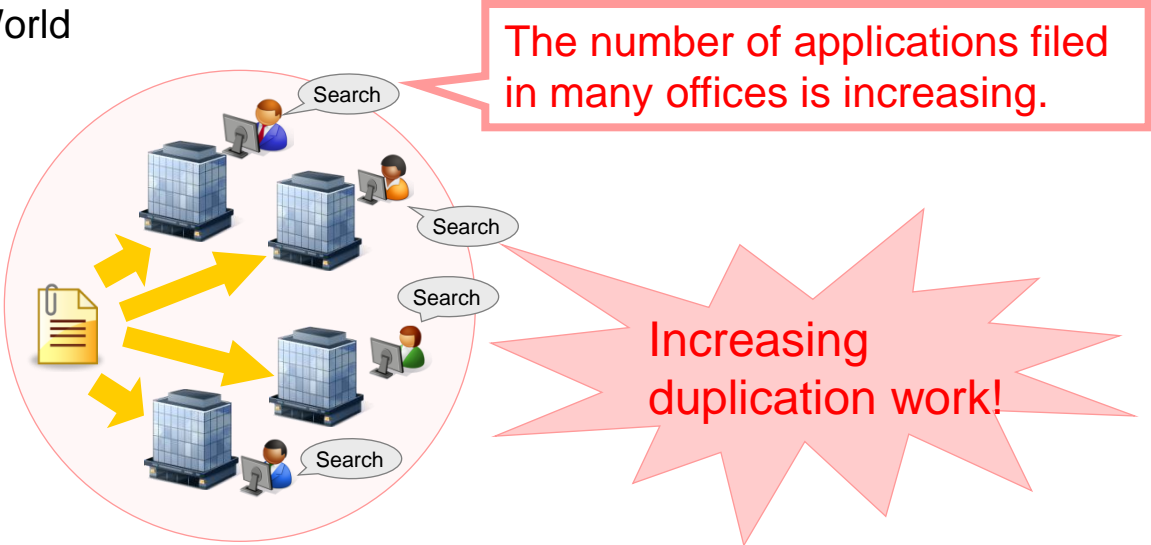
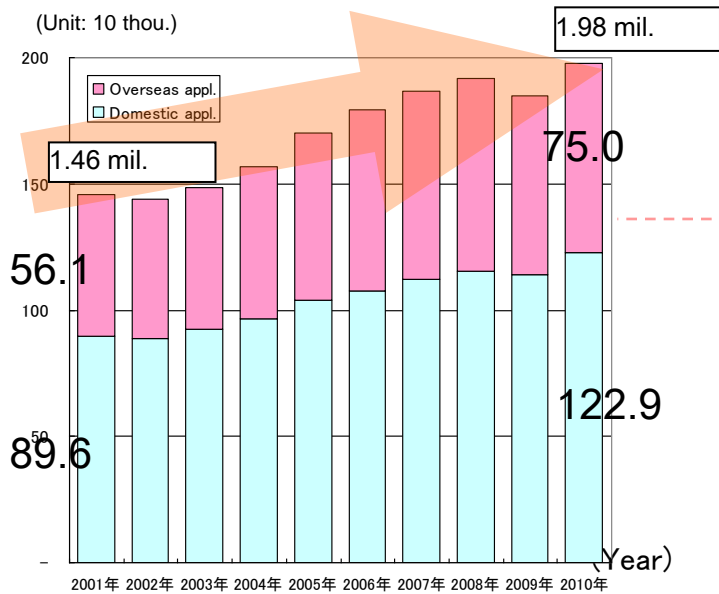
- Disclosure by the description originally filed (especially Examples)
- Common general technical knowledge
- Experiment results submitted afterward



- ✓ *Background*
- ✓ *Current Situation of PPH Program*

✓ The number of patent applications in the world is increasing along with the globalization of business. In particular, the number of applications filed abroad is significantly increasing.

Changes in Patent Appl. Filed in the Whole World

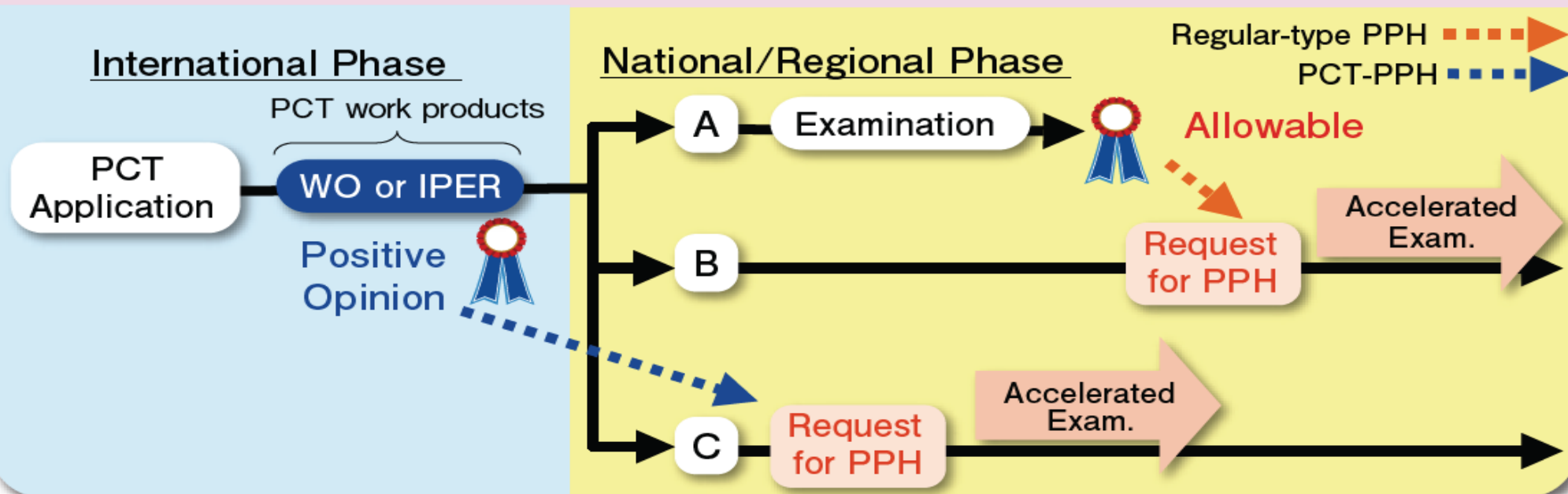
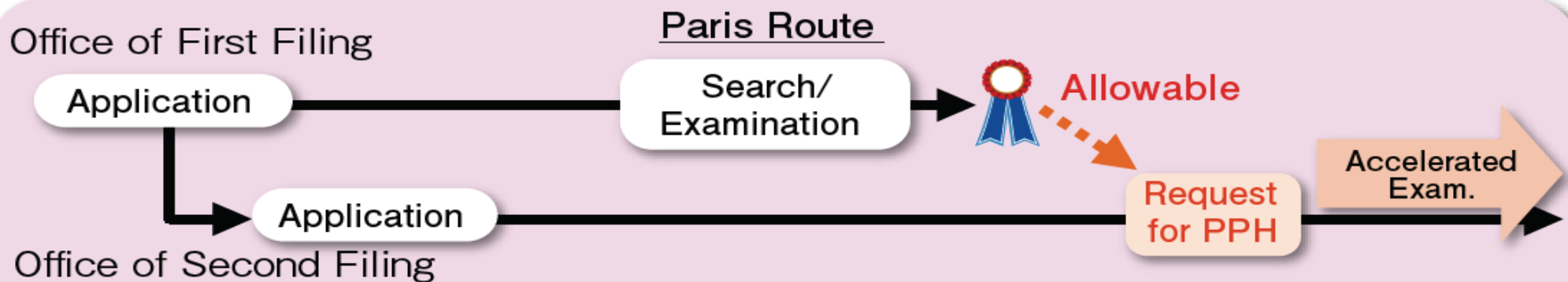


**Growing Demand for Worksharing**

Source: WIPO Industrial Property Statistics

- ✓ *Background*
- ✓ *Current Situation of PPH Program*

➤ If a patent application has been determined to be patentable in the Office of First Filing (OFF), the corresponding application is qualified for accelerated examination in Offices of Second Filing (OSFs) with a simplified procedure.



# Number of Requests for PPH

As of the end of June, 2012

		OLE																							
		JP	US	KR	GB	CA	DE	AU	DK	EP	SG	FI	RU	AT	HU	ES	MX	PT	IL	TW	NO	CN	IS	PH	Total
OEE	JP		5520	1395	24 (0)	100 (3)	607	-	2	598	8	1 (0)	51(2)	0	0	0	10	0	0	46	0	253	0	0	8615
	US	1783(44)		627	49 (1)	2422 (60)	88	190 (10)	7	406	9	2 (0)	36(1)	0	2	1	49	-	0	109	6	210	0	-	5996
	KR	202	957		6	5	3	-	0	-	-	0 (0)	1	-	-	2	-	-	-	-	-	3	-	-	1179
	GB	71(5)	294	27		10 (2)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	402
	CA	4(4)	152	1	0 (0)		0	-	0	-	-	1 (0)	-	-	-	0	-	-	-	-	-	-	-	-	158
	DE	93	80	19	0	32		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	224
	AU	-	153	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153
	DK	10	107	4	-	2	-		-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	123
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	PT	0	-	-	-	-	-		-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
	IL	0	5	-	-	-	-		-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	TW	2	3	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	NO	0	2	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	CN	10	49	1	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
	IS	0	5	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	PH	0	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	<b>Total</b>	<b>2304</b>	<b>7651</b>	<b>2074</b>	<b>79</b>	<b>2573</b>	<b>698</b>	<b>190</b>	<b>9</b>	<b>1004</b>	<b>17</b>	<b>4</b>	<b>89</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>155</b>	<b>6</b>	<b>466</b>	<b>0</b>	<b>0</b>	<b>17383</b>

The number in parentheses shows the cumulative number of PPH MOTTAINAI requests out of the total number of PPH requests. (The number of OLE-US is not noted.)

As of the end of June, 2012

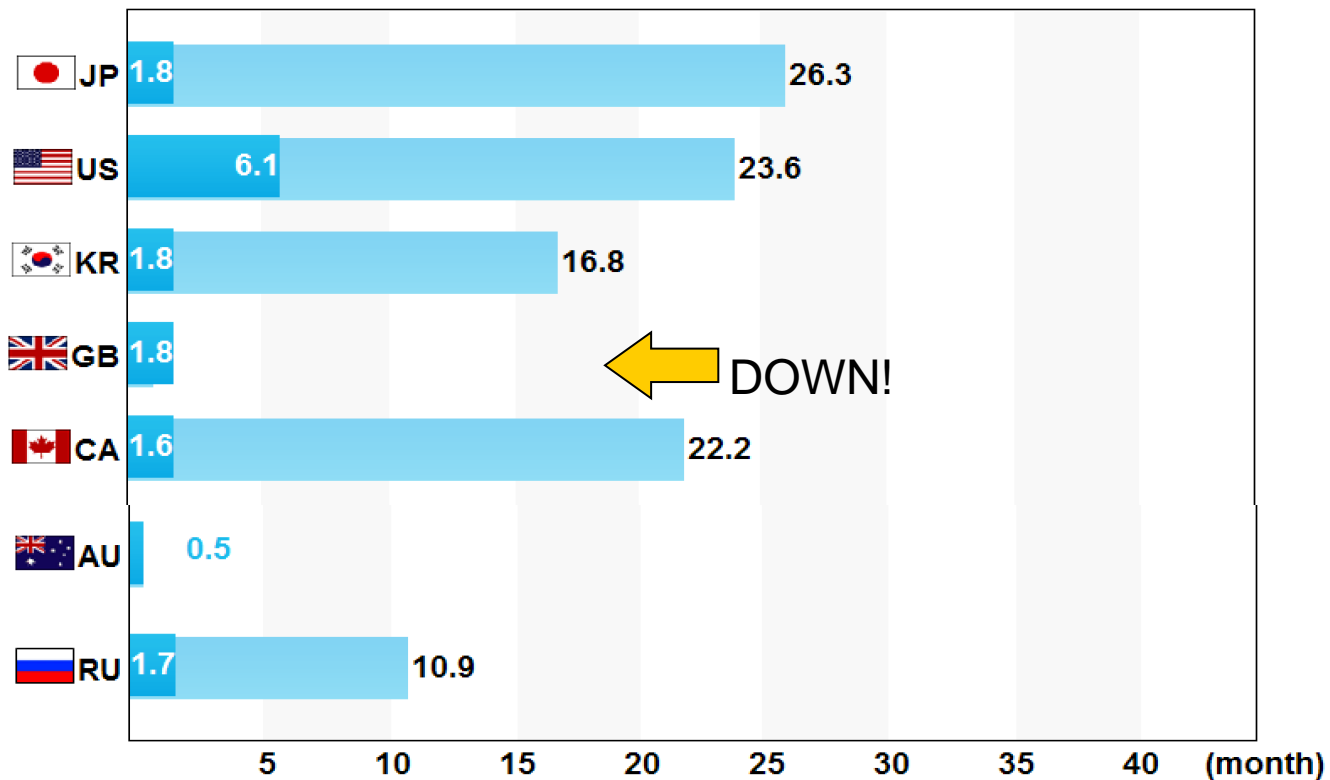
		Office of Filing																			
		JP	US	KR	CA	AU	DK	EP	FI	RU	AT	ES	MX	PT	SE	NO	CN	IS	PH	Total	
ISA/PEA	JP	1184	754	-	-	-	0	283	0	-	-	1	2	0	5	0	62	0	1	2292	
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	KR	-	1469	41	-	-	-	-	-	-	-	-	-	-	-	-	-	84	-	-	1594
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	FI	-	36	-	-	-	-	-	-	-	0	0	0	-	-	-	-	-	-	-	36
	RU	-	11	-	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	-	11
	AT	-	10	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	10
	ES	2	6	-	-	-	-	-	-	0	0	-	-	0	0	-	-	-	-	-	8
	SE	8	42	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	51
	XN	3	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37
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	Total	1651	3915	57	48	14	0	0	308	0	6	0	1	2	0	6	0	150	0	1	6159

PPH meets not only office satisfaction but also user satisfaction!

## Speed Up!

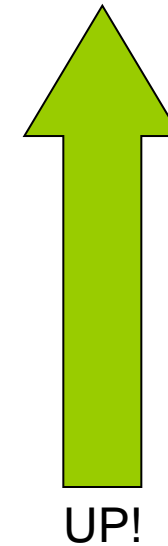
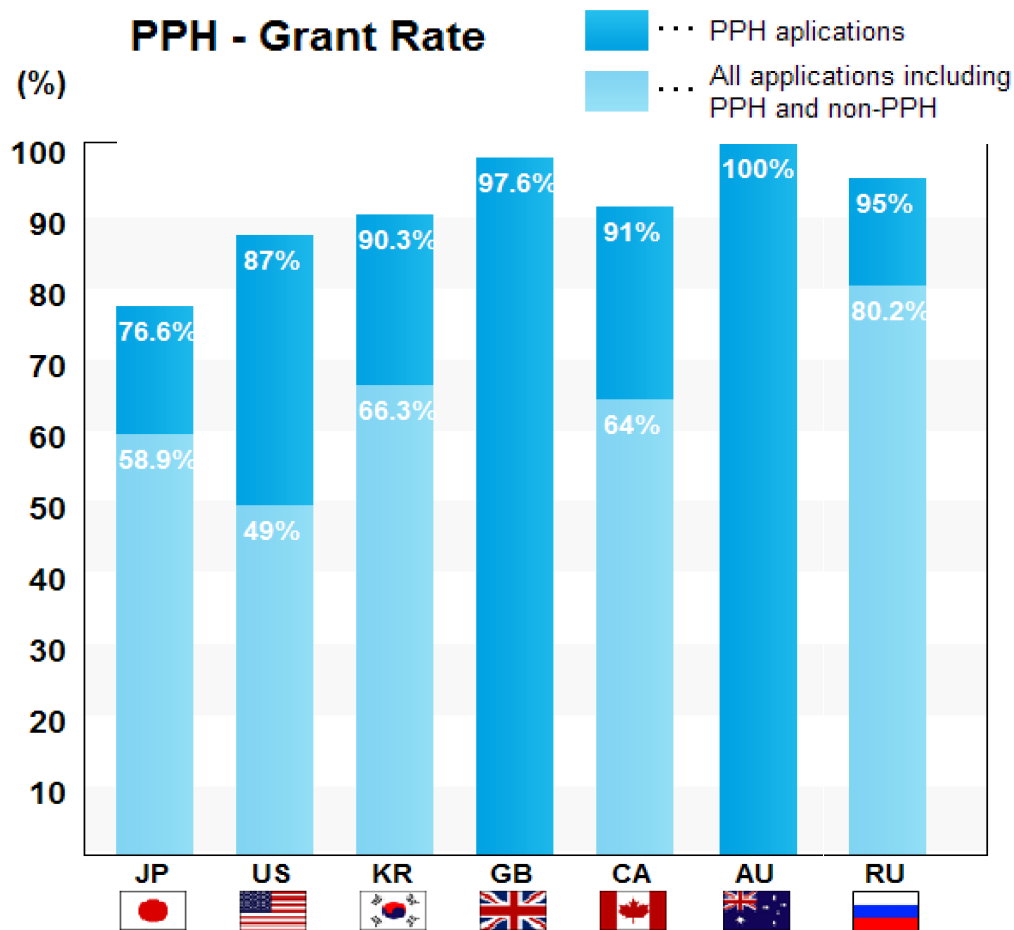
PPH - Average Pendency from PPH Request to First Office Action

■ ... PPH applications  
■ ... All applications including PPH and non-PPH



PPH meets not only office satisfaction but also user satisfaction!

## Increase in Grant Rate!

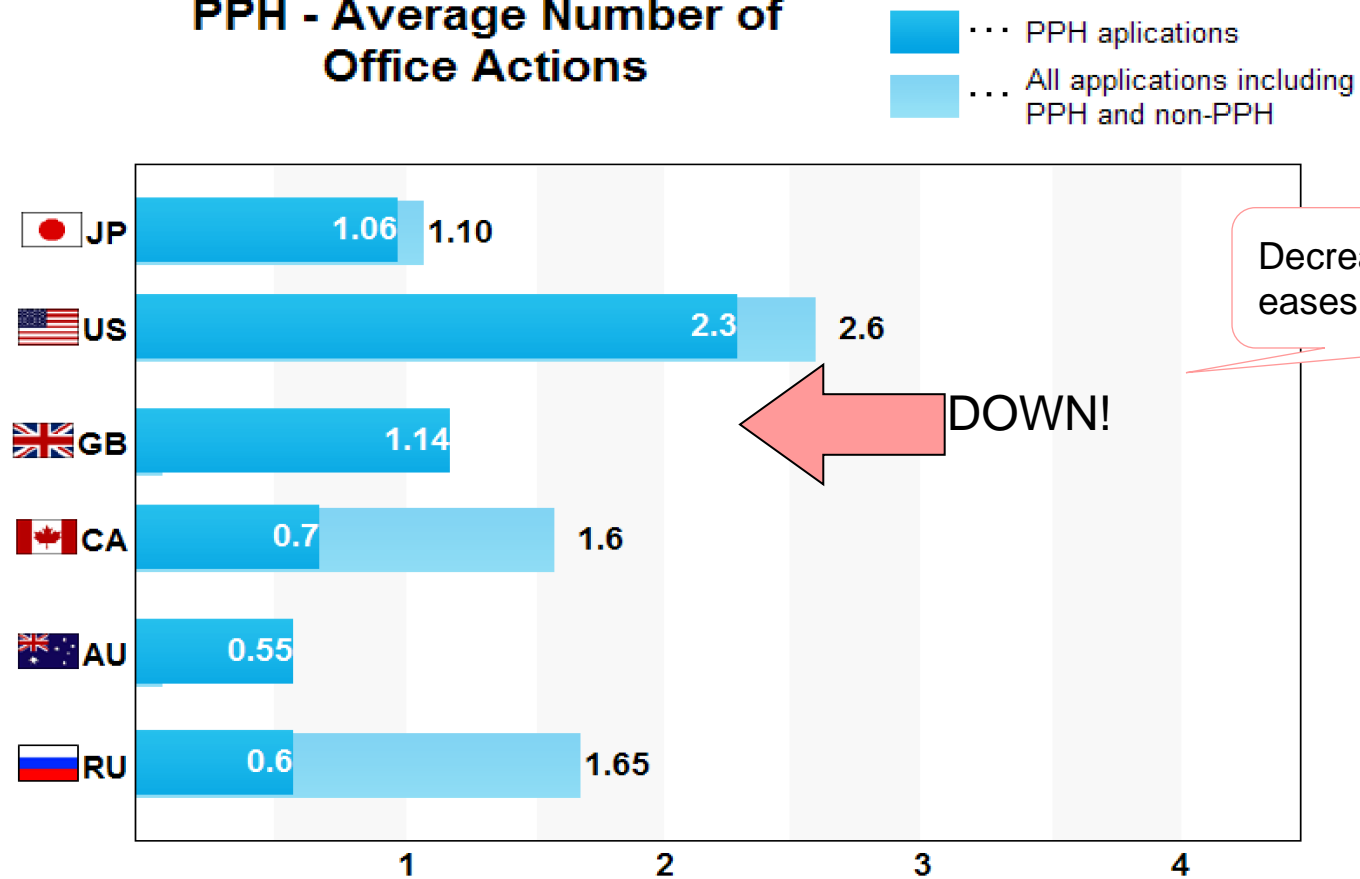




PPH meets not only office satisfaction but also user satisfaction!

## Low Cost!

### PPH - Average Number of Office Actions

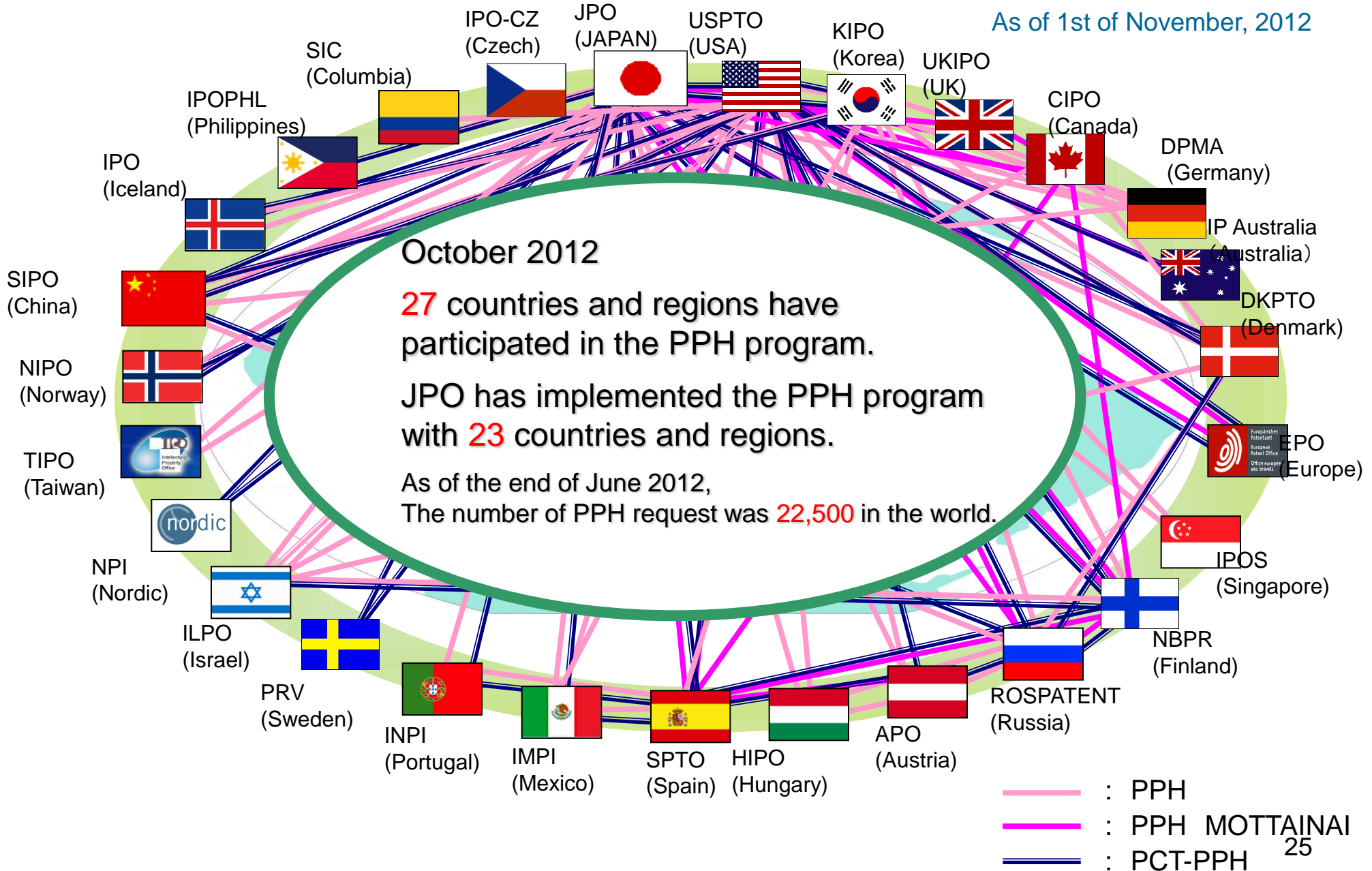


Decreasing number of OAs eases office & user burden.

DOWN!

# Expanding PPH Network

As of 1st of November, 2012



➤ JPO website

(In Japanese)

[http://www.jpo.go.jp/cgi/link.cgi?url=/torikumi/t\\_torikumi/patent\\_highway.htm](http://www.jpo.go.jp/cgi/link.cgi?url=/torikumi/t_torikumi/patent_highway.htm)

(In English)

[http://www.jpo.go.jp/cgi/link.cgi?url=/torikumi\\_e/t\\_torikumi\\_e/patent\\_highway\\_e.htm](http://www.jpo.go.jp/cgi/link.cgi?url=/torikumi_e/t_torikumi_e/patent_highway_e.htm)

➤ USPTO website

[http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp)

**Thank you for your kind attention!**

