

Managing IP Statistics

at the JPO

Japan Patent Office

Ryo FUNAKOSHI



OUTLINE

- 1) How to conduct researches on Trend of Patent Applications at the JPO
- 2) JPO database



IP statistics at the JPO

- Researches on Patent Application
- Researches on Trademark Application
- Researches on Design Application
- Researches on IP bundles
- Researches on IP Activity
- etc....



IP statistics at the JPO

Researches or Reports that JPO conducts can be categorized into two main types.

- Fundamental trend

- Data is extracted from database

Coverage : wide , Accuracy : Bad

- Detailed trend

- Examiners scan each patent document

Coverage : narrow , Accuracy : Good



How does JPO conduct Researches?

Procedures for Researches

- 1) Clarify the purpose
- 2) Set up the research design
- 3) Collect data and build database for analysis
- 4) Make Patent Maps
- 5) Analyze Patent Maps



How does JPO conduct Researches?

1st
commission

First commission

- Determine a direction

- Determine items for analysis

2nd , 3rd
Commission

Progress Report

- Check a direction

- Check data

- Check analysis

Last
commission

Final Report

- Final Confirmation



How does JPO conduct Researches?

◆ Parent Population

- Country
- Period
- Technological Coverage (with IPC, Keyword)

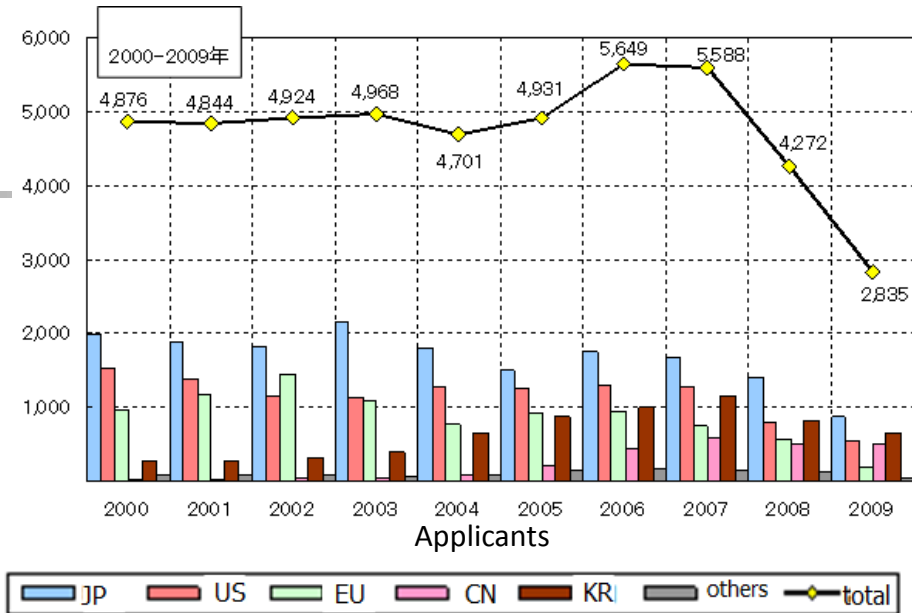
◆ Items for Analysis

- Use application/
- Technical Problem/Technical Solution

How does JPO conduct Researches?

- Clarify what we would like to know

How is the trend of patent applications about X technology?



Source: JPO, Research on Trend of patent applications — Internet TV —

Who is in Top rank at X Technology

1980-1989			1990-1999			2000-2009		
Rank	Applicant	Number	Rank	Applicant	Number	Rank	Applicant	Number
1	CANON	90	1	E Ink	249	1	SEIKO-EPSON	1599
2	PANASONIC	59	2	XEROX	186	2	PHILIPS	960
3	HITACHI-MAXWELL	48	3	COPYTELE	118	3	BRIDGESTONE	854
4	SEIKO-EPSON	40	4	CANON	88	4	FUJI-XEROX	522
5	PHILIPS	35	5	FUJI-XEROX	41	5	E Ink	491
6	COPYTELE	33	6	SONY	40	6	SAMSUNG	450
7	IBM	30	7	SEIKO-EPSON	35	7	KONICA MINOLTA	431
8	NICON	27	7	RICOH	35	8	LG	382
9	Sharp	24	9	STAR MICRONICS	34	9	CANON	354
10	Toshiba	23	10	PILOT	31	10	RICOH	276

Source: JPO, Research on Trend of patent applications — Electric Paper —

How does JPO conduct Researches?

Query	Coverage for period	Year 1990 - 2009
	country/ Region	US or AT or BE or CZ or DE or DK or EP or ES or FI or FR or GB or HU or IE or IT or LU or NL or PT or RO or SE or SK or CH or NO or CN or KR or WO or JP or CS or DD or AU or SG or IN
	Coverage for tech	IC=(C02F-001/42+C02F-0001/42+C02F-001/44+C02F-0001/44+C02F-001/46+C02F-0001/46+C02F-001/46+C02F-0001/46+C02F-001/461+C02F-0001/461+C02F-001/463+C02F-0001/463+C02F-001/465+C02F-0001/465+C02F-001/467+C02F-0001/467+C02F-001/469+C02F-0001/469) AND (MEMBRANE? + ULTRAFILT? + MICROFILT? + NANOFILT? + ULTRA(W)FILT? + MICRO(W)FILT? + NANO(W)FILT?)/TX
		IC=((C02F-001+C02F-0001+C02F-003+C02F-0003+C02F-009+C02F-0009) AND (B01D-061+B01D-0061+B01D-063+B01D-0063+B01D-065+B01D-0065+B01D-071+B01D-0071)) AND (MEMBRANE? + ULTRAFILT? + MICROFILT? + NANOFILT? + ULTRA(W)FILT? + MICRO(W)FILT? + NANO(W)FILT?)/TX
		IC=(B01D-061+B01D-0061+B01D-063+B01D-0063+B01D-065+B01D-0065+B01D-071+B01D-0071) AND (MEMBRANE? + ULTRAFILT? + MICROFILT? + NANOFILT? + ULTRA(W)FILT? + MICRO(W)FILT? + NANO(W)FILT?)/TX AND (WASTEWATER? + WASTE(W)WATER?)/TX
IC=(B01D-0061+B01D-061+B01D-0063+B01D-063+B01D-0065+B01D-065+B01D-0071+B01D-071) AND (SEWAGE + SEWERAGE + SIKE + SULLAGE + SEPTAGE + POLLUTED + BLACK(W)WATER + EFFLUENT + WASTE(W)WATER + DRAINAGE(W)WATER + DISCHARGE(W)WATER + BRINE + MARINE(W)WATER + OCEAN(W)WATER + SEAWATER + CW + CLEAN(W)WATER + PURE(W)WATER + PROCESS(W)WATER + BRACKISH(W)WATER)/TX AND (MEMBRANE? + ULTRAFILT? + MICROFILT? + NANOFILT? + ULTRA(W)FILT? + MICRO(W)FILT? + NANO(W)FILT?)/TX		

To apply applications

IPC, FI

Keyword

How does JPO conduct Researches?

Items for analysis by Technical Problem

Technical Problems	Material	Element of electrical power generation
		Device of electrical power generation
		Peripheral Device
		Others
	System	Supply
		Drive
		Improve for practical utility
		Security, Reliability, Durability
		Others

Items for analysis by Technical Solution

Technical Solutions	By Electric property	Element of electrical power generation
		Others
	By Manufacturing	Element of electrical power generation
		Device of electrical power generation
		Peripheral Device
		Others
	By Material Composition	Catalyser
		Electrolyte
		Complex
		Module
		Peripheral Device
		Others

Source: JPO, Research on Trend of Patent Applications – Fuel Cell

How does JPO conduct Researches?

Items for analysis by Technical Problem

Technical Problems (A)	Material (AA)	Element of electrical power generation (AA1)
		Device of electrical power generation (AA2)
		Peripheral Device (AA3)
		Others (AA4)
	System (AB)	Supply (AB1)
		Drive (AB2)
		Improve for practical utility (AB3)
		Security, Reliability, Durability (AB4)
		Others (AB5)

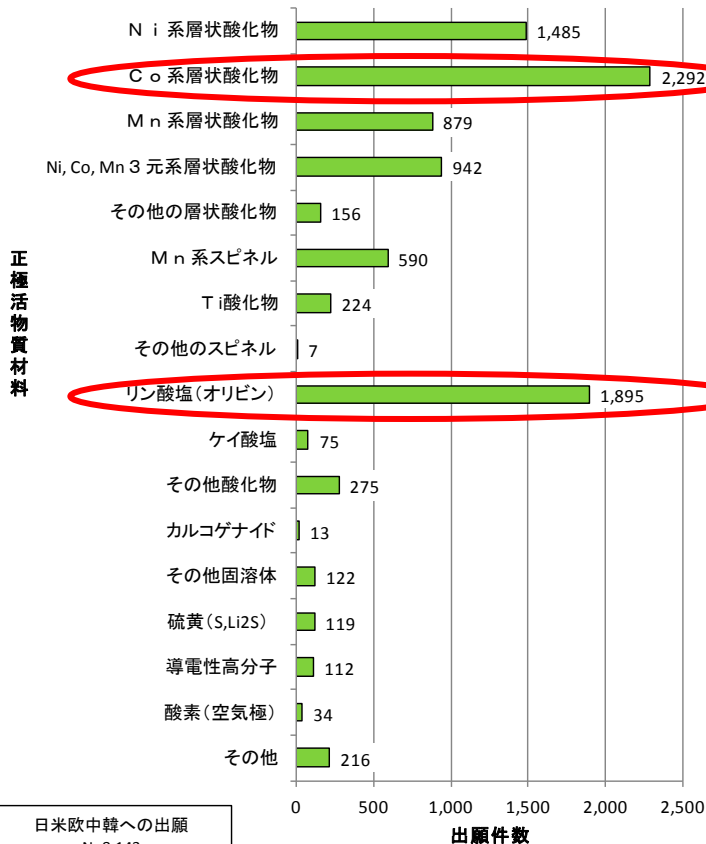
Items for analysis by Technical Solution

Technical Solutions (Z)	By Electric property (ZA)	Element of electrical power generation (ZA1)	
		Others (ZA2)	
	By Manufacturing (ZB)	Element of electrical power generation (ZB1)	
		Device of electrical power generation (ZB2)	
		Peripheral Device (ZB3)	
		Others (ZB4)	
	By Material Composition (ZC)	Catalyser (ZC1)	
		Electrolyte (ZC2)	
		Complex (ZC3)	
		Module (ZC4)	
		Peripheral Device (ZC5)	
		Others	

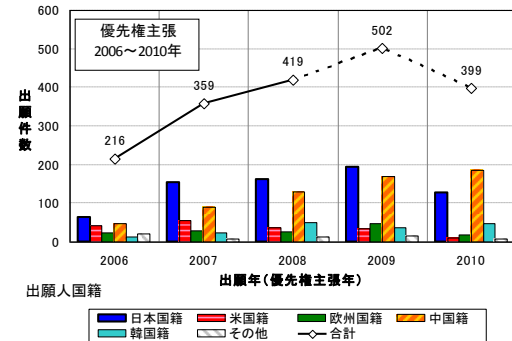
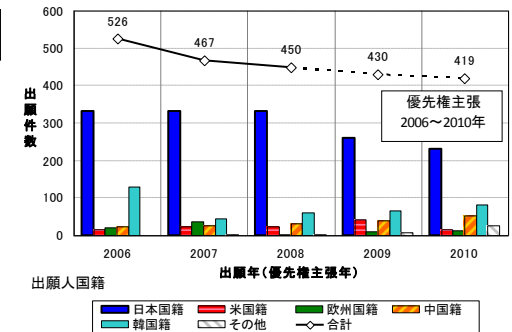
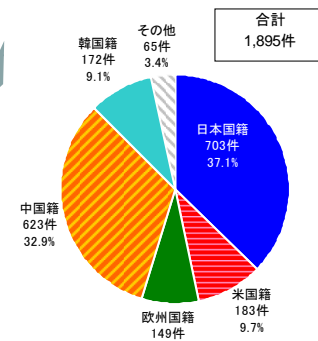
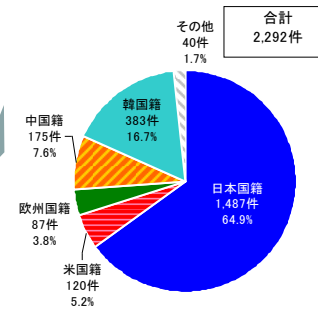
Source: JPO, Research on Trend of Patent Applications – Fuel Cell

How does JPO conduct Researches?

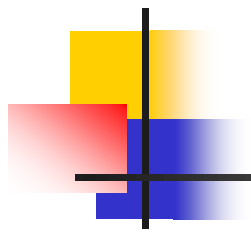
Statistics from Researches conducted by JPO



日米欧中韓への出願
N=8,143



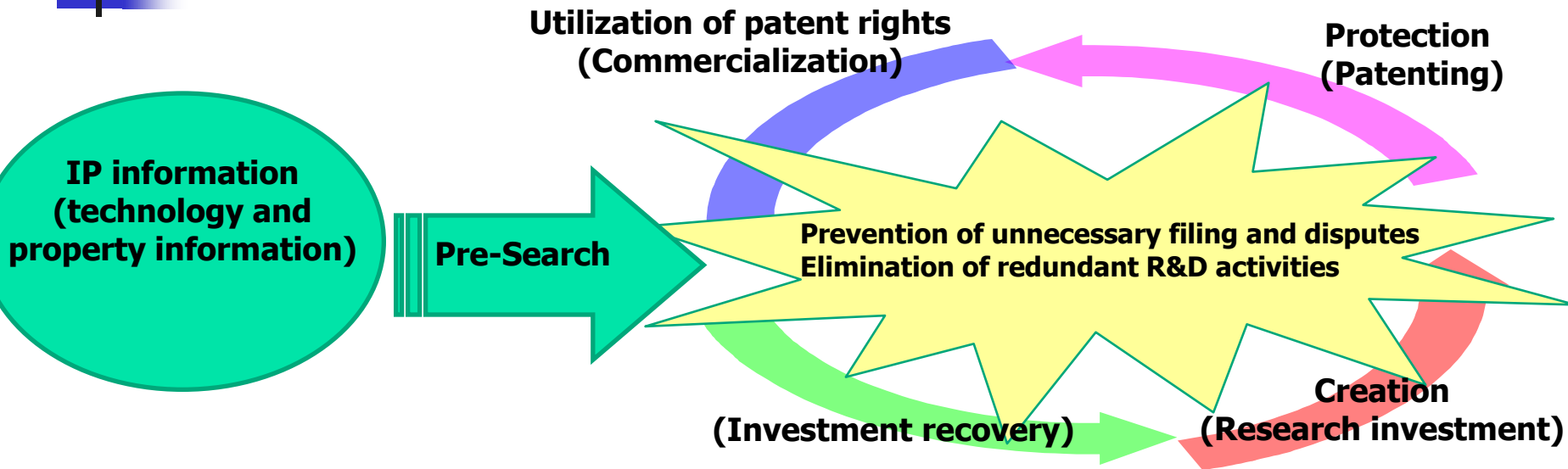
注：2009年以降はデータベース収録の遅れ、PCT出願の各国移行のずれ等で、全データを反映していない可能性がある。



Available Data – JPO -

Available Data - JPO -

IP information is indispensable for creation, protection and utilization of intellectual properties.



※ Points for IP Information Dissemination Policy:

What information, at what price, and how should we provide?

- ✓ ***Assignments of roles between the private and public sectors***
- ✓ ***Utilization of external specialized agencies***

Available Data - JPO -

The 19th session of the Information Committee of the Industrial Property Council (June, 1997)

1. IP information dissemination through the Internet

The JPO provides IP information **free of charge through the Internet.**

→ **IPDL**

2. Review on price for provision of IP Information

JPO's retained data are **provided at marginal cost (reasonable price)**

→ **providing Standardized data**

3. Further promotion of cooperation with other offices

→ **IP data exchange among foreign offices etc.**

National government is responsible for dissemination and utilization of patent information.

Article 20 of "Intellectual Property Basic Act (December, 2002)"

Committee for Promotion of Utilization of IP Information (March, 2003)

1. Government sector

Provision of exact and basic "primary information"

2. Private sector

Provision of high-value added information / service based on "primary information"

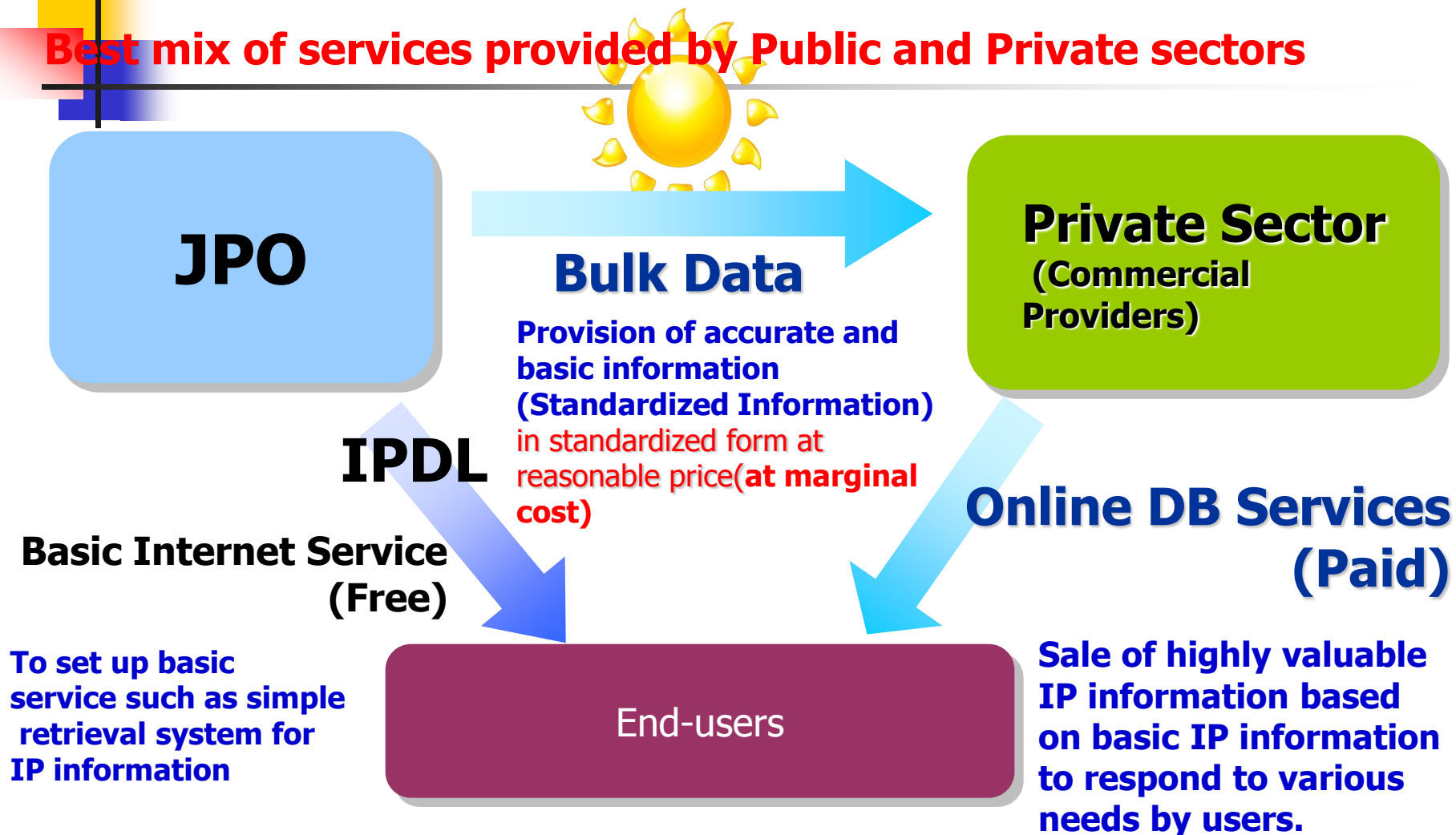


***"Best mix"
government
and
private sectors***

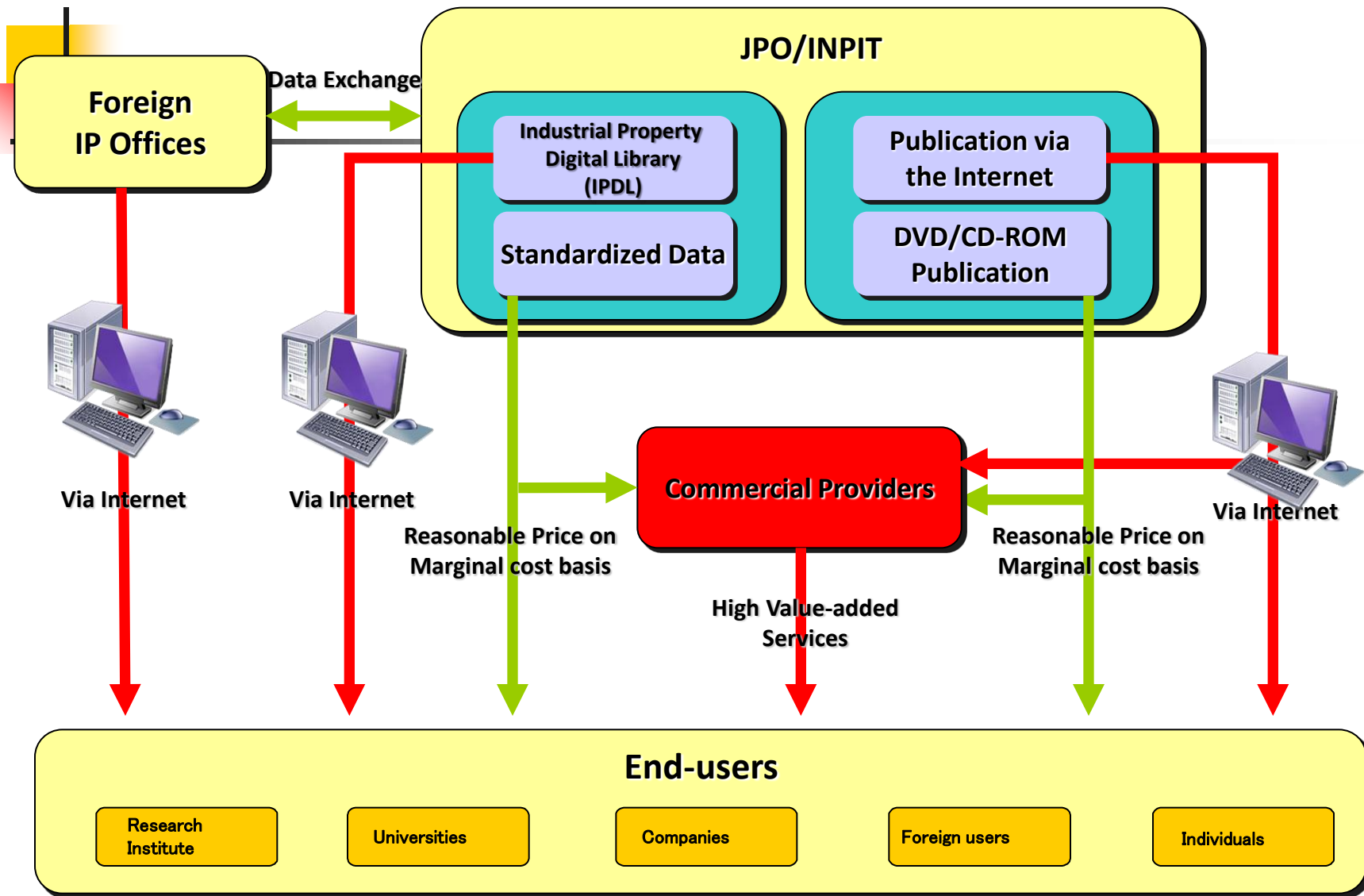
Available Data - JPO -

Basic Concept of Industrial Property Information Provision

Best mix of services provided by Public and Private sectors



Available Data - JPO -



Available Data - JPO -

1. Gazette data

Technical information, property information

2. Organized and "standardized data"

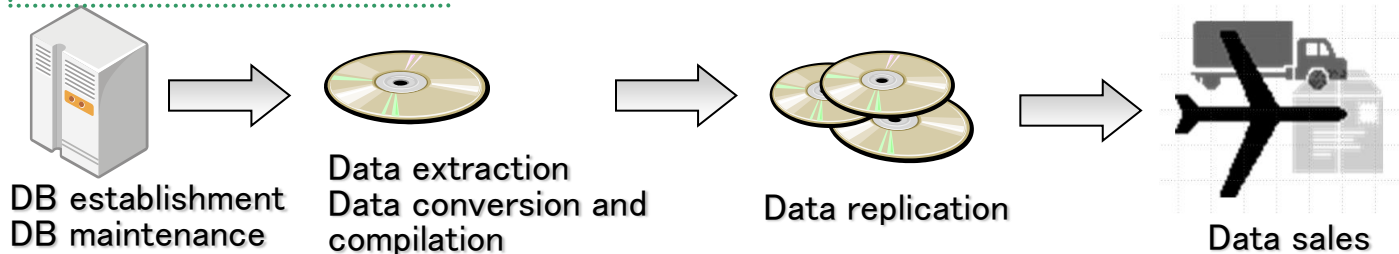
Formatted data which enable users and commercial providers to easily process bibliographic data and legal status data related to IP information

3. JPO's retained data

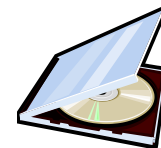
Patent Abstracts of Japan (PAJ)

Japanese abstracts of EPO publications and USPTO publications etc.

Data creation process



Provision of
bulk data





Available Data - JPO -

- Legal Status data
- Bibliographic database for applications
- Bibliographic database for appeals and trials and registration

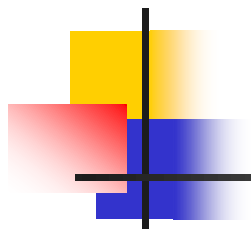
**Filed and standardized data
(patents, utility models,
designs, and trademarks)**

- Cited documents master files →

Filed and standardized data of
cited documents master files

- Search master files →

Filed and standardized data of
F-term search master files



Thank you