“Pathways to Innovation :
Policies, Products, and Processes for Competitive Advantage in a Global Economy”

Intellectual Property Strategy in Japan

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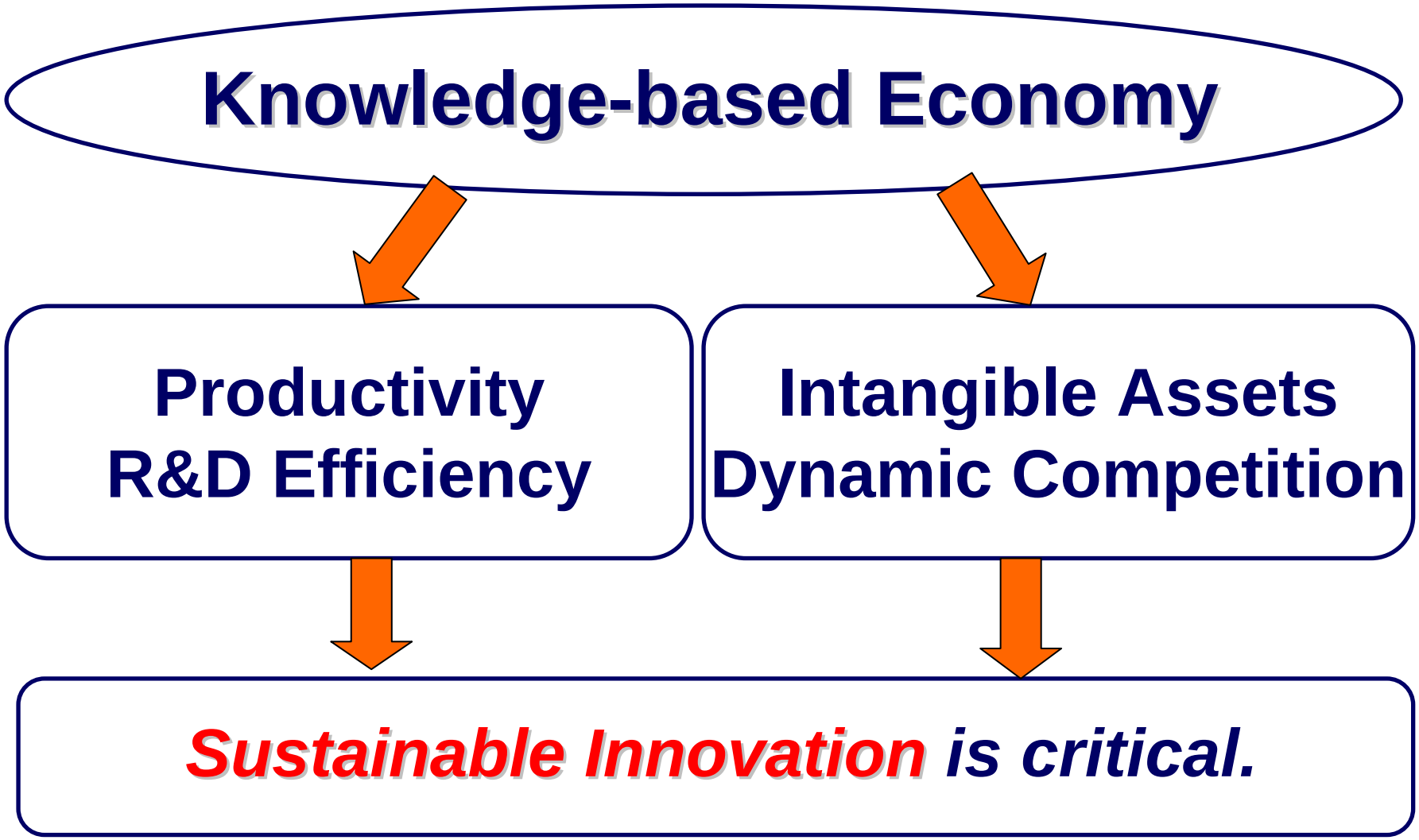
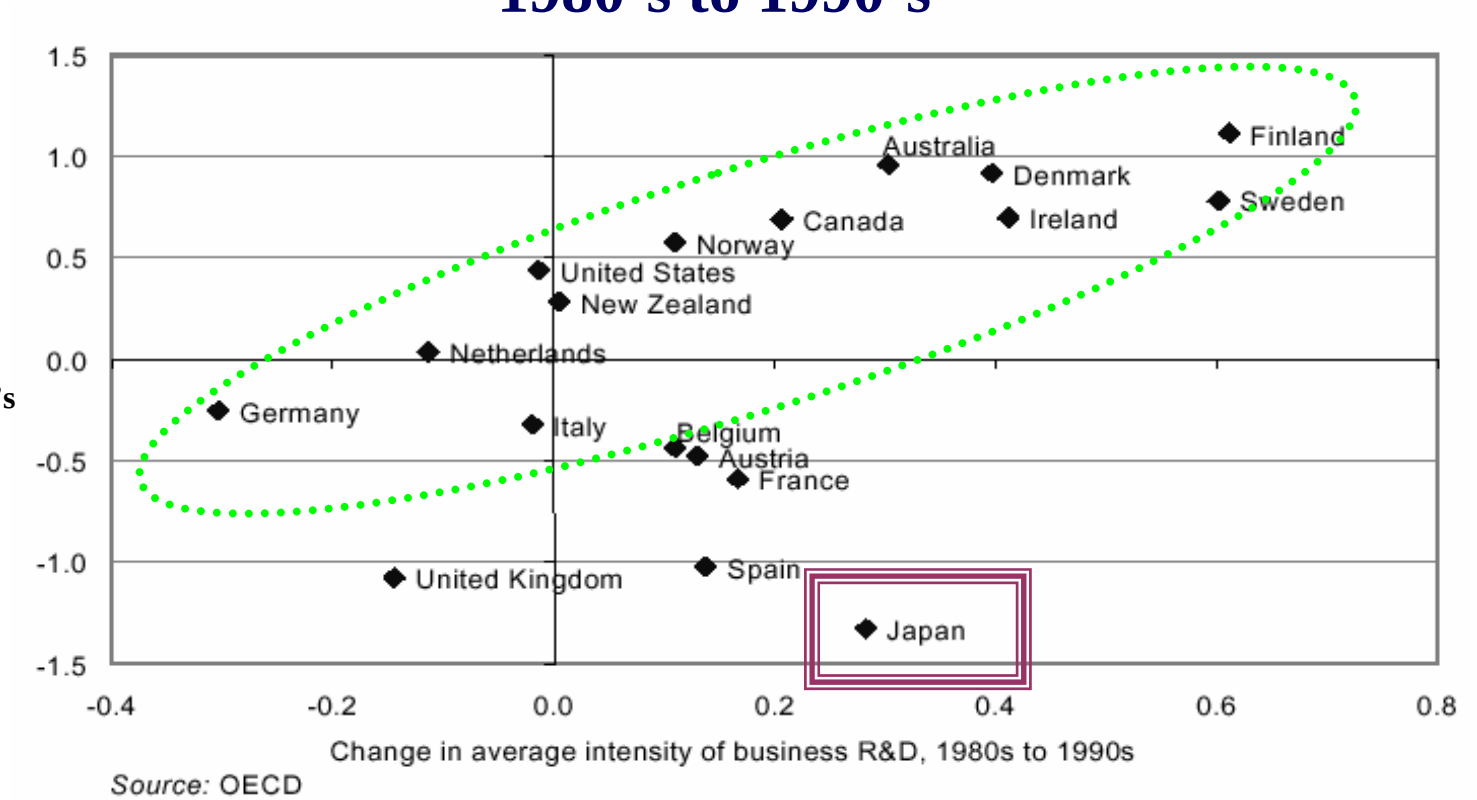
Part I Why Intellectual Property?



R&D Efficiency

Intensity of business R&D and Productivity Growth, 1980's to 1990's



Source : OECD Science, Technology and Industry Outlook 2001, reprinted from METI's following report;

http://www.meti.go.jp/report/downloadfiles/g30314b04j.pdf

R&D Efficiency of individual firms

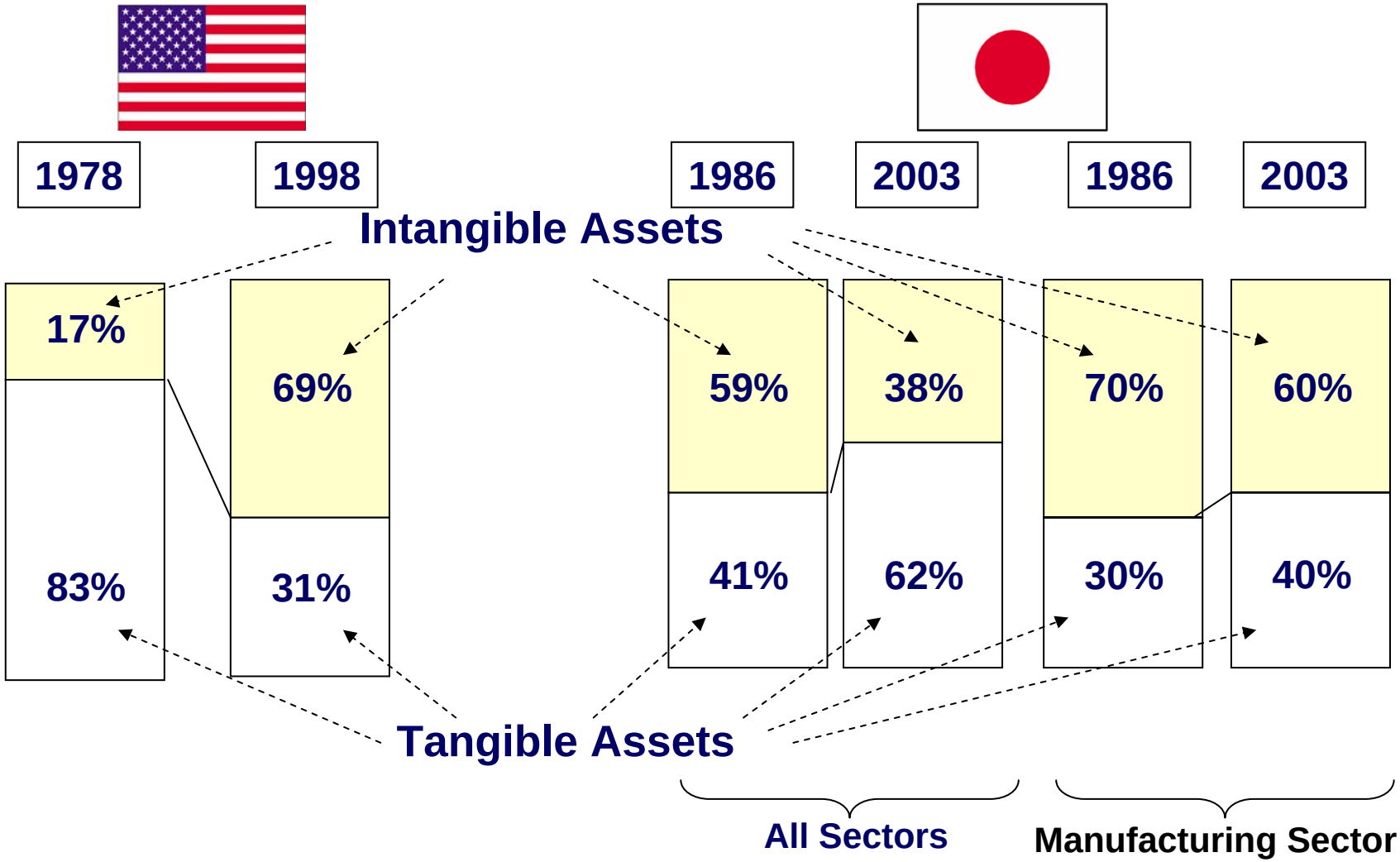
Profits in 5 years／R&D in the previous 5 years (%)

	1988 ～ 92	1989～ 93	1990～ 94	1991～ 95	1992～ 96	1993～ 97	1994～ 98
SEI*	173	158	138	116	110	108	112
NEC	44	34	25	21	21	26	33
Toshiba	71	58	38	35	39	37	39
Sony	43	24	12	3	14	23	32
Matsushita	51	42	32	24	21	22	26
Toyota	154	120	88	59	63	79	93
Sharp	63	65	62	59	58	52	45
Canon	110	93	80	82	93	106	121
Bridgestone	304	274	251	228	216	210	226

* Sumitomo Electric Industries

Source: Roichi Murakami, “Crisis-driven Innovation Management”, Works, Dec. 19999-Jan. 2000

Increasing Intangible Assets



Source: METI, White Paper on International Trade 2004

More investment in intangible assets

	Company	(A) R&D Expenses (%)	(B) Marketing Expenses (%)	(A)+(B) Intangible Assets (%)	(C) Investment in Tangible Assets (%)	(A)+(B)+(C) Total Investment (hundred million \)
Pharma-ceuticals	TAKEDA	70	16	**86**	14	1,133
	EISAI	76	12	**88**	12	613
Communi-cation / Game	NTT	81	1	**82**	18	2,557
	SQUARE	74	12	**86**	14	196
Electronics	TOSHIBA	64	4	**68**	32	4,368
	FUJITSU	67	5	**72**	28	4,886
Automobile	TOYOTA	56	12	**68**	32	7,673
	MAZDA	50	16	**66**	34	1,374
Average		67	10	**77**	23	2,850

The figures represent the amount of FY2000. Source; METI, White paper on Int'l Trade 20

Part II IP Policy Making

IP-based Nation

2002 Policy Statement by Prime Minister KOIZUMI

Basic Law on IP

2003 IP Strategy Headquarters

IP Strategic Program 2003

2004 IP Strategic Program 2004 (revised one)

Policy Package against Counterfeiting & Piracy

IP Strategy Headquarters

(Members)

- All Ministers
-10 Experts from Private Sector

(Chairman)

- Prime Minister Koizumi

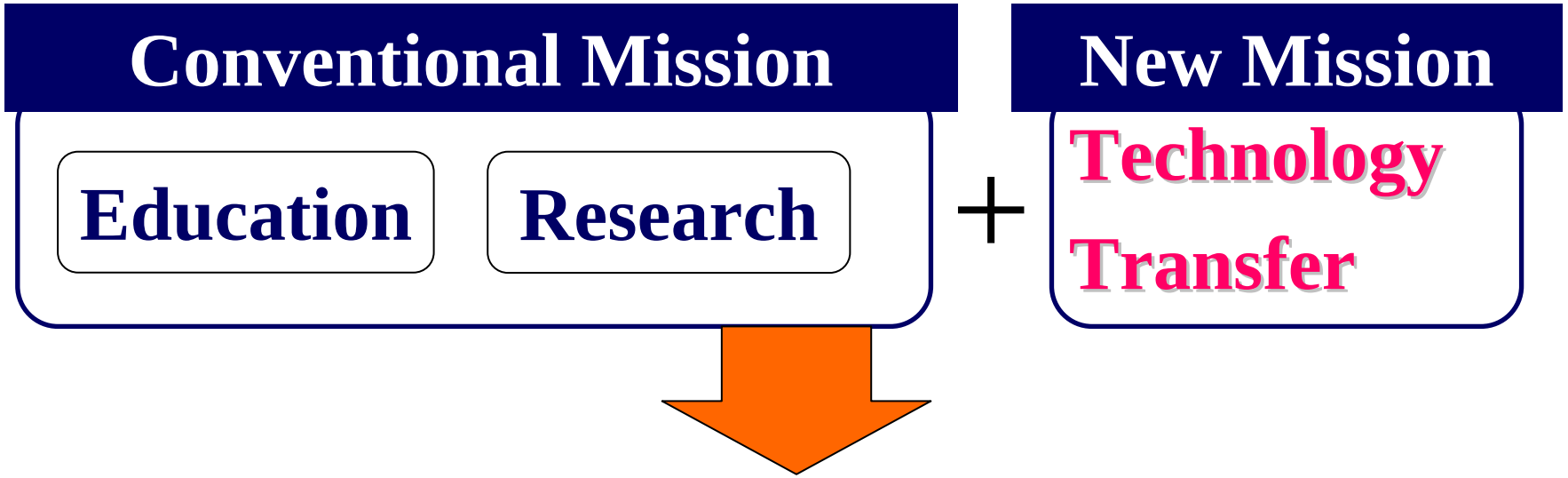
IP Strategic Program

1. IP Creation
2. IP Protection
3. IP Exploitation
4. Promotion of Media Contents Business
5. Human Resources Development

Part III, Major Policy Developments

1. Universities
2. Patent Examination
3. IP High Court
4. Measures Against Counterfeiting & Piracy

1. Universities

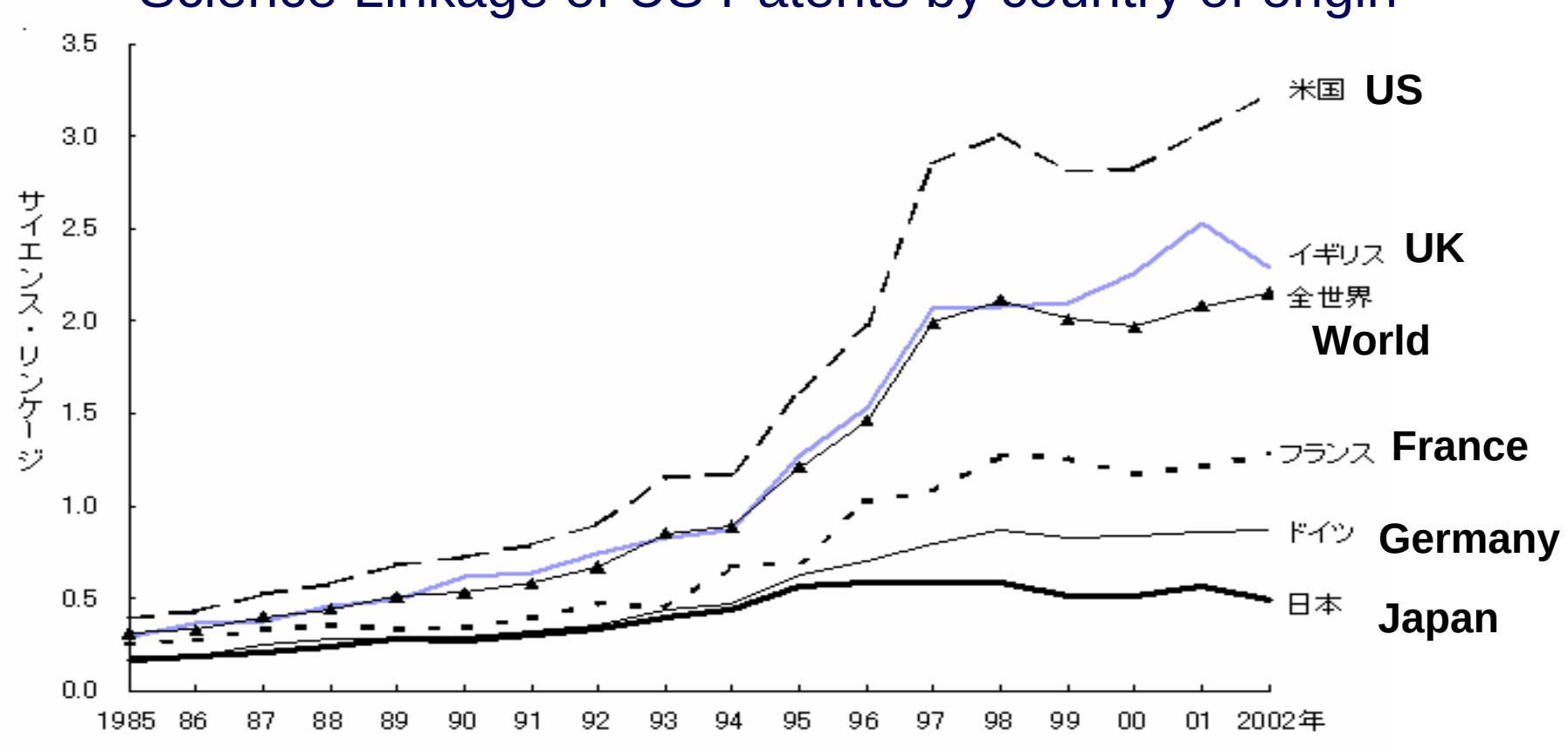


Universities are encouraged to

- establish their **IP-focused Organizations(TLOs)**
- set up **Rules & Regulation (IPR Ownership)**
- secure **Funding (Patent Prosecution Fee)**

Science Linkage

Science Linkage of US Patents by country of origin



Science Linkage = (Science publications cited in US Patents) /(US Patents)
Source: NISTEP, Science and Technology Indicators 2004 –Data Updated in 2005-

2. Patent Examination

Huge Backlog

Current First Action Period :**26 months**
(Waiting period for examination)

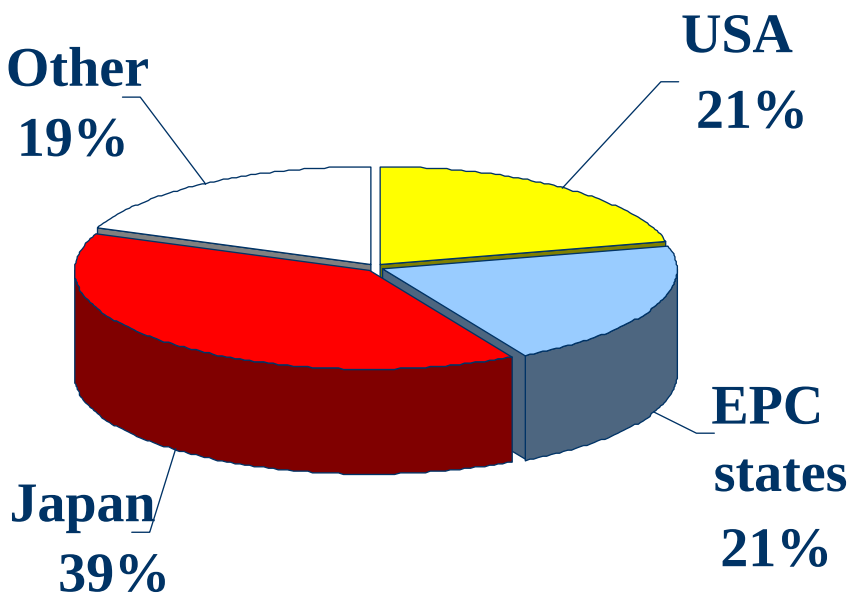
For expeditious examination

500 examiners for 10-years fixed-term
Outsourcing prior art search

Final Goal 0 (Real time examination)

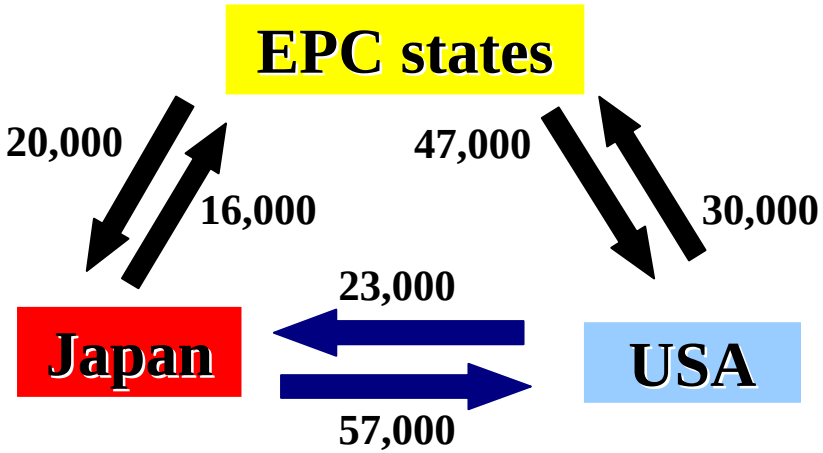
Worldwide "Patent Explosion"

World Patent Applications by Bloc of Origin



Resource: Trilateral Statistical Report 2002 edition

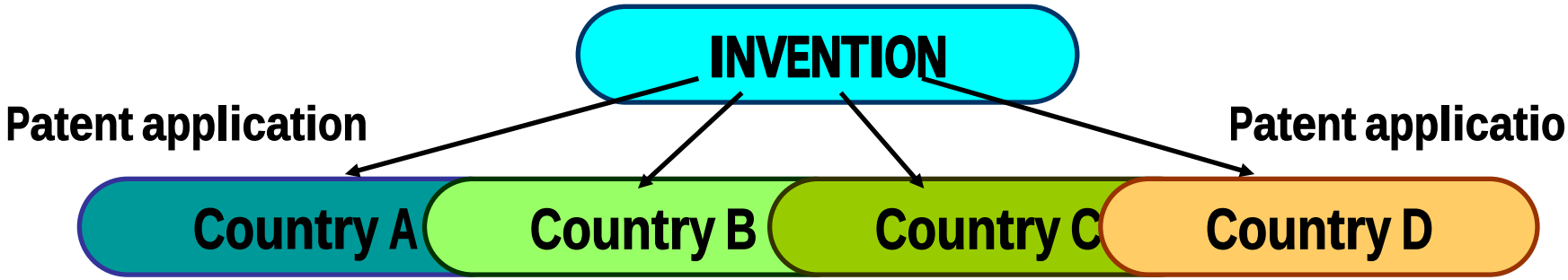
Flows of Applications between Trilateral Blocs



Resource:
Annual Report of EPO(CY), USPTO(FY), JPO(CY) in 2002

Towards Global Patent System

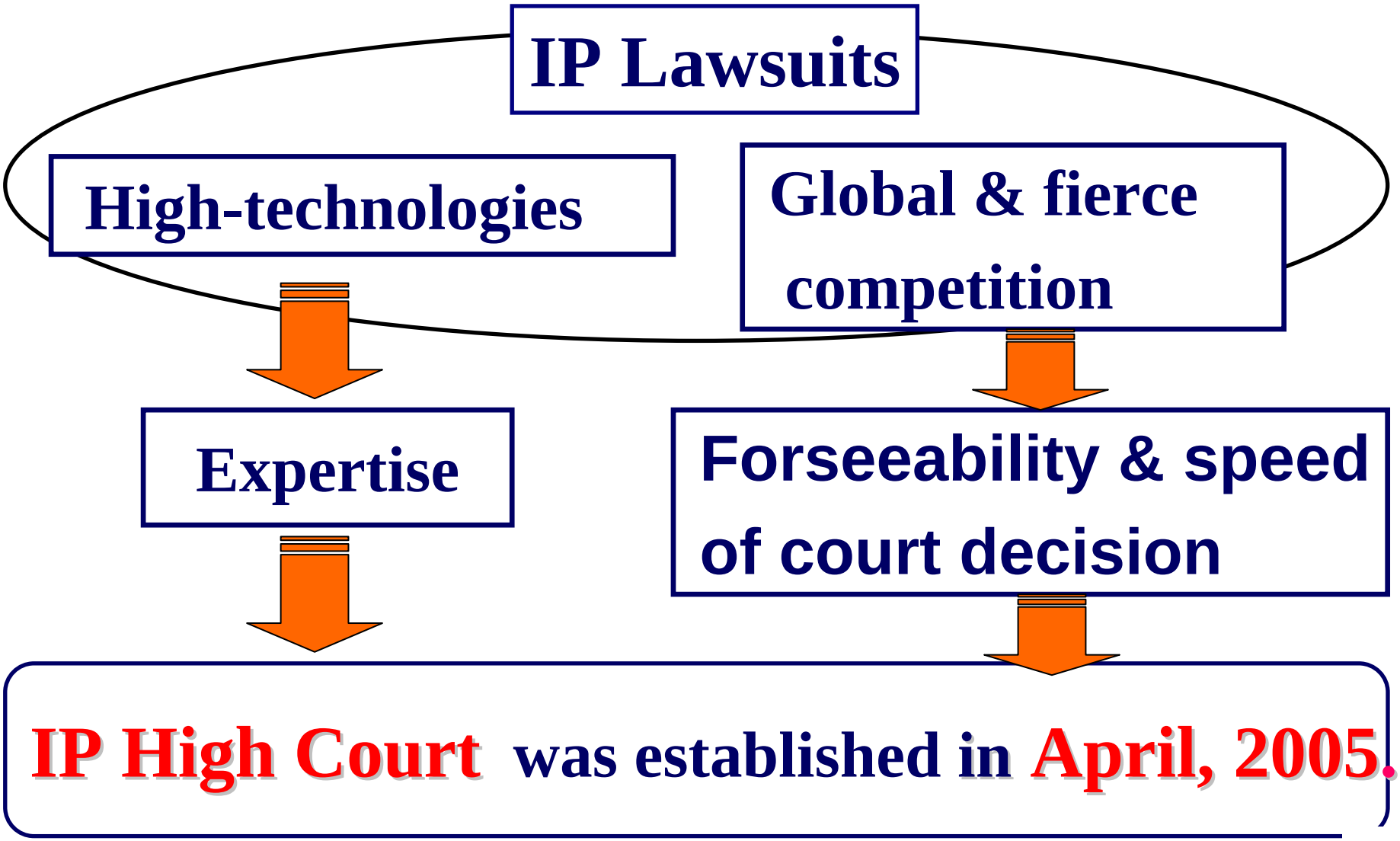
Independent patent system



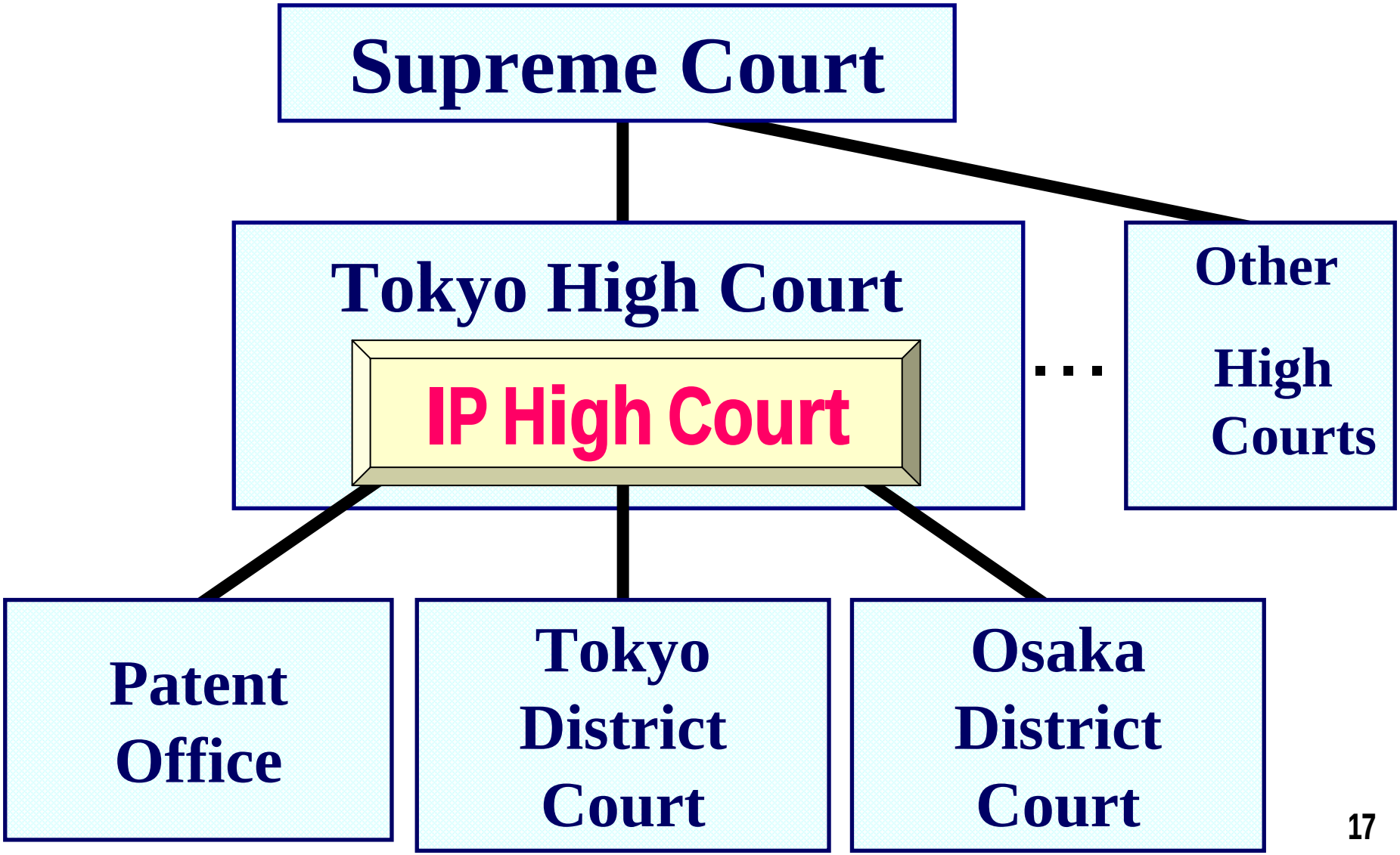
- Applicants → Increased Costs
- Patent Offices → Increased Burden of Examination

Needs for Global Patent System

3. IP High Court



IP High Court in Japanese Judicial System



4. Anti-Counterfeiting and Piracy

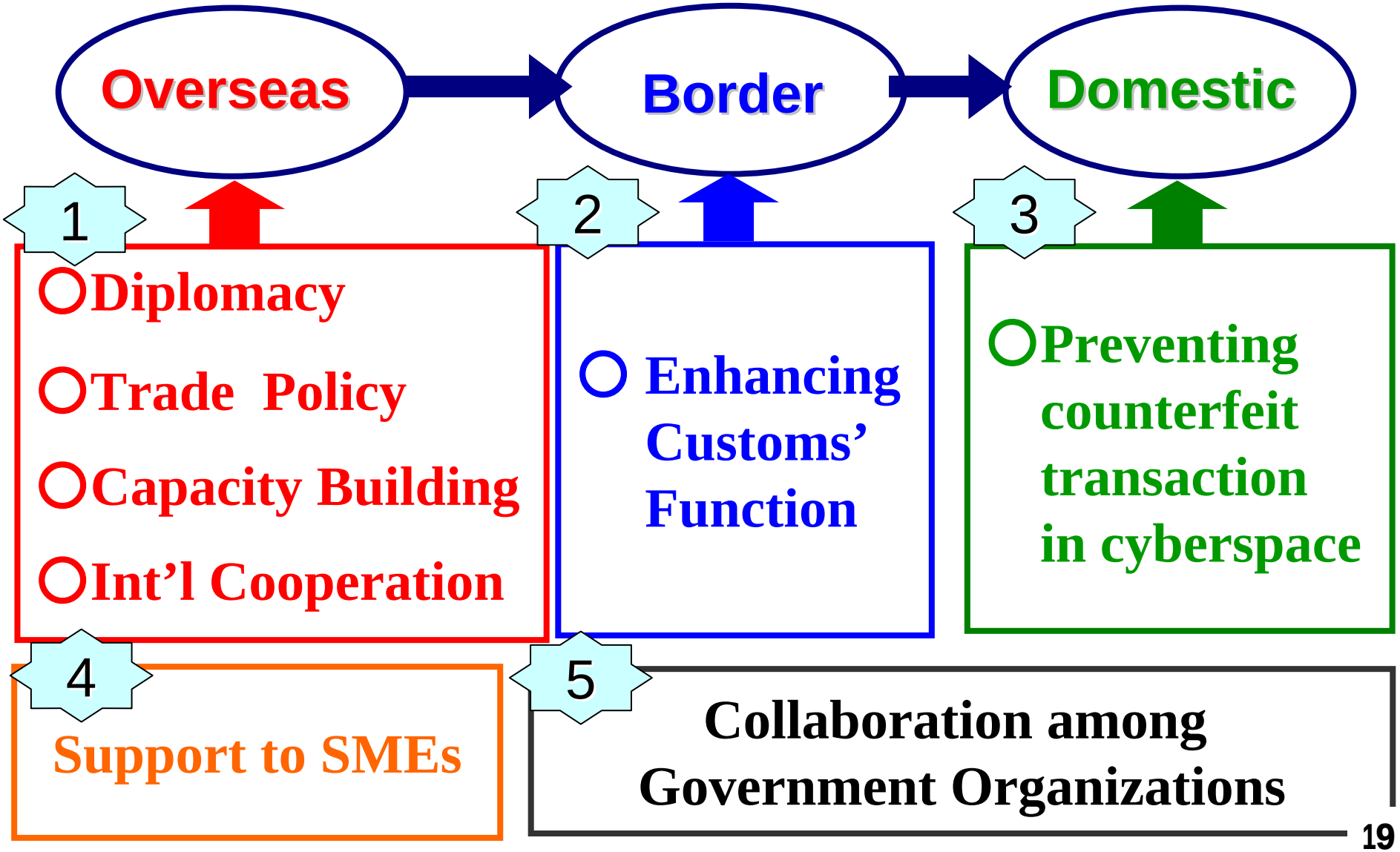
"The global trade in counterfeit goods is estimated at over

500 billion Euro

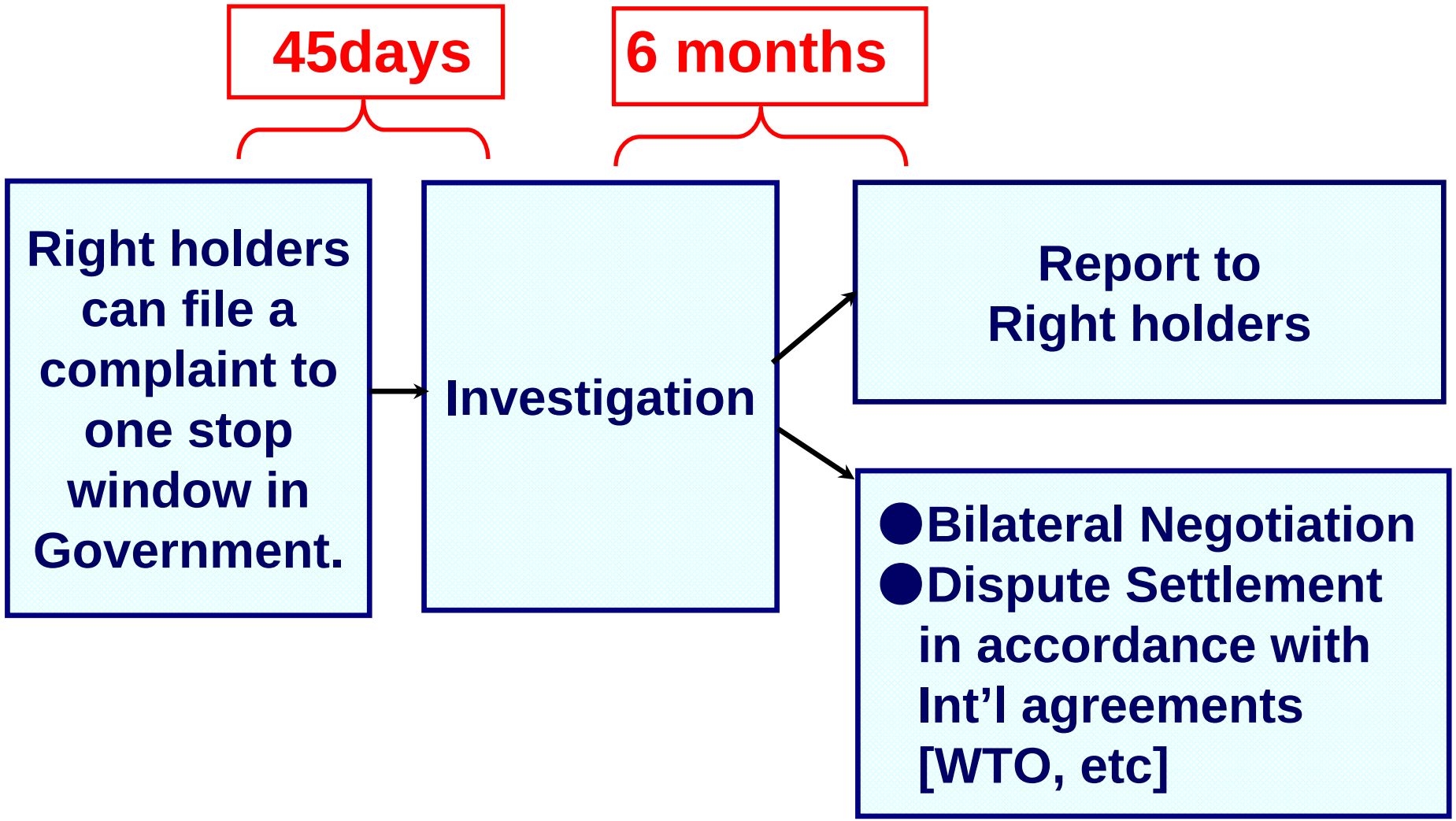
annually and is escalating rapidly."

Source: The First Global Congress on Combating Counterfeiting, organized by WCO (World Customs Organization] and Interpol, 16/06/2004

Overview of Anti-Counterfeiting and Piracy



Investigation system on unfair IP practices by foreign countries

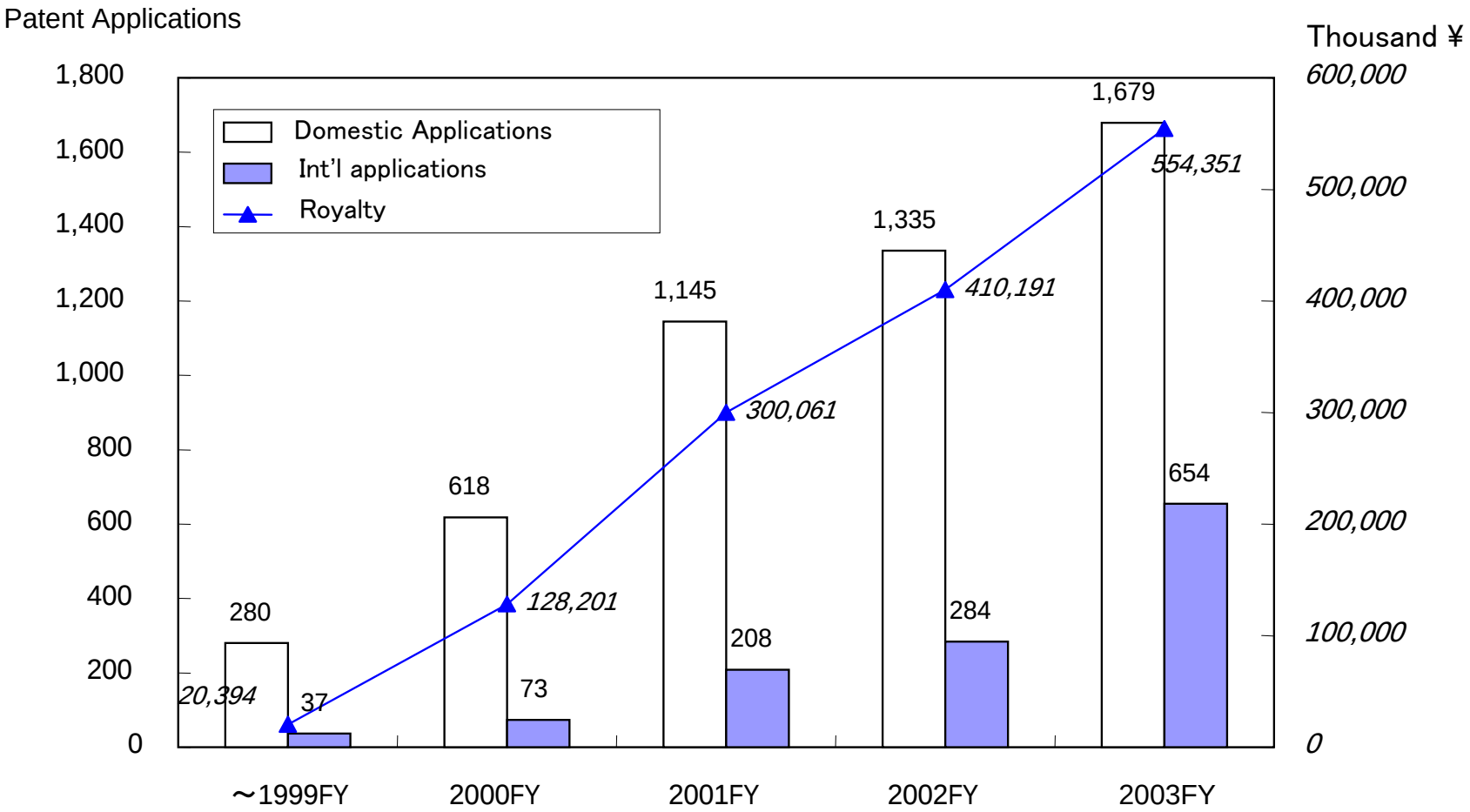


Part IV, Does IP Policy Matter?

1. IP-related Activities in Universities
   - Technology Transfer
   - Start-ups

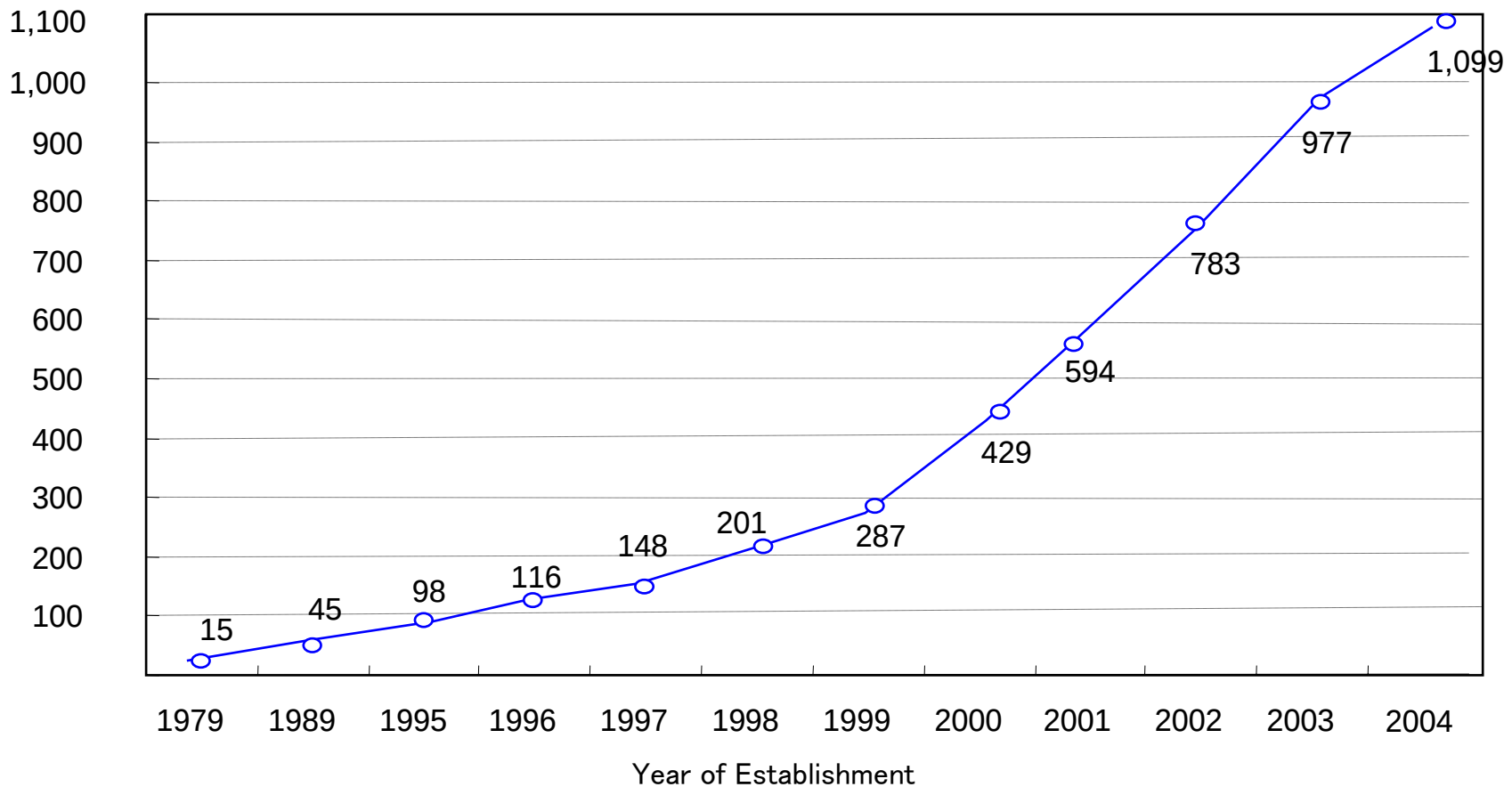
2. IP in Corporate Strategy
   - IP as “visible” assets
   - IP Disputes

Technology Transfer from TLOs



Source : METI, http://www.meti.go.jp/policy/innovation_corp/tlo2/tlosuii.pdf

Start-ups from Universities



Source : METI, http://www.meti.go.jp/policy/innovation_corp/whatsnew/shiryou.pdf

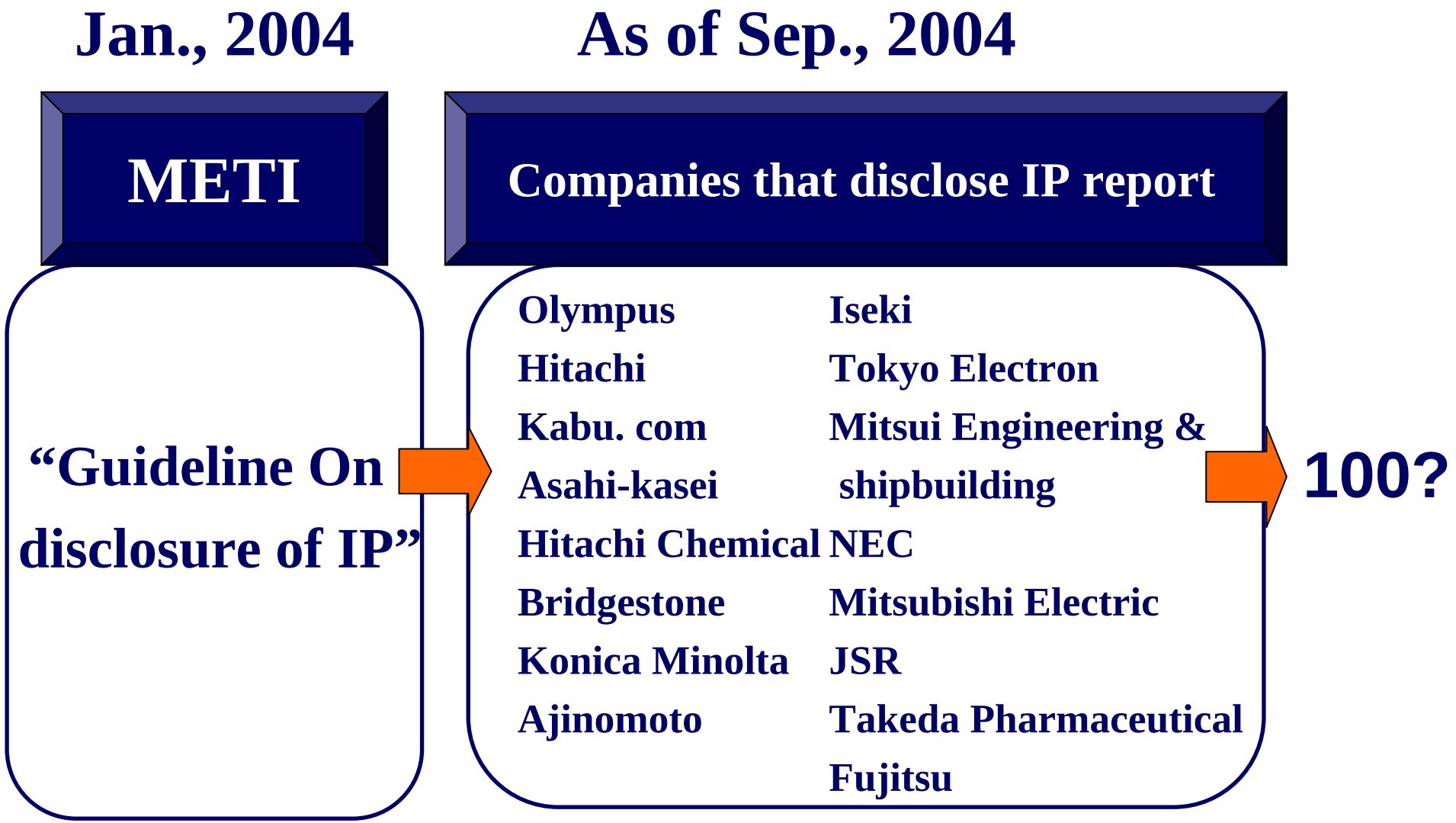
US-Japan Comparison

	US(*1) 2003FY (N=165)	Japan(*2) 2003FY (N=36)
Patent applications	7,203	1,679
Royalty	1,034M$	5M$
Start-ups	1980～2003 4,081	～2004 1,099

*1 Source : AUTM Licensing Survey; FY 2003 Survey Summary

**2 Source : METI, http://www.meti.go.jp/policy/innovation_corp/tlo2/tlosuii.pdf

IP as “visible assets” in management



Source: METI, http://www.meti.go.jp/committee/materials/downloadfiles/g50225a04j.p

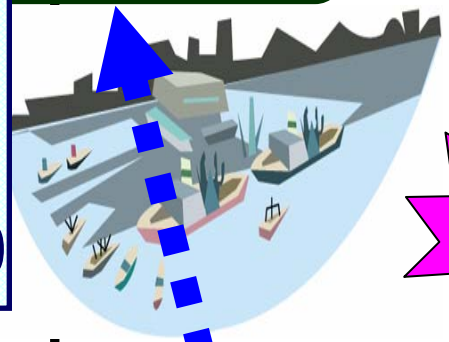
IP Disputes at Border

Exporter

JPO

Customs

Importer



Application for import suspension of goods infringing patents (2003.4 ～)

16 patentees are filing applications as of May, 2005.

Right Holders

IP Policy does have an effect on activities of both universities and industries.

However, the overall effect on innovative activities is yet to be seen... .