



**Hitachi's IP Strategy to Support Social Innovation Business**  
**~ Competition + Co-creation ~**

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# 1. Expanding Footprint of IP Division

## Serving the World with Our Social Innovation Business

Products / Services

Social Innovation Business

### Let's make it happen with the Power of Patents

#### Competitive Strategy

Exploiting IP power to create barriers to entry →3-2, 3-3

#### Co-creation Strategy

Exploiting IP power to promote partnerships →3-4, 3-5

**Securing IP power globally (Attaining IP rights, identifying and managing know-how)**

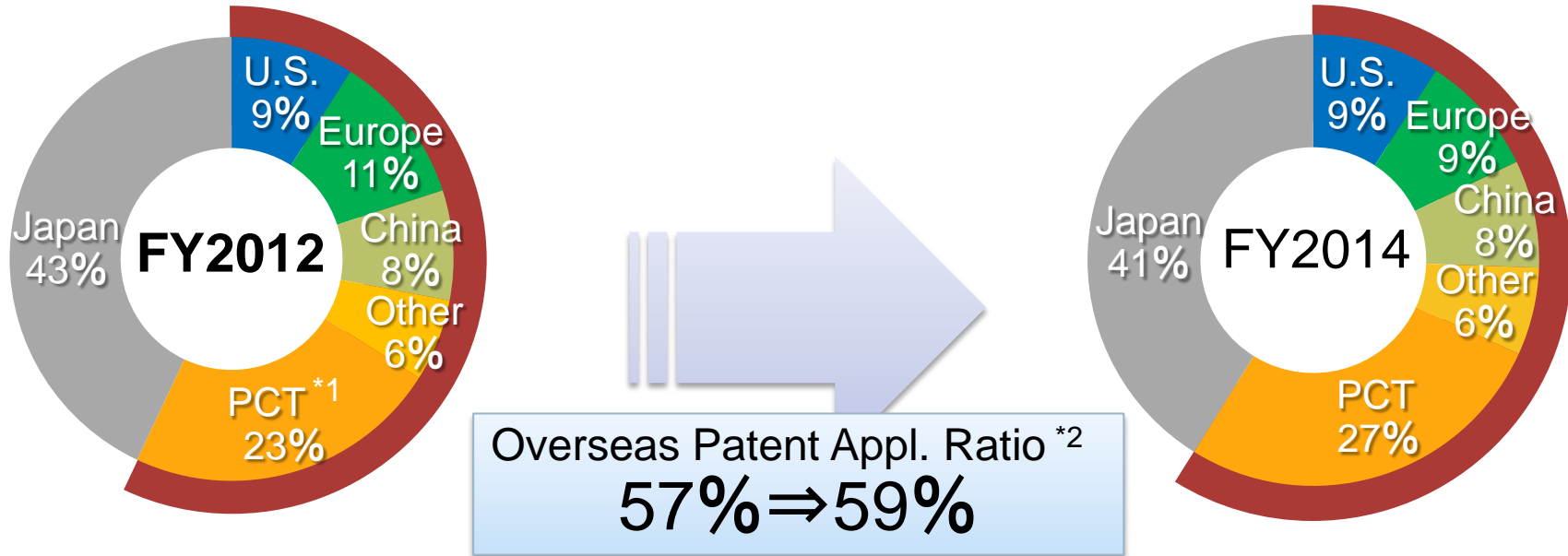
→2-1, 2-2

Intellectual Property "Rights" Division

→ Intellectual Property Division (April 2015~)

# 2-1. Securing IP Power Globally(1)

Utilizing PCT to cover potential markets globally and flexibly



PCT: Patent Cooperation Treaty  
\*1 Filing one patent application can have an effect of filing multiple patent applications

\*2 Overseas Patent Appl. Ratio =  $\frac{\text{The number of overseas patent Applications}}{\text{The number of patent Appl. filed W.W.}}$   
For each PCT application, we counted expected number of countries where we plan to obtain patents.

Have received TOP 100 Global Innovators Award for four consecutive years



Award for innovative companies and organizations selected based on patent data

## 2-2. Securing IP Power Globally (2)

Globally building up patent portfolio comparable to the rivals in size

Patent Applications Published in 2014 (Granted patents for U.S.)<sup>\*1</sup>

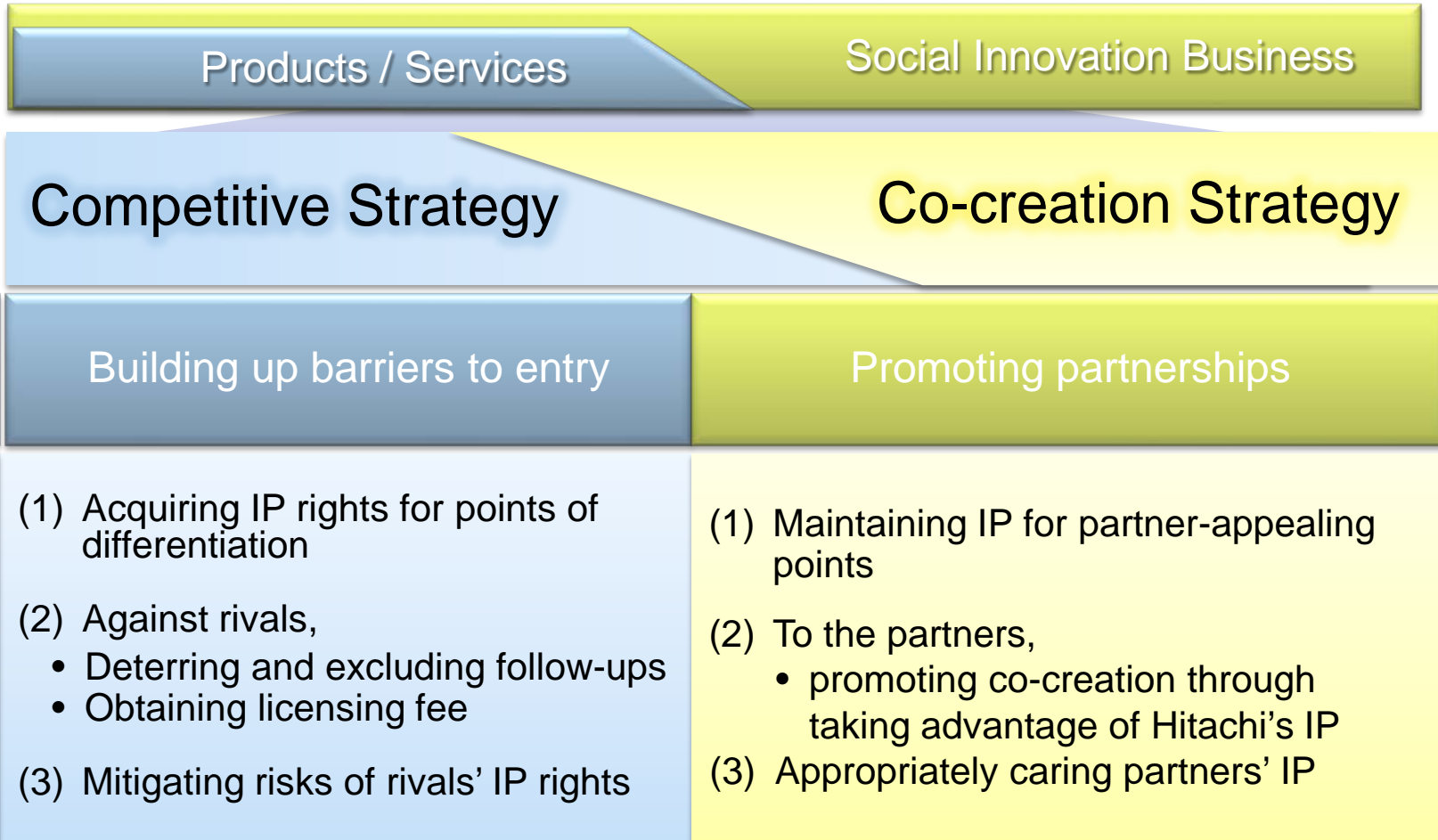
Japan			U.S.			PCT			China			Europe		
Corporate group			Corporate group			Corporate group			Corporate group			Corporate group		
1	Hitachi	8,300	1	IBM	7,600	1	Hitachi	2,400	1	Hitachi	2,000	1	Siemens	2,100
2	Toshiba	6,900	2	Toshiba	3,000	2	Siemens	2,200	2	Siemens	1,900	2	GE	1,000
3	Mitsubishi Electric	5,200	3	GE	2,200	3	Mitsubishi Electric	1,600	3	Toshiba	1,300	3	Hitachi	700
4	MHI	2,300	4	Hitachi	2,100	4	Toshiba	1,000	4	IBM	1,300	4	Toshiba	600
5	GE	900	5	Siemens	1,900	5	GE	900	5	Mitsubishi Electric	1,200	5	Mitsubishi Electric	500
6	Siemens	300	6	Mitsubishi Electric	900	6	MHI	600	6	GE	1,200	6	MHI	400
7	IBM	300	7	MHI	400	7	IBM	500	7	MHI	300	7	IBM	100

\*1 Hitachi's survey on selected rivals using Shareresearch, Patolis, IFIPAT/Questel - orbit, and Pat-List/CN. The ranks are determined based on the number of the patent applications before rounding off

\*2 Mitsubishi Heavy Industries

# 3-1. Contributing to Competitive and Co-creation Strategy

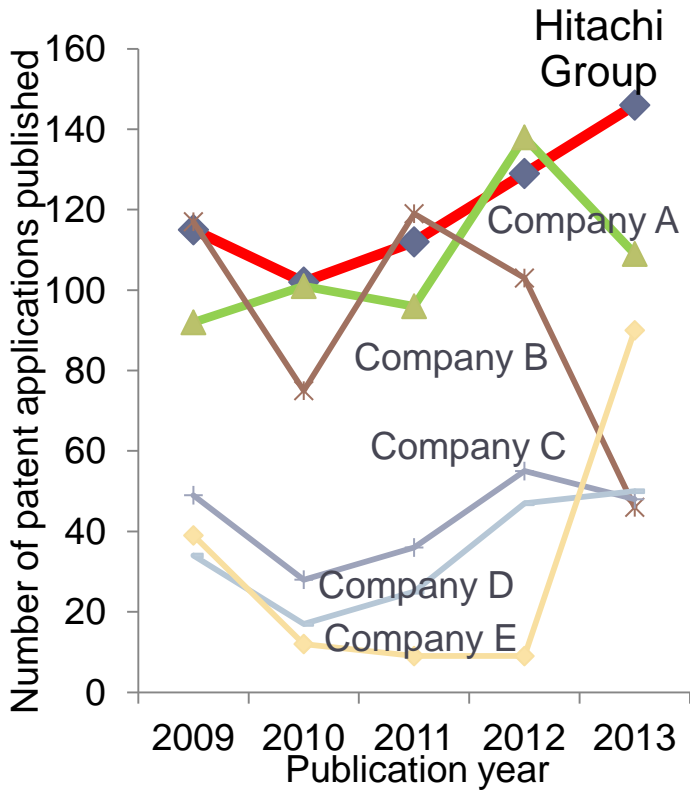
Aligning with the shift to social innovation business



# 3-2. Contributing to Competitive Strategy: Elevator **HITACHI** Inspire the Next

- Reinforcing the patent portfolio in China, the largest market
- Appealed the technologies of the world's fastest elevator for Guangzhou CTF Finance Centre, with relevant patents, in one of the largest elevator expo

Patent applications published in China (Elevator)\*2



Guangzhou CTF Finance Centre (Rendering)



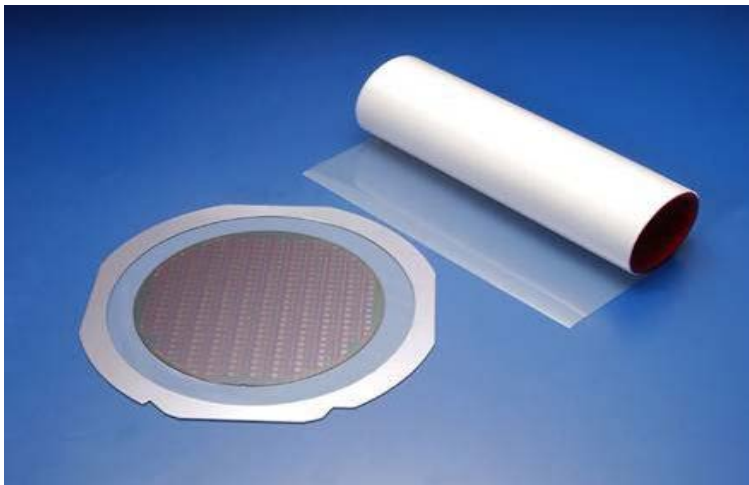
\*1) The World Elevator & Escalator Expo 2014

\*2) Hitachi's survey using Shareresearch

# 3-3. Contributing to Competitive Strategy: Dicing Die Bonding Film

- Appealed a patent to rivals and customers
- Provided notice and filed a lawsuit against a potential patent infringer

Detering and blocking follow-ups



Dicing die bonding film

## Dicing die bonding film:

Integrated film that combines the function of dicing film which fixes the semiconductor wafer to the work while the wafer is cut into chips and the function of die bonding film which adheres the cut semiconductor chips to the substrate

Patent publicity including news releases  
→(i) deterring rivals and  
(ii) appealing to customers

Discovered a potential patent infringer

Provided notice to respect the IP right  
→Filed a lawsuit\*

\*) Hitachi Chemical dismissed the case upon agreement from the both sides



# 3-4. Contributing to Co-creation Strategy: Appealing Technology to Customers

- Globally building up the patent portfolio on Big-Data-related technology
- Promoting co-creation by the technologies backed-up by patent portfolio

## Big-Data-related technology patent applicant ranking

(Sum of patent appl. to Japan, U.S., Europe, China & Korea. A survey by Japan Patent Office)

### ■ Total

Rank	Applicant	# of appl.
1	IBM* <sup>1</sup>	1,967
2	Hitachi	1,682
3	Microsoft* <sup>1</sup>	1,130
4	Fujitsu	610
5	NTT	548

### ■ Segmentation by field of technology

Base technology for data analysis\*<sup>2</sup>

Applicant	#
1 Hitachi	1,217
2 IBM	658
...	

Technology for data stream analysis

Applicant	#
1 IBM	108
...	
3 Hitachi	71

Technology for data stock analysis\*<sup>3</sup>

Applicant	#
1 IBM	1,309
...	
3 Hitachi	442

### Japan Patent Office, “2013 Patent Application Survey on Big Data Analysis Technology”

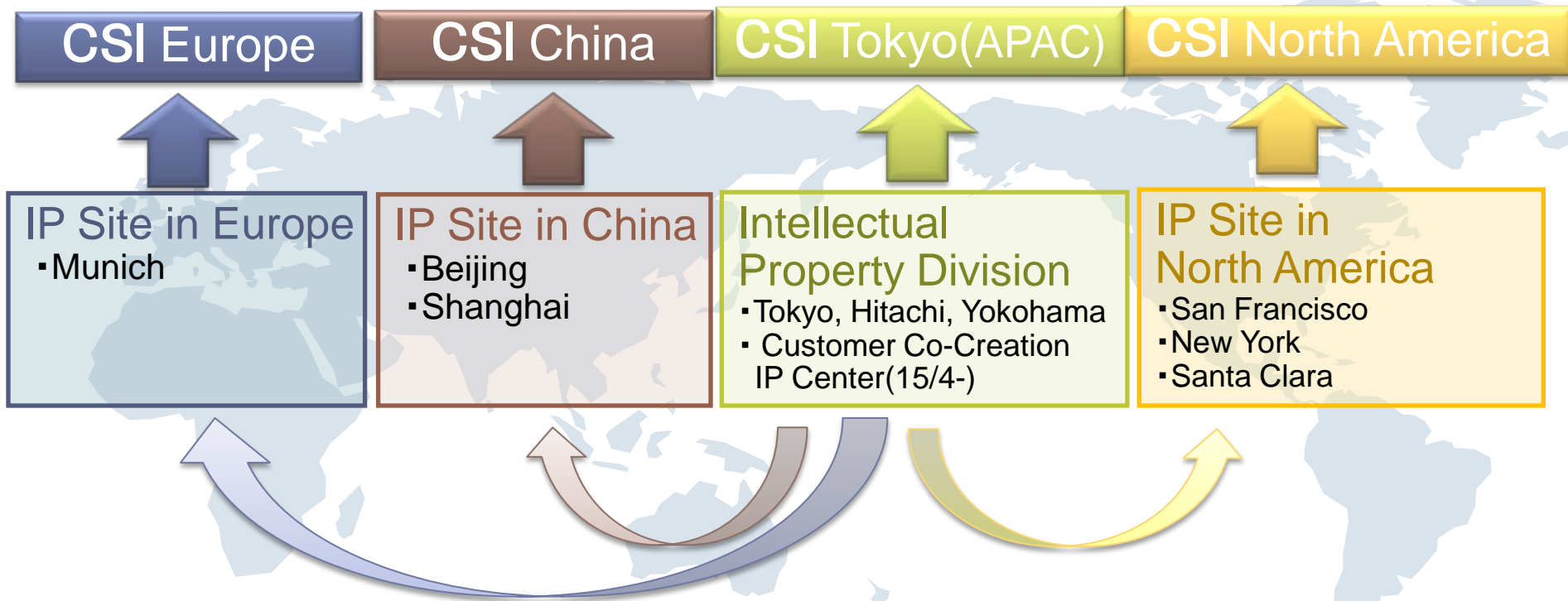
\*1: U.S.

\*2: Distributed file system/DB, privacy protection, parallel distributed system, data falsification protection, and other base technology for data analysis

\*3: Pre-processing technology for data stock analysis, database for analysis, technology for data analysis

# 3-5. Contribution to Co-Creation Strategy: Global IP Support

- Supporting co-creation activities from local IP sites
- Transferring IP Practice from Intellectual Property Division in Japan



CSI: Global Center for Social Innovation  
APAC: Asia Pacific

- ◆ Maintaining IP for co-creation
- ◆ Appropriately caring partners' IP

**END**

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**HITACHI**  
**Inspire the Next**