

FY2007 Fujitsu Laboratories' R&D Strategy Briefing

# **Collaboration between R&D and Intellectual Property and Standardization Activities**

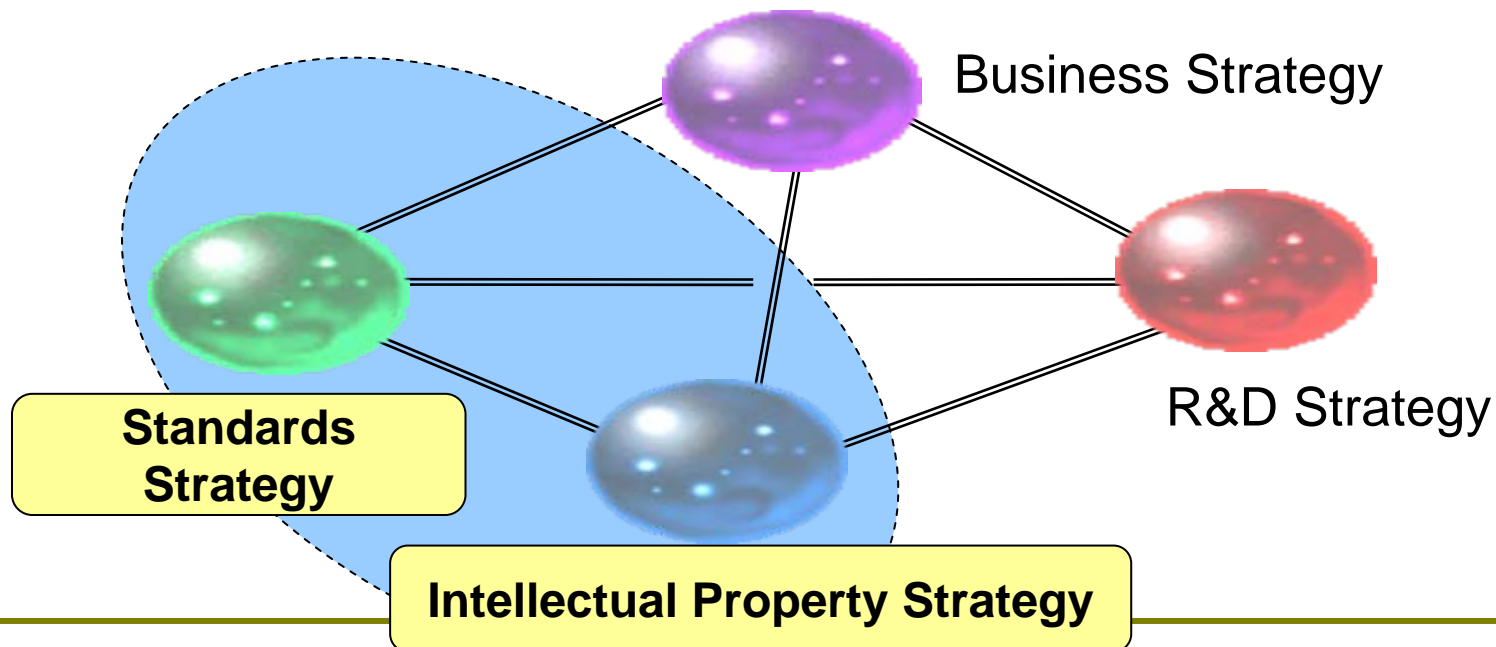
**April 13, 2007**

**Masahiro Kamei, IP Planning Office**

**Tatsuji Igarashi, Standards Center**

**Law and Intellectual Property Unit, Fujitsu Limited**

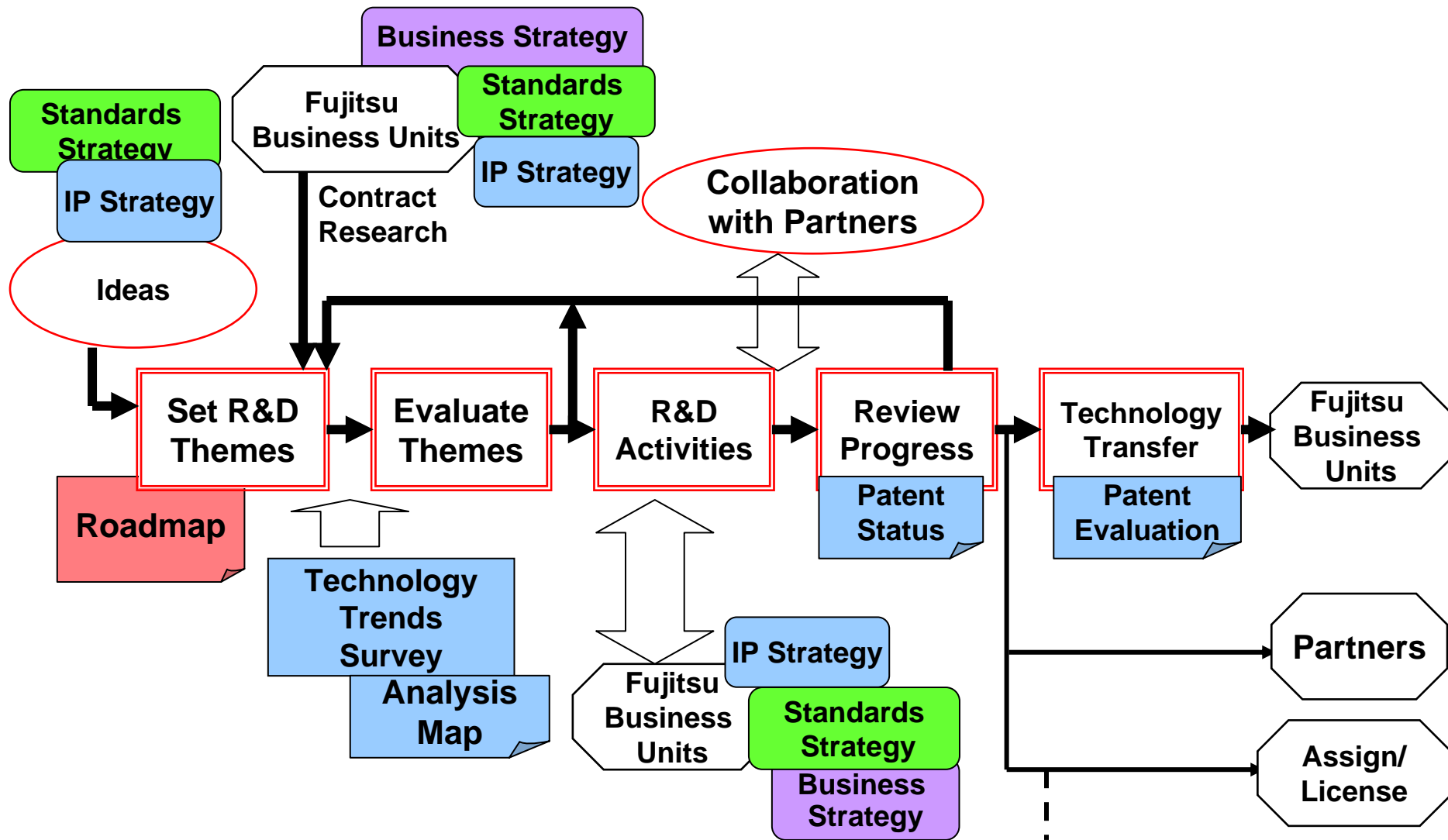
# Link with Business Strategy and R&D Strategy



**We are pursuing the following measures in order to support the promotion of business and R&D from the intellectual property standpoint:**

- 1. Secure, maintain and utilize rights (patents, trademarks, industrial design and copyrights)**
- 2. Undertake activities to ensure respect for rights, including those of competitors**
- 3. Carry out through management of information, including trade secrets**
- 4. Actively engage in external policy-making activities**
- 5. Cultivate and maintain strategic human resources**

# R&D Activities and Intellectual Property/Standards Strategy



# IP Strategy Planning through Investigation of Technology Trends



## Interweave IP strategies through feasibility studies from the patent perspective

- (1) Investigation and analysis of generally recognized patent positions
  - ⇒ Determine business feasibility, strengths & weaknesses
- (2) Planning of IP strategies

### Offensive

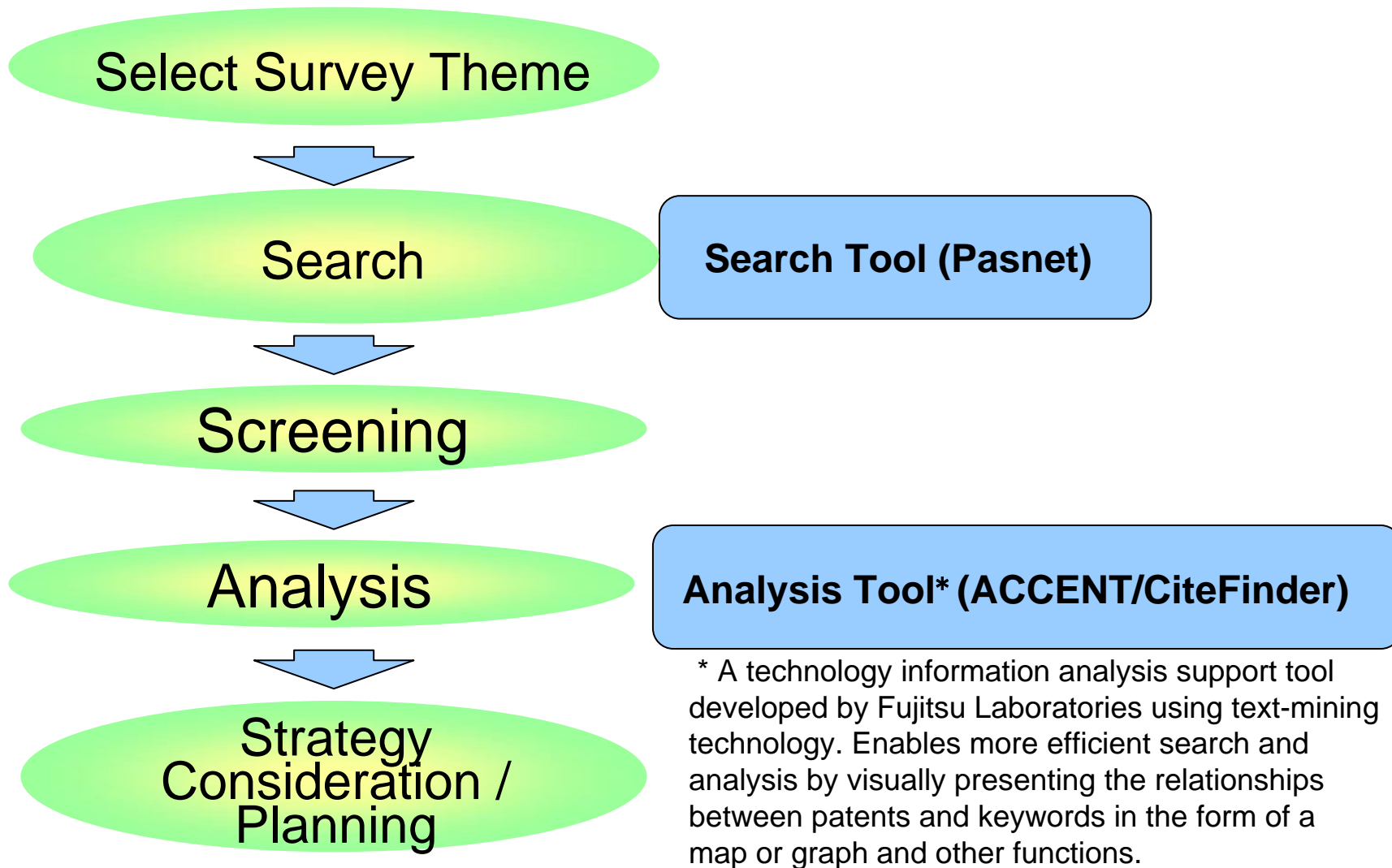
Develop internal technology development and patent acquisition plan; consider joint development and other possible collaborations with other companies

### Defensive

Take early action to avoid infringement of patents held by competitors (early identification and management of patent risks)

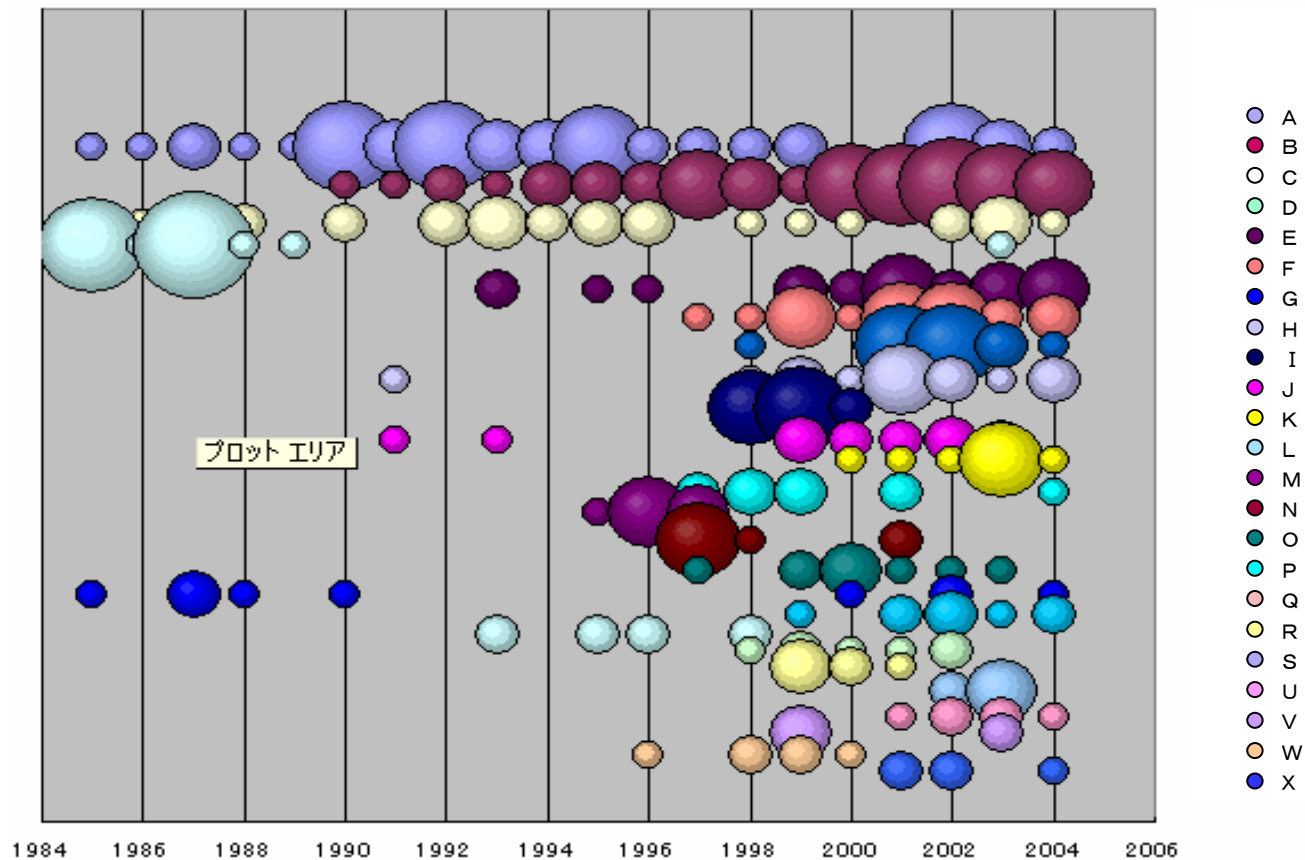
**It is important to consider business scenarios, roadmaps, market environments and standardization trends together.**

# Method for Investigating Technology Trends



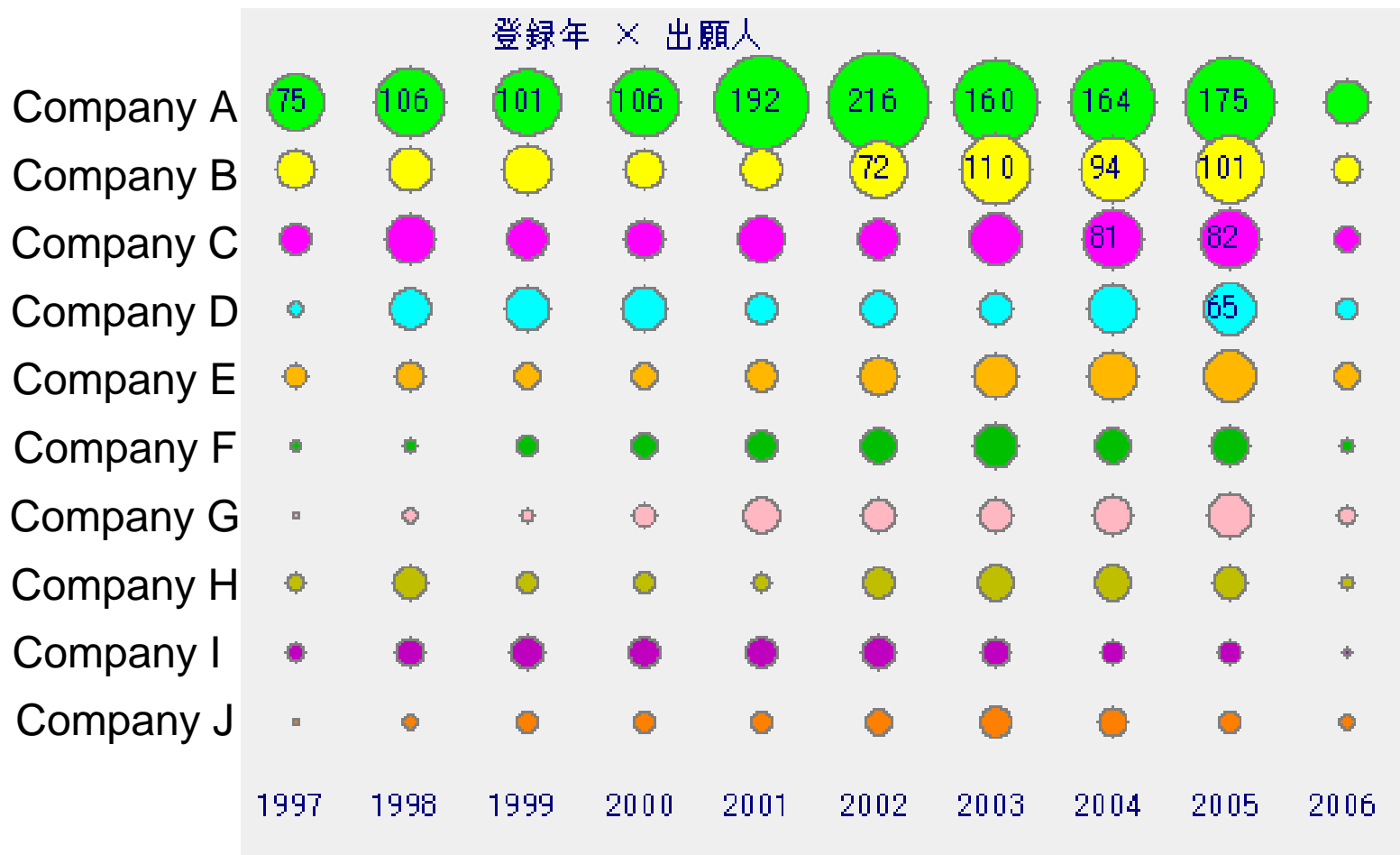
# Analysis via ACCENT ①

## Grasp of market entrant companies and their relative position



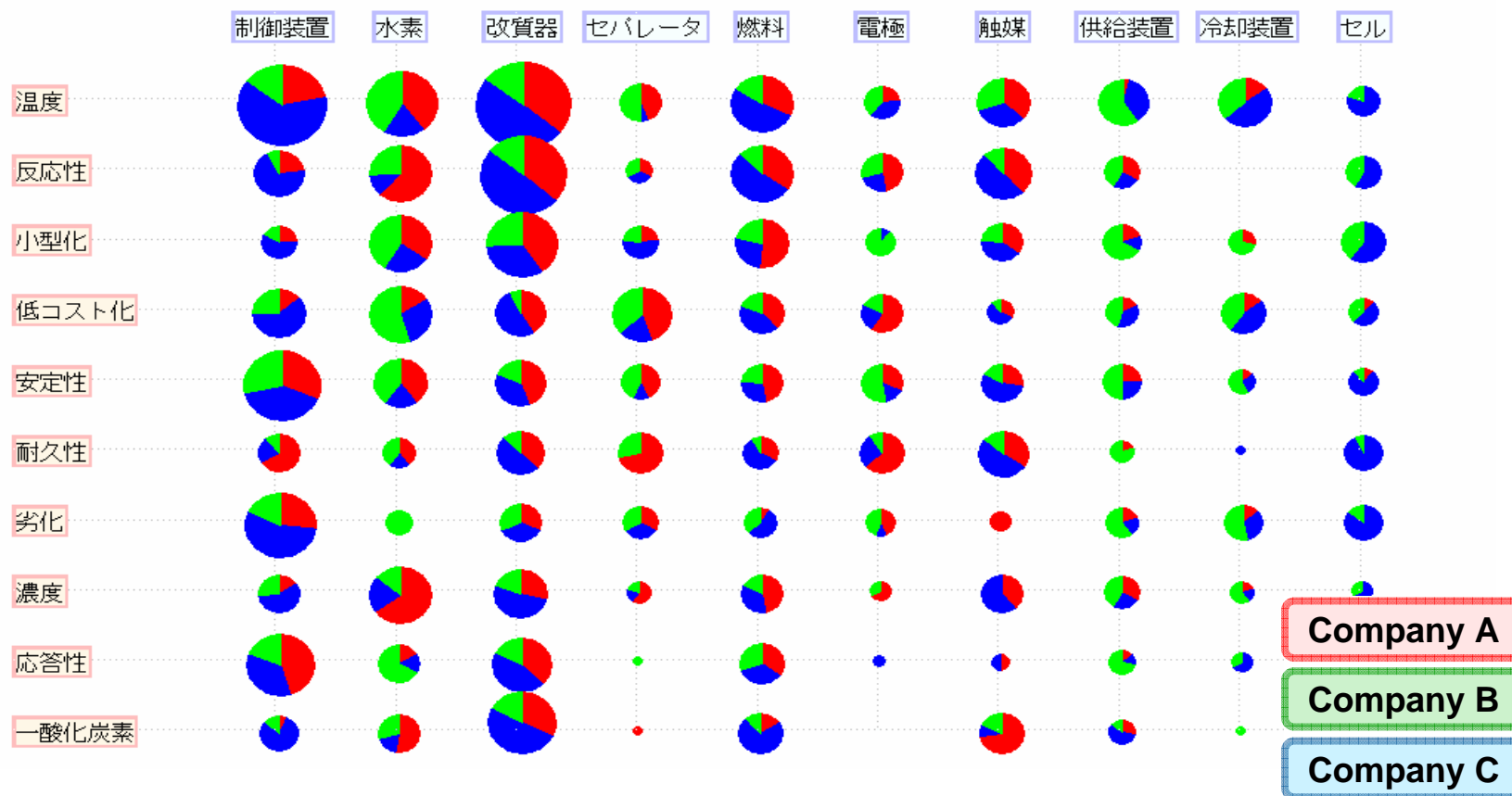
# Analysis via ACCENT ②

Grasp of patents held by companies to be cautious about



# Analysis via ACCENT ③

For use as a reference to analyze the strengths and weaknesses of companies based on patent issues and targets, focus on areas where competitors are not engaged in development, and seek cooperative relationships with companies in possession of technology that Fujitsu does not have





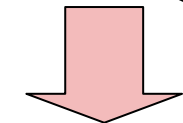
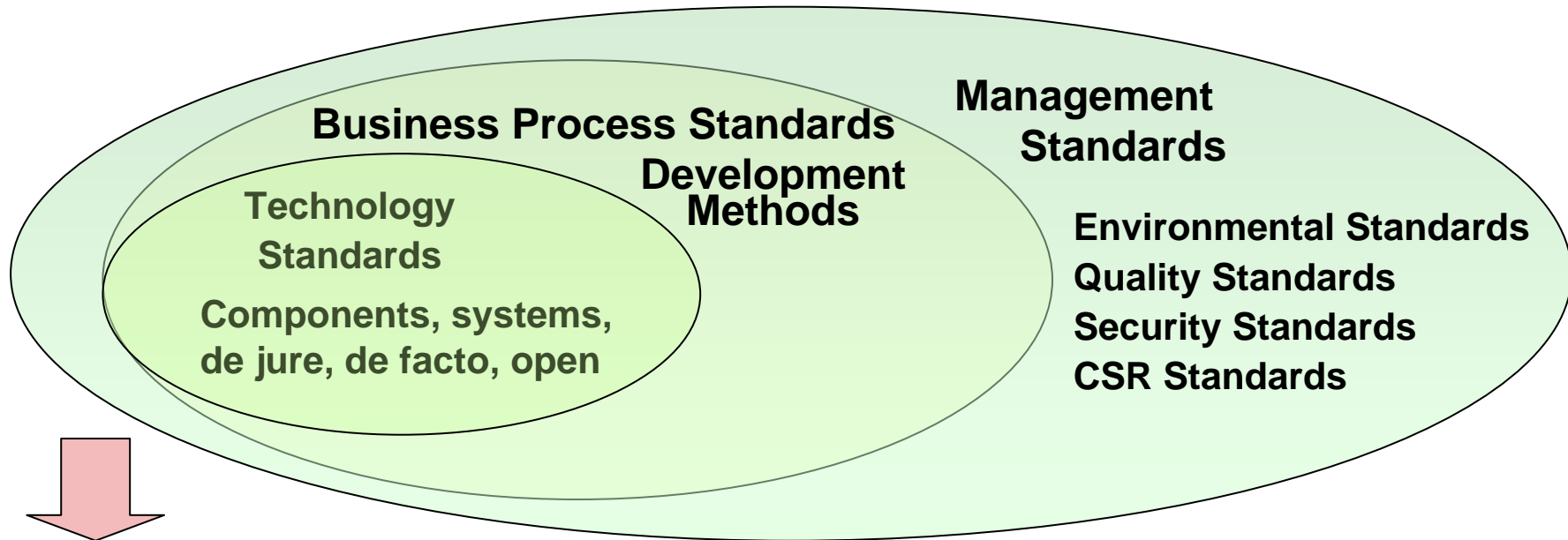


A small image in the top left corner showing two men in suits shaking hands in a business meeting.

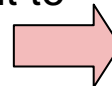
# Standardization Activities

# Expanding Standards Areas

Standards are covering broader areas and becoming more sophisticated



- Companies with good grasp of standards have market advantage
- For some industries, such as mobile communications, and some companies, standards strategy is equivalent to business strategy
- Economic growth in Asia (esp. China) as well as the West
- A key factor in global competition



**Promoting an appropriate strategy for the era of international standards**

# Standards Affect Business

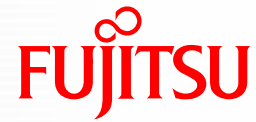
Standards back up technology quality and revitalize business

## **10 reasons** for pursuing standards in business

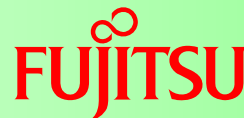
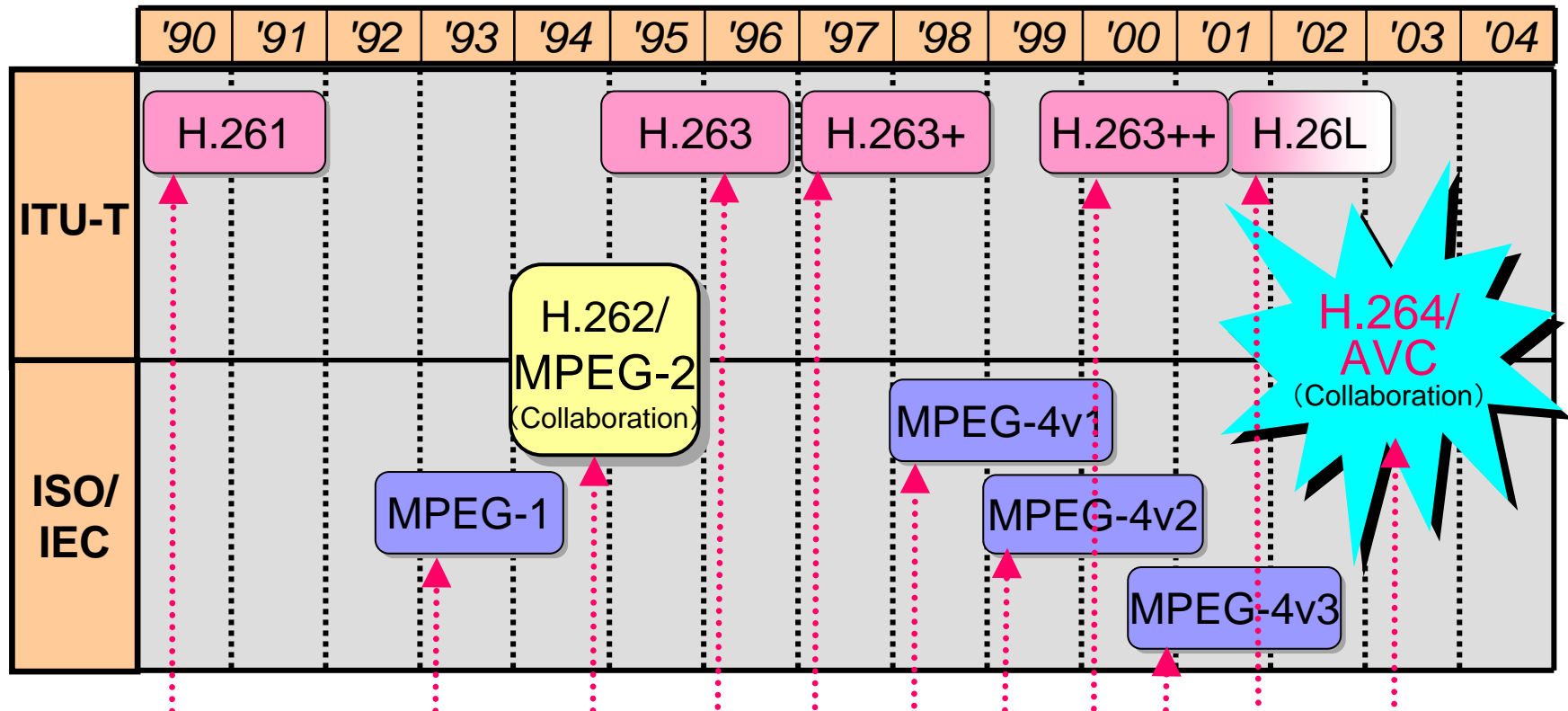
- Improve products and services
- Attract new customers
- Increase competitive edge
- Inspire added trust in your business
- Lesson the likelihood of mistakes
- Reduce your business costs
- Make your products compatible
- Comply with regulations
- Make exporting your goods easier
- Improve your chances of success

Source: Pamphlet from British Standards Institution

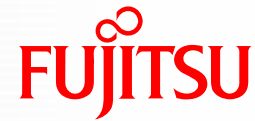
# Fujitsu Involvement in International Standardization



Fujitsu has continuously served as a key member of international standards bodies **ITU-T** and **ISO/IEC** since international standardization started in the early 90's



# Fujitsu's Essential Patents for International Standards



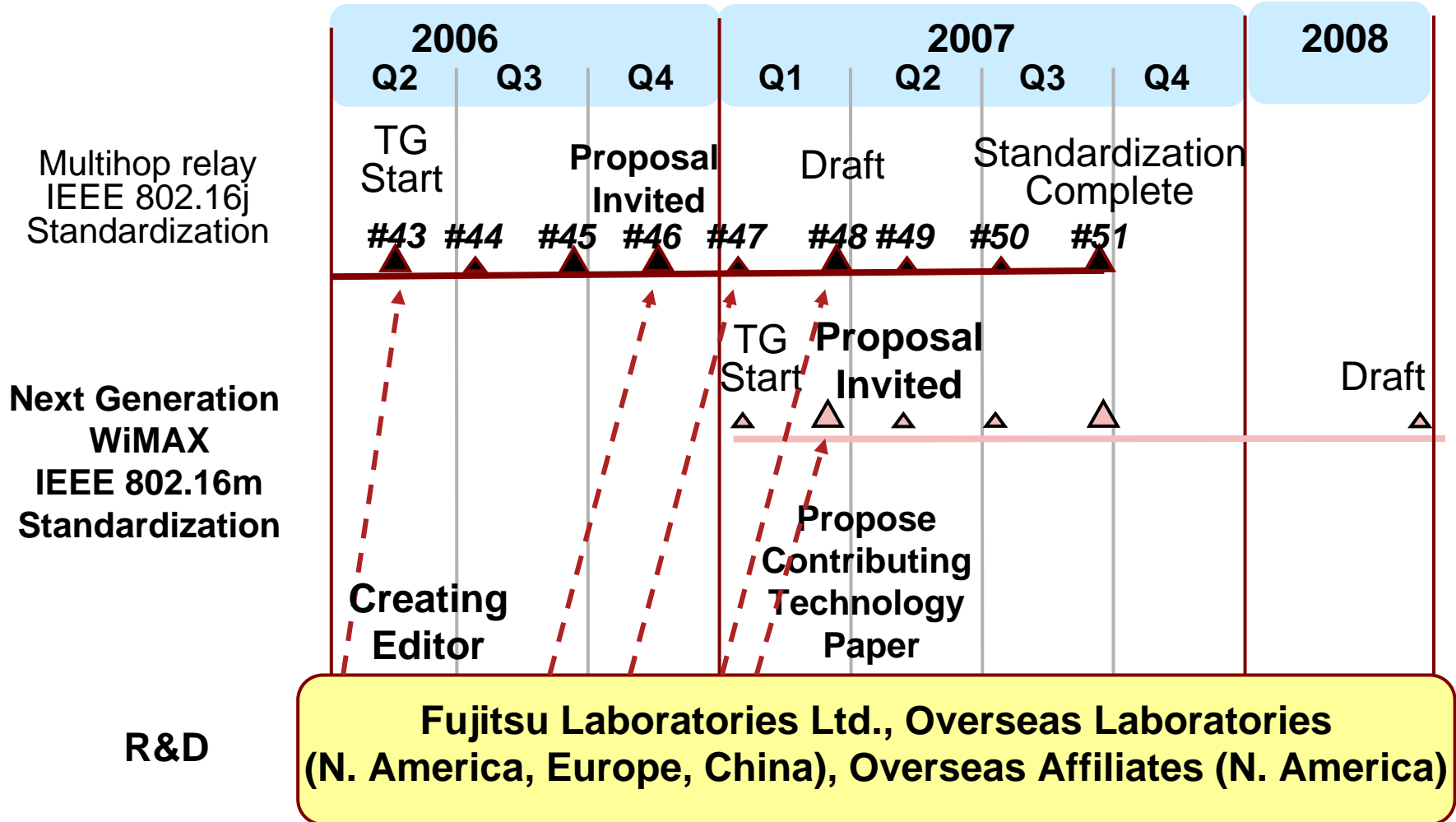
Essential patents granted for **MPEG-2/4, H.263, H.264, VC-1 (WMV)** international image standards administered by MPEG-LA licensing body

The image shows a collage of four screenshots from the MPEG-LA website, each displaying a list of licensees for a specific video standard. In each list, 'Fujitsu Limited' is circled in red to highlight its status as a licensee.

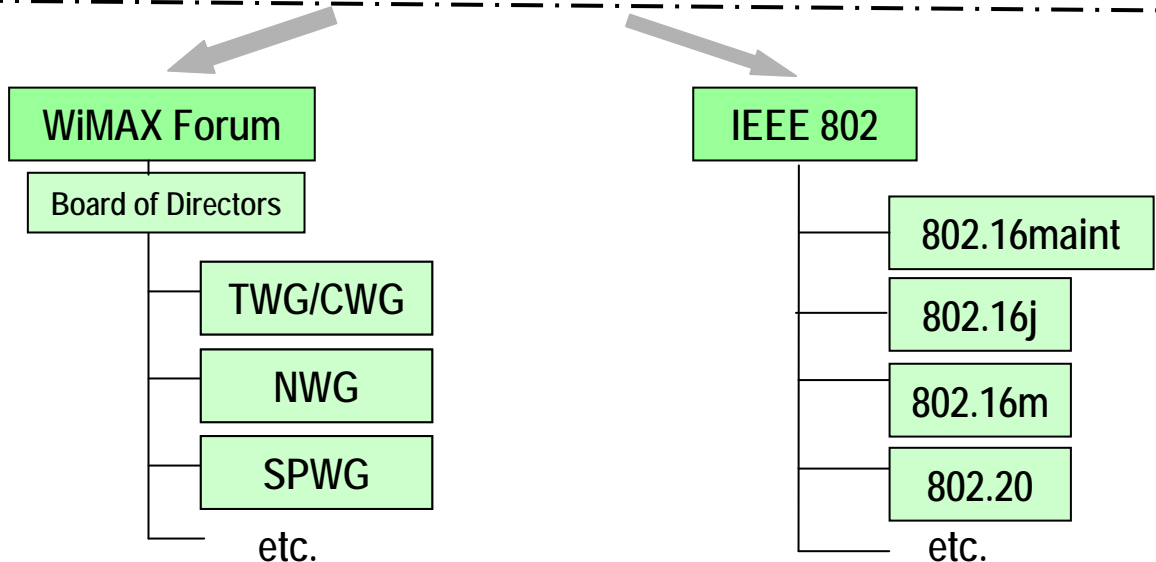
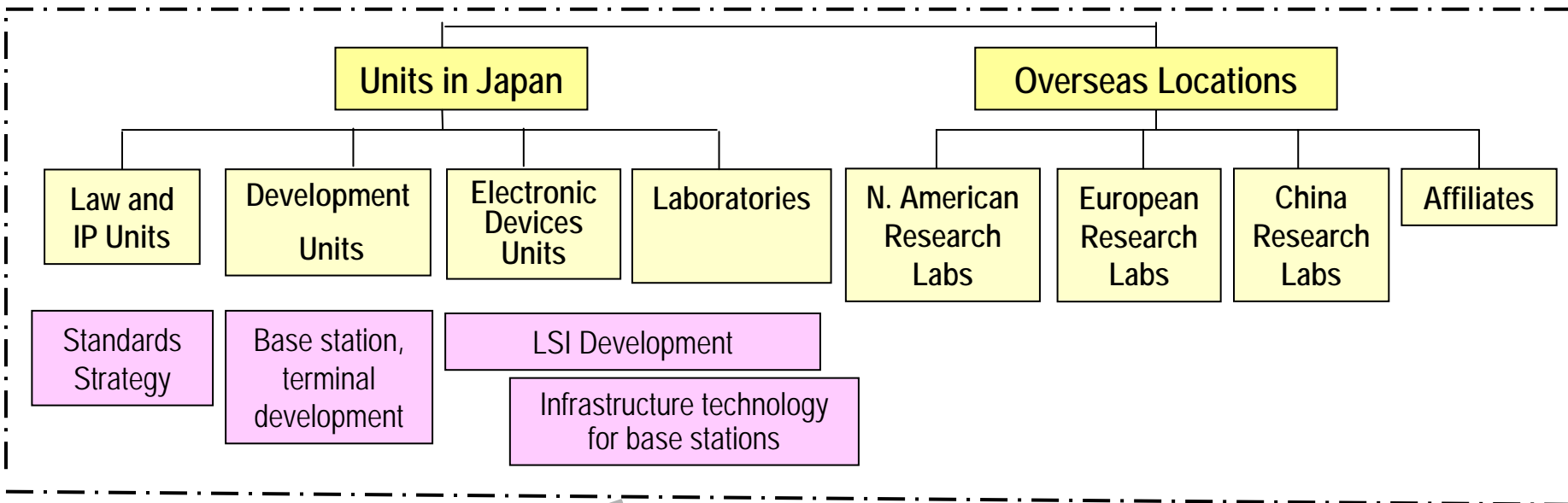
- MPEG-2 Licensees:** ALCATEL, BOSCH, Canon, CIF Licensing, LLC, COLUMBIA UNIVERSITY, france telecom, FUJITSU, General Electric Company, General Instrument, HITACHI, JVC, KDDI.
- MPEG-4 VISUAL Licensees:** Canon Inc., CIF Licensing, LLC, Competitive Technologies, Inc., DAEWOO Electronics Corporation, France Telecom, Société anonyme, Fujitsu Limited, GE Technological Center, Inc., Hitachi, Ltd., KDDI Corporation, Koninklijke Philips Electronics N.V., LG Electronics Inc., Matsushita Electric Industrial Co., Ltd., Microsoft Corporation, Mitsubishi Electric Corporation, Oki Electric Industry Co., Ltd., Pantech&Curitel Communications, Inc., Robert Bosch GmbH, Samsung Electronics Co., Ltd., SANYO Electric Co., Ltd., Sedna Patent Services, LLC, Sharp Kabushiki Kaisha, Siemens AG, Sony Corporation, Telenor ASA, Toshiba Corporation, Victor Company of Japan, Limited.
- AVC/H.264 Licensees:** DaeWoo Electronics Corporation, France Télécom, société anonyme, Fujitsu Limited, Koninklijke Philips Electronics N.V., LG Electronics Inc., Matsushita Electric Industrial Co., Ltd., Microsoft Corporation, Mitsubishi Electric Corporation, Nippon Telegraph and Telephone Corporation, Pantech&Curitel Communications, Inc., Samsung Electronics Co., Ltd., Sharp Corporation, Sony Corporation, Telenor ASA, Toshiba Corporation, Victor Company of Japan, Limited.
- VC-1 Licensees:** DAEWOO Electronics Corporation, France Télécom, société anonyme, Fujitsu Limited, Koninklijke Philips Electronics N.V., LG Electronics Inc., Matsushita Electric Industrial Co., Ltd., Microsoft Corporation, Mitsubishi Electric Corporation, Nippon Telegraph and Telephone Corporation, Pantech&Curitel Communications, Inc., Samsung Electronics Co., Ltd., Sharp Corporation, Sony Corporation, Telenor ASA, Toshiba Corporation, Victor Company of Japan, Limited.

Source: MPEG-LA homepage (<http://www.mpeg-la.com/>)

# Global R&D Standardization Activities



# Structure for Promoting Global Standardization

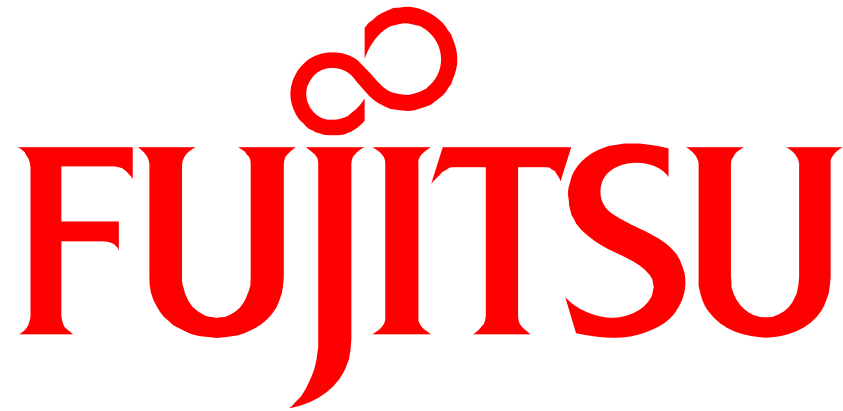




# Cautionary Statement

These presentation materials and other information on our meeting may contain forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Words such as "anticipates," "believes," "expects," "estimates," "intends," "plans," "projects," and similar expressions which indicate future events and trends identify forward-looking statements. Actual results may differ materially from those projected or implied in the forward-looking statements due to, without limitation, the following factors:

- general economic and market conditions in the major geographic markets for Fujitsu's services and products, which are the United States, EU, Japan and elsewhere in Asia, particularly as such conditions may effect customer spending;
- rapid technological change, fluctuations in customer demand and intensifying price competition in the IT, telecommunications, and microelectronics markets in which Fujitsu competes;
- Fujitsu's ability to dispose of non-core businesses and related assets through strategic alliances and sales on commercially reasonable terms, and the effect of realization of losses which may result from such transactions;
- uncertainty as to Fujitsu's access to, or protection for, certain intellectual property rights;
- uncertainty as to the performance of Fujitsu's strategic business partners;
- declines in the market prices of Japanese and foreign equity securities held by Fujitsu which could cause Fujitsu to recognize significant losses in the value of its holdings and require Fujitsu to make significant additional contributions to its pension funds in order to make up shortfalls in minimum reserve requirements resulting from such declines;
- poor operating results, inability to access financing on commercially reasonable terms, insolvency or bankruptcy of Fujitsu's customers, any of which factors could adversely affect or preclude these customers' ability to timely pay accounts receivables owed to Fujitsu; and
- fluctuations in rates of exchange for the yen and other currencies in which Fujitsu makes significant sales or in which Fujitsu's assets and liabilities are denominated, particularly between the yen and the British pound and U.S. dollar, respectively.



**THE POSSIBILITIES ARE INFINITE**

# Supplementary Materials

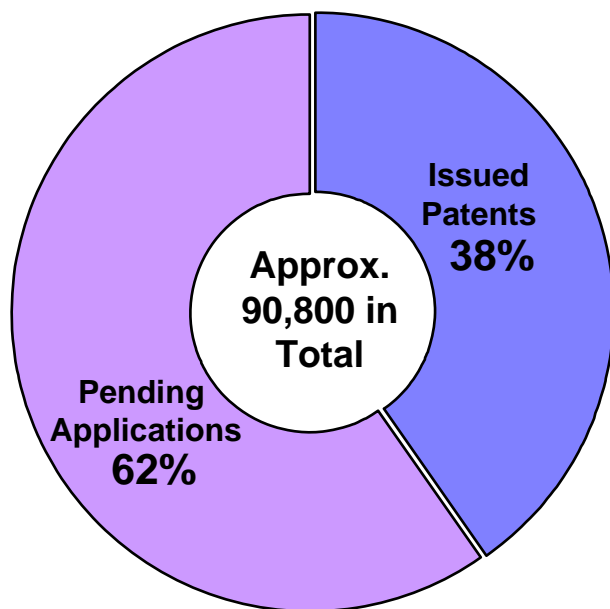
## (Patent Related Data)

**Please refer to the Intellectual Property Report for more detailed information concerning Fujitsu intellectual property strategy and related activities. The report can be found on the Fujitsu website and is scheduled to be updated in July 2007.**

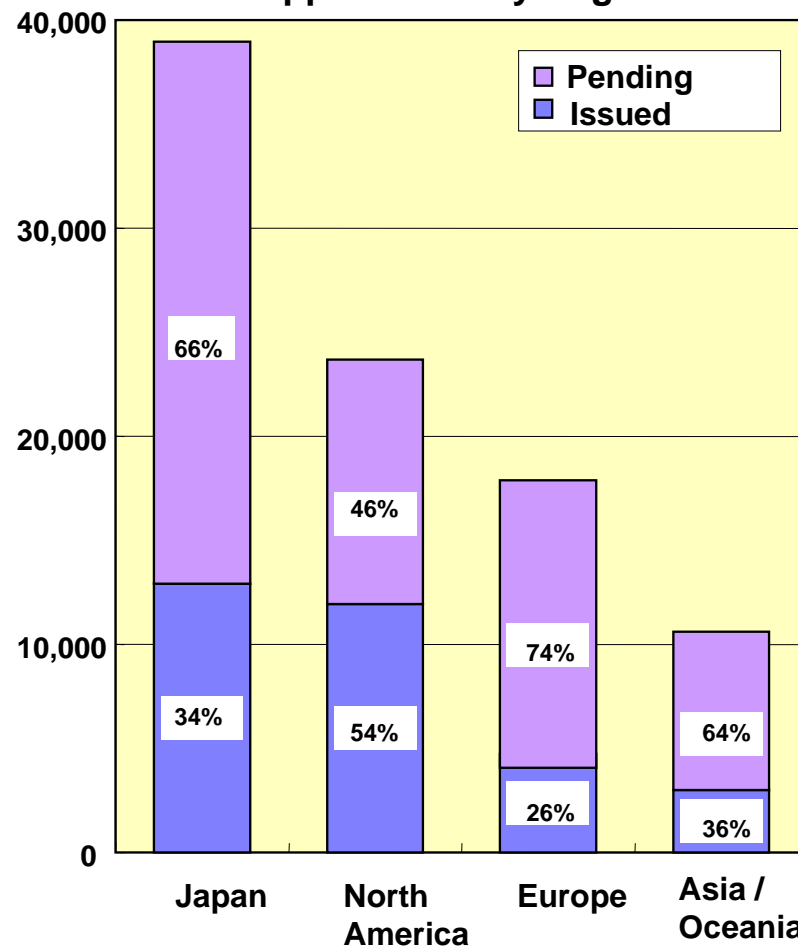
**<http://www.fujitsu.com/global/about/ir/library/intellectualproperty/>**

# Global Patent Portfolio

## Fujitsu Issued Patents & Pending Applications Worldwide

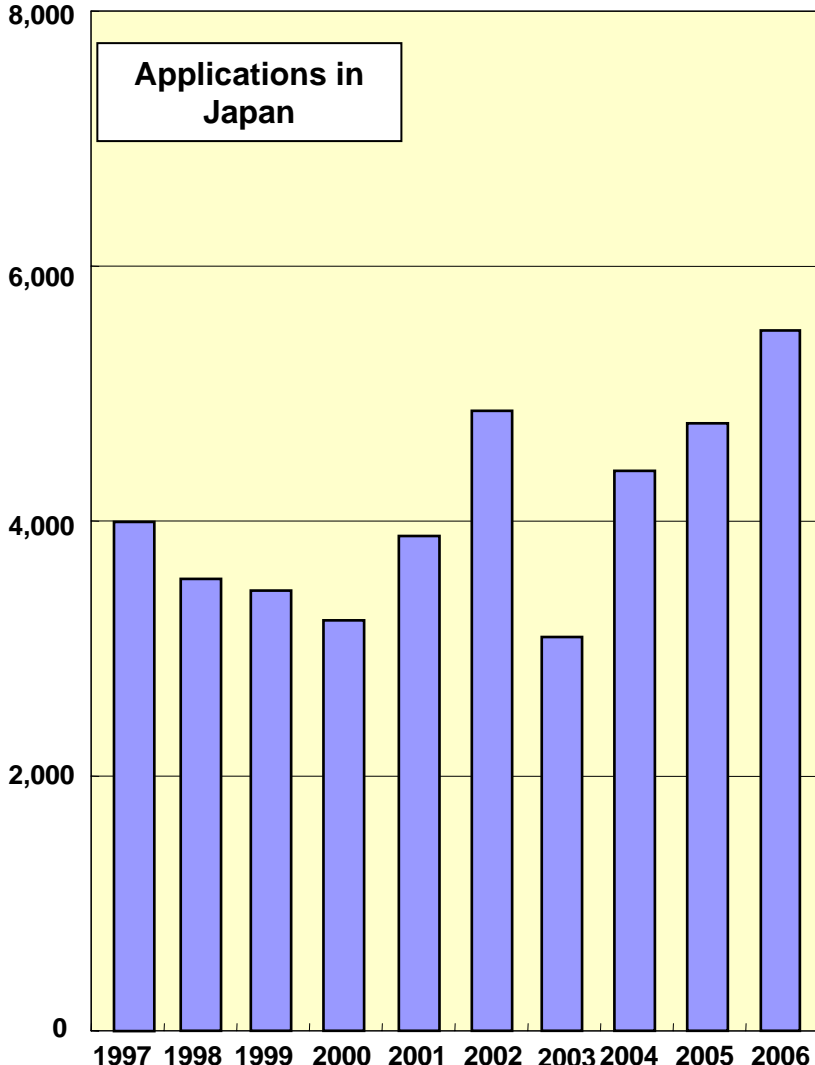


## Issued Patents & Pending Applications by Region

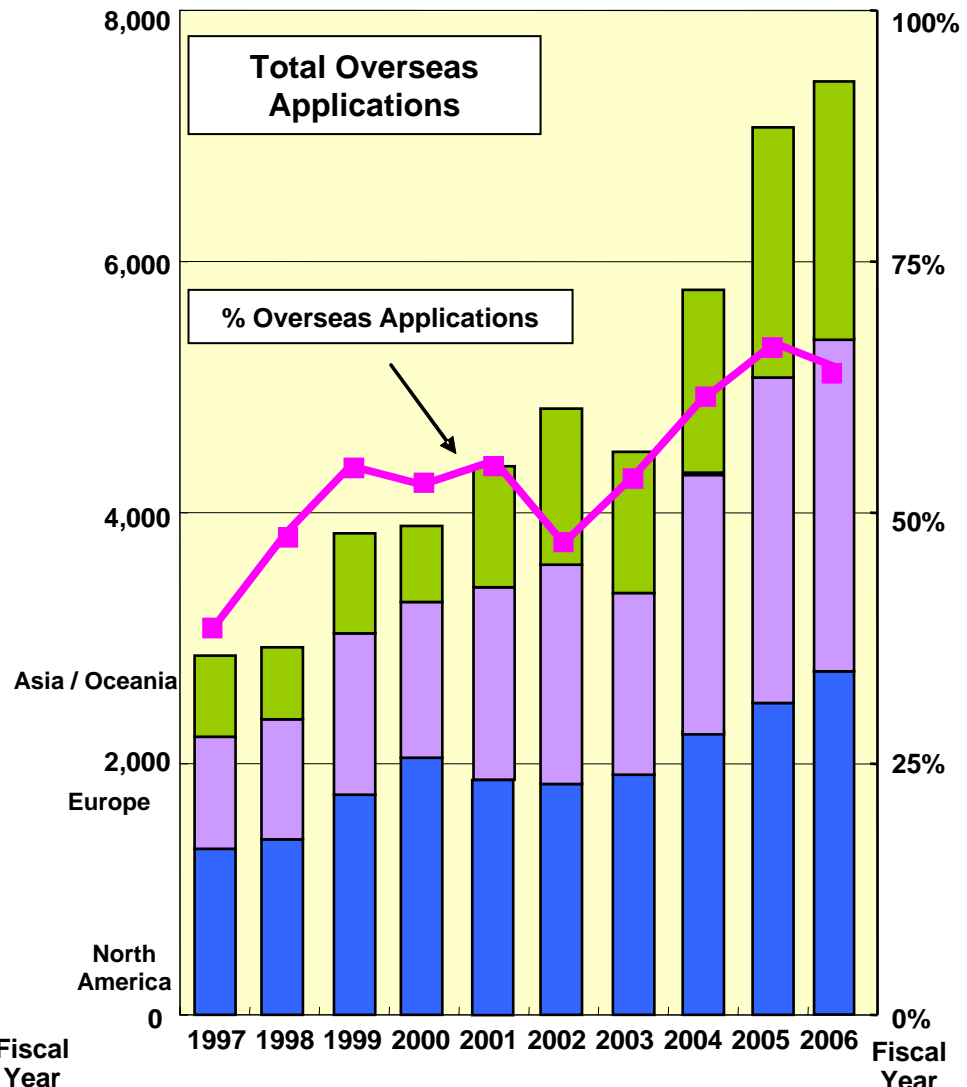


As of March 31, 2007  
Source: Fujitsu internal figures

# Continuously Strengthening Overseas Applications – to Support Overseas Business –



\* Includes patent applications in Japan based on International Patent Cooperation Treaty

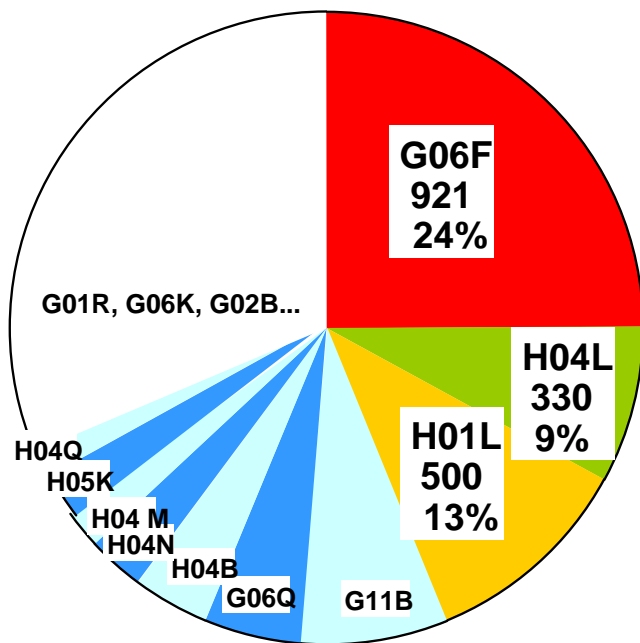


Source: Fujitsu internal figures

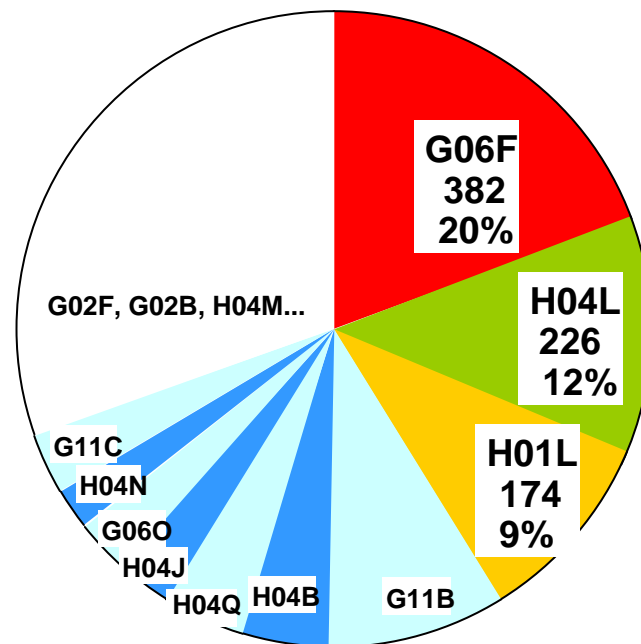
# Patent Applications Aligned with Business

## ■ Breakdown of International Patent Classification (Jan. – Dec. 2006)

### 3,847 Published Applications



### 1,835 Issued Patents



**G06F: Electric Digital Data Processing**

**H04L: Transmission of Digital Information, i. e. Digital Communications (networks)**

**H01L: Semiconductor Devices; Electric Solid State Devices Not Otherwise Provided For**

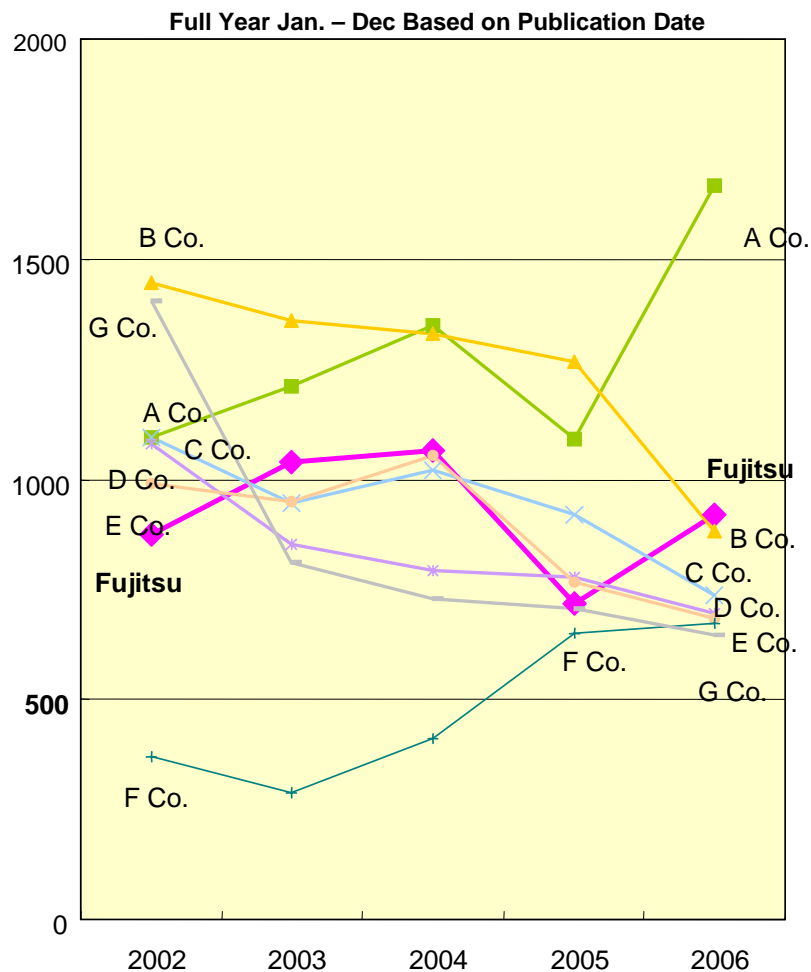
\* Excludes patent applications in Japan based on International Patent Cooperation Treaty

Source: Internal Survey Based on Data from the Japan Patent Office

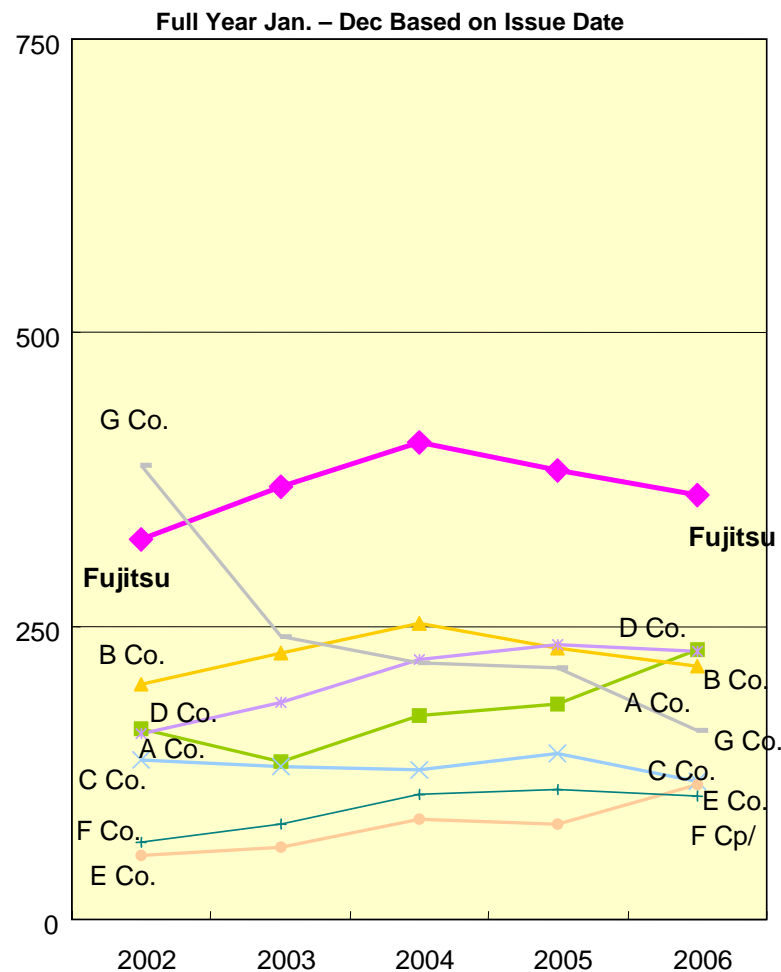
# Patent Volume Trends 1 – G06F (Data Processing Related)



### Trend of G06F Published Applications (JP)



### Trend of G06F Issued Patents (JP)

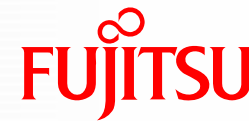


\* Comparison against top 7 companies for published applications (excluding Fujitsu)

G06F: Electric Digital Data Processing

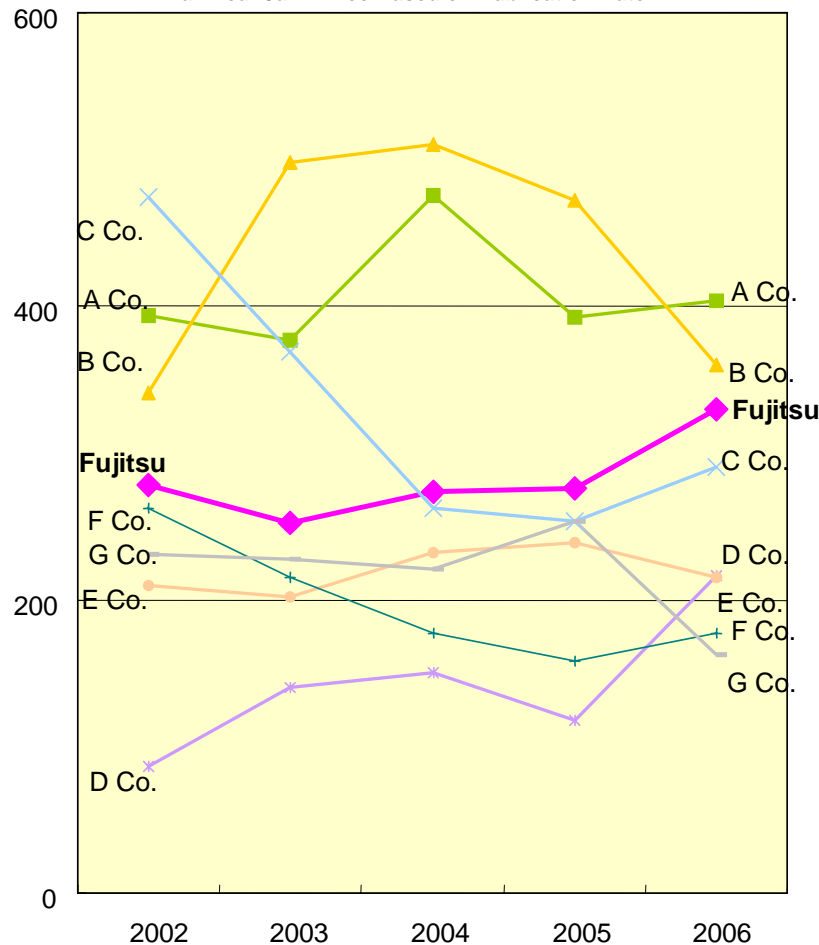
Source: Internal Survey Based on Data from the Japan Patent Office

# Patent Volume Trends 2 – H04L (Networking Related)



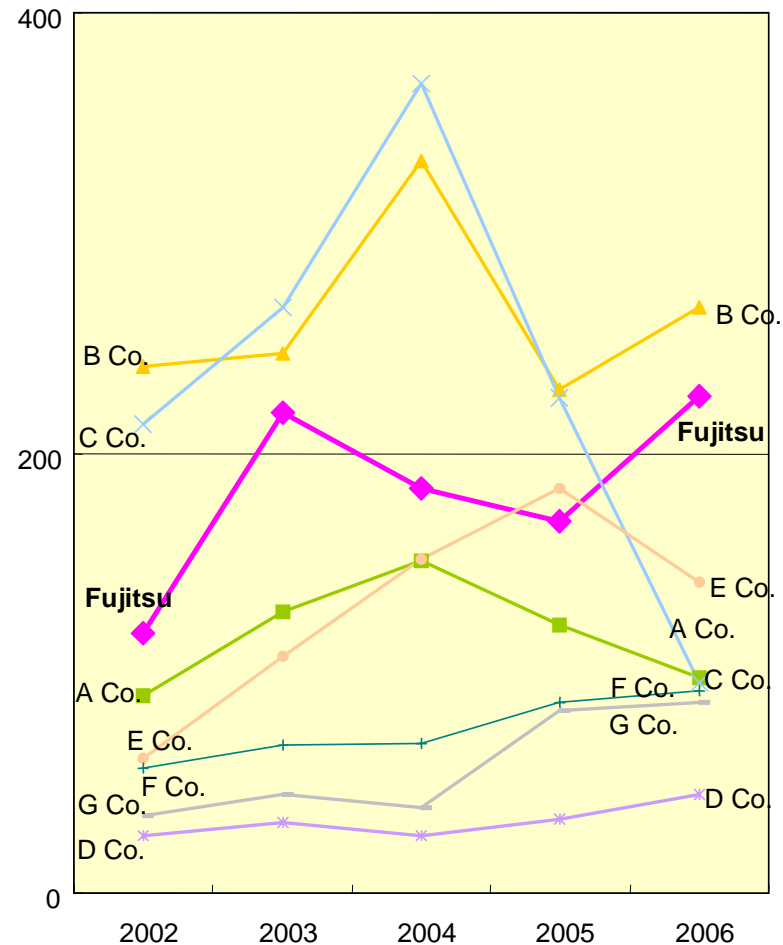
## Trend of Published Applications

Full Year Jan. – Dec Based on Publication Date



## Trend of Issued Patents

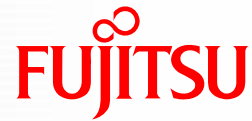
Full Year Jan. – Dec Based on Issue Date



\* Comparison against top 7 companies for published applications (excluding Fujitsu)

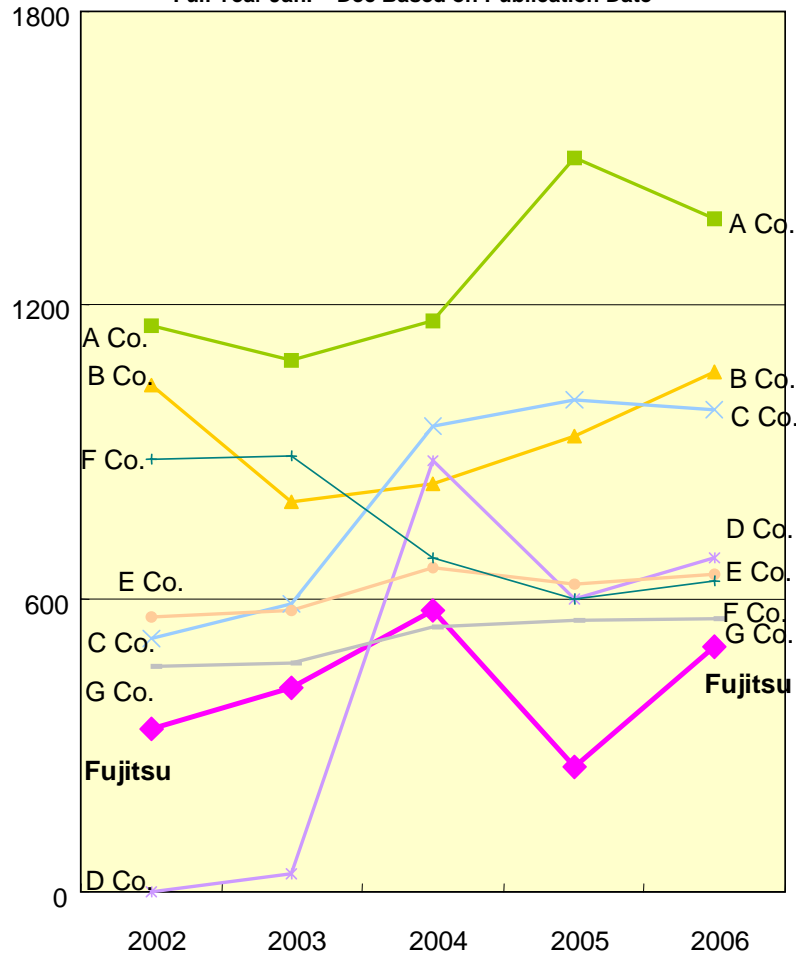


# Patent Volume Trends 3 - H01L (Electronic Devices Related)



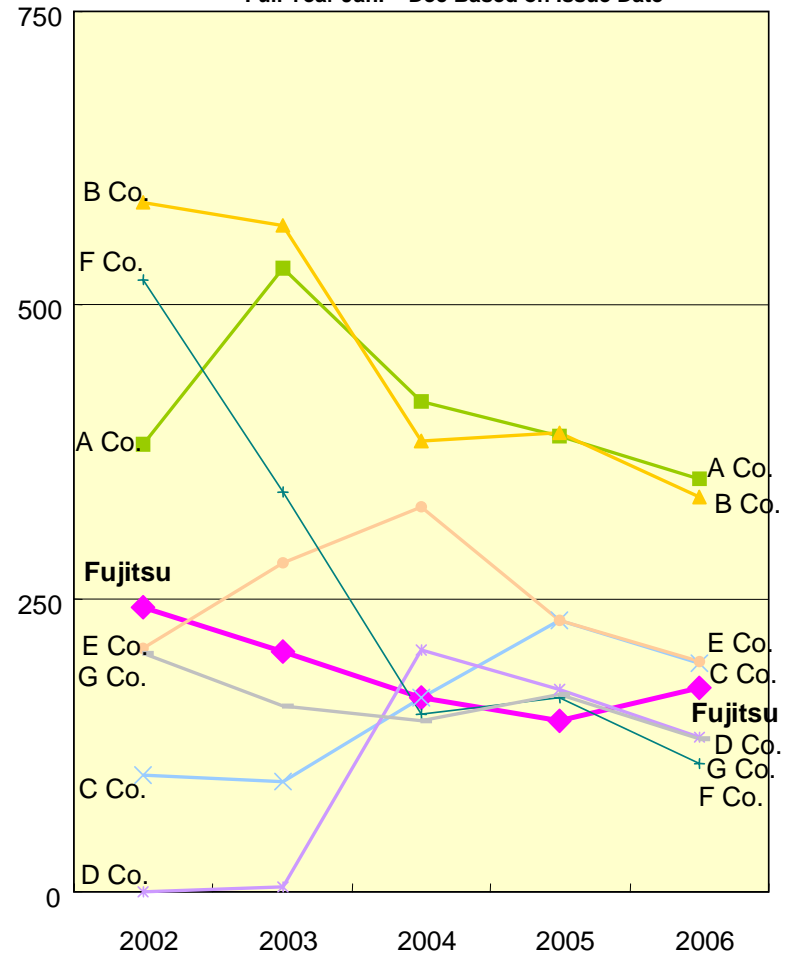
### Trend of Published Applications

Full Year Jan. – Dec Based on Publication Date



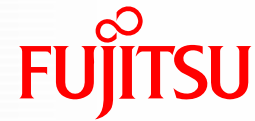
### Trend of Issued Patents

Full Year Jan. – Dec Based on Issue Date

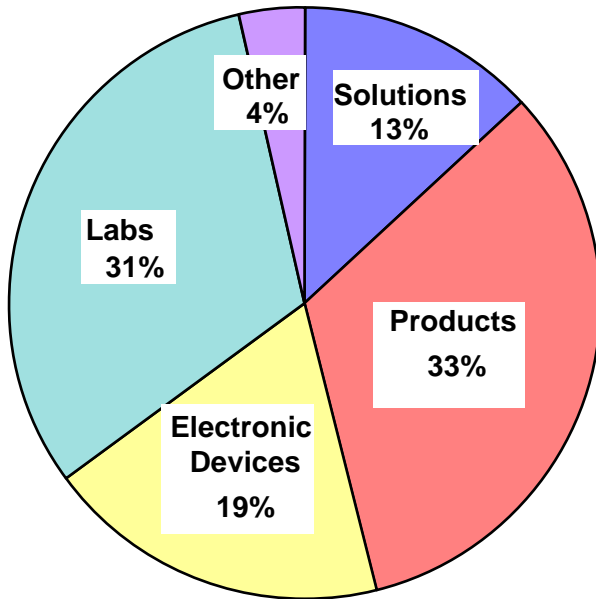


\* Comparison against top 7 companies for published applications (excluding Fujitsu)

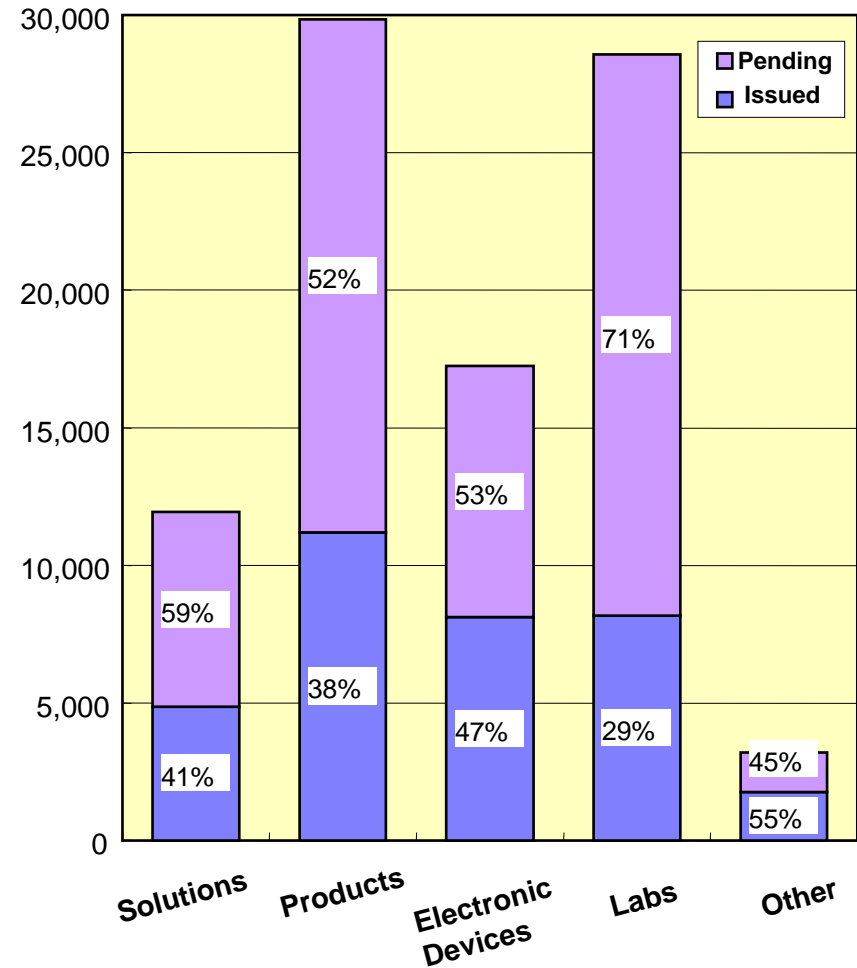
# Fujitsu Patents by Business Group



**Composition of Fujitsu Pending Applications & Issued Patents by Business Group**

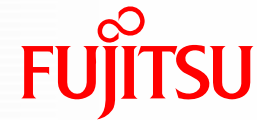


**Ratio of Pending Applications / Issued Patents within Business Groups**

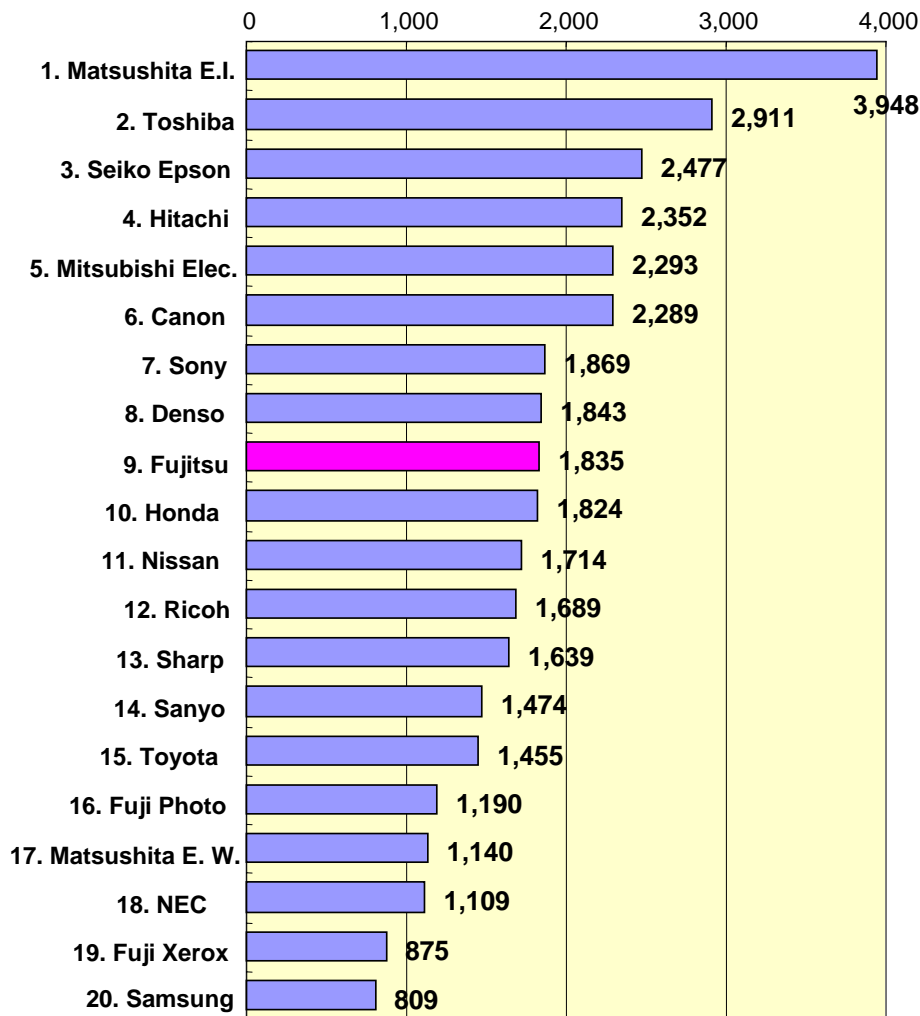


As of March 31, 2007  
Source: Fujitsu internal figures

# Position in Japan and the US

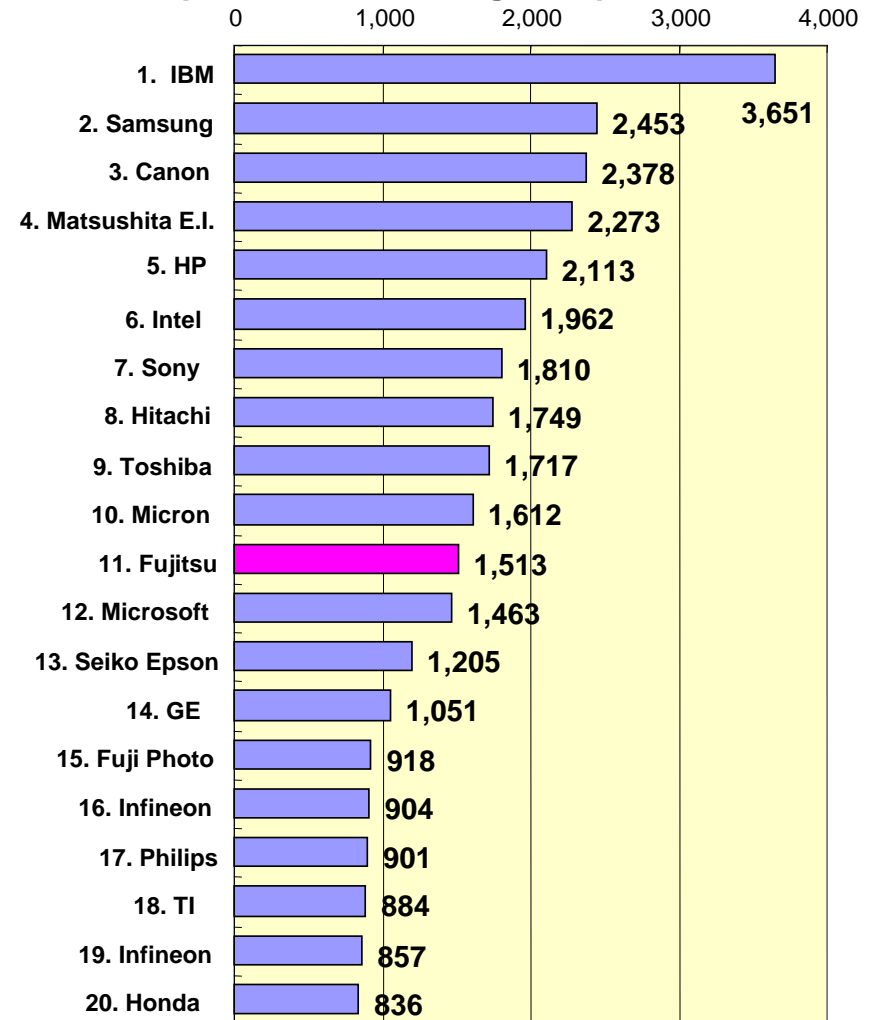


## Top Japan Patent Issuing Companies for 2006



Based On Issue date  
Source: Internal Research on Patent Data

## Top US Patent Issuing Companies for 2006



Based On Issue date  
Source: IFI CLAIMS Patent Services