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
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
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

Select Survey Theme

Search

Screening

Analysis

Strategy Consideration / Planning

Search Tool (Pasnet)

Analysis Tool* (ACCENT/CiteFinder)

* A technology information analysis support tool developed by Fujitsu Laboratories using text-mining technology. Enables more efficient search and analysis by visually presenting the relationships between patents and keywords in the form of a map or graph and other functions.
Analysis via ACCENT

Grasp of market entrant companies and their relative position
Grasp of patents held by companies to be cautious about
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.
Grasp of basic patents and their links technology links through branch maps
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 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

Source: MPEG-LA homepage (http://www.mpegla.com/)
Global R&D Standardization Activities

Multihop relay IEEE 802.16j Standardization
- TG Start
- #43 #44 #45 #46

Next Generation WiMAX IEEE 802.16m Standardization
- Creating Editor

2006
- Q2
- TG Start
- #43
- Q3
- Proposal Invited
- #44
- Q4
- Proposal Invited
- #45
- #46

2007
- Q1
- Draft
- #47
- Q2
- Standardization
- Complete
- #48 #49
- Q3
- #50 #51

2008
- Draft

Fujitsu Laboratories Ltd., Overseas Laboratories (N. America, Europe, China), Overseas Affiliates (N. America)
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 affect 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

As of March 31, 2007
Source: Fujitsu internal figures

Issued Patents & Pending Applications by Region

Pending
Issued

Japan
North America
Europe
Asia / Oceania

66%
46%
74%
64%

34%
54%
26%
36%

As of March 31, 2007
Source: Fujitsu internal figures
Continuously Strengthening Overseas Applications
- to Support Overseas Business -

Applications in Japan

Total Overseas Applications

% Overseas Applications

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

Source: Fujitsu internal figures

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)

Full Year Jan. – Dec Based on Publication Date

Trend of G06F Issued Patents (JP)

Full Year Jan. – Dec Based on Issue Date

* 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

Copyright 2007 FUJITSU LIMITED
**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)*

**H04L: Transmission of Digital Information**

Source: Internal Survey Based on Data from the Japan Patent Office
Patent Volume Trends 3 - H01L (Electronic Devices Related)

Trend of Published Applications

Trend of Issued Patents

H04L: Transmission of Digital Information

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

* Comparison against top 7 companies for published applications (excluding Fujitsu)
Composition of Fujitsu Pending Applications & Issued Patents by Business Group

- Labs: 31%
- Products: 33%
- Electronic Devices: 19%
- Solutions: 13%
- Other: 4%

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**

1. Matsushita E.I. 2,948
2. Toshiba 2,911
3. Seiko Epson 2,477
4. Hitachi 2,352
5. Mitsubishi Elec. 2,293
6. Canon 2,289
7. Sony 1,869
8. Denso 1,843
9. Fujitsu 1,835
10. Honda 1,824
11. Nissan 1,714
12. Ricoh 1,689
13. Sharp 1,639
14. Sanyo 1,474
15. Toyota 1,455
16. Fuji Photo 1,190
17. Matsushita E. W. 1,140
18. NEC 1,109
19. Fuji Xerox 875
20. Samsung 809

**Top US Patent Issuing Companies for 2006**

1. IBM 3,651
2. Samsung 2,453
3. Canon 2,378
4. Matsushita E.I. 2,273
5. HP 2,113
6. Intel 1,962
7. Sony 1,810
8. Hitachi 1,749
9. Toshiba 1,717
10. Micron 1,612
11. Fujitsu 1,513
12. Microsoft 1,463
13. Seiko Epson 1,205
14. GE 1,051
15. Fuji Photo 918
16. Infineon 904
17. Philips 901
18. TI 884
19. Infineon 857
20. Honda 836

Source: Internal Research on Patent Data

Source: IFI CLAIMS Patent Services