FUJITSU

FUJITSU LIMITED

Intellectual Property Report 2014

shaping tomorrow with you

Introduction

Every year since 2006 we have made an Intellectual Property Report available on the Internet to provide our shareholders and the general public with information on Fujitsu's efforts concerning intellectual property.

We are engaged in the total solution business in the field of Information and Communication Technology (ICT) to provide not only individual services, but also comprehensive enterprise services, including activities for developing, manufacturing, selling, and maintaining high-performance, high-quality advanced products and electronic devices that support these services. Our intellectual property strategy is closely tied to each phase of these business activities.

In particular, Fujitsu has set a medium- to long-term vision of "realizing a human centric intelligent society" (realizing a society in which people can live more affluently and peacefully through the use of ICT). Fujitsu aims to acquire, maintain, and use intellectual property rights to help achieve this vision.

This Intellectual Property Report describes the role of Fujitsu's intellectual property strategy, and the efforts being made by our individual business units. It also includes statistics covering our intellectual property.

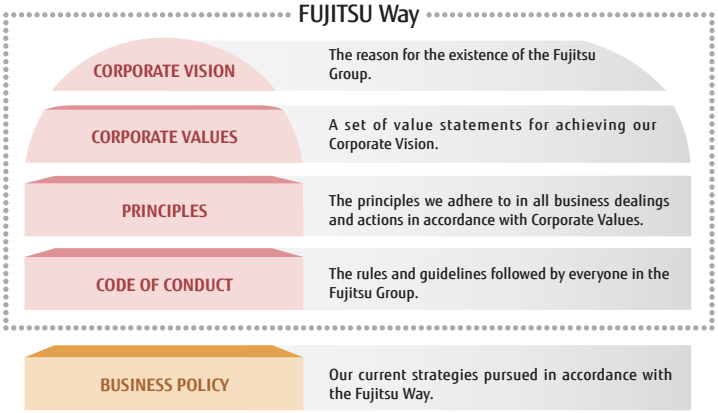
(Masahiro Kamei, Vice Head of Legal, Compliance & IP Unit)

Contents

1 Corporate Vision and Intellectual Property Strategy

Our Corporate Philosophy "FUJITSU Way"

FUJITSU Way embodies the philosophy of the Fujitsu Group, our reason for existence, our values and the principles that we follow in our daily activities.



Code of Conduct

- We respect human rights.
- We comply with all laws and regulations.
- We act with fairness in our business dealings.
- We protect and respect intellectual property.
- We maintain confidentiality.
- We do not use our position in our organization for personal gain.

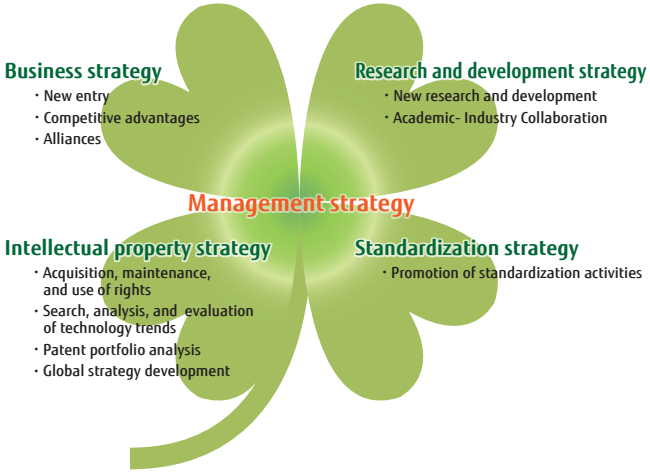
One of FUJITSU Way codes of conduct clearly states that "We protect and respect intellectual property."

We are contributing to the establishment of a networked society by continuously creating new value and providing products and services on a global basis to meet customer needs. The intellectual property that results from our large investment in R&D is of great value to us. We conduct our business being fully aware that our intellectual property is a valuable resource and an essential management resource underpinning our business activities and the confidence our customers place in us. We will make every effort to obtain and maintain all necessary intellectual property rights, and utilize them effectively in growing our business. We respect third-party intellectual property.

Role of Our Intellectual Property Strategy

At Fujitsu Group, our intellectual property strategy is based on our management strategy and is integrated with our business, research and development, and standardization strategies. To that end, from the earliest stages of our business activities, we implement a multilateral analysis focused on intellectual property to ensure that we can proceed based on the results of this analysis. By implementing our intellectual property strategy, we will endeavor to maximize the value of the intellectual property assets of the entire Fujitsu Group.

Role of intellectual property strategy



2 Relationship between Products/Services and Intellectual Property

Fujitsu Group Products and Services

Products and services provided by Fujitsu Group are roughly divided into three segments, each of which consists of business segments. The first segment includes technology solutions, which are typically servers, storage devices, wireless base stations, many software products, and services. The second segment includes ubiquitous product solutions, which are typically personal computers and mobile phones.

The third segment includes device solutions, which are typically semiconductor devices.

Technology Solutions

2-way tower server
PRIMERGY TX300 S8

Exterior view of the new Akashi System Center building

Services

Fujitsu provides solutions/system integration services focused on information system consulting and construction, and infrastructure services centered on outsourcing services (complete information system operation and management).

System Platforms

Fujitsu offers system products such as servers and storage systems which form the backbone of information systems, along with network products such as mobile phone base stations, optical transmission systems, and other communications infrastructures.

Ubiquitous Solutions

A PC designed with a feminine touch
Floral Kiss (LIFEBOOK CH75/R)

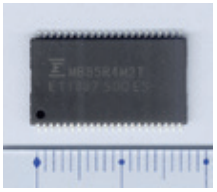
Realizing the ultimate in smartphone character input technology, ARROWS NX F-05F

Fujitsu manufactures PCs within a made-in-Japan framework, delivering high quality, high added-value products including desktop PCs, laptop PCs, water- and dustresistant tablets, and customization options.

In Mobile Phones, Fujitsu offers high-end smartphones with advanced, high-speed CPUs, and the Raku-Raku Phone series featuring easy-to-read displays, clearsounding speakers, and intuitive functionality.

In Mobilewear, Fujitsu is answering diverse needs through "Connectivity Products," among them intuitively operated car navigation systems that connect with wireless networks for a more enjoyable driving experience.

Device Solutions



4 Mbit FRAM non-volatile memory compatible with SRAM MB85R4M2T

Thin profile primary cell achieving a five-year life expectancy due to superior low self-discharge characteristics

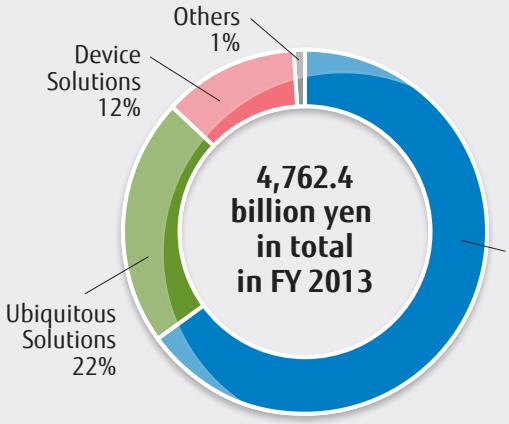
LSI devices and electronic components comprise Fujitsu's Device Solutions. Fujitsu Semiconductor, the Fujitsu Group's operating company in semiconductors, provides LSI devices found in products such as digital home appliances, automobiles, mobile phones, and servers. Meanwhile, publicly listed consolidated subsidiaries such as Shinko Electric Industries, Fujitsu Component, and FDK provide semiconductor packages and other electronic components, as well as structural components such as batteries, relays, and connectors.

Intellectual Property by Segments

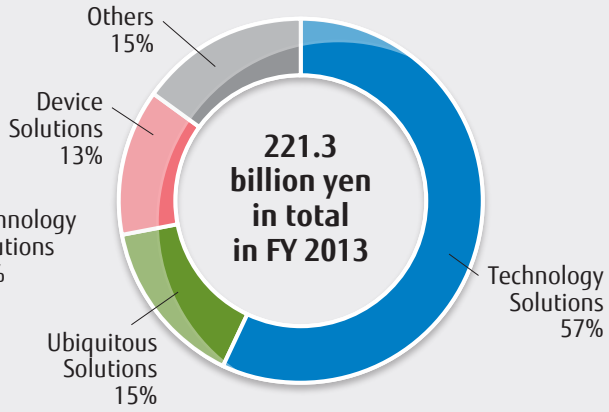
Fujitsu Group is enhancing its intellectual property on a business segment basis. In addition, common foundations supporting all businesses and new fields for creating future businesses are studied mainly by the laboratories and it enhances intellectual property more.

The followings show the sales, and research and development expenditure by segment in fiscal 2013. They also show the number of granted and pending patents by segments and in "Common foundations and new fields."

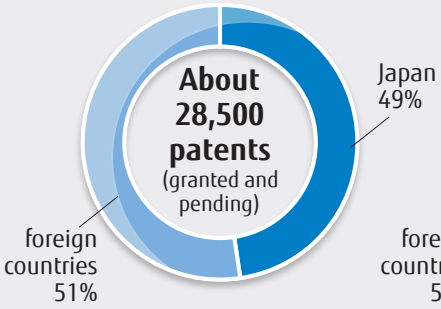
Sales by segment



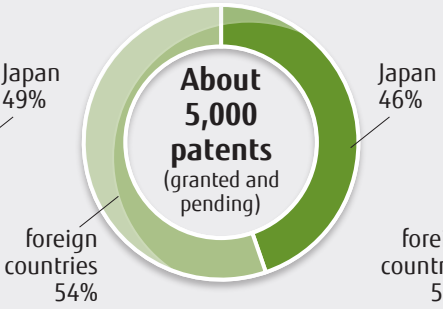
Research and development expenditure by segment



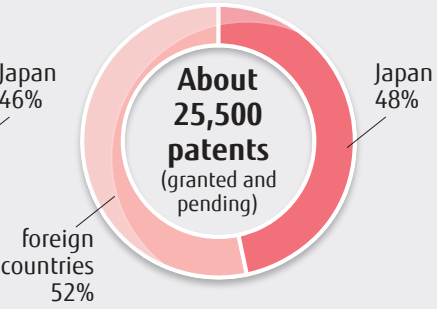
Technology Solutions



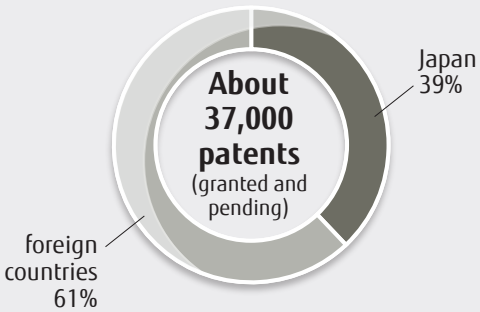
Ubiquitous Solutions



Device Solutions



Common Foundations and New Fields*



* The patents of "Common Foundations and New Fields" are those mainly applied for by Fujitsu Laboratories. They relate to the research and development of technologies that provide a common foundations supporting all Fujitsu Group businesses and new fields.

3 Current Situation and Activities of Intellectual Property

Our Activities for Acquiring Patents

Fujitsu Group is actively promoting activities for acquiring patents because patents comprise an important management resource that helps guarantee our technological advantage.

In particular, Fujitsu intensively creates inventions and applies for patents consistent with important themes based on the business and R&D strategies. Fujitsu makes efforts to improve quality of each patent application before filing by doing a prior-art search and to enhance its patent portfolio by regularly reviewing how technologies covered by each pending patents application are being used.

In addition, we are focusing our efforts on improving the patent application preparation process to ensure efficiency in our acquisition of high-quality patents both in Japan and overseas, by developing internal infrastructures and dispatching representatives to overseas bases.

In fiscal 2013, Fujitsu Group filed around 3,800 patent applications in Japan and around 4,900 patent applications overseas.

■ **Number of patent applications filed by Fujitsu Group in 2013 FY**

Number of patent applications filed in Japan*	Total number of patent applications filed foreign countries		
3,825	4,929		
	Americas	Europe	Asia and Oceania
	1,951	2,110	868

* This value includes patent applications filed in Japan based on the Patent Cooperation Treaty.

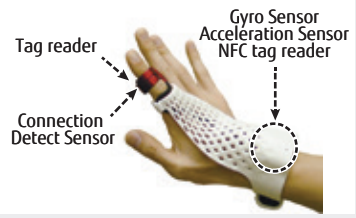
From April 1, 2013 to March 31, 2014
Source : Fujitsu internal statistical information

Here are examples of our activities for acquiring patents in fiscal 2013.

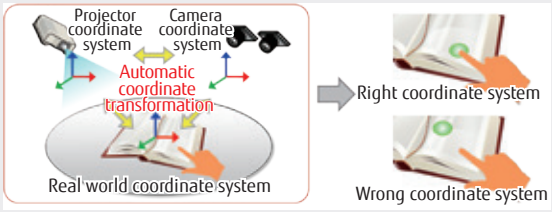
<User interface to link between intuitive human operations and ICT services>

Fujitsu Group has developed various user interfaces to realize a natural linkage between intuitive human operations in real-world environments and ICT services, ahead of all others in the world.

The **Glove-style wearable device** displays information such as work method via the natural action of touching an object. Also, as work results can be input by gestures, this facilitates work.



The **FingerLink** automatically measures unevenness in the real world with a general-purpose camera to determine a person's finger position in a real-world space and correctly display it on a projector.



Furthermore, the **tactile touch panel** provides a sensuous interface that gives smooth or rough textures of the object in the image. This has been realized by changing the frictional force of a finger by supersonic vibration.

During the development of such user interface technologies, Fujitsu applied for about 50 patents in Japan and overseas by screening out core inventions.

<Fujitsu received Imperial Invention Prize for high-dimensional supercomputer interconnect technology>

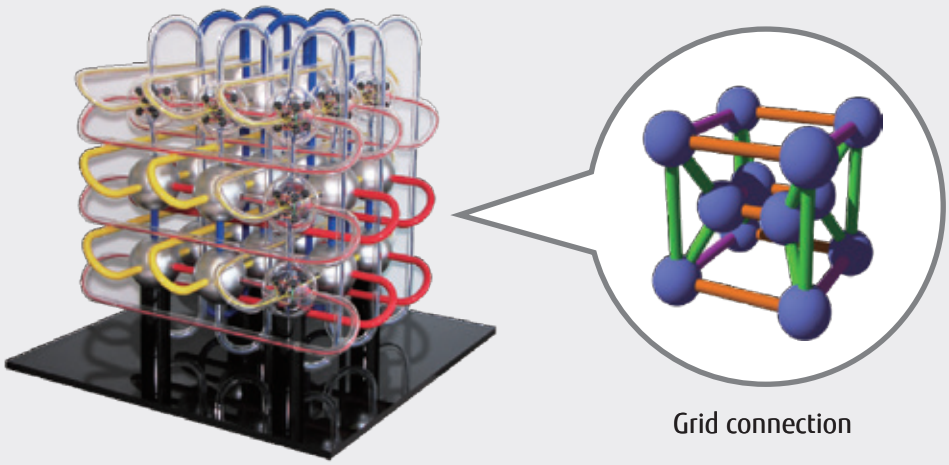
Fujitsu's supercomputer PRIMEHPC FX10 is a massively parallel computer system connecting up to tens of thousands of nodes, with each node connected in a configuration called "high-dimensional torus".

The high-dimensional torus consists of individual groups, where a predetermined number of nodes is fully connected in which multiple groups are connected in a ring, with many rings connecting different groups in a grid (torus). This interconnection scheme configures a grid connection structure comprised of a group at each torus grid point (see the figure below).

This method allows for fine partitioning at arbitrary positions without any dedicated switches. Even if one of nodes in a group fails, calculation can be continued by using a short detouring path via other nodes in the group.

Since a super computer with a "high-dimensional torus" can perform large-scale computations fast, complicated natural phenomena can be minutely simulated. For example, it is used for study areas such as "life science and application in drug discovery and medical development," "new materials and energy creation," and "global climate change forecasting." Thus, it contributes to social safety and environmental conservation.

Fujitsu's high-dimensional torus interconnect technology for massive parallel computers was awarded the fiscal 2014 Imperial Invention Prize by the Japan Institute of Invention and Innovation, having already received the fiscal 2011, Contribution Prize of the Ichimura Prizes in Industry from the New Technology Development Foundation. Fujitsu has acquired patents in Japan and overseas for this technology.



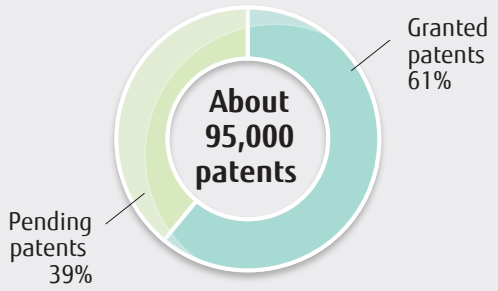
Grid connection

High-dimensional torus interconnect structure

Current Situation of Fujitsu's Owned Patents(1) Number of Owned Patents

Currently, Fujitsu Group holds about 95,000 patents (granted patents and pending patent applications) worldwide.

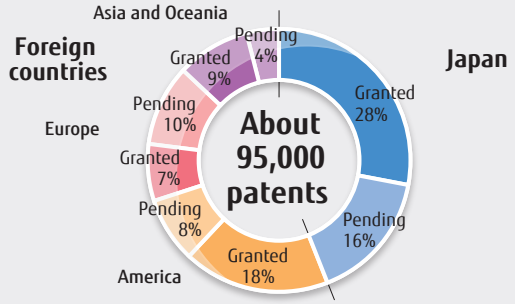
■Fujitsu Group's owned patents worldwide



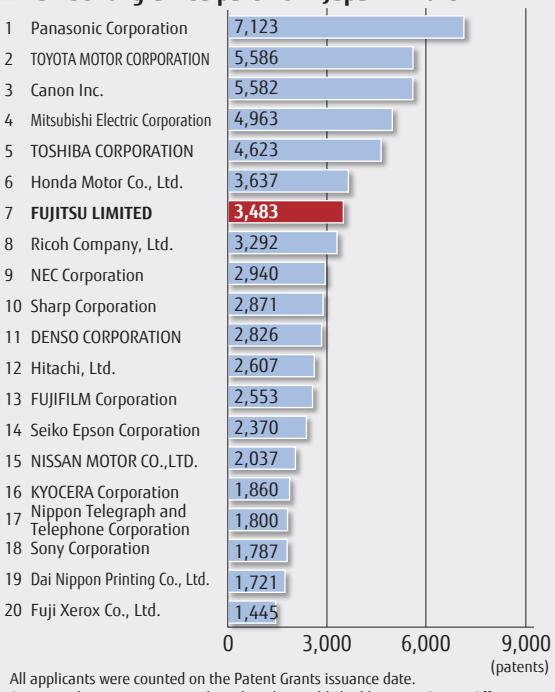
When the number of Fujitsu patents in Japan and in the U.S. are viewed, Fujitsu ranked 7th in Japan (based on our own research) and 12th in the U.S. (based on IFI CLAIMS Patent Services' research).

The following graph shows the number of owned patents by region. The number of owned patents in foreign countries has exceeded the number in Japan. This is because, with the globalization of our business, we are actively engaging in efforts to file patent applications, acquire patent rights globally, and extract inventions from the outcomes of the technological activities at our group member companies in the U.S., Europe, China, and other countries or areas in order to enhance our patent portfolios.

■Fujitsu Group's owned patents for each region

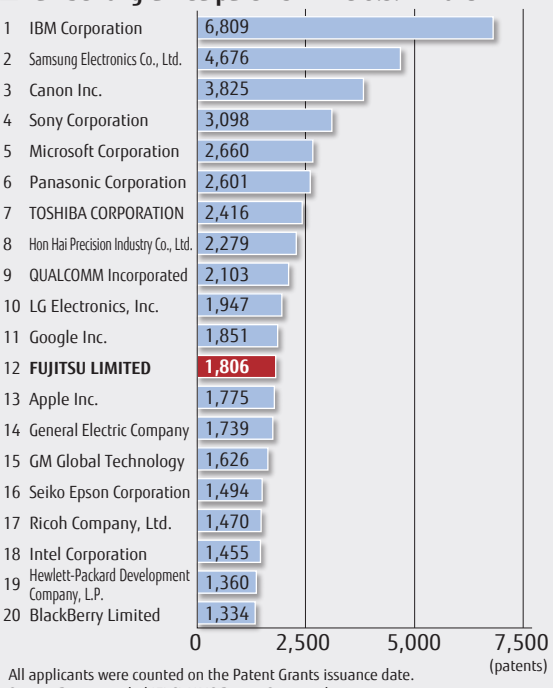


■Number of granted patents in Japan in 2013



All applicants were counted on the Patent Grants issuance date.
Source: in-house investigation based on data published by Japan Patent Office
The number of patents granted to Fujitsu Group companies other than Fujitsu Limited is 1,645 (20 companies).
The total number of patents granted to Fujitsu Group: 5,128

■Number of granted patents in the U.S. in 2013



All applicants were counted on the Patent Grants issuance date.
Source: Date provided IFI CLAIMS Patent Services data
The number of patents granted to Fujitsu Group companies other than Fujitsu Limited is 649 (12 companies).
The total number of patents granted to Fujitsu Group: 2,455

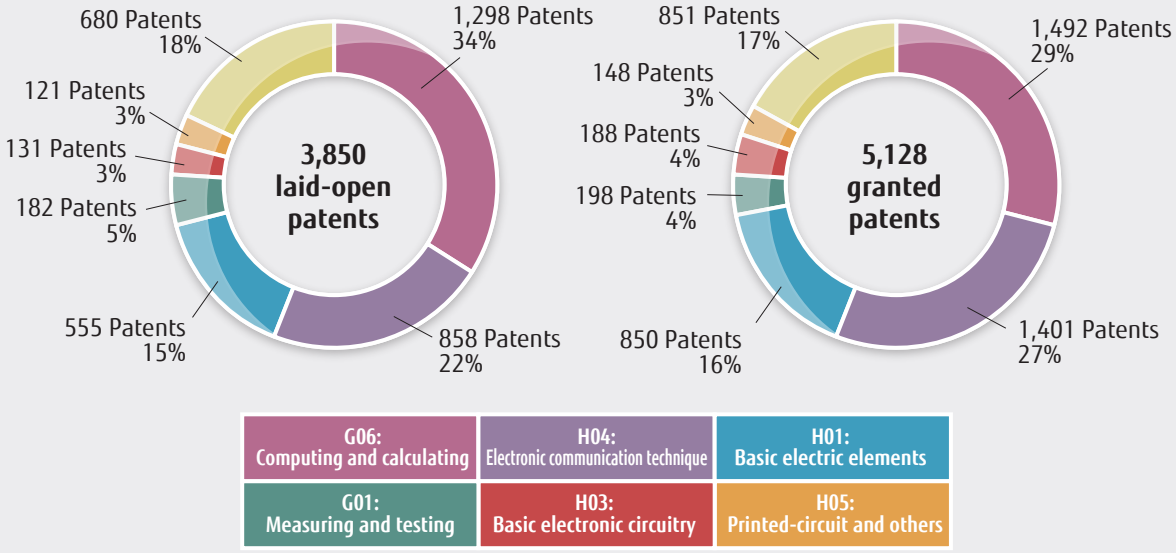
Current Situation of Fujitsu's Owned Patents(2) Technical Fields of Inventions

The inventions of patents owned by Fujitsu group are categorized into following technical fields.

The lower pie chart shows the technical fields of inventions of Fujitsu Group's laid-open patents and granted patents in 2013 in Japan sorted based on the International Patent Classification (IPC). The ratio of Computing and calculating field (G06), Electric communication technique field (H04) and Basic electric elements field (H01) are high.

The bar graph below shows change of ratio of each IPC in the laid-open patents for the past five years. The ratio of the Computing and calculating field (G06) is increasing.

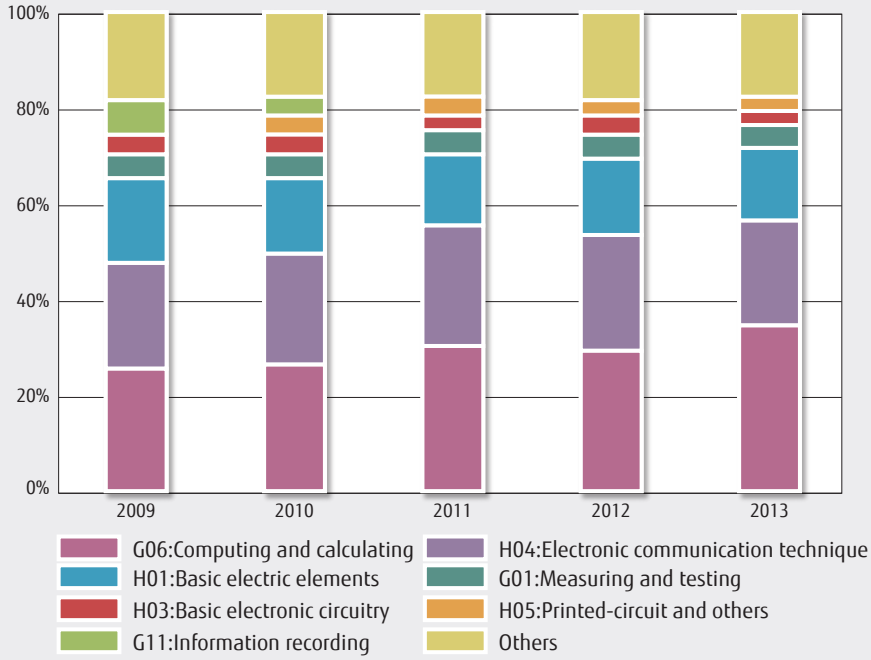
■**Fujitsu Group owned patents by the international patent classification**



(Patent applications field in Japan based on the Patent Cooperation Treaty are not included.
Source : in-house investigation based on data published by Japan Patent Office)

The upper pie charts show classes which have rates equal to or more than 3 percent.

■**Transition ratio of the international patent classification of Fujitsu Group's laid-open patents.**



Design

We believe that all design activities are centered on people and that Fujitsu Group should build a positive relationship between people and ICT in order to contribute to the realization of an ICT society in which everybody can participate.

Fujitsu Group handles a broad range of design activities, including designing products such as PCs and smartphones, designing graphical user interfaces (GUIs) for Web sites and business systems, designing office and retail space for use in information systems, and creating visual designs for branding purposes.

In the belief that designs are valuable intellectual property assets because they link our customers to our products and services, Fujitsu has been active in acquiring design rights that will protect its designs. At present, Fujitsu holds about 530 design rights in Japan and overseas countries.

<Raku-Raku smartphone screen menu>

This smartphone's menu interface was developed while taking a variety of factors into consideration, including the size of buttons, the readability of the screen, and the window layout. Common features such as phone, e-mail and address book applications are laid out at the most accessible locations. By adopting round buttons and creating space between buttons, this smartphone can be used with the same feeling as a conventional mobile phone. This makes it easy to use even for first-time smartphone users.

NTT docomo Raku-Raku smartphone F-12D
(Design Registration in Japan (No.1467851))

Raku-Raku smartphone's screen
(Design Registration in Japan (No.1458483))

<Smartphone design>

The characteristic of Fujitsu's smartphone is its sophisticated design with leading-edge technology while pursuing ease of use that matches the lifestyles of individual users.

NTTdocomo ARROWS NE F-01F
(Design Registration in Japan (No.1499196))

SoftBank ARROWS A 301F
(Design Registration in Japan (No.1502715))

au ARROWS Z FJL22
(Design Registration in Japan (No.1499201))

Brand

Fujitsu Group regards our brands as one of our important management resources. We promote the spread of the brand promise "shaping tomorrow with you," announced in 2010. We have decided on a brand graphic that visually represents the brand promise, aiming to establish our brand image throughout the world.

The design of the brand graphic is based on the "F" of the FUJITSU symbol mark, and the concept of "dialogs with customers," which will be the most important task related to putting the brand promise into action, thereby creating a visually unique and memorable impact.

In fiscal 2013, Fujitsu enhanced the association between product/service brand names and the corporate brand (FUJITSU) and set rules for a product/service name structure so that customers can easily search and understand for Fujitsu product/service. Through these rules, Fujitsu aims to further emphasize the merits of the FUJITSU brand.

Fujitsu is ranked 26th in Interbrand Corporation's "Japan's Best Global Brands 2014."

Fujitsu actively pursues the acquisition of trademark rights for the names of products and services to protect our brand value.

Currently, Fujitsu holds about 6,100 trademarks inside and foreign countries. In particular, we have acquired the trademark rights to the Fujitsu symbol mark in about 150 countries and regions.

* Released every year by Interbrand Corporation in order to rate the values and positions of globally expanding Japanese brands based on world standards.

Symbol mark

FUJITSU

Symbol mark　　Brand graphic

Brand promise and Brand graphic (example)

shaping tomorrow with you

Copyrights

In Fujitsu Group, copyrighted work constitutes part of our important management resources. For example, we not only license our programs that are copyrighted work to multiple customers as software products but also develop a support business through customers' continuous usage including in cloud computing.

For software asset management, we accumulate programs developed independently using our know-how or customized parts realized by responding to customer requests for software products.

For customized development under the SI business, we reserve the copyrights of developed programs according to the Copyright Act and hold them as the resources of Fujitsu Group. In such case, we set terms and conditions that respect customers' free use and consider the protection of customers' confidential information and specific information.

We reuse these accumulated software resources so as to strengthen functions, reduce bugs, and provide our customers with high-quality systems in a short delivery time.

Thorough Information Management

Proper information handling is not only the basis of Fujitsu Group's business activities, it is also vital to the company's success. However, any information even leaked due to a careless mistake will lose its value as property, possibly having an adverse affect on Fujitsu's business.

Therefore, Fujitsu Group establishes and announces detailed rules on proper handling of information and implements e-Learning on information management (yearly) and introduced "SHieldMailChecker" for preventing information leakage by erroneous e-mail sending, etc. Through these approaches, we improve the awareness and skill of individual employees regarding information management and ICT use.

We also work on improving management structures and information security measures by checking and evaluating security cases and troubles that occur in the world.

Respect for Other Companies' Intellectual Property

Fujitsu Group believes that the policy of respecting the intellectual property of other companies is extremely important, not only to protect Fujitsu Group's business, but also to avoid causing unexpected problems for our customers.

Fujitsu Group requires its employees to survey intellectual property held by other entities, during both the research and development and product development phases. For patents, when a new technology to be included in a product under development is determined, a survey is conducted to investigate whether other companies already hold patents on that technology. When a new name is to be assigned to a product or a service, an advance trademark survey is conducted and a trademark application is filed. For copyrights, we adhere to the licensing conditions for other companies' copyrighted work. Before using free or open-source software, which has become popular in recent years, we carefully study the risks involved with applying it to our products.

4 Utilization of Our Intellectual Property

Policy

Fujitsu Group mainly utilizes its intellectual property for "securing of business competitive advantages," "securing of business flexibility," and "securing of business profits."

We effectively differentiate our products and services by using the technologies, design and brands supported by intellectual property to secure business competitive advantages. By utilizing intellectual property in international standardization activities, we aim to realize business competitive advantages and business flexibility at the same time.

We will secure business flexibility by making cross-license agreements for our intellectual property with other companies under good terms and conditions and realizing technical linkages with other companies via intellectual property.

Fujitsu Group has concluded cross-licensing agreements with numerous companies. Major companies that have signed cross-license agreements with Fujitsu Group include Intel Corporation, IBM Corporation, Alcatel-Lucent USA, Inc., Texas Instruments Inc., Microsoft Corporation.

Fujitsu will also secure business profits through license activities (including technical sales of onerously licensable patents).

We also make social contributions by actively using intellectual property for protection of the global environment and licensable patents though cooperation with nationwide municipalities.

Efforts in International Standardization

Particularly in the ICT area, it is difficult for one company alone to create a market by depending only on its own technologies. A robust market is formed when multiple companies provide various products and services using standardized technologies and ensure that their products and services satisfy interconnectivity and compatibility requirements. Such a business environment is beneficial to companies that have developed technologies adopted as international standards and that hold patents on such technologies. Recently, it has also become important for a company to ensure superiority in business by successfully creating an area in which they can be competitive while making good use of standards.

Under such recognition, Fujitsu has established a special organization, from the perspective of the entire Fujitsu Group. It is responsible for drawing up and implementing international standardization strategies across sectional boundaries in order to encourage strategic standardization activities aimed at fostering the development of ICT society. We are promoting the development of global standards by linking the business strategy of each section and standardization activities, and participating in major standardization organizations in the world including ISO, IEC, ITU, IEEE, 3GPP, OASIS, OMG, and DMTF. Further, Fujitsu promotes activities for securing standard-related patents and making effective use of patents by participating in various patent pools* as a licensor.

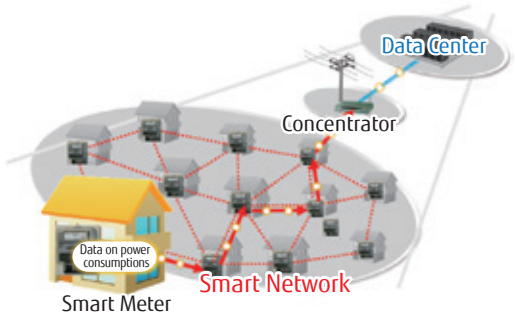
* Fujitsu is participating as a licensor in patent pools relating to various standards such as AVC/H.264, MPEG-4 Visual, VC-1, W-CDMA, ARIB digital broadcasting standards, and digital cable broadcasting standards.

<Global Standards for Smart Grids>

"Smart Grid" is a next-generation power distribution network that properly controls power flow from both the supply side and demand side. For its realization, technologies for steady measurement of power supply/demand and their proper control are necessary, and international standardization is important to acquire global markets.

For measurement technology, Fujitsu developed ad hoc communication technology (WisReed), which makes it possible to maintain a steady communication connection under various environments, as communication technology for a household smart meter. With this technology, a large-scale network can be automatically configured as a steady autonomous-decentralized network, which was difficult with conventional technology. We promoted standardization activities in the Internet Engineering Task Force (IETF) so that this technology can be used by power utilities and equipment makers in Japan and overseas, and the specification has been approved.

For control technology, we have been participating in the OpenADR Alliance, a body that promotes international standardization of Demand Response (DR) technology for power supply/demand adjustment, from an early stage. We have contributed to the development of the latest standard (2.0b). We also developed a demand response control system DRAS (Demand Response Automation Server) and, as the first company in the world, successfully acquired the certification of OpenADR 2.0b.



Ad hoc communication technology (WisReed)

Utilization of Open Source Software

Open Source Software (OSS) has become increasingly popular because it offers a fast development speed and cost reduction, etc. These days, since the quality and performance have been improved and technologies covered have increased, more and more companies are actively using it. Under such changes in the environment, it is necessary to use OSS so as to provide optimal ICT according to customer needs in order to support the growth and development of customers.

Advanced technologies are increasingly being developed by multiple venders in OSS communities. Fujitsu Group also actively participates in OSS communities to contribute to them by suggesting functional improvements and posting program modifications.

We also use OSS for various fields including software products, embed equipments, SI business and cloud computing, and also provide support business that customers can use with no worry.

On the other hand, we control the use by setting multiple check items such as for license compliance, OSS use by suppliers, and provision of OSS information to customers in addition to function and quality evaluations.

Currently, we securely implement these check items mainly in the technology solutions segment by creating an "OSS self-check system" for organizational governance.

Amid changes in the business environment, collaboration with customers, partners, and OSS communities has become important. We at Fujitsu Group respect other companies' intellectual property rights while making effective use of our own copyrights.

Technology Sales

Fujitsu Group has some patents that are no longer used because of changes in its business strategy. Even those patents that Fujitsu currently use may be available for widespread use by other companies to create more value. We are aggressively working to license to these patents and other know-how, as technology "seeds," to other companies to ensure that the outcome of our research and development work will be utilized widely in society and become a source of royalty earnings. We refer to all of these activities as technology sales activities.

The sales of technology in close collaboration with local authorities, regional banks and universities throughout Japan have created a large number of new business opportunities in small-to-medium business, and have helped to revitalize regional communities.

In particular, for the cooperation with financial institutions, we host a "workshop for the use of intellectual property" on a financial institution basis to deepen their understanding of the seeds provided and the strategies to create the new products of small-to-medium businesses. This helps enhance the certainty and efficiency of matching.

In partnership with Fujitsu's customer value promotion center and the private demand business sector, we actively introduce technology solutions for improving the products and services of our customers.

Fujitsu Group's technology seeds are posted on a publicly accessible Web page at the following URL. It shows many attractive technologies in the field of material, hardware, software etc. We hope you to access the page.

http://jp.fujitsu.com/about/ip/

<Contribution to Local Communities –Intellectual Property Matching Activities>

In the city of Kawasaki in Kanagawa Prefecture, where the headquarters of Fujitsu is located, intellectual property such as licensable patents owned by large businesses is introduced to small-to-medium businesses to help enhance their product development capability. Fujitsu actively participates in this project and has signed 15 license agreements with small-to-medium businesses in Kawasaki since 2007 (as of September 2014).

Photocatalyst titanium apatite technology (four companies)	Magnifying visual recognition device (One company)	Robot pet technology (One company)	Atmosphere sensor technology (One company)
Shock-absorbing package material (One company)	Paper fastening technology with water (One company)	Seismic isolation foot (One company)	Laser welding technology (One company)
Daihen prevention technology (technology to prevent someone answering a roll call for another) (One company)	Fragrance emitting technology (One company)	Simple vibration control unit (One company)	Attendance management technology (One company)

One of them is photocatalyst titanium apatite technology, where a licensed company in Kawasaki developed paint using antibacterial/antivirus titanium apatite.

Antibacterial sheets where this paint is applied are used for the operation panels of ATMs of banks.

Contribution to Global Environmental Protection

Based on the statement "In all our actions, we protect the environment and contribute to society," which is included in the FUJITSU Way Corporate Values, Fujitsu Group contributes to the protection of the global environment from the perspective of intellectual property, while at the same time, responding to global environmental activities and regulations.

More specifically, we have positioned technologies that contribute to the protection of the global environment as one of our important themes, and are maintaining awareness of the environment by cooperating with the business unit as early as in the stage of searching for useful inventions. In addition, we are using such technologies strategically by, for example, applying them to products and using them for promotion in business negotiations.

To raise our employees' awareness of environmental issues, we have established a system for awarding those who have made remarkable contributions to the creation or use of intellectual property for the protection of the global environment.

<Contribution to global environment conservation by forest resource visualization>

Forest resource measuring service "Morissi"

Forests provide various values, not only timber production but also water conservation, disaster prevention/mitigation, biodiversity conservation, landscape conservation, and CO_2 fixation. For the sustainable use of forests, it is necessary to understand forest conditions such as tree type, tree height and the number of trees in a timely and highly accurate way. However, the conventional, human-powered method is limited for forest research in terms of scale, accuracy, and cost.

"Morissi" can measure forest resources on a large scale, with high accuracy, and at low cost by analyzing the hyperspectral data shot from an airplane with unique technology* developed by Fujitsu Laboratories Ltd.

* Thirteen patent applications were filed for the program, information processing method and equipment to identify plant species.

[Application]

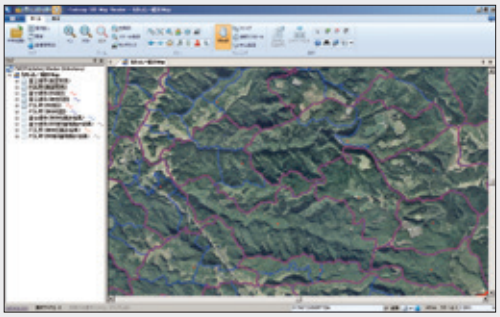
Forest conservation, forestry development, water conservation, disaster prevention/mitigation, conservation of facilities and equipment in mountain areas, vegetation survey, biodiversity conservation, measures against exotic trees, pest measures, forest CO_2 offset credit certification

[Advantages] (The following is the data of demonstration experiment results of cedar/Japanese cypress artificial forest)

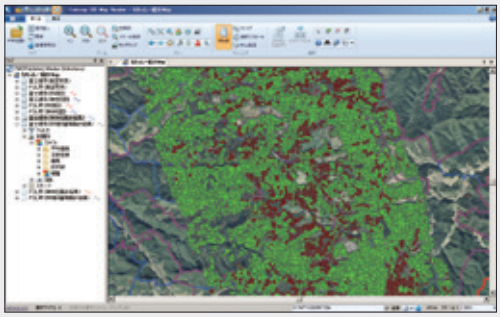
1. Highly accurate measurement data of 90% or more for tree type/height, 80% or more for the number of trees, and about 80% for accumulation (total volume of tree trunks)
2. Shooting of 20,000 ha a day at a maximum (slightly bigger than 17,005 ha of Hachiro-gata reclaimed land in Akita Prefecture)
3. Reduction in the time and person-hours required for forest research/vegetation mapping to about one-twentieth

[Analyzed example]

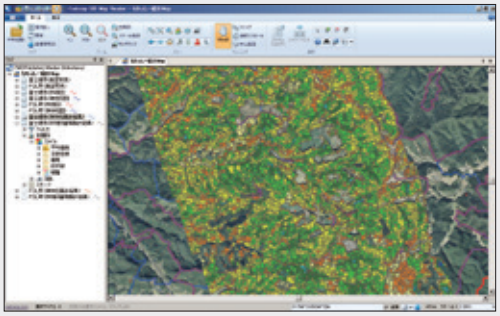
Aerial photograph



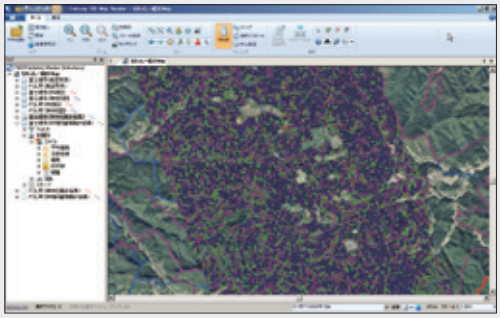
Tree type identification



Tree height identification



Number measurement



5 Management Frameworks of Intellectual Property

Administrative and Global Management Frameworks

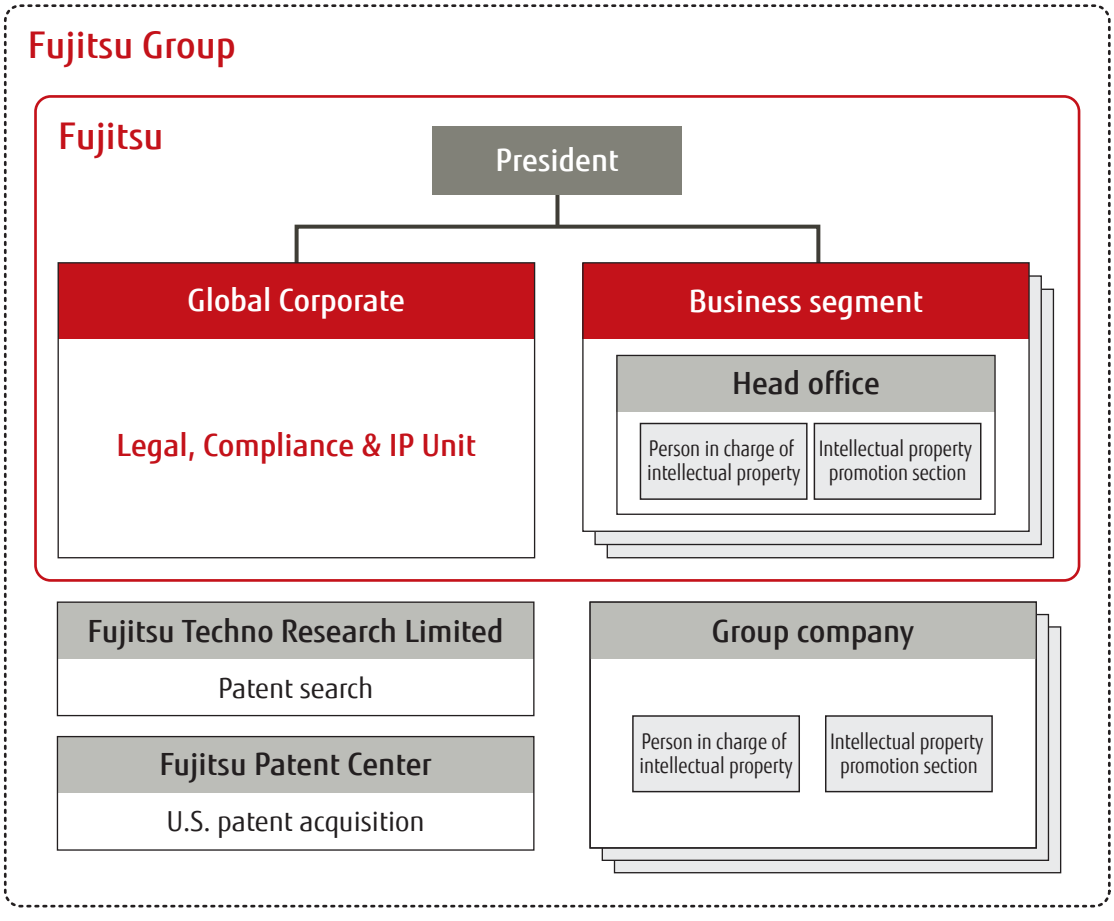
Fujitsu established the Legal, Compliance & IP Unit as one of units of its global corporate center to promote activities in areas ranging from the development and planning of the intellectual property strategies of Fujitsu Group and acquiring intellectual property rights to the utilization of intellectual property including licensing of intellectual property rights. We also take the initiative in strategic standardization activities.

In business units in each business segment an intellectual property strategy manager is appointed and assures seamless cooperation between the research and development units and the intellectual property units.

In addition, Fujitsu Techno Research Limited, a Group company, mainly conducts pre-application surveys of prior art to determine the appropriate scope of rights being claimed.

Furthermore, to promote efficient global business operations, Fujitsu Group is making efforts to appropriately acquire, maintain, and utilize its intellectual property throughout the world. In particular, the intellectual property Promotion Section in each site extracts inventions from the outcomes of the local research and development site and files patent applications. Furthermore, in the U.S., the Fujitsu Patent Center we established in 2008 in an effort to improve our ability to acquire patent rights is expanding its activities to increase the quality of our patents.

Organization chart



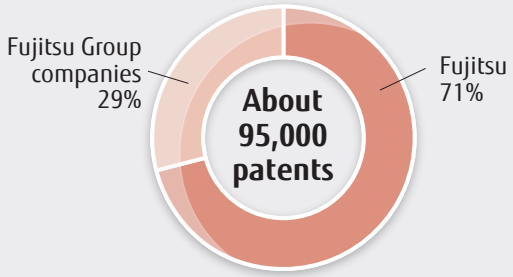
Improvement of the Value of the Intellectual Property of the Entire Group

Looking at the entire Fujitsu Group, the proportion of patents held by group member companies to the total number of patents held by the entire Fujitsu Group is high (around 30% in fiscal 2013, as in the previous year), so that intellectual property activities that consider the entire group have become ever more important.

With the aim of improving the value of our intellectual property assets so as to contribute to the improvement of the business competitiveness of the entire group, Fujitsu Group is undertaking the following efforts so that the group member companies worldwide can collaboratively practice consistent intellectual property strategies:

- Information sharing by holding regular liaison conferences by group member companies
- Establishment of a framework that enables the use of intellectual property within the group
- Mutual cooperation within the group for patent portfolio enhancement
- Concerted standardization activities throughout the entire group
- Creation and enhancement of common infrastructures for intellectual property related activities within the group

■Breakdown of pending and granted patents by Fujitsu and Fujitsu Group companies



Education and Enlightenment for Effectively Implementing Our Intellectual Property Strategy

Fujitsu Group works positively to educate employees recognizing that intellectual property strategy should be implemented alongside business strategy, research and development strategy and standardization strategy in an integrated manner.

We are developing training system to fulfill the needs to individual employees in their respective careers and offering a large number of training program strategically such as basic knowledge of intellectual property, strategic utilization of intellectual property and enhancing patent portfolio by acquisition of valuable patents.

We provide two types of training programs, e-learning and classroom education, so that employees can learn in an effective and efficient manner.

In this way, we actively foster our employees' awareness on the importance of intellectual property and encourage them to integrate business, research and development, standardization, and intellectual property strategies when performing their activities.

Systems for Supporting Tasks Related to Intellectual Property

Fujitsu Group developed a support system for intellectual property-related operations necessary for developing business activities and to use it internally for streamlining operations.

For example, our patent search service allows researchers or developers to verify the novelty of their own inventions and to determine whether their inventions would relate to the patent rights of other companies. This service is used by all employees, including those of Fujitsu Group member companies, over our intranet.

Our patent management system is used by our intellectual property sections when they initiate intellectual property rights acquisition procedures, or manage our intellectual property rights among others. The know-how and techniques of intellectual property management we have accumulated through our internal activities are applied to our intellectual property solution ATMS for sales. ATMS is now widely used by customers as a solution that totally supports all tasks in the intellectual property life cycle.

<Intellectual property solution ATMS> http://jp.fujitsu.com/solutions/ip/

"An intellectual property solution that supports all tasks included in the intellectual property life cycle"

Fujitsu's ATMS is comprehensive intellectual property solution that supports activities throughout the entire intellectual property life cycle from the stage in which inventions are still mere ideas through patent search, acquision of rights, utilization and assistance in business strategy.

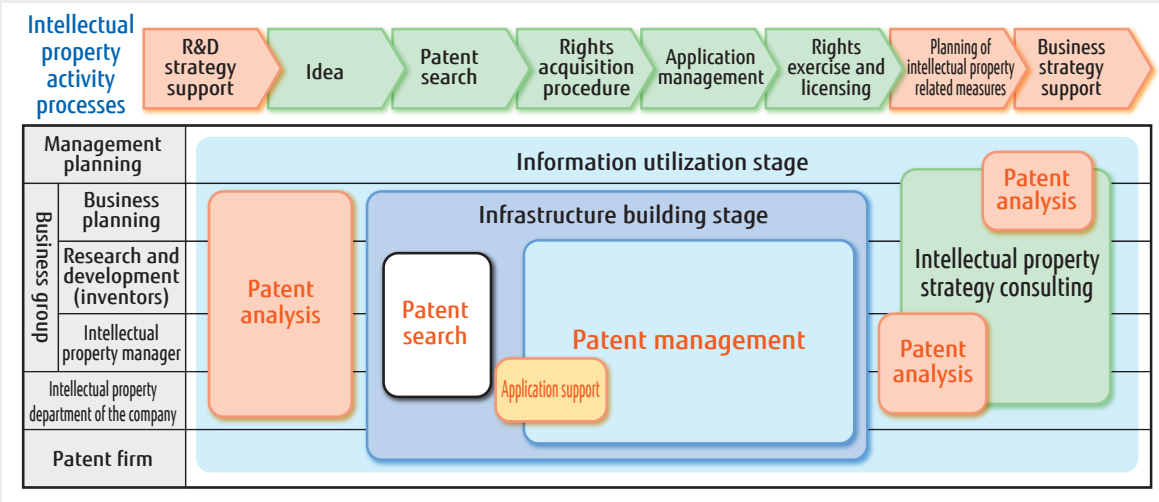
ATMS supports customers in a wide range of intellectual property activities by integrating the know-how and techniques Fujitsu and Fujitsu Group member companies have accumulated through their in-house practices.

The main ATMS-related products and services include the following:

- **Patent analysis system**
  It supports to analyze intellectual property, such as technological trend analysis, which is indispensable for planning and implementing business and reserch and development strategies, and for valuation of products and services relative to those of competitors.
  It provides not only tools with the latest analyzing functions, but also agent service of analyzing or consulting service for Intellectual property strategy.

- **Patent search service**
  It was designed based on the result of analyzing the search techniques used by our experienced patent survey engineers. It provides easy-to use search functions that fulfill the needs from a wide range of users from inventors (researchers and developers) to people engaged in managing intellectual properties.

- **Patent management system**
  It promotes informatization of patent management works and comprehensively supports works of intellectual property such as deadline management, cooperative system with patent firm's system, automated data input, computerization of distributing information.



6 Award-Winning Inventions/Activities

Awards Related to Inventions and Standardization

Fujitsu Group's overall efforts relating to patents and other intellectual property related activities have been widely recognized even outside the company and Fujitsu Group received various awards. The table below lists the main awards we have earned after fiscal 2013.

< Awards related to Invention >

Award Title	Awarding Institution
National Commendation for Invention; Imperial Invention Prize Award 2014 Invention of 6-dimensional interconnect technology (Patent No. JP5212469) (Note: This is introduced on page 7 of this Intellectual Property Report. We encourage you to read this.)	(Public interest incorporated association) Japan Institute of Invention and Innovation
The Kanto Local Commendation for Invention; Kanagawa Prefectural Governor's Award 2013 "Directional sound receiving method" (Patent No. 4912036)	(Public interest incorporated association) Japan Institute of Invention and Innovation

<Awarded inventions> "Directional sound receiving method" (Patent No. 4912036)

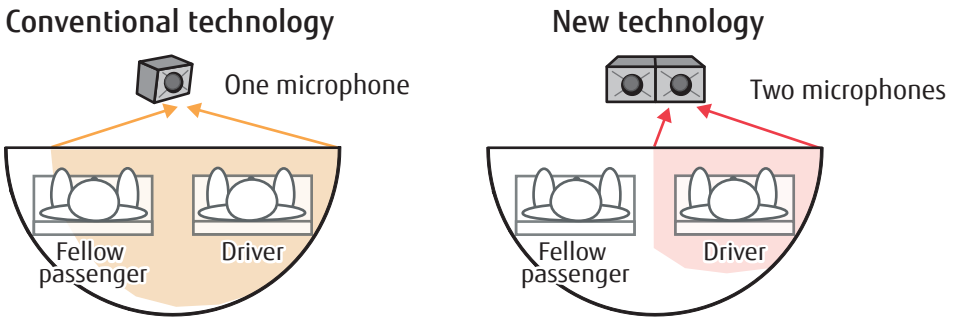
This invention enhances sound recognition rate in the environment exposed to noises from many directions.

With conventional technology, when noises are received from many directions, many microphones are necessary to strictly suppress them. However, this method is not advantageous since many microphones cannot be set in the limited space in a vehicle or on a small mobile phone.

This invention converts the sound that is input through a microphone onto the frequency axis, in a small microphone array with two omnidirectional microphone elements. By assuming that the sound source of each frequency band is one, the sound from a predetermined direction is enhanced and signal processing that suppresses sounds from other directions is performed.

For example, by using this invention, the driver's voice can be recognized very accurately by enhancing the sound from the driver's seat and suppressing sound from the passenger's seat.

This invention is applied to the noise suppression function of on-board equipment microphones of car navigation systems and the microphone of Fujitsu's mobile phones.



Reference (Japanese): http://jp.fujitsu.com/labs/techinfo/techguide/
By Fujitsu Laboratories Ltd.

<Awards related to Standardization>

Award Title	Awarding Institution
Award of the Minister of Internal Affairs and Communications, Information and Communication Technology Award Contribution to standardization activities and commercialization of 100-Gigabit optical communication technology	(General incorporated association) The Telecommunication Technology Committee
The Award for Distinguished Service Achievement concerning with the standardization activity which conformed to the time as a strategy committee	(General incorporated association) The Telecommunication Technology Committee
The Award for Distinguished Service Achievement concerning the promotion of standardization relating to the service platform for the home network services	(General incorporated association) The Telecommunication Technology Committee
The Award for Distinguished Service Achievement concerning with the improvement of the survey and analysis method in de facto standard and the optimization for data collection work	(General incorporated association) The Telecommunication Technology Committee
ITU-AJ Award; International Activity Incentive Award Contribution to the future network standardization activity in ITU-T SG13 and FG-FN	(General incorporated foundation) ITU Association of Japan (ITU-AJ)
Industrial Science and Technology Policy and Environment Bureau Director Award, Industrial Standardization Award 2013 Contribution to international standardization for the software and system life cycle processes	Ministry of Economy, Trade and Industry
Standardization Contribution Award Standardization activities about a Biometric Technical Interface	(General incorporated association) Information Technology Standards Commission of Japan, Information Processing Society of Japan
Standardization Contribution Award Standardization for the development of ODP and modeling language	(General incorporated association) Information Technology Standards Commission of Japan, Information Processing Society of Japan
Standardization Contribution Award Standardization activities in the area of information security management	(General incorporated association) Information Technology Standards Commission of Japan, Information Processing Society of Japan
International Standard Development Award ISO/IEC 19794-9：Information technology - Biometric data interchange formats - Part 9：Vascular image data - AMENDMENT 1：Conformance testing methodology	(General incorporated association) Information Technology Standards Commission of Japan, Information Processing Society of Japan

Information contained in this document includes statements regarding future forecasts based on current business estimates or hypotheses. The actual results or events may differ from what is expressed or implied by these statements because of known or unknown risks and/or uncertain factors. Examples of risks and factors that may affect actual results and examples of events are listed below. (Note that they are only examples and the actual risks and factors are not limited to those listed below.)

- Economic trends in major markets (especially in Japan, North America, and Europe)
- Possible changes in high-tech markets (especially in the semiconductor, PC, and mobile phone markets)
- Trends in foreign exchange and floating interest rates
- Capital market trends
- Intensification of price competition
- Changes of competitors' positions in a market as a result of technological developments
- Changes in component procurement environments
- Changes in competitive relationships resulting from tie-ups, alliances, and technological licensing
- Possibility of projects becoming unprofitable
- Accounting policy changes

INTELLECTUAL PROPERTY REPORT 2014 Fujitsu

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