JAPANESE INDUSTRY AND POLICY NEWS
April 2017

LEGISLATION AND POLICY NEWS

The IP System Study Group Published a Report to Cope with the 4th Industrial Revolution

The Ministry of Economy, Trade and Industry (METI) published a report on 19 April regarding corporate strategies in response to the Fourth Industrial Revolution and an ideal intellectual property system that supports those companies.

In October 2016 the METI established the Intellectual Property System Study Group for the Fourth Industrial Revolution which includes academic and industrial experts to consider an ideal intellectual property system which balances the promotion of data use and the protection of related rights with regard to new information property such as big data accumulated via sensors and works created by Artificial Intelligence (AI). The key points concerning future measures are as follows.

1. Utilization of data:

Ideal data protection systems such as providing remedies including compensation for damages or injunctive relief against a person who obtains data illegally shall continue to be discussed to determine future directions in view of amendment of the Unfair Competition Prevention Act as well.

Appropriate protection of data and rules concerning contracts should be examined in line with the current situation of data utilization among companies and contract terms, and contractual guidelines should be drawn up to ensure that the scope of data use is properly and fairly defined and clarified within contracts.

2. Industrial property rights system:

Regarding data structures which have patent eligibility, predictability of obtaining rights should be enhanced. From the perspective of developing an intellectual property system that supports new business models which utilize Internet of Things (IoT), efforts should be made to review Examination Guidelines for software-related inventions, develop means to better utilize business-related patents, facilitate utilization of newly established patent classifications, and build patent examination systems to respond to cross-sectoral technology.

Deliberations should continue concerning the protection of rights for cross-border infringements, while taking into account accumulating court cases. With regard to industrial property rights on inventions by AI and data for 3D printing, the protections currently provided under the Acts should be adequate, but future developments need to be monitored carefully. In consideration of disputes over standard essential patents, the introduction of an Alternative Dispute Resolution (ADR) system (under which the government decides proper licensing terms for standard essential patents) should be discussed together with the revision of the Patent Act, if necessary.

3. International standardization

Cross-industrial projects should be considered through the utilization of the New Market Creation Standardization System and National Research and Development Agencies, thereby strengthening standardization systems in the public and private sectors. Efforts should be strengthened for developing human resources responsible for standardization.

In addition to the above, the current status, problems and future measures to be taken are compiled in the report for each industrial sector and from the perspectives of both small and medium-sized enterprises (SMEs) and venture companies.

http://www.meti.go.jp/english/press/2017/0419_001.html

Report on the Long-term Global Warming Countermeasures Published

On 14 April, the Ministry of Economy, Trade and Industry (METI) published a report on the long-term measures to reduce greenhouse gas emissions extending beyond 2030. It is a result of the study conducted by the Long-term Climate Change Policy Platform that the METI established in July 2016 with representatives of government, industry and academia.

According to the Platform's report, Japan should seek for a long-term, low greenhouse gas emission strategy not limited to but beyond conventional ideas within Japan, industries or existing technologies. The strategy stipulates "three arrows" game changers as countermeasures against global warming: (1) international contribution, (2) global value chain-based reductions by industries and companies, and (3) innovation.

Based on the three-arrow policy, the government, industries and companies should all proactively engage in efforts for reducing carbon emissions by an amount greater than that emitted by themselves, i.e., eventually making Japan

carbon neutral, and should lead emission-reduction efforts by other countries, thus contributing to the effective implementation of Paris agreement.
http://www.meti.go.jp/english/press/2017/0414_001.html
http://www.meti.go.jp/english/press/2017/pdf/0414_001a.pdf

Interim Report for Promoting "Safety Support Car" Published

An inter-ministerial conference for promoting "safety support car" published its interim report on 4 April. The conference consists of vice-minister level members of the Ministry of Economy, Trade and Industry (METI), the Ministry of Land, Infrastructure, Transportation and Tourism (MLIT), the Cabinet Office and the National Police Agency.

In light of the increase of fatal accidents incurred by the elderly people of more than 75 years old, the conference decided to strengthen "enlightening activities" centering around safety education. As for the safety support equipment of cars, the conference set the target of 90% of new cars to be equipped with autonomous brake system to avoid accident by the year 2020. According to the Japanese automobile manufacturers, diffusion of autonomous brakes among new cars was 45.4% in 2015. The inter-ministerial conference will continue further consideration of the traffic safety measures.

http://www.mlit.go.jp/jidosha/jidosha_170125supportvehicle.html
(Japanese language only)

Promoting Electronic Tags at Convenience Stores

The Ministry of Economy, Trade and Industry (METI) announced on 18 April that it reached an agreement with major operators of convenience stores on introducing electronic tags for all products sold in their stores by 2025 to cope with such challenges as a labor shortage, food loss and returned food. Based on this agreement, METI and the companies jointly formulated a statement called "Declaration of Plan to Introduce 100 Billion Electronic Tags for Products in Convenience Stores."

According to the declaration, Seven-Eleven Japan Co., Ltd., FamilyMart Co., Ltd., Lawson, Inc., Ministop Co., Ltd., and JR East Retail Net Co., Ltd. (operator of NewDays convenience store chains) should attach electronic tags to all products sold in their stores (estimated to be 100 billion products per year) and achieve individual-item monitoring for every product by 2025. In this process, the companies must consider providing a portion of the information that they

acquire through using such electronic tags to supply chains. The companies should start electronic tag demonstrations around 2018 by attaching such tags to products in their convenience stores in certain areas, aiming to achieve individual-item monitoring for every product. The companies should set the unit production price of a “dissemination-type” electronic tags to one yen or less to be attached to all applicable products.They should develop a system for fully accomplishing source tagging, where manufacturers themselves attach the electronic tags to their products, and in which nearly all their products can be incorporated into their system using radio-frequency identification (RFID) technology.

The utilization of electronic tags is expected to bring about a variety of ripple effects to retailers, such as acceleration of the work at cash registers, product inspections, and inventory clearance, prevention of shoplifting with security gates, and reduction of food loss by making expiration-date management more efficient. Moreover, information sharing through electronic tags between businesses involved in supply chains, including manufacturers and wholesale businesses, will enable such businesses to reduce waste across the manufacturing, distribution, wholesale and retail sectors, e.g., flexible adjustment of production amounts by manufacturers based on the amount of inventory distributed, or advancement of joint deliveries through sharing information on unused space in delivery vehicles.

http://www.meti.go.jp/english/press/2017/0418_003.html

SURVEY AND BUSINESS DATA

GHG Emission Reduced by 2.9% in FY2015

According to the joint survey of the Ministry of Environment and the National Institute for Environmental Studies (NIES) published on 13 April, Japan's total greenhouse gas (GHG) emissions in FY2015 were estimated at 1,325 million tons of carbon dioxide (CO2) equivalents (Mt CO2 eq.).

This is a decrease of 2.9% and 6.0% respectively as compared to the FY2014 and FY2013 results. Main reasons of the decrease are the reduced energy-related CO2 emissions owing to lowered CO2 emissions from power generation as a result of decreased electricity consumption (due to energy conservation, cool summer and mild winter, etc.) and the improvement of carbon intensity in

power generation (due to greater adoption of renewable energy, resuming nuclear power operation, etc.).
Removals by forest and other carbon sinks under the Kyoto Protocol in FY 2015 were 58.8 Mt CO2 eq., consisting of 50.1 Mt CO2 eq. by forest carbon sink and 8.6 Mt CO2 eq. by cropland management, grazing land management, and urban revegetation.
https://www.env.go.jp/en/headline/2309.html

Energy Consumption Decreased for 5 Consecutive Years

The Agency for Natural Resources and Energy (ANRE) released on 13 April a revised report on Japan's energy supply and demand situation in FY2015. Highlights of the report are as follows:

1) Trends in energy demand:

The overall final energy consumption decreased by 1.4% year-on-year, recording a decrease for five consecutive years. The decrease is due to the further popularization of energy saving efforts among the public, the cooler summer and warmer winter than in previous years, etc. A breakdown by sector shows that the final energy consumption decreased in all sectors, centering around the household sector. While the ratio of decrease was 0.9% in the business sector, it was 3.3% in the household sector, and 1.6% in the transportation sector.

2) Trends in energy supply

The overall domestic supply of primary energy decreased by 1.4% on a year-on-year basis, showing a decrease for two consecutive years. Regarding primary energy supply, the ratios of renewable energy (including unused energy and hydro energy) and nuclear power both increased by 0.4 percentage points on a year-on-year basis, while those of petroleum and natural gas decreased by 0.5 and 0.9 percentage points respectively, which are all due to the further dissemination of renewable energy for power generation and the advancement in restarting nuclear power plants. In addition, the ratio of coal in the supply of primary energy increased by 0.7 percentage points due to the inventory buildup in power stations and plants, while the consumption of coal for power generation and the final consumption of coal decreased.
http://www.meti.go.jp/english/press/2017/0413_001.html

Sales and Profit of Internet-based Service Providers Increase Rapidly

The Ministry of Economy, Trade and Industry (METI) and the Ministry of Internal Affairs and Communications (MIC) published on 28 March the result of the Seventh Basic Survey on the Information and Communications Industry to ascertain the overall state of the information and communications industry in Japan for the year of 2015.

<Overview of the information and communications industry>

There were 5,474 companies engaged (primarily or otherwise) in the information and communications industry (1*). Total sales of this industry in FY2015 were 48.0504 trillion yen, up by 3.3% from the previous year, while combined sales of these companies earned in other industrial sector and the information and communications industry in total were 71.9513 trillion yen. By sector, the telecommunications sector was the biggest, followed by the software sector and the information processing/providing sector. These three sectors accounted for 77.8% of total sales in the industry.

There were 4,686 companies classified in the information and communications category (i.e., companies whose sales within the information and communications industry account for the largest portion of their revenue) and their FY2015 total sales were 50.2474 trillion yen, up by 1.8% from the previous year, of which 46.5774 trillion yen were sales earned in the information and communications industry (up by 4.2% from the previous year).

Sales by sector, the telecommunications sector marked the biggest, followed by the newspaper sector and the Internet-based service sector.

<Internet-based service sector>

There were 545 companies engaged in the Internet-based service sector and their FY2015 total sales were 2.3954 trillion yen, up by 26.7% from the previous year. Breakdown by service (2*), the web-content delivery service marked the highest sales, showing a double-digit increase from the previous year.

<Information service sector>

There were 3,494 companies engaging in the information service sector and FY2015 total sales were 17.2683 trillion yen, up by 15.9% from the previous year, showing an increase for six consecutive years. Sales by service (3*), the commissioned software development service marked the highest sales.

*Note 1: The information and communications industry includes the following sectors: telecommunications; broadcasting; broadcast program production; Internet-based service; information service; and video picture/sound information/character information production.

*Note 2: Major services in this sector include web-content delivery, shopping website management, etc.

*Note 3: Major services in this sector include commissioned software development, information processing, and game/software development.

http://www.meti.go.jp/english/press/2017/0328_005.html

E-Commerce Market Continue to Expand

According to the annual survey of the Ministry of Economy, Trade and Industry (METI) on electronic commerce (EC) published on 24 April, Japanese domestic B to C (business-to-consumer) EC market expanded to 15.1 trillion yen (up by 9.9% from the previous year) in 2016. In addition, the domestic market scale of B to B (business-to-business) EC in a narrow sense (*1-1) expanded to 204 trillion yen (up 1.2%) and in a wide sense (*1-2) expanded to 291 trillion yen (up 1.3%).

As for the EC ratio (*2) for B to C transaction, it was 5.43% (up by 0.68 percentage points from the previous year), for B to B-EC in a narrow sense it was 19.8% (up 0.6 percentage points), and for B to B-EC in a wide sense it was 28.3% (up 1.0 percentage points), showing the computerization of commercial transactions continues to advance.

Japan's B to C-EC Market (Unit: 100 million yen, %)

*1. Domestic e-commerce is defined as follows in this survey:

1) E-commerce in a narrow sense
Transactions that are conducted (purchase orders are issued) via computer network systems using Internet technologies and whose contract amounts are captured also via such systems.
2) E-commerce in a wide sense
Transactions that are conducted (purchase orders are issued) via computer network systems and whose contract amounts are captured also via such systems.
*2. The EC ratio in this survey refers to the ratio of the e-commerce market scale to the total amount of overall commercial transactions. The subjects for calculating the EC ratio for B to C-EC and B to B-EC are selected respectively from merchandising businesses and business types except “other” in an industrial classification system.
http://www.meti.go.jp/press/2017/04/20170424001/20170424001.html
(Japanese language only)

Overseas Production Ratio Reached Historical High in FY2015

On 25 April, the Ministry of Economy, Trade and Industry (METI) published the results of the 46th Basic Survey on Overseas Business Activities of Japanese corporations. The actual situation of Japanese overseas affiliates in the FY2015 can be summarized as follows:

- The overseas production ratio for the manufacturing industry (based on all domestic companies) was 25.3%, the highest in history. By industry, this ratio was high in transportation machines (48.8%), general purpose machines (33.8%) and information and telecommunication machines (29.4%).
- Sales of overseas affiliates increased by 0.7% from the previous year. Ordinary profits, net income, the amount of retained earnings and investment on equipment decreased. By industry, sales increase was registered in the transportation machines, food and services. By region, Europe and North America recorded increases while Asia registered a decrease.
- The total number of employees at overseas affiliates was 5.57 million people, a decrease of 3.0% as compared to the previous year. North America (690,000 people) registered a slight decrease of 1.2% and Asia (3,990,000 people) recorded a larger decrease of 5.2%.
- Research and development (R&D) expenses in the manufacturing industry maintained a high level of 637.3 billion yen. R&D expenses by overseas affiliates reached 5.2% of total R&D investment of Japanese companies.
- Payments (dividend, loyalties) from overseas affiliates to Japanese investors

marked a record high of 4.5 trillion yen.
http://www.meti.go.jp/press/2017/04/20170425001/20170425001.html
(Japanese language only)

Trend of University-Oriented Venture Businesses Reported
The Ministry of Economy, Trade and Industry (METI) conducted a survey of university-oriented venture businesses and discovered that the number of such venture businesses increased from 1,773 in FY2015 to 1,851 in FY2016. It was found that a 55.7% of such venture businesses have become profitable, showing little change from the figure in the FY2015 survey (55.6%). Moreover, it was found that approximately 30% (the largest share) of all such venture businesses engage in the healthcare related sector including biotechnology and medical equipment. In the student-based venture business category, approximately 40% involved in the field of IT, and in the joint research venture business category, approximately 30% are involved in healthcare related field, including biotechnology and medical equipment, which represents the largest share, with environmental technology-related ventures representing 23% of that category was the second largest.
http://www.meti.go.jp/english/press/2017/0426_001.html

Bankruptcy Recorded the Lowest in 26 Years
Tokyo Shoko Research (TSR), a credit research company announced on 10 April that the total number of bankruptcies with more than 10 million yen debts in FY2016 was 8,381, a decrease of 3.4% as compared to the previous year, reaching at the lowest level in 26 years. TSR indicates the reasons for the decrease as favorable attitude of financial institutions vis-à-vis of rescheduling request of debtors and recovering trend of economy in general.
http://www.tsr-net.co.jp/news/status/year/2016.html (Japanese language only)

COMPANY NEWS

Wireless Power Supplying from Road to a Moving EV Successful
A research group consisting of researchers of the Graduate School of Frontier Sciences of the University of Tokyo lead by Mr. Hiroshi Fujimoto, Associate Professor, NSK, Ltd. and Toyo Denki Seizo K.K. announced on 5 April that they

succeeded in supplying power from the road to a running electric vehicle (EV) for the first time in the world. The EV was equipped with in-wheel motors (IWM) and power supplying was made wireless.
Compared with a conventional on-board motor, IWM can be more environmentally friendly, safer and easier to secure more compartment space due to its lightness, independent traction control by wheel, and smaller size. Wireless power supply from road will contribute to extend cruising distance much longer.
http://hflab.k.u-tokyo.ac.jp/technoFrontier2017/wiwm_unit2.pdf (Japanese language only)
http://www.nsk.com/jp/company/news/2017/press0405a.html (Japanese language only)
https://www.toyodenki.co.jp/en/technical-report/ (English reference material)

Electric "Super Car" to be Marketted in 2019

GLM Co., Ltd. of Kyoto announced on 18 April that they intended to start selling “G4” model electric vehicle (EV) from 2019 at a unit price of 40 million yen. Projected number of production is 1,000 units. GLM G4 was first introduced as a four-door four-seater “concept car” at the Paris Motor Show in September 2016.
According to the GLM, G4 will be the first EV “super car” from Japan with a maximum output of 400kW (equivalent to 540 horse powers) which enables the car to reach 100km/h in 3.7 seconds and run at a maximum speed of 250km/h. Projected cruising distance is 400km.
http://glm-g4.com/
http://glm.jp/jp/

CEPCO to Participate in the Submarine Power Transmission Business in Germany

Chubu Electric Power Co., Inc. (CEPCO) and Mitsubishi UFJ Lease & Finance Co. Ltd. (MUL) announced on 25 April that they had decided to jointly participate in the submarine power transmission business for offshore wind power plants in Germany.
The joint investment company established by CEPCO and MUL has agreed with Mitsubishi Corporation (Mitsubishi) to acquire 49% of the shares of Mitsubishi’s subsidiary that has the business right of this project, and a share purchase and

transfer agreement has been concluded. It will be the first time for CEPCO and MUL to participate in overseas power transmission projects.
This project is to operate and maintain four submarine transmission cables that have a power transmission length of over 100 km and run from a wind power plants located in an offshore area of the North Sea. The Dutch national power transmission operator TenneT Holding B.V. and Mitsubishi's subsidiary own the business right of the project.
http://www.chuden.co.jp/english/corporate/ecor_releases/erel_pressreleases/3264055_18939.html

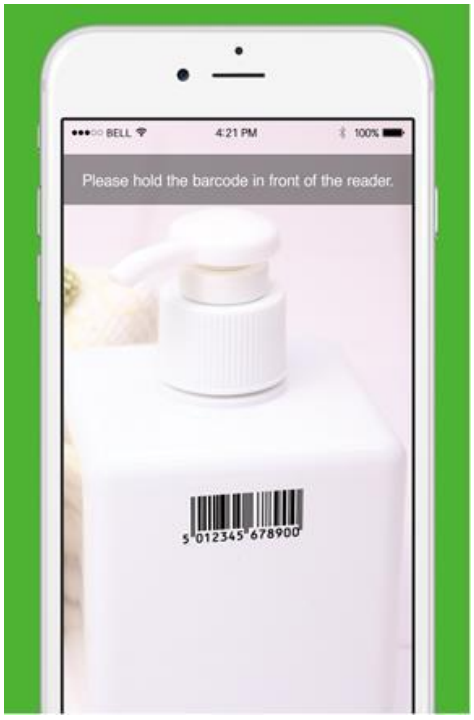
ADDITIONAL TOPICS

Multilingual Presentation of Product Information for Helping Foreigners Will Be Accelerated

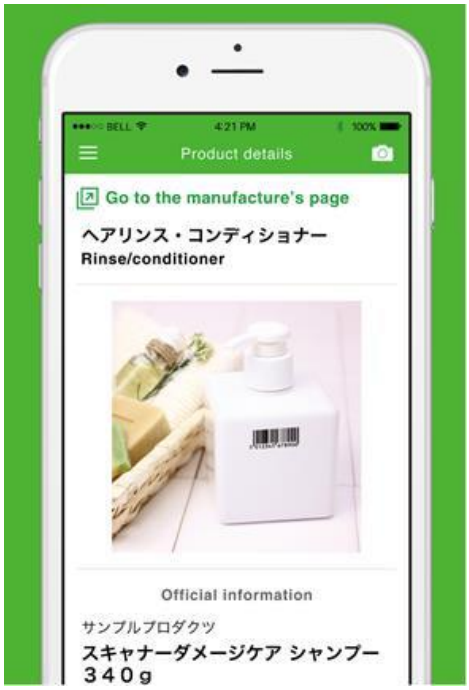
The Council for the Collaboration between the Manufacturing, Distribution and Sales Sectors has developed a data pool to accumulate translated product information and a smartphone application to indicate product information in multiple languages using this data pool with the aim of offering an environment where foreign visitors and residents can enjoy shopping in Japan. The Council aims to register information on products of 500 or more companies by the 2020 Tokyo Olympic and Paralympic Games. As of March 28, a total of 53 enterprises participate in the Council.
The Council was established in May 2011 for the purpose of eliminating inefficient operations from the entire supply chain and establishing a system which creates new value through the collaboration of the manufacturing, intermediate distribution/wholesale, and retail sectors. In July 2016, some member enterprises voluntarily established the Multilingual Product Information Feasibility Study Project in order to respond to increasing demand of foreign visitors.
The developed multilingual product information data pool is a repository to accumulate product information in multiple languages. At present, approximately 176,000 pieces of text information and 135,000 pieces of image information on products have been accumulated through the use of existing databases of respective industries and with cooperation of Council member enterprises.

The Council has also developed a smartphone application for multilingualization, using this data pool. Through the use of this application, a product category is indicated in multiple languages (in English, simplified Chinese, traditional Chinese, and Korean) when a user scans the barcode of a product with his/her smartphone. A user who needs more detailed information can access the linked manufacturing company's page which will introduce the relevant product information in multiple languages.
It is understood necessary to further promote multilingualization of product information and enhance the data pool in order to develop a better environment for foreign visitors to enjoy shopping in Japan without worry. It is expected that the data pool will be further enhanced and widely utilized in various services, not limited to the developed application for multilingualization.

How to operate



First, activate the camera using the application and read the barcode.



Then, the relevant product information is indicated in multiple languages.
http://www.meti.go.jp/english/press/2017/0328_003.html

Promoting Robot Use through Navigation Website

The Ministry of Economy, Trade and Industry (METI) and the Japan Robot Association (JARA) compiled reference information on robot utilization and made them available through a variety of media, e.g., a portal website, brochure and video clips.

METI and JARA collected a variety of information on robot utilization and published it on this portal website (http://robo-navi.com/). It provides a variety of features, e.g., video clips explaining the on-site operation of robots; interviews with businesses that have introduced robots in their activities; and, a search system for retrieving robotics system integration businesses that offer proposals to companies on introducing robot-based machine systems.

They also published a Q&A-style brochure describing possible question businesses may have in introducing robots for the first time. This brochure explains the benefits of introducing robots, expected cost of introduction, steps for establishing robotic systems and other tips.

http://www.meti.go.jp/english/press/2017/0329_003.html

Registration of Qualified Information Security Specialists Begins

The Ministry of Economy, Trade and Industry (METI) announced on 3 April that a total of 4,172 people were approved as the first Registered Information Security Specialists (RISS). The RISS scheme was introduced in October 2016 as a new national qualification for developing human resources specialized in the cyber security field. RISS are expected to contribute in the development of secure information systems and give effective advice in evaluating security measures.

Of the first RISS, 94.6% were male and remaining 5.4% were female. Average age of them were 40.5 years. Qualifying examination for RISS is implemented two times per year.

http://www.meti.go.jp/press/2017/04/20170403005/20170403005.html (Japanese language only)

http://www.ipa.go.jp/siensi/index.html (Japanese language only)