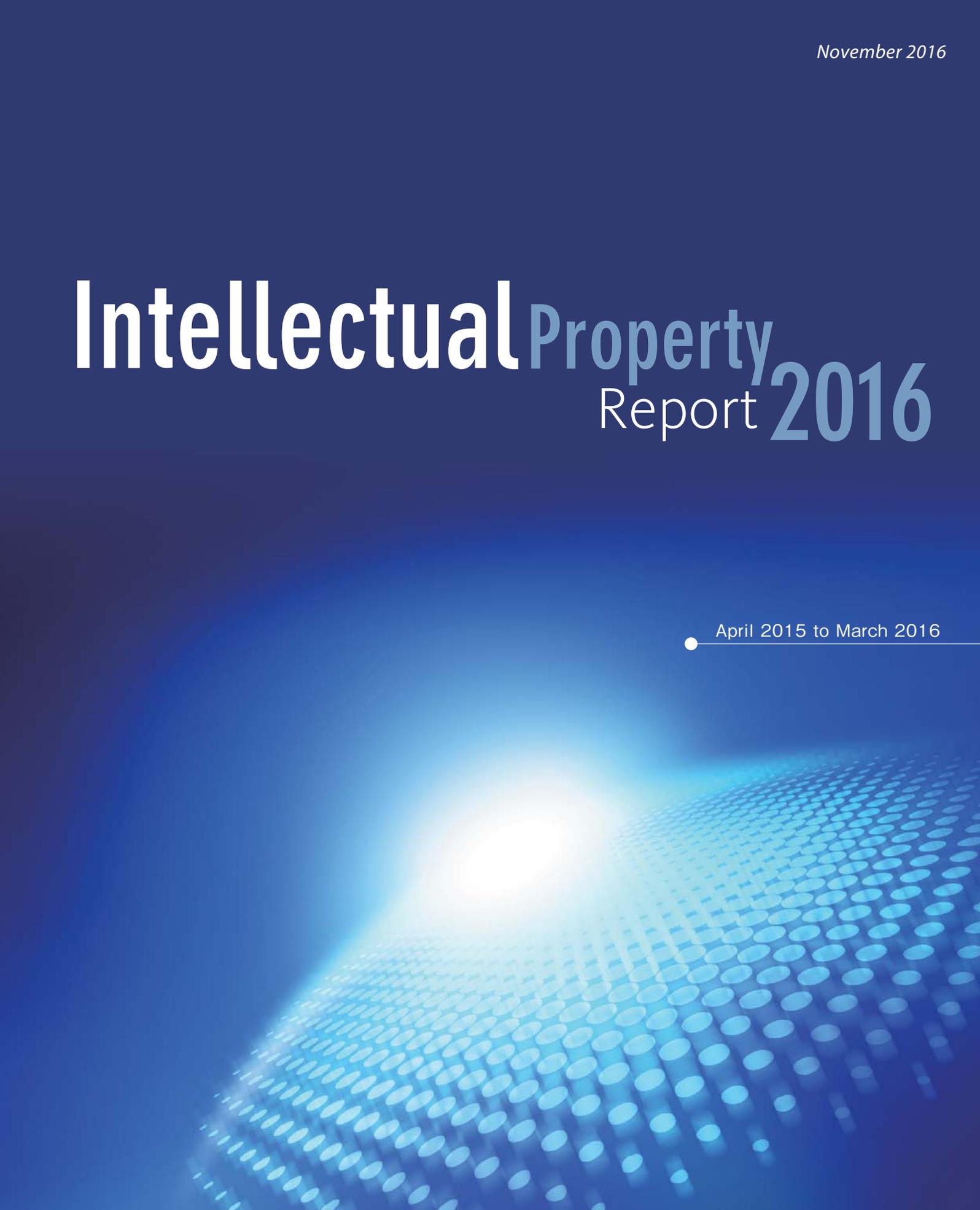


November 2016

# Intellectual Property Report 2016

● April 2015 to March 2016



**КАПЕКА**

## Intellectual Property Report 2016

(April 2015 to March 2016)

KANEKA Group has established the "Declaration of Kaneka United for the future"<sup>\*1</sup>, our long-term management vision, and is working steadily toward the realization of ¥1 trillion in total sales and a 70% overseas sales ratio. In our medium-term management plan for the 2016 to 2018 fiscal period, we have identified R&D and globalization as key drivers of growth, and intend to accelerate the rearrangement of our portfolio to reflect this.

Intellectual property is key to the realization of these philosophies and objectives, and the KANEKA Group is working to implement intellectual property strategies that are unified with business and R&D strategies, while advancing the strategic, global creation, protection, and use of intellectual property through portfolio management.

The Intellectual Property Report 2016 will outline the KANEKA Group's activities regarding intellectual property throughout fiscal 2015.

### 1. Policies regarding Intellectual Property

KANEKA upholds the global-scale reinforcement of intellectual property conducive to new business, as well as intellectual property that protects existing business, as a key policy, and we work to acquire the necessary rights in the necessary countries through watertight patents that allow us to exercise these rights both domestically and overseas.

Moreover, we respect the intellectual property rights of other companies and, to avoid disputes, are sure to conduct patent searches and secure patent clearance whenever a new theme is proposed, business commercialized, or specification revised.

### 2. Contribution to Business

#### (1) Global IP Activities

To strengthen our competitiveness in global markets, we are working to increase the number of foreign patents we hold, primarily in the United States, Europe, and China. In fiscal 2015 we established a global patent incentive program that aims to strengthen our overseas patent portfolio by offering rewards when a patent is registered overseas. The program builds on our existing domestic incentive program, which confers rewards when a patent is applied for and registered in Japan.

Moreover, in fiscal 2015 we placed an intellectual property specialist at our operating headquarters in Asia, where we have built a framework with which to swiftly address on-site issues related to intellectual property. This marks the second placement of an intellectual property specialist at a regional operating headquarters since the placement of a specialist at our operating headquarters for the Americas in fiscal 2013.

#### (2) Contribution to Existing Business

KANEKA currently offers a highly-specialized product range<sup>\*2</sup>, which corresponds to seven business segments: Chemicals, Functional Plastics, Expandable Plastics and Products, Foodstuffs Products, Life Science Products, Electronic Products, and Synthetic Fibers and Others.

In fiscal 2015, we newly acquired a large number of patents both domestically and overseas, including patents to secure the competitiveness of our exclusive liquid resin products; patents to fend off rising new competition regarding the constituents and application of our polyimide films; and patents relating to our graphite sheets, which eliminate problems related to heat diffusion (cooling) encountered by telecommunications equipment.

Furthermore, despite third-party objections regarding three patents held by KANEKA in Europe relating to our chemical production methods and liquid resin products, all objections were rejected and our patents upheld.

#### (3) Contribution to New Business

To tackle the various social and environmental issues faced by the seven segments outlined above, KANEKA has defined the Environment and Energy, Information and Communications, Health Care, and Food Production Support as its four important strategic domains and is working toward the creation of new business and business models to reflect this.

\*1 Web Page detailing KANEKA's "Declaration of Kaneka United for the future":

<http://www.kaneka.co.jp/kaneka-e/corporate/message/>

\*2 Web page detailing KANEKA's product range: <http://www.kaneka.co.jp/kaneka-e/branch/>

During fiscal 2015, we registered major patents in Japan including those relating to a heat resistant light-stable transparent resin, which is synthesized using our proprietary molecular structure control techniques and has properties that make it suitable for use in various optical applications; protein-based medication for animals, which is effective in the treatment of renal failure and renal anaemia in cats; a DNA chromatography chip, which makes it possible to visually detect the presence of target genes quickly; and a hip-protector, which prevents femoral neck fractures that can occur due to falls. Further, in the United States we registered a patent relating to a composition for a high performance fertilizer to boost crop yields, the ability of which to become a solid makes it easier to handle.

Organic EL (OEL) lighting panels represent one aspect of the patent portfolio we are working to build within our important strategic domains. OEL lighting panels are lighting panels that use OEL elements as a light source. OEL elements comprise an organic layer sandwiched between an anode and a cathode, and emit light in response to an electric current. OEL lighting panels feature beneficial characteristics such as the soft light they give off due to flat plane emission, they are thin and light, highly efficient and produce little heat as a by-product of light emission, and they last a long time.

KANEKA is collaborating with external lighting designers and, by leveraging the benefits of OEL lighting panels, aspires to create “value-added lighting” that differs from conventional LED lighting, while working to boost recognition of the Company in the global lighting markets as “OEL KANEKA” through participation in exhibitions across Japan, the United States, and Europe. “Masterpieces of Kosan-ji Temple: the complete scrolls of Chōjū-giga, Frolicking Animals,” a special exhibition held at the Tokyo National Museum between April 28 and June 7, 2015 (one of the most important art events of the year), used KANEKA OEL lighting panels to light all four of the nationally treasured Chōjū-jinbutsu-giga scrolls.

Since we earnestly embarked on the research and development of OEL lighting panels in 2009, we have been working to establish new technology by leveraging the thin film technologies that we had previously nurtured through the development of products such as our thin-film silicon solar cells, polyimide films for flexible printed circuit boards, and optical films for liquid crystal displays. The result of this R&D is that we have built a diverse patent portfolio, having applied for a total of 190 patents (49 of which have been registered) relating to light fixtures, elements, film production, seals, and organic materials.

The main patents registered include those relating to light fixtures that leverage the beneficial characteristics of OEL lighting panels, including a building-integrated variant with one-sided support panel (Japanese Patent No. 5919023) and a wireless power supply variant (US Patent No. 9386656); patents relating to the lighting of large areas through the arrangement of multiple panels, including a longitudinal-transverse connectable variant (US Patent No. 9307585) and another relating to the suppression of differences in light emission between multiple OEL lighting panels (Japanese Patent No. 5889932); and patents relating to enlargement and mass production, and ensuring high levels of reliability, including those relating to integration technology (Japanese Patent No. 5575133), an anode layer auxiliary electrode (Japanese Patent No. 5677117), patterning (Japanese Patent No. 5941414), and a high-reliability solid thin film sealing (Japanese Patent No. 5798886).

Going forward, we intend to maintain and strengthen our patent portfolio by promptly submitting applications to protect the results of our R&D while gradually securing rights associated with existing applications.



KANEKA OEL Lighting Panels



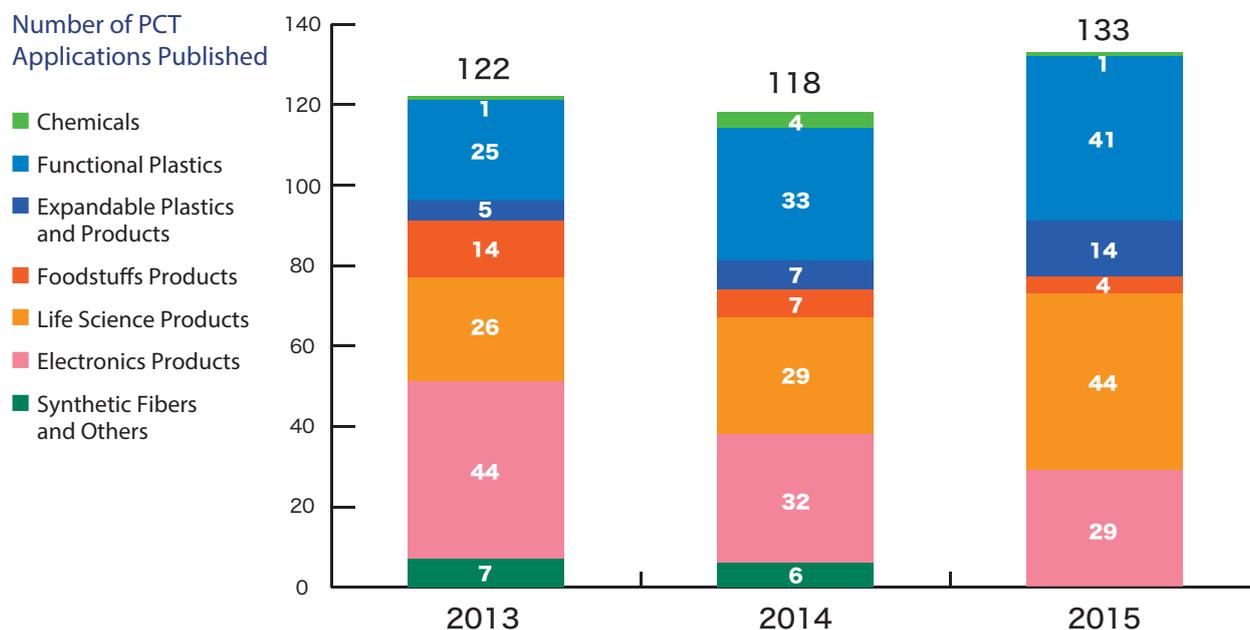
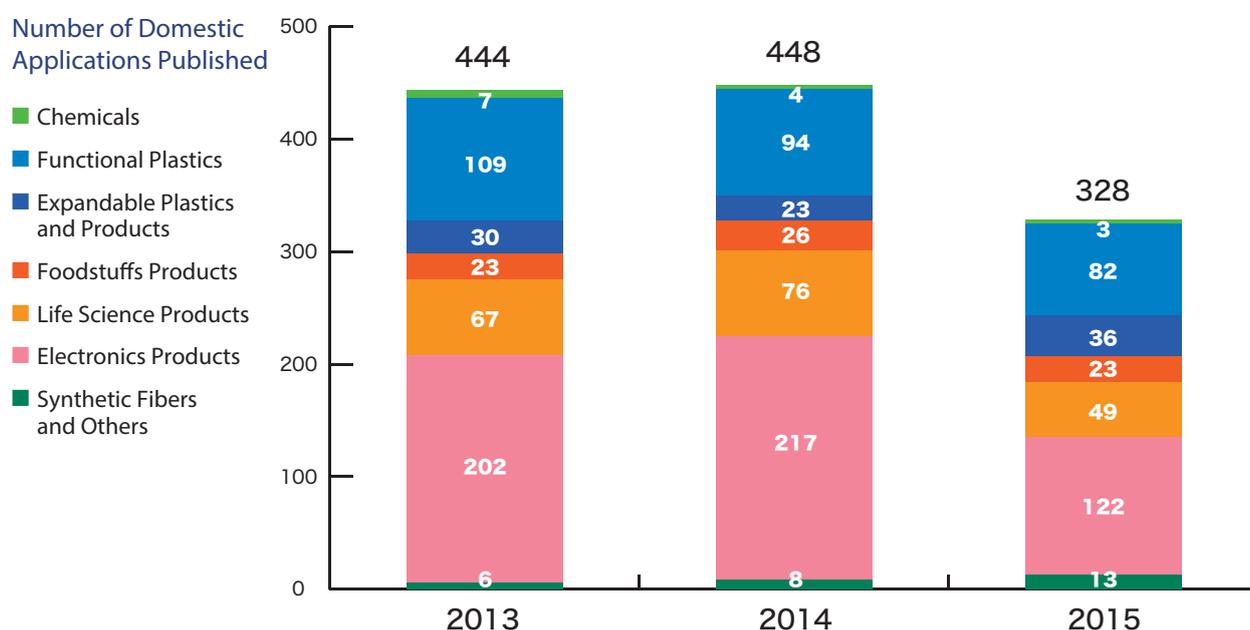
Application of OEL lighting panels to décor

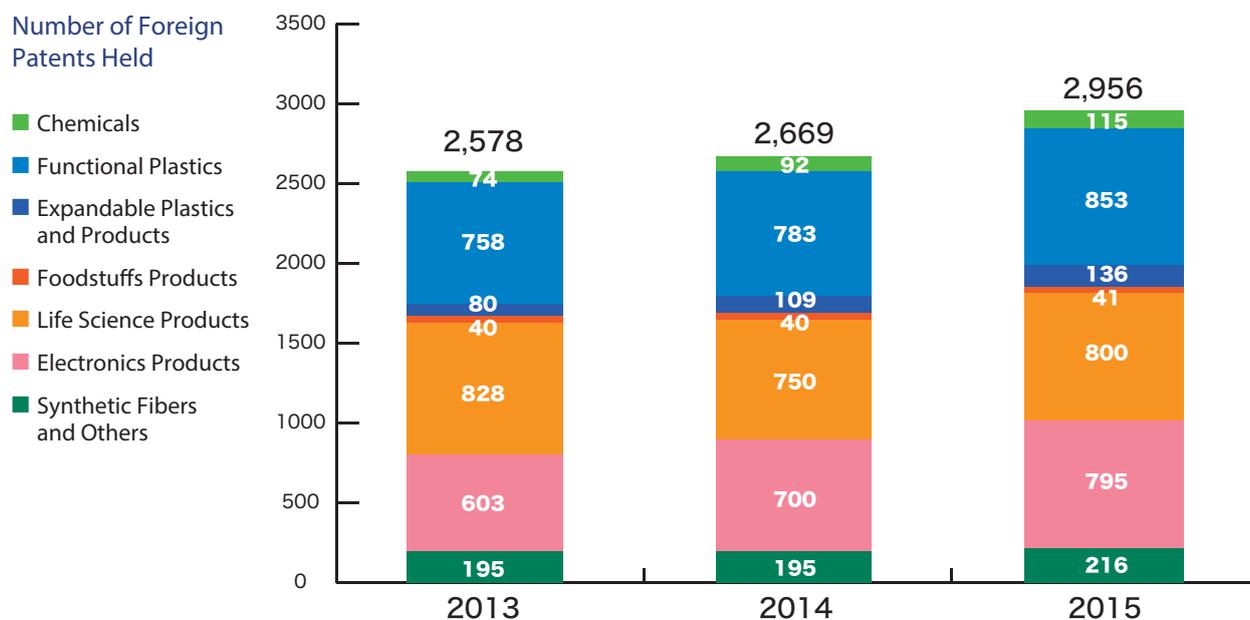
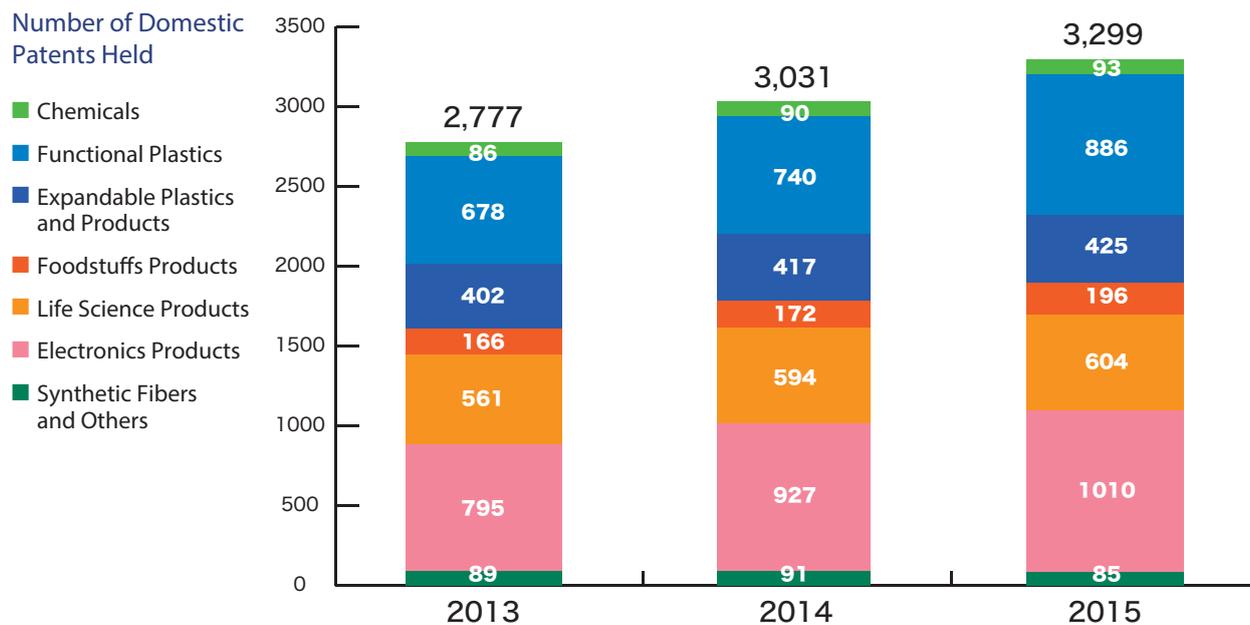
## 3. Number of Patent Applications / Number of Patents Held

The number of domestic patent applications published for the KANEKA Group in fiscal 2015 decreased from the number published in fiscal 2014 to 328. This is a reflection of a decrease in the number of applications put forward between fiscal 2012-2013 as a result of our efforts since 2011 to tighten prior art investigations and boost the ratio of patents applied for that are subsequently registered. On the other hand, the number of published PCT applications, which are key to strengthening our patent portfolio overseas, increased from 118 in fiscal 2014 to 133 in fiscal 2015.

As a result of our efforts to boost the ratio of domestic patents registered, this ratio increased from approximately 48% in fiscal 2010, to approximately 71% in fiscal 2015. With this, the number of patents held by KANEKA both domestically and overseas is gradually increasing and, as of the end of fiscal 2015, the numbers of domestic and foreign patents held stood at 3,299 and 2,956 respectively. The increase in the number of patents held overseas has been particularly significant.

With regards to the number of patents held by segment, patents relating to Electronic Products, Functional Plastics, and Life Science Products occupy the highest positions, with approximately 75% of patents held domestically and approximately 83% of patents held overseas attributable to these three segments.





## 4. Lawsuits Concerning Intellectual Property

As of the end of July 2016, no intellectual property lawsuits with the potential to significantly affect operations have been filed against the KANEKA Group. On the other hand, we have filed the following patent infringement lawsuits in response to the suspected infringement of patents held by KANEKA.

Regarding a patent infringement lawsuit based on US patent rights held by KANEKA concerning the production method for oxidized Coenzyme Q10 (brought before the United States District Court, the Central District of California on March 22, 2011), an appeal was made in April 2014 against a District Court summary judgment dismissing KANEKA's infringement claims. On June 10, 2015, the judgement of the court upon the appeal reversed the original judgment and remanded the case back to the District Court, where we are currently fighting the case.

In another case concerning the same patent, a separate party filed a declaratory judgment action claiming non-infringement with the United States District Court, Southern District of Texas, in response to which KANEKA asserted patent infringement as a counterclaim. KANEKA's claims were, however, dismissed by a summary judgment on November 30, 2015. Dissatisfied with this ruling, KANEKA submitted an appeal to the Court of Appeals for the Federal Circuit (CAFC) on December 29, 2015; the appeal is currently still in progress.

The patent infringement case filed by KANEKA in the United States District Court, Eastern District of Texas on July 26, 2010 regarding our U.S. patents concerning polyimide film products and relevant manufacturing method, which is still pending, is now under the jurisdiction of the United States District Court, Central District of California. Following a jury trial in November 2015, KANEKA obtained a jury verdict in its favor on the 19th day of the same month.

The jury found that the defendants had directly or indirectly infringed KANEKA's valid patents, leading to approximately \$13.5 million in lost earnings.

On April 7, 2016, regarding a case in which the defendants concerned appealed against a decision made in KANEKA's favor regarding infringement of our U.S. patents concerning a flame retardant polyester fiber for artificial hair, the United States Court of Appeals for the Federal Circuit (CAFC) affirmed the judgment of the United States District Court, Northern District of Texas (NDTX) (held on November 5, 2013), and awarded KANEKA approximately \$6 million in total damages for infringement of our valid patents. After the decision of CAFC, the defendants-appellants did not file either a petition for rehearing in CAFC or a petition for a writ of certiorari in the Supreme Court. Therefore, NDTX judgment has become final. Further, on March 18, 2015, NDTX also granted an injunction enjoining the defendants from infringing our patents.

On January 19, 2016, we filed a patent infringement lawsuit with the United States District Court, Eastern District of New York based on US patent rights held by KANEKA concerning reduced Coenzyme Q10, against a retailer that had allegedly been selling the aforementioned product in the US without KANEKA's permission. The dispute was quickly reconciled, however, and the case was dismissed on April 21, 2016.

## **Forward-Looking Statements**

Discussion in this report pertaining to Company or Group performance forecasts, planning, policies, management strategies, determination of facts, and other items relating to the future save previously realized facts, represent predictions, assumptions, and plans etc. based on the information currently available to us. Moreover, KANEKA uses certain assumptions, as separate from previously realized facts, in making forecasts. We cannot guarantee these assumptions to be indisputably accurate, or that they will necessarily be realized in the future. Factors influencing these assumptions include trends in technology and demand, competition, the economic environment, and fluctuations in the exchange rates.

## **Disclosure Policy**

The Company adheres strictly to a policy of non-disclosure regarding matters of major uncertainty and details pertaining to important business strategies. Accordingly, this report discloses no such matters.

The logo for KANEKA Corporation, featuring the word "KANEKA" in a bold, blue, sans-serif font. The letters are stylized with a slight shadow effect, giving it a three-dimensional appearance.

**KANEKA Corporation**

### ■ **Osaka Head Office** ■

2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, Japan (Nakanoshima Festival Tower)

Phone:+81-6-6226-5050 Fax:+81-6-6226-5037

### ■ **Tokyo Head Office** ■

1-23-32, Akasaka, Minato-ku, Tokyo 107-6025, Japan (ARK Mori Building)

Phone:+81-3-5574-8000 Fax:+81-3-5574-8121