
The Importance of IP in Innovation, Promotion and its Exploitation; Japan's Case

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1. History of Intellectual Property (IP) System and Innovations in Japan

2. Cases of Japanese Companies' Innovation

3. Japanese Government's Policies for Promoting Innovations

Establishment of the IPR System in Japan

- 1884 Enactment of **Trademark Act**
- 1885 Enactment of **Patent Act** and establishment of the **Japan Patent Office (JPO)**
- 1889 Enactment of **Design Act**



Original JPO Bldg.
(Established in 1885)



Korekiyo Takahashi
(First JPO Commissioner,
who became a prime
minister later)

Modern industrialization

- 1896 Beginning of **Foreign Applications**
- 1899 Accession to **Paris Convention**
- 1905 Enactment of **Utility Model Law**



Panels of ten great
Japanese inventors
(100th Anniversary
Project)

Period of Economic Growth

- 1959** Revision of **IP Laws (Patent, Utility Model, Trademark, Design)**
- 1975** Accession to **World Intellectual Property Organization (WIPO)**
- 1978** Accession to **Patent Cooperation Treaty (PCT)**
- 1990** Introduction of **Electronic applications**

Period of Economic Globalization

- 2000** Accession to **Madrid Protocol**
- 2002** Enactment of **Intellectual Property Basic Act**
- 2005** Establishment of **IP High Court**
- 2006** Start of **Patent Prosecution Highway (PPH)**
- 2010** **125th Anniversary of IPR system in Japan**

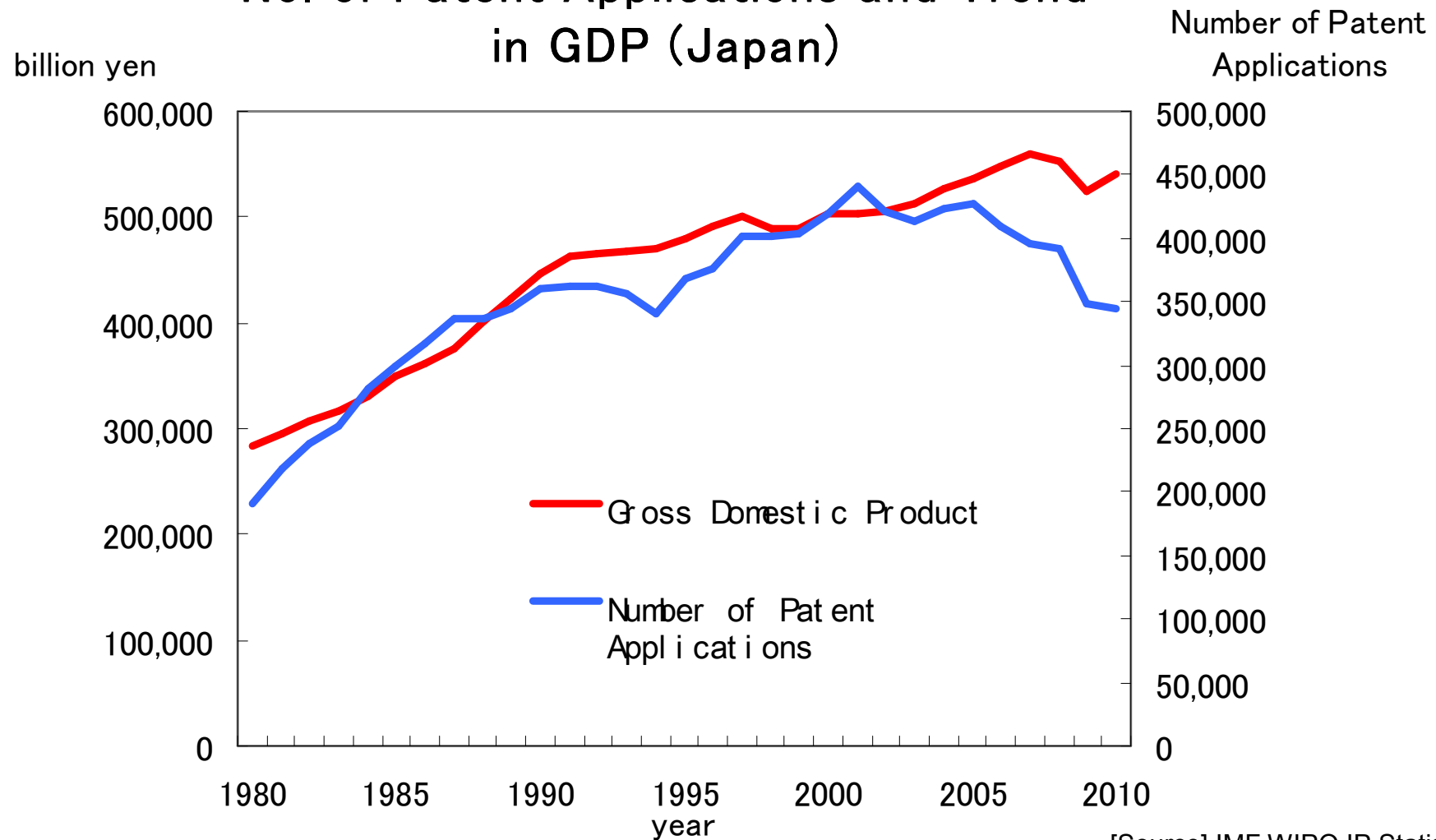


Present JPO Bldg.
(completed in 1989)

Number of Patent Applications and Trend in GDP

■ Innovation has been accelerating according to economic growth, followed by the increasing number of patent applications.

No. of Patent Applications and Trend in GDP (Japan)

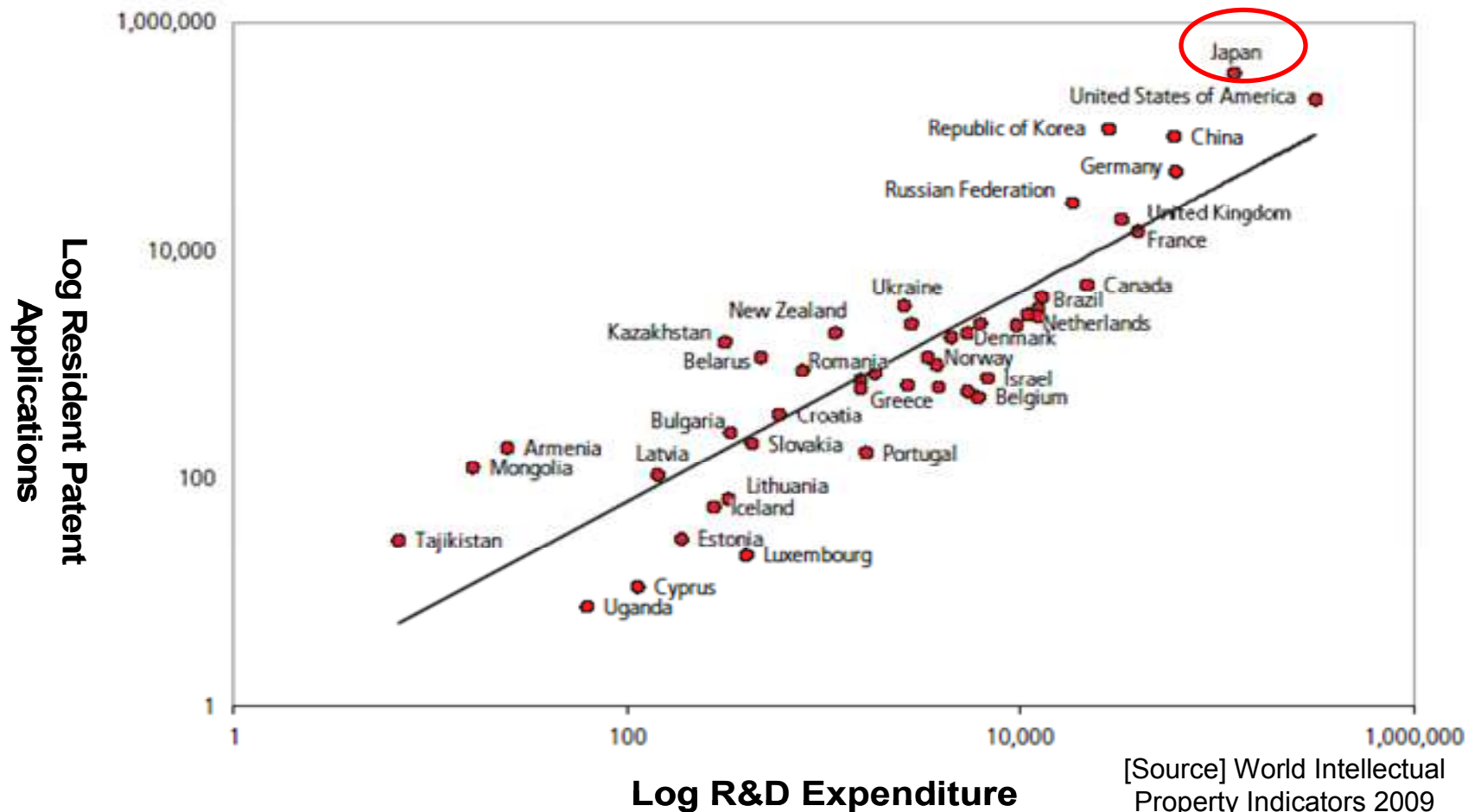


[Source] IMF, WIPO IP Statistics

Number of Patent Applications and R&D Expenditure

- In Japan, compared to other foreign countries, a larger amount of money has been spent on R&D activities, all while a significant number of patent applications have been filed.

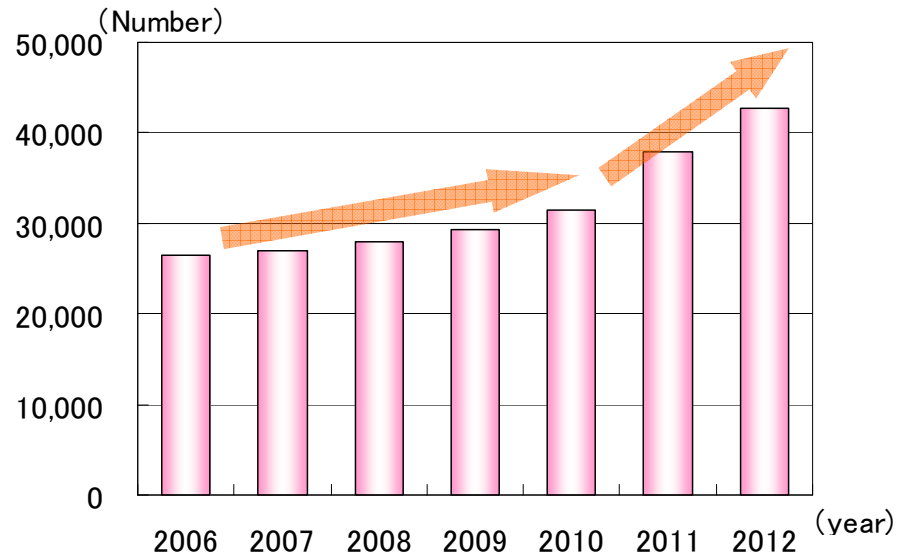
Resident Patent Applications per R&D Expenditure, 2003-2007



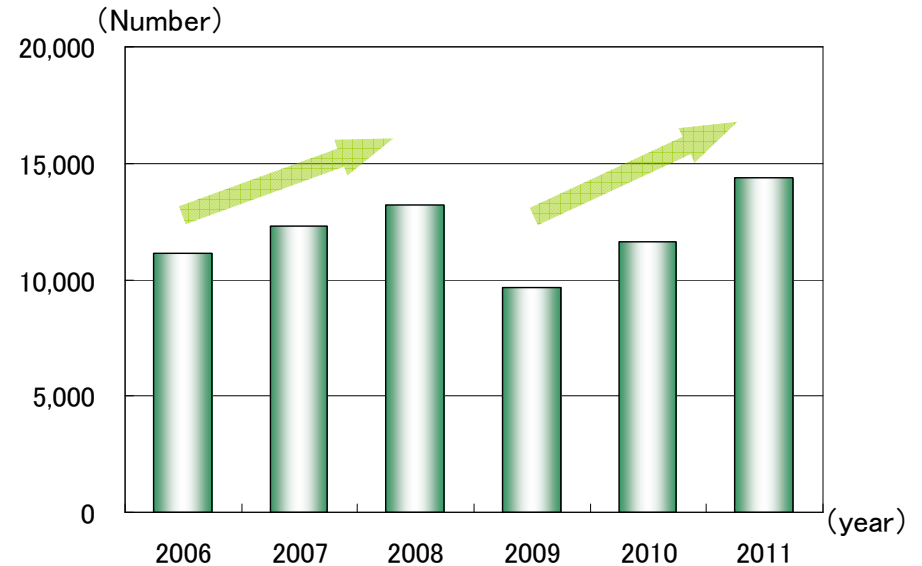
[Source] World Intellectual Property Indicators 2009

Changes in the Number of Overseas Applications Filed by Japanese Companies

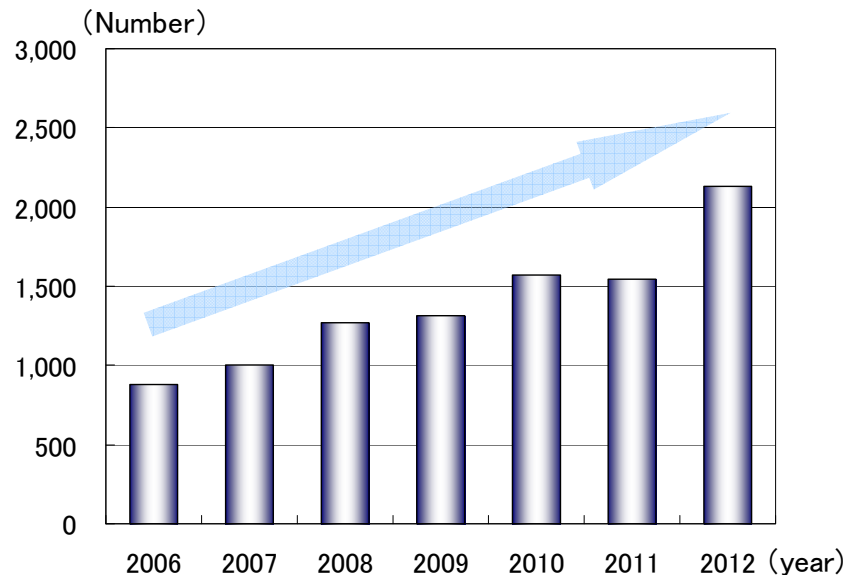
Number of PCT Applications from Japan



Number of Design Applications Filed in Foreign Countries by Japanese Applicants



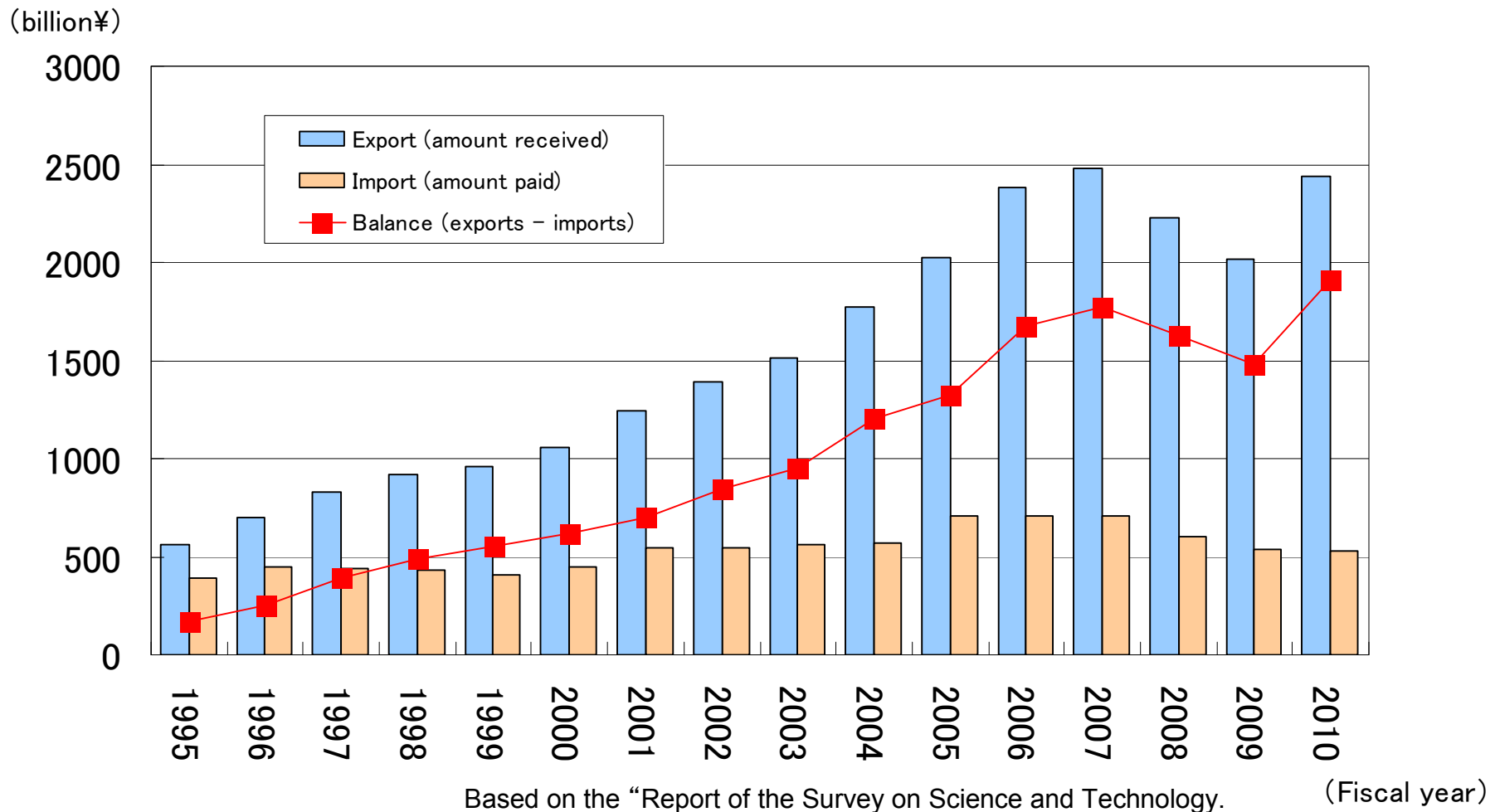
Number of Trademark Applications for International Registration from Japan



With corporate activities becoming more globalized, Japanese companies have increased the number of applications that they filed in foreign countries for patents, designs, and trademarks.

[Source] Patents and trademarks: JPO statistics Design: WIPO IP Statistics

■ Based on the technological precedence of Japanese companies, Japan's technological trade surplus has grown to 2 trillion yen per year.



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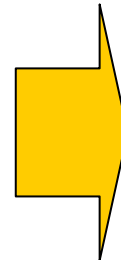
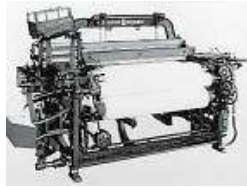
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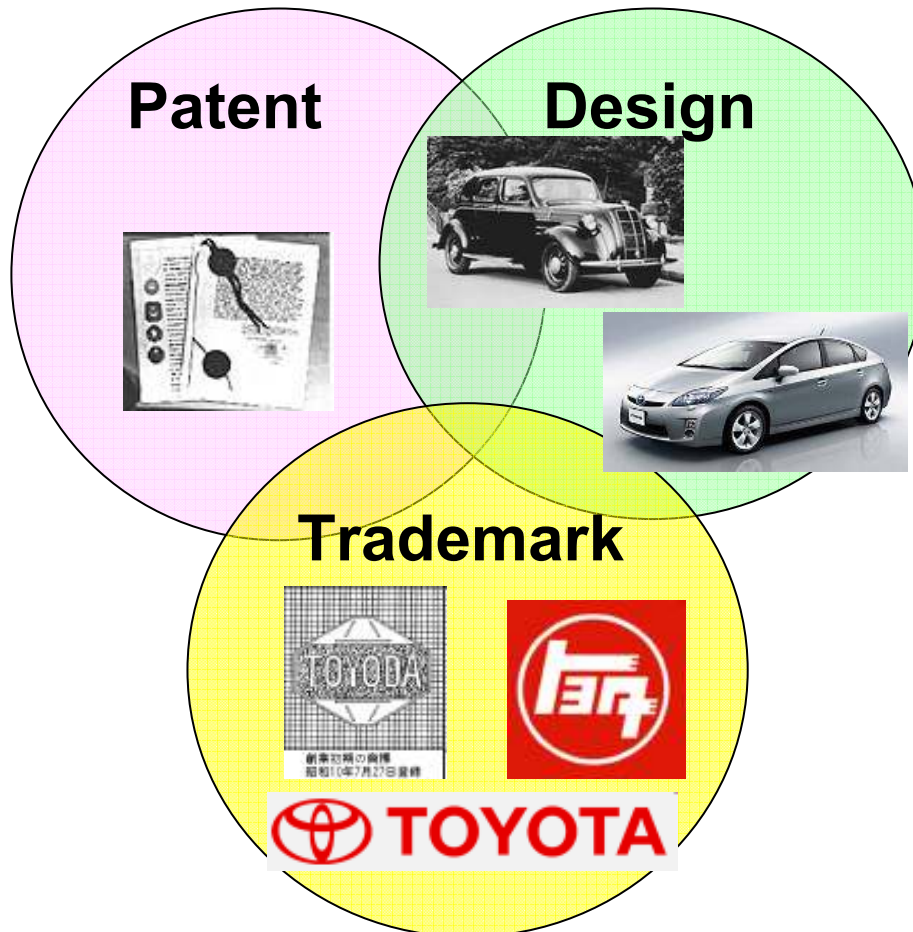
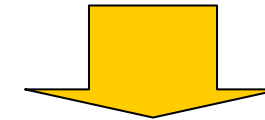
Toyota Case(Utilization of Patent,Design, TM)

Company's Roots

in 1924



Entry into a New Business Area



Today



Capital: \$5 billion,
Annual sales: \$240 billion

Panasonic Case (Creation and Protection)

Company's Roots



Workplace

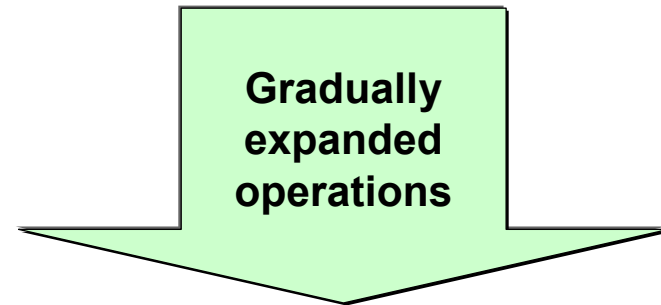


in 1918

The first product



The company started by making minor improvements to wiring equipment ...



Today

Panasonic
ideas for life

Capital: \$3 billion

Annual sales: \$110 billion

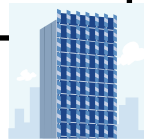


Source: <http://panasonic.net/>

Contributions to Africa through Japanese Innovations

SUMITOMO CHEMICAL

- Synthetic chemical company
- R&D with the effective use of IP such as patents.



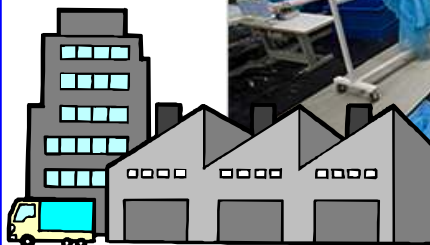
➤ **Olyset[®] Net** (Registered Trademark)



The company developed mosquito nets containing insecticides in their threads.

(The repellent lasts more than 5 years)
→ WHO recommends using them.

➤ Local production in Tanzania



- Granted manufacturing technology without any charge to local companies

- Set up a joint venture with local companies

→ providing under the Trademark of “**Olyset[®] Net**” in the world, focused on Africa.

✓ Approx. 29 million are produced per year

✓ Approx. 7,000 jobs were created (as of August 2010)

- Innovations are not always created based on advanced technologies.

Some were based on excellent ideas and concepts developed by SMEs and individuals.

【Packing Container】

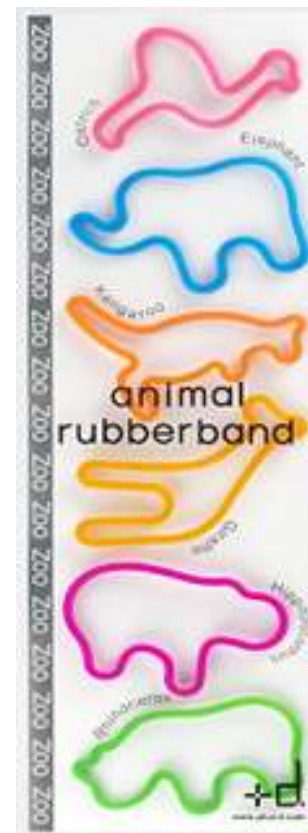
Before being opened,
it protects vegetables.



After being opens, it serves
as a plate.

- Patents were filed and protected overseas
- Company sought business partners overseas

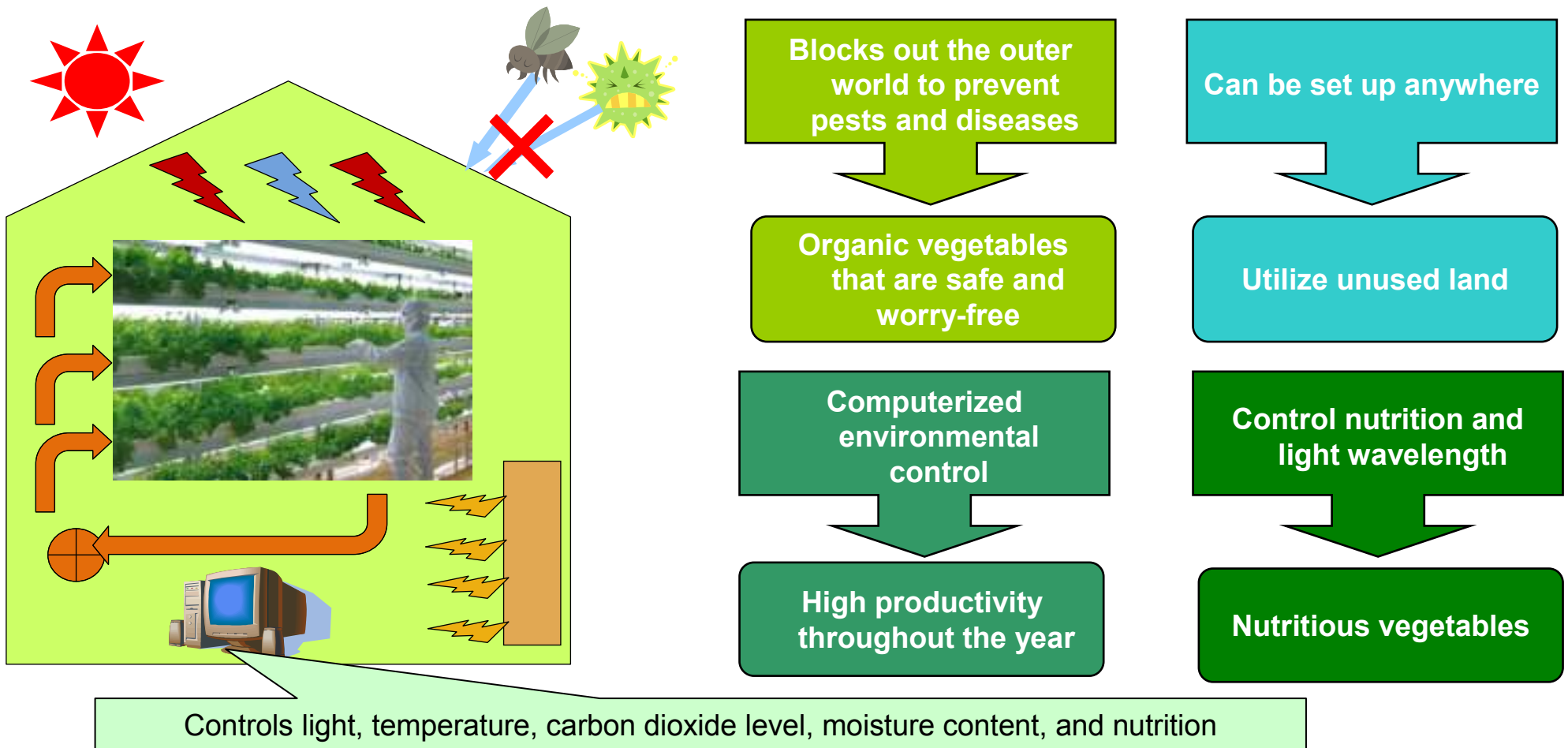
【Animal rubber band】



- Outstanding designs
- Obtained funding based on the registered design right

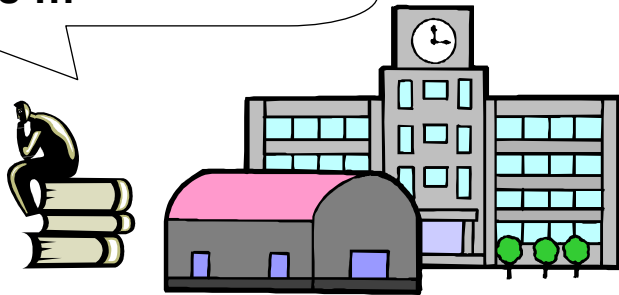
Innovation from Agriculture

- “Plant Factory” as a new style of agriculture.
- Computerized control of environmental items including light, water, temperature, and humidity.
- Stable and efficient production of delicious, safe and worry-free, and nutritious vegetables throughout the year.
- Can be set up in sites other than farmlands since it can be set up anywhere.



Ajinomoto Case (Industry-University Cooperation)

We don't know how to apply our research results ...




Fill the gaps in each other's weak areas




We lack R&D capabilities ...

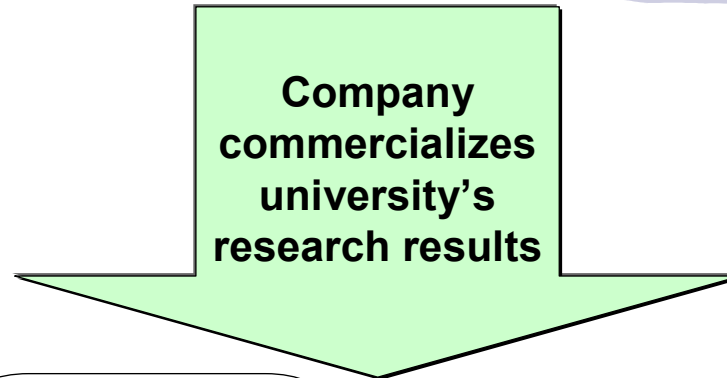


✓ **“Umami” seasoning**
by Prof. Kikunae Ikeda
(Tokyo University)

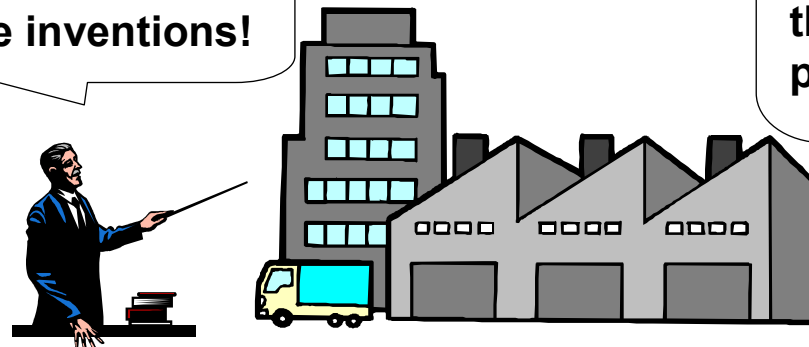


→ 

in 1907



Commercialize inventions!



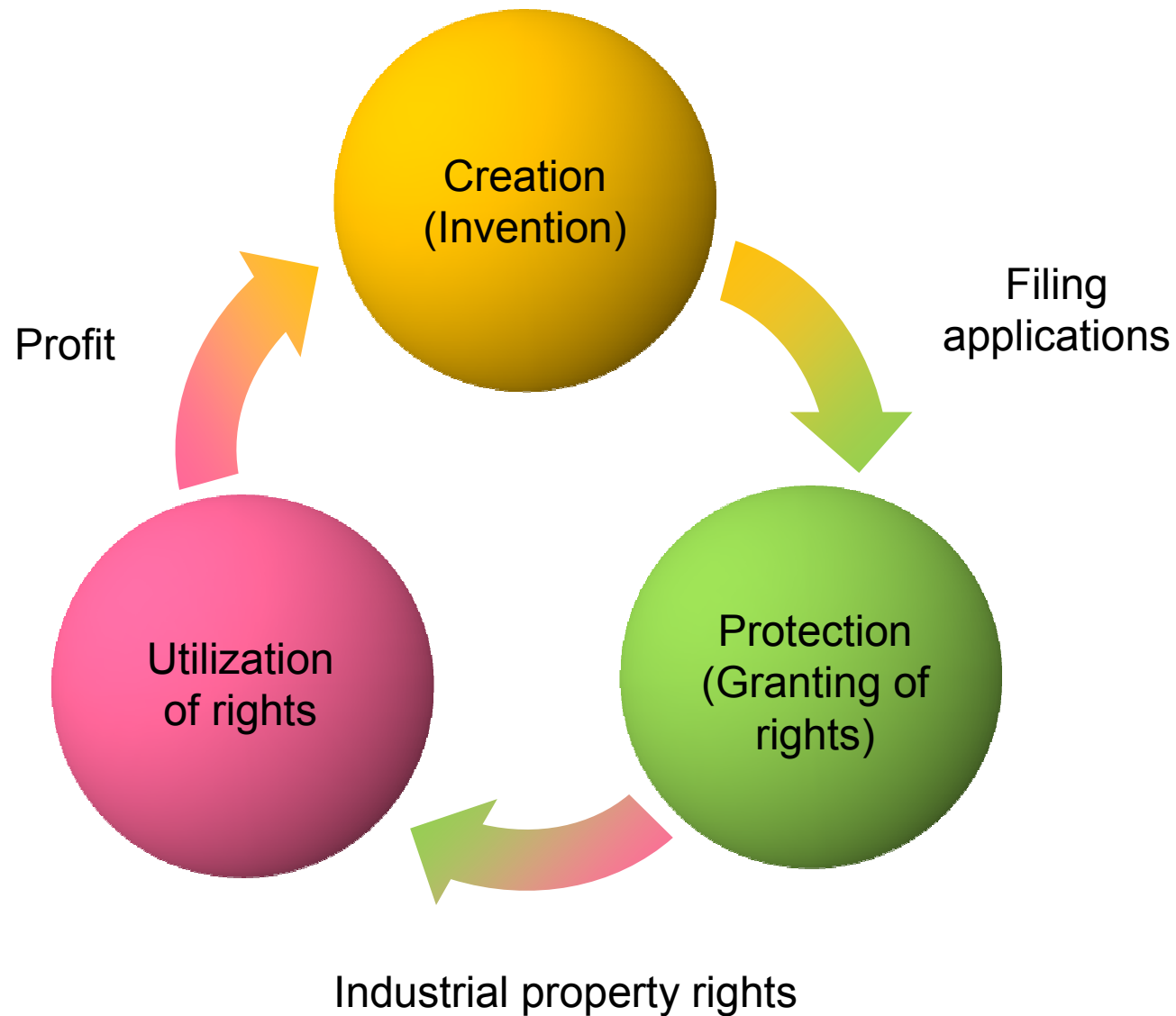
Expand our business using the new product!



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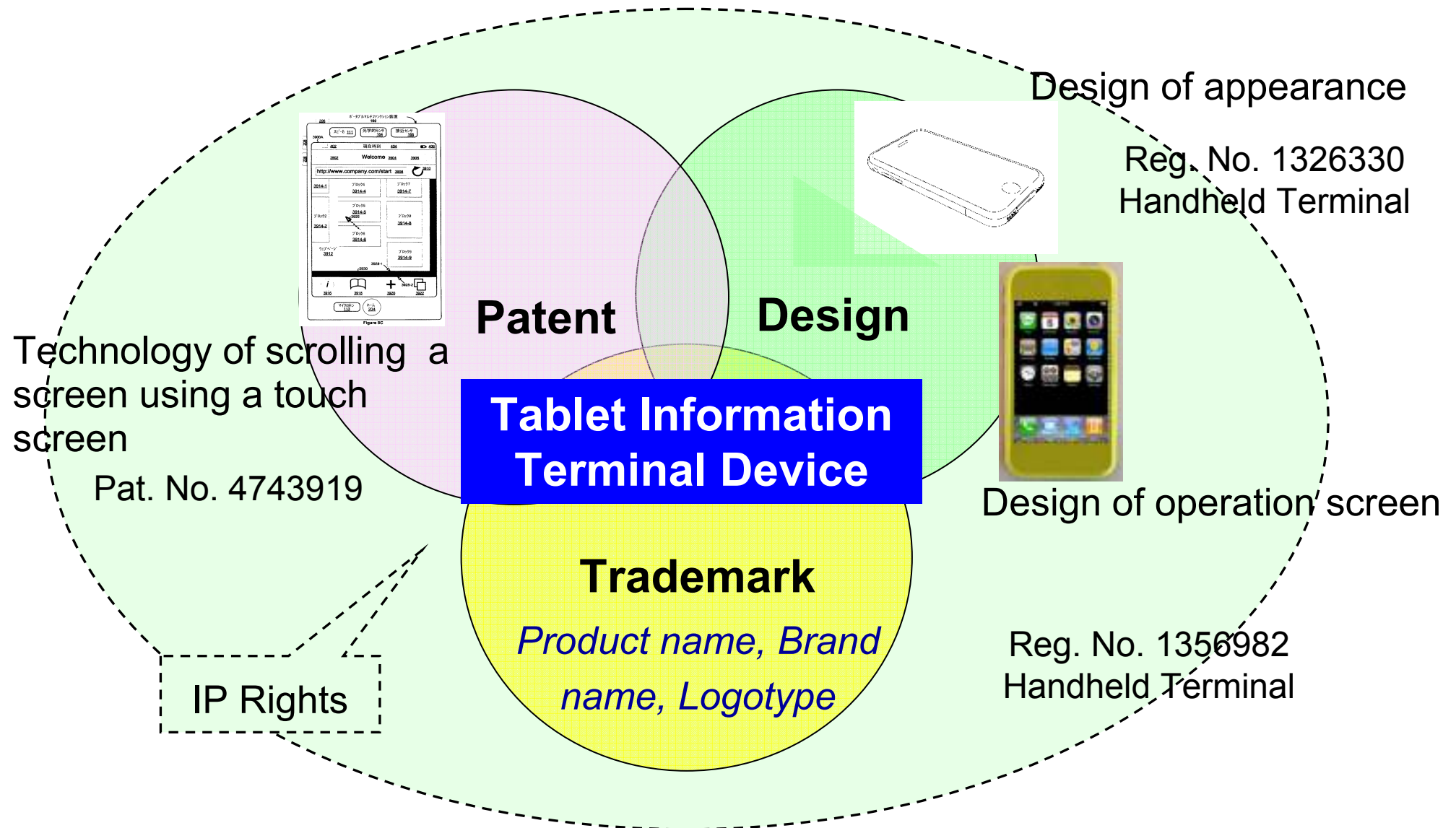
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The ultimate goal is to make IP cycle more robust and more dynamic.

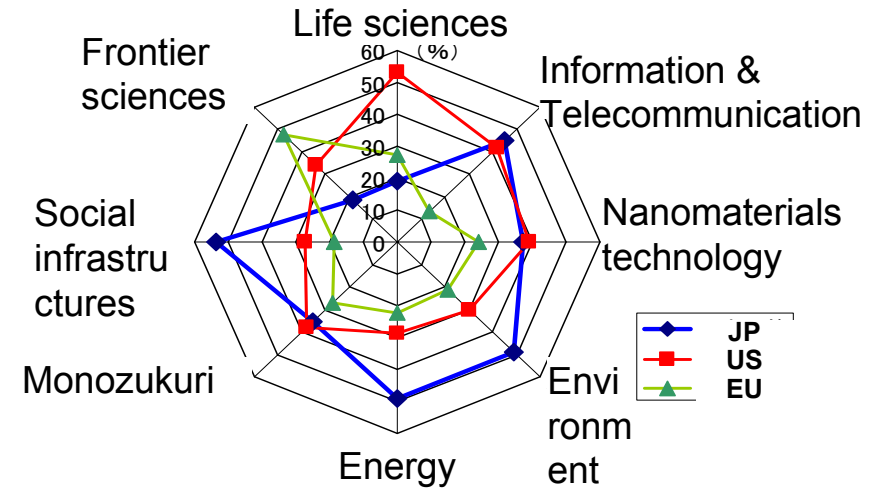
Image of Compound Protection of IP Rights



- Japanese Government has designated important eight technological areas
- Research expenses / supports are intensively supplied.

➔ Promotion of innovations and patent filings of the results.

【Comparison between Japan/US/Europe Patent Applications Published in 2007】



【Environment/Energy】

Lithium-ion batteries



Batteries are applied to a car.

【Nanomaterials technology】

LED



Street light

LCD TV

【Life sciences】

iPS cells



Professor Yamanaka

- IP Strategy Headquarters formulate the “IP Strategic Program” every year. Government ministries and agencies implement measures based on the programs.
- The IP Strategic Program 2012 was formulated on May 29th, 2012.

IP Strategy Headquarters

IP Strategic Program

Headed by:

The Prime Minister

Headquarters members:

All the Ministers and

10 experts

JPO



Other Ministries



Companies



Universities

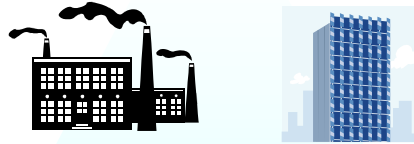


Intellectual Property Strategic Program 2012

1. Comprehensive IP Innovation Strategy
2. Comprehensive content strategies to boost Japan

Extracted from the Intellectual Property Strategic Program 2012

Industrial Development



**Promoting the creation,
protection and utilization of IPRs**

- ✓ Subsidies for Innovations
- ✓ Formulating IP strategies
- ✓ Facilitating collaboration between industry and academia

Establishing IP infrastructure

- ✓ Developing IP laws
- ✓ Environment for IPR enforcement
- ✓ Developing IP experts
- ✓ Raising awareness on the importance of IPRs

Support Activities by JPO



➤ WIPO Japan FIT for Africa & LDC

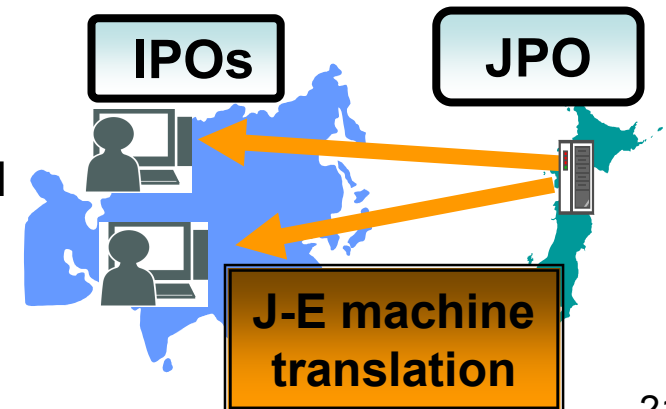
- ✓ Established in 2008
- ✓ **1.1 million CHF** voluntary contribution per annum
- ✓ Examples of Activities for **Africa**



- About 10 seminars in a year on various themes
- Fellowships for Masters Degree in Intellectual Property (MIP)
- Supports for IP Offices digitization and TISCs activities
- Invitation to training programs in Tokyo, Japan

➤ AIPN: Advanced Industrial Property Network

- ✓ Providing **JPO Examination Results in English via the Internet**
 - Reduces work load of foreign examiners
- ✓ **Free of Charge**
- ✓ The AIPN started on 12 October 2004, now it is used in 61 IPOs all over the world. (**14 African IPOs**)
- ✓ For registration: PA0868@jpo.go.jp



Thank you.