



# WINDS FROM JAPAN

The Licensing Executives Society Japan

## Topic presented at the 2010 LES Germany Meeting “R&D Cooperation between Industry and Universities in Japan”

By Yoshiaki YAHAGI\*

Some of the remarks summarized below were presented at the 2010 LES Germany Spring Meeting, held on March 25, 2010 in Koenigswinter Germany.

### 1. Recent Circumstances relating to IP

In these turbulent times of an ever changing social, economic, and political world, it will be widely acknowledged that, to meet the changing needs of customers, new technology is essential, and manufacturers of products taking advantage of new technology will flourish through innovation.

Further, licensing, collaboration, and cooperation between R&D facilities are essential for innovation. In this connection, R&D cooperation in Japan, especially between Universities and Industry, is discussed below.

Firstly, the present environment of global competition in industry and the academic world is reviewed. Secondly, approaches to improvement in competitiveness are discussed. The importance of collaboration to solve technological problems is also touched upon. Finally, an overview of R&D cooperation with universities is provided.

### 2. The present situation of global competition

In the manufacturing world, China has become the leading country in manufacturing as well as in export sales<sup>1)</sup>. On the other hand, when this is considered alongside research and development, it is apparent that countries strong in manufacturing are not necessarily leaders in innovation at present<sup>2)</sup>. However, this situation appears to have been

improving gradually from year to year recently. It can be pointed out that countries within the EU, especially Germany, show an increasing tendency to redress this imbalance, especially in comparison with other countries<sup>2)</sup>. It can be regarded that this increasing tendency to balance R&D with manufacturing corresponds closely to the potential to create new technology.

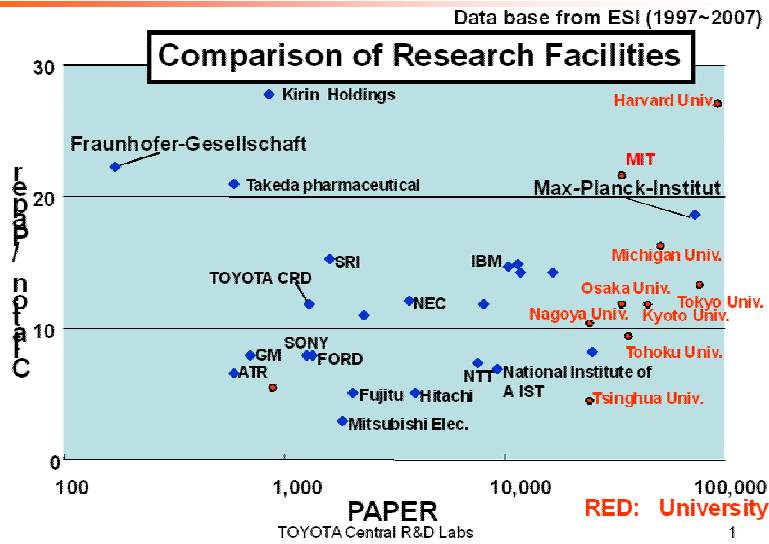
With regard to the relationship between research and manufacturing, though they do not necessarily show consistent correlation, in my personal view, an ability to create higher quality research papers closely corresponds to the potential to create high quality new technology. Therefore, China and India will catch up with the front runners sooner or later.

A citation index is shown in Figure 1. As the number of published papers increases, the citation of papers gradually increases. Large numbers of papers are published by university groups, including the Max-Planck Institute. It appears that publishing a large number of papers is essential to the development of academic networking.

On the other hand, it must also be presumed that, especially in the private sector of industry, publication of higher quality papers is ideal, as in the case of Fraunhofer-Gesellschaft, which, though publishing a small number of papers, has a high citation rate.

One of the purposes of collaboration with universities is to increase the possibility of solving technological problems, and industry anticipates a broad range of activities at universities.

Figure 1 RECENT “Research”- COMPETITIVENESS



3. How to improve competitiveness

To strengthen competitiveness through R&D collaboration, concretely, industries work together to complement each others’ weaknesses. This can be seen in the case of collaboration between battery and vehicle manufacturers, where electronics and chemical companies maintain a complex relationship with vehicle manufacturers<sup>3)</sup>.

Industry has certain criteria for requesting cooperation with universities. For industry, the key word is “Scarcity,” meaning that R&D is insufficient, and needs to be supplemented. Industry looks to Universities to fill this gap.

Then what is the issue? Generally, universities tend to overlook that advanced technology is unstoppable, and that when the seeds of advanced technology have begun to sprout, they are sure to continue to grow bigger and stronger. In the process, though, several barriers must be overcome.

It is to break down these barriers to achieve a final product that industry requires the cooperation of universities, as shown in Table 1. There are mainly three barriers to overcome, and the process can be regarded as a sort of survival game, or a “new Triathlon.” Surviving the game is analogous to Darwinian selection (Figure 2).

Table 1 R&D between Universities and Industry

What am I counting on U to do ?

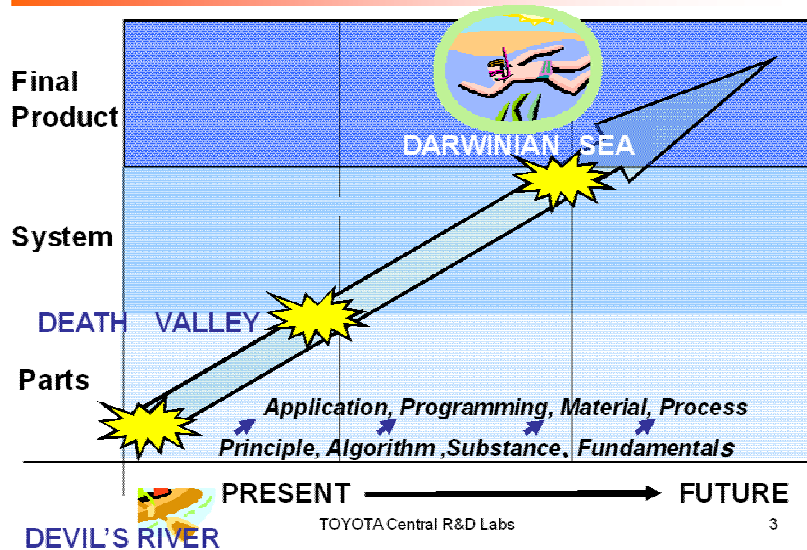
Criteria to request U

	EU	US	China	Japan
Survey				★
Techno-Evaluation				★
Production engineering etc.			★	
Practical Technology, Systems etc.		★		★
New Devices, materials etc.	★	★		★
New Principles, Substances etc.				

↓

Fill in Areas of Scarcity

Figure 2 HOW TO ACHIEVE BREAKTHROUGH? 



Good collaboration is indispensable for overcoming the barriers and creating a smooth R&D process for target products to be created. Here, a common target can be visualized; in other words, R&D divisions on both sides have the same goal.

Another important point to clarify here is good communication. "Face to face" conversation, though conventional and simple, is indispensable to mutual understanding. So, many researchers and engineers are sharing ideas, together with the joys of successes and the disappointments of failures, through good communication with a view to overcoming the same problems.

#### 4. Collaboration between University and Industry

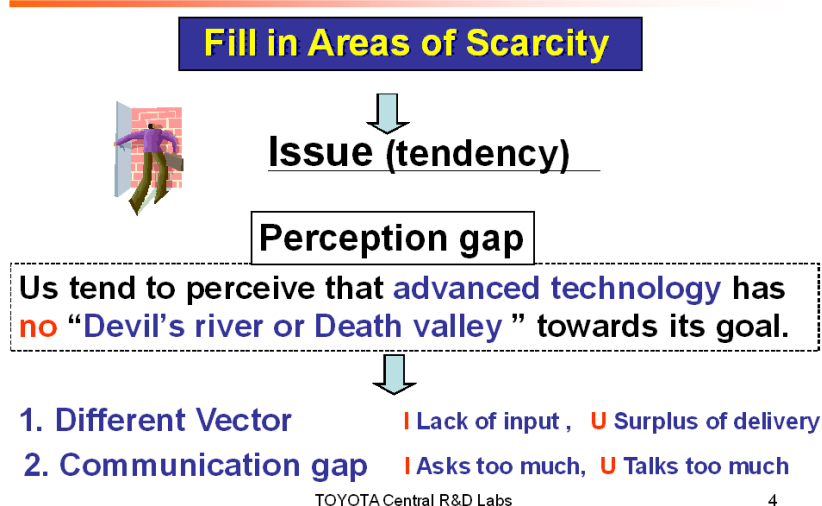
Here an example of collaborative research into a brain machine interface is shown<sup>4)</sup>. This was the first step toward realizing the idea of auto driving or

controlling a vehicle "without hands and feet," in accordance with a driver's intention, such as turning right & left and stopping & starting.

Though working to turn this idea into reality, Toyota CRD has little experience in the field of studying the human brain. To fill this gap, CRD has collaborated with eminent facilities of brain research and have been able to benefit from cooperation from those specialized and experienced in the field.

However, generally speaking, collaboration with universities is not so easy to accomplish, because the gap in mutual understanding is still wide, presumably owing to the different factors and the communication gap as shown in Figure 3, although the number of instances of collaborations increased steeply immediately after the change from ---universities--- being state-owned to being incorporated from 2004.

Figure 3 R&D between Universities and Industry Issue ?



Here the graphs showing the number of collaborations, contracts, patent applications and licenses of Japanese universities are shown<sup>5)</sup>. Nowadays such activity is quite high and income from licensing has increased in Japan, but the level cannot be compared with that of the USA. It can be supposed that there are several reasons that Japanese universities have not achieved similar results. In my view, for example, it is because the quality of biotechnology and pharmaceutical research at US Universities is high, compared with that at Japanese universities.

Therefore, the product value of research results is also high, because this system of open innovation of industry has been established as a result of the Bayh-Dole Act of 1980 and has settled down steadily since that time.

## 5. Summary

Licenses are an essential tool of innovation, because manufacturers adopting new technology will flourish, meeting the needs of customers.

The problem of collaboration between industry and universities is that "Universities and industry are not sharing a canoe to cross the Devil's River. In other words, the perception gap is an issue of various factors including less than satisfactory communication.

It seems to me that to establish a win-win relationship, both sides have to hold the same vector with the same target and the same process, and ultimately to afford the same value to collaboration.

Both sides have the chance to exchange views on the target and the process of reaching it, and when universities and industry can refer to themselves as "we," collaboration will be well on the way to succeeding.

## Acknowledgement

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## References

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# IP News from Japan

By Shoichi OKUYAMA\*

## Supreme Court Orders Stop of Location-Free TV Services

On January 18 and 20, 2011, the Third and First Petty Benches of the Supreme Court of Japan, respectively, rendered decisions in two separate copyright infringement cases. By each decision, earlier Intellectual Property High Court (IP High Court) decisions in which no infringement was found were reversed and remanded. In these cases, major broadcasting companies were plaintiff-appellants against small Japanese businesses, seeking injunction orders and damages, for so-called location-free TV services.

The first case, decided on January 18, 2011, by the Third Petty Bench, relates to so-called *Maneki* TV services that are provided by a small company,

Nagano Shôten, to a relatively small number of clients. Nagano allows its clients to buy Sony's location-free base station and houses it, providing space, power, Internet access, and airwave feed to the base station, for a fee. The location-free base station can record broadcast TV programs as programmed by the client and allow the client to view the recorded programs later via the Internet. The clients who own the location free TV system and often live outside Japan can view Japanese TV programs without geographical or temporal restrictions. The point is that the ownership of the base station rests not with the defendant; the defendant is merely allowing its clients to record TV programs with the base station that is under the operational control of the clients.

According to Article 23 of the Copyright Act, the right to make copyrighted works available by

transmission is provided as: “The author shall have the exclusive right to effect a public transmission of his work (including, in the case of automatic public transmission, making his work transmittable).” The lower courts found no infringement of this right because the transmission from the base station to the client who owns the location-free TV system is one-to-one and does not constitute transmission to the “public.”

On the other hand, the Supreme Court noted that Nagano is the entity that inputs broadcast programs into the base station by providing airwave feed and is therefore the actor of “transmission.” Also, since any user can use this service without restriction, the transmission is to the “public.” According to the Supreme Court, these factors are sufficient to deem that Nagano is making public transmissions possible. To reinforce the logic of its arguments, the Supreme Court further noted that transmission from the base station to the user is also performed by Nagano.

The second decision relates to another type of service called “*Rokuraku II Video Deck Rental*.” In this case, the defendant, Nihon Digital Co., Ltd., lends users two proprietary video decks that allow the users to record TV programs broadcast in Japan with one device housed on the premises of the defendant in Japan, and to transfer copies via the Internet to the other similar device for viewing by the user. In this case, while the Tokyo District Court found infringement, the IP High Court, Fourth Division, presided over by Judge Nobuyoshi Tanaka, found no infringement. According to the IP High Court, the user is free to make copies of broadcast programs for his or her personal use, and the service provider is merely helping to do what the user wishes.

The Supreme Court, however, reasoned that: “the service provider is not merely providing a technical means to make copying easier; it is providing an essential act in actually making copies of broadcast programs, etc., using copying equipment by receiving airwave and inputting information concerning broadcast programs into the copying equipment. If the service provider does not perform the above-mentioned acts when copies are made, even if the user of the service instructs recording, it is impossible to make copies of broadcast programs. These factors are sufficient to conclude that the service provider is the actor of copying.”

The two Supreme Court decisions are clearly intended to protect broadcasters and also the hierarchical structure that exists in Japan of major broadcast stations and relatively small local stations which exclusively broadcast programs made by major stations, at the cost of users.

The most problematic aspects in these decisions are manifest in the following passage from the *Maneki TV* decision: “in view of the fact that

automatic public transmission is premised on the use of a device that has the function of automatically transmitting information that has been input into such device in response to a request from the receiving person, a person who creates a state in which the device can automatically transmit information in response to a request from the receiving person should be considered as the actor of automatic public transmission.” This clearly indicates that the Supreme Court decisions are applicable to not only TV programs, but also any copyrighted work and information. According to such a line of reasoning, any cloud computing or hosting service provider who has a server for storing and transmitting broadcast programs to a user under the control of that user would be “the actor of automatic public transmission” and risks being held liable for copyright infringement.

It is obvious that the Supreme Court did not pay sufficient attention to the reality of IT technologies we now use and enjoy every day. Providers of most Internet hosting and cloud computing services have to consider these decisions and place certain restrictions on the use of the services, making it more difficult for users to enjoy the fruits of technological developments, or they may opt to move their businesses outside Japan. Article 23 of the Copyright Act was intended to restrict the use of copyrighted materials in the HTTP scheme, but with these decisions, the Supreme Court seems to have expanded the interpretation of this Article to cover any IP transmission, regardless of whether this was actually the intent of the Supreme Court.

### **Another Batch of Amendments in Sight for the Patent Act**

On December 3, 2010, the Japan Patent Office (JPO) published a report prepared by the Patent System Subcommittee of the Industrial Structure Council formed by the Ministry of Economy, Trade and Industry. Public comments were solicited until January 4, 2011. This report outlines a forthcoming bill for amendments to the Patent Act that will be introduced before the Diet during the ordinary session of 2011.

Major items include: (1) making it possible to assert non-exclusive licenses against third parties even if they are not registered with the JPO, (2) providing statutory provisions for allowing the transfer of a derived patent from the false holder to the rightful entity, (3) removing restrictions on the availability of the grace period as long as the rightful entity is the one who made the invention public, and (4) reducing examination fees.

Such contentious issues as restrictions on the availability of injunction orders, a major reform of the double-track validity determination by the JPO and infringement courts, and new provisions on

document production under some measures of secrecy protection for court proceedings in employee invention cases are unlikely to make it into the bill.

While some of the issues that have been raised and will probably enter into the bill may involve fundamental principles of Japanese law, at a practical level, users of the IP system in Japan, foreign users in particular, will not be much affected by the proposed changes. The bill will be finalized soon and submitted to the Diet this spring.

### The Yakult Bottle found Registrable as a 3D Trademark

On November 16, 2010, the IP High Court, First Division, presided over by Judge Tetsuhiro Nakano, rendered a decision that reversed an earlier JPO decision and allowed the shape of a container for a very popular fermented milk drink called Yakult to be registered as a 3D trademark.



The plaintiff did not contest the fact that the shape of the container in itself is not distinctive under Article 3(1) of the Trademark Act, but argued that the container had acquired distinctiveness through extensive use since 1968 under Article 3(2) of the Act, which provides for acquired distinctiveness. The JPO's position was that the container has been used with word marks, and it is distinctive not because of its shape, but because of the Yakult trademarks shown on the container. In the case of Yakult, unlike earlier cases for 3D trademarks, the plaintiff

has not actively tried to remove similar container designs for fermented milk drinks from the Japanese market. In fact, products that use this particular container shape have dominated the Japanese market with shares of 40% or more. The plaintiff produced a voluminous amount of evidence showing its advertising efforts and also the results of a survey it conducted among general consumers.

The IP High Court sided with the plaintiff and found the container sufficiently distinctive in the eyes of consumers.

This decision is significant because it comes from the First Division of the IP High Court and also because the existence of similar container designs used by competitors was positively perceived by the court as a sign of competitiveness or distinctiveness of the products and its containers. Traditionally, the JPO has been tough on the registrability of the shape of a product itself or that of the container as a trademark. For example, although the Colonel Sanders statue found in every KFC restaurant in Japan is an early example of a registered 3D mark, negative decisions mounted for containers as 3D marks. In recent years, we have seen several IP High Court decisions in which the registrability of 3D marks was recognized for MAG-LITE flashlights or Coca-Cola bottles, but they consistently came from the Third Division of the IP High Court, presided over by Judge Toshiaki Imura. This decision by the First Division of the IP High Court reinforces the trend started by the Third Division of the IP High Court.

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