

Chapter 3

Promotion of Patent Licensing / Technology Transfer

1 Enhancement of Intellectual Property-Related Activities at Universities and Public Research Institutes

1. Support measures to enhance intellectual property-related activities at universities and public research institutes

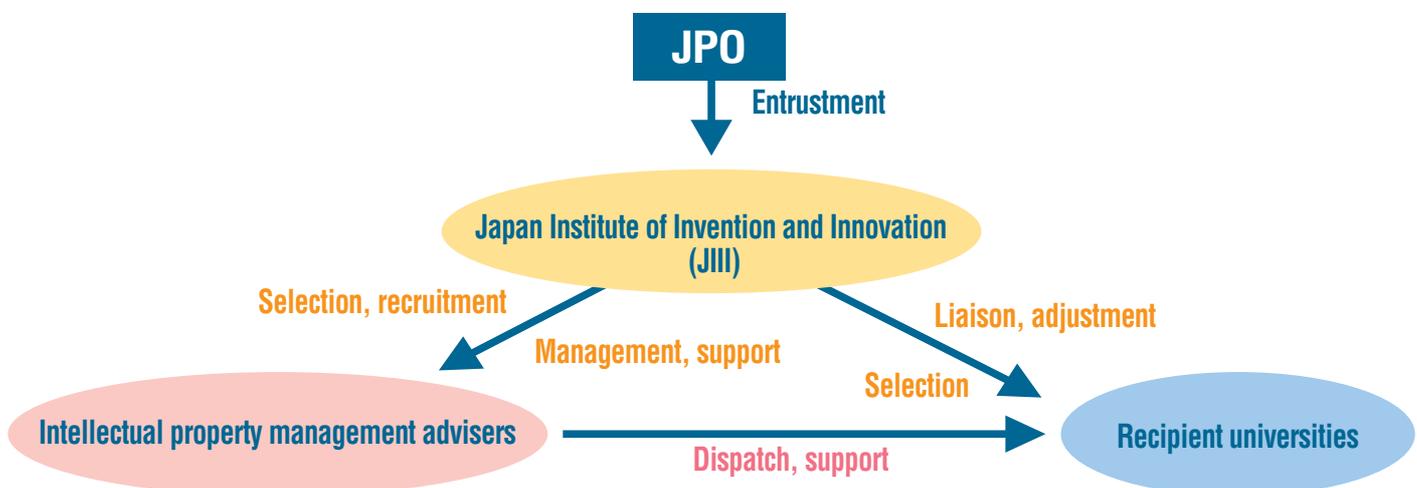
A great deal of research results are produced at universities and research institutes, the source of "intellectual" creation. In order to create new technologies and new businesses based on such research results produced at universities, etc., it is necessary to grant appropriate rights including patent rights for these research results. If research results are properly protected and transferred from universities, etc. to industries as intellectual property and then industrially utilized, universities and TLOs will be able to obtain license fees from industries, and secure and reinvest funds for new R&D activities. This intellectual creation cycle will promote further technical innovation.

(i) Dispatch of Various Experts

In order to promote cooperation between industry and academia and revitalize the economy with the use of inventions made at universities and research institutes, it is important to attribute intellectual property including inventions that are made at universities, etc. to organizations such as universities and TLOs, instead of attributing them to individual researchers. To achieve this, it is necessary for universities to strengthen their intellectual property management function by establishing a system for filing patent applications and managing patents in a systematic manner (intellectual property management system).

In light of this, in FY 2002 the JPO started to dispatch experts (intellectual property management advisers) to support universities in establishing intellectual property management divisions with the goal of independent administration (The JPO will dispatch these advisers to six universities in FY 2002). Intellectual property management advisers provide training for university staff engaged in filing patent applications and carrying out prior art search, and support establishing a system for filing patent applications and managing patents at universities.

Scheme for Intellectual Property Management Advisers



Additionally, in FY 2001, the JIII began dispatching consultants, including patent attorneys, to universities under the cooperation of the Japan Patent Attorneys Association and through authorized TLOs to provide consultation

services concerning overall matters on intellectual property rights, from patent applications to patent management, contracts and infringements. (In FY 2001, the JIII provided the services 111 times at 29 universities through 5 TLOs; Hokkaido TLO, Co., Ltd; Tohoku Technoarch Co., Ltd; Yamaguchi TLO, Ltd; Kyushu TLO Co., Ltd; and Kitakyushu Foundation for the Advancement of Industry, Science and Technology).

(ii) Measures to Reduce or Exempt Annual Fees and Fees to Request Examination

Under the provisions of the Law Promoting Technology Transfer from Universities to Industry and the Law for Strengthening of Industrial and Technical Competitiveness, the JPO has been supporting activities for industry-academia-government cooperation and for technology transfer at universities and TLOs by taking measures to reduce or exempt Universities and TLOs from annual fees and fees to request examination.

[Law Promoting Technology Transfer from universities to Industry (come into effect August 1998)]

- Granting subsidies to authorized TLOs (subsidy rate: about 67%; up to ¥20 million annually)  
→ 27 authorized TLOs (at the end of July 2002)<sup>1</sup>
- Exempting accredited TLOs from paying annual fees and fees to request examination (in relation to Section 12)  
→ 2 accredited TLOs (at the end of July 2002)<sup>2</sup>

[Law on Special Measures for Industrial Revitalization (came into effect in October 1999)]

- Promoting transfer of results of R&D projects sponsored by the national government to the private sector (Japanese Bayh-Dole provisions) (in relation to Section 30)

[Actual results]<sup>3</sup>

Number of contracts to which the law applied<sup>4</sup>: 1,530 (FY 2001)

Amount of expenses for sponsored R&D: about ¥195.8 billion (FY 2001)

- Reducing annual fees and fees to request examination in respect to authorized TLOs (in relation to Section 32)

[Actual results]<sup>5</sup>

Annual fees reduced: 6 cases (at the end of March 2002)

Fees to request examination reduced: 71 cases (at the end of March 2002)

[Law for Strengthening of Industrial and Technical Competitiveness (put into force in April 2000)]

- Relaxing the regulations on professors/instructors of national universities holding the post of director of a private company (in relation to Section 14)

[Actual results]<sup>6</sup>

Those holding the post of director of a private company for the purpose of utilizing R&D results: 31 (at the end of March 2002)

Those holding the post of director of a TLO: 86 (at the end of March 2002)

Those holding the post of auditor: 13 (at the end of March 2002)

- Measures to allow authorized TLOs to use facilities of national universities free of charge (in relation to Section 15)

[Actual result]<sup>7</sup>

17 authorized TLOs (at the end of July 2002)

- Reducing annual fees and fees for request to examination in respect to universities and university professors/instructors (in relation to Section 16)

[Actual results]<sup>8</sup>

Annual fees reduced: 16 cases (at the end of March 2002)

Fees for request for examination reduced: 80 cases (at the end of March 2002)

<sup>1</sup>Source: Ministry of Economy, Trade and Industry

<sup>2</sup>Source: Ministry of Economy, Trade and Industry

<sup>3</sup>Source: Ministry of Economy, Trade and Industry

<sup>4</sup>Including indirect contracts sponsored by the Ministry of Economy, Trade and Industry

<sup>5</sup>Source: JPO

<sup>6</sup>Source: National Personnel Authority

<sup>7</sup>Source: Ministry of Economy, Trade and Industry

<sup>8</sup>Source: JPO

### (iii) Accelerated Examination

When universities and authorized/accredited TLOs submit descriptions of circumstances requiring accelerated appeal examination for patent applications for which they have already filed requests for examination, these applications shall be examined with priority over other ordinary applications, with no additional fees (the accelerated examination system). In 2001, the actual number of requests for accelerated examination was 2,895, of which those filed by universities or authorized/accredited TLOs accounted for less than 1%. As it is hard to say that the system is fully utilized at present, it is hoped that the system will be more frequently used in the future.

### (iv) Holding of Seminars and Dispatch of Lecturers

Patent chambers of nine Regional Bureaus of Economy, Trade and Industry in Japan hold industrial property seminars for university students and university researchers, targeting universities considering including intellectual property in their curriculum which have many faculty members interested in industrial property systems. In 2001, about 3,300 people participated in 94 seminars.

The JPO also dispatches its staff, including examiners, to universities for the purpose of support in opening intellectual property-related courses. The JPO will dispatch staff upon request to law schools that will start accepting students in April 2004.

### (v) Designation of Universities and Public Research Institutes as Scientific Bodies under Section 30 of the Patent Law

Section 30 of the Patent Law provides that "presentation in writing at a study meeting held by a scientific body designated by the Commissioner of the Patent Office" shall be deemed not to fall under any of the grounds for lack of novelty. In order to deal with presentations of results of R&D activities conducted by universities and public research institutes, the JPO amended the standards for "scientific bodies designated by the Commissioner of the Patent Office" in December 2001 and April 2002 to clearly provide that the Commissioner of the Patent Office may designate universities and public research institutes as scientific bodies.

According to these amendments, if a university or public research institute is designated by the Commissioner of the Patent Office as a scientific body, if a patent application is filed in respect of the contents presented at a study meeting held by the body after the presentation was made, the exception to lack of novelty shall apply to the patent application in the same manner as patent applications concerning presentations at ordinary academic meetings. In order to properly secure the right under this provision, however, one should try to file a patent application before making a presentation at a study meeting. As of July 1, 2001, 62 universities, 3 technical colleges, 2 institutions for joint use among universities, 12 independent administrative agencies, and 29 public laboratories were designated as scientific bodies.

### (vi) Distribution of the "How to File Patent Applications for R&D Results" Booklet and Measures to Promote Use of Electronic Application Software

It is important for researchers and patent managers at universities to fully recognize the importance of knowledge of the patent system, filing patent applications for inventions made at universities and utilizing patent rights. In light of this, the JPO distributes a booklet titled "How to File Patent Applications for R&D Results" for these researchers and patent managers, with the aim of promoting patent applications and presenting the JPO's various support measures.

The JPO also presents in this booklet how to file patent applications for inventions made at universities by using electronic application software, provided by the JPO free of charge, as well as how to obtain effective patents for the results of continuing R&D activities at universities by utilizing the domestic priority system.

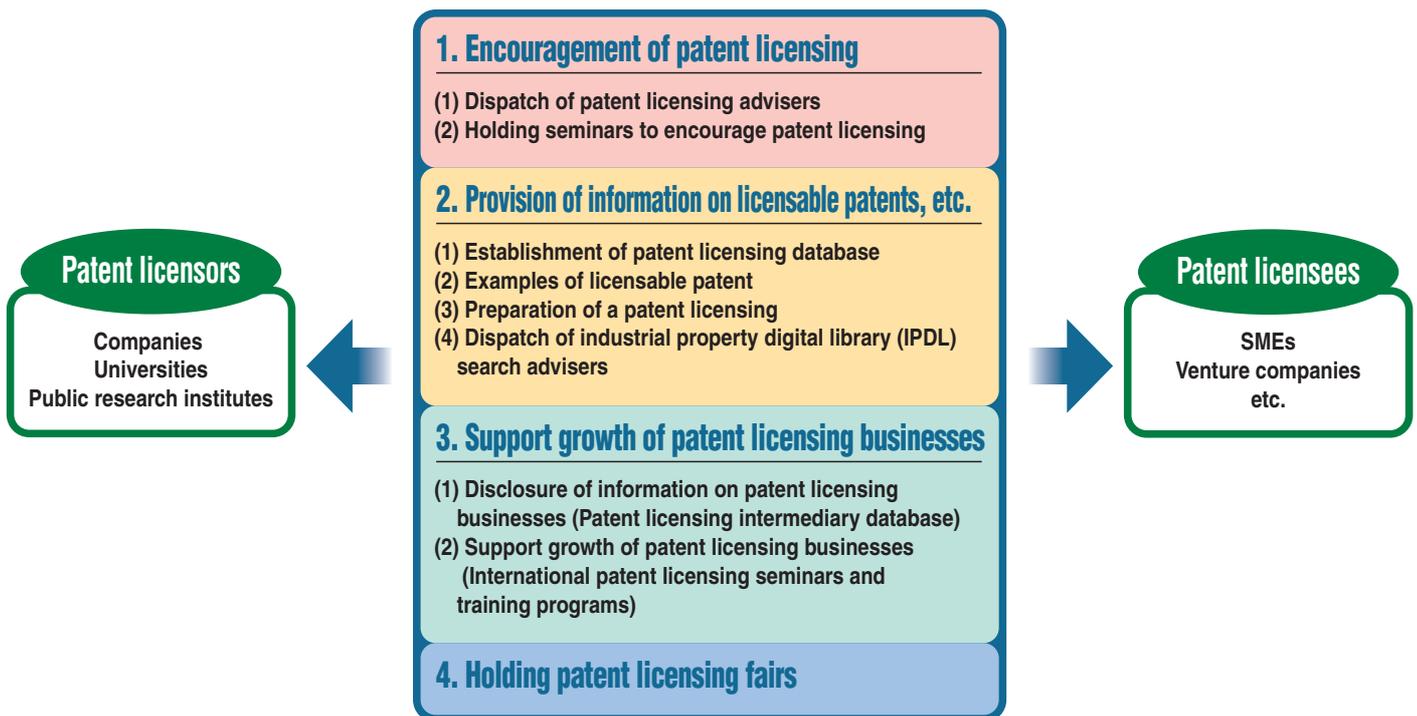
## 2 Creation of a Patent Licensing / Technology Transfer Market

### 1. Necessity of a Patent Licensing Market

Intellectual property is the result of intellectually creative activities, including technological development. It has become necessary to make positive use of IP for the revitalization of industry and the economy based on technical capability. Specifically, in the present situation in which the lifecycle of products is becoming shorter while companies select and concentrate their economic resources, it is required not only to reduce such R&D costs and develop more effective R&D systems but also to make use of the technology of others. To achieve this, it is important to develop an environment in which those who have obtained patents by exercising their ingenuity and those who seek to utilize such patents are connected in an effective manner, that is, a patent licensing market. Universities and public research institutes must play a part in realizing the intellectual creation cycle by providing their R&D results to society.

The JPO has been promoting patent licensing since 1997 with the aim of promoting technology transfer and encouraging the creation of new businesses through patent licensing. Since 2001, the National Center for Industrial Property Information (hereinafter "NCIPI") has taken over most of the projects. Recently the number of patent licensing contracts concluded with the support of patent licensing advisers has been rapidly increasing. This is a result of the NCIPI's projects.

#### ■ Patent Licensing/Technology Transfer Market



### 2. Promotion of Patent Licensing through the Use of Human Resources

(i) Patent Licensing Advisers (<http://www.ryutu.ncipi.go.jp/en/advisor/index.html>)

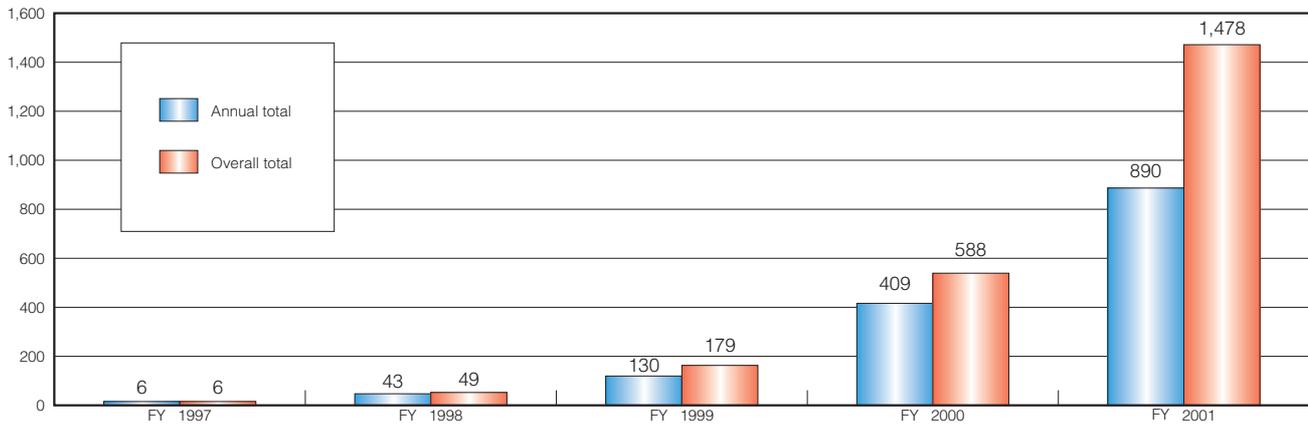
With the aim of discovering licensable patented technologies owned by companies, universities and public research institutes and finding needs of SMEs and venture companies for technology introduction, and then matching these technologies and needs, the NCIPI has been dispatching patent licensing advisers who have abundant knowledge and experience concerning intellectual property rights and technology transfer at the request of prefectural governments and TLOs. (104 advisers have been dispatched as of September 2002.)

The major activities of patent licensing advisers are to investigate local SMEs' needs for the introduction of patents and search for appropriate patent licensors by prefecture. TLOs then find patented technology owned by universities and public research institutes and match it with the technological needs of appropriate patent

licensees. Additionally, these advisers carry out a wide range of activities focusing on promotion of the use of intellectual property rights, such as instruction and consultation on patent licensing know-how and supporting the registration of patent licensing information in the patent licensing database.

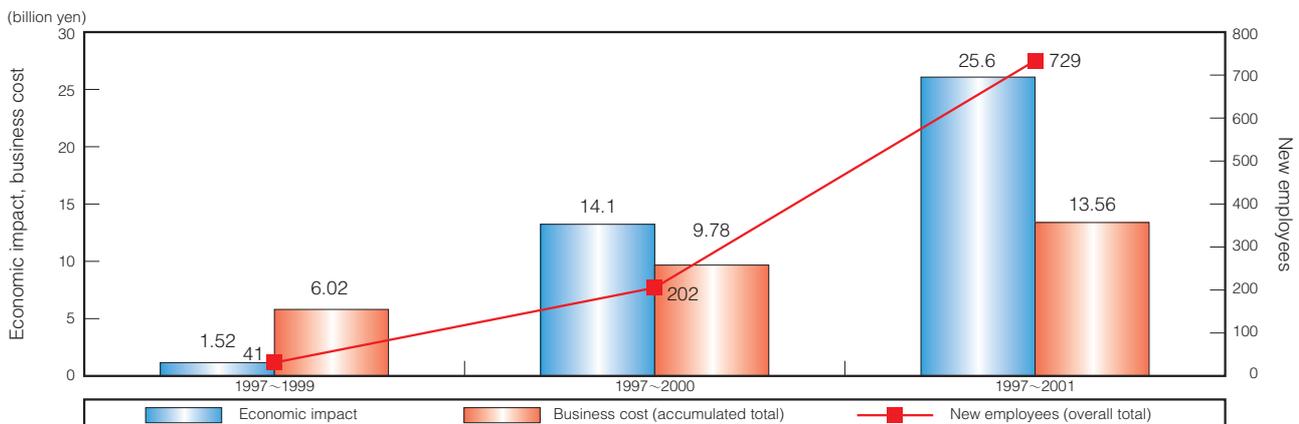
The actual results of the activities of patent licensing advisers are as follows (at the end of FY 2001).

## ■ Contracts Concluded under the Promotion Policy for Patent Licensing



Under the measures for encouraging patent licensing, patent licensing advisers supported conclusion of patent licensing contracts. The number of concluded contracts rapidly increased from only 6 in 1997 when the project started to an overall total of 1,478 at the end of 2001.

## ■ Economic Impact of the Promotion Policy for Patent Licensing



The economic impact of the measures for encouraging patent licensing, reached an estimated overall total of ¥25.6 billion at the end of 2001. This amount is about twice as large as the invested business cost.

The economic impact refers to the total amount of money transacted due to the activities of patent licensing advisers (excluding business costs). More specifically, it refers to the sales total of products manufactured with the use of introduced patented technology, the amount of business investment for manufacturing, the amount of license fees, and the amount of labor costs for new employees.

### (ii) Seminars to Encourage Patent Licensing

With the objective of increasing awareness of the measures for encouraging patent licensing in Japan, the NCIPJ holds seminars in eight locations nationwide consisting of special lectures and panel discussions on successful cases of technology transfer under the themes of Intellectual Property Strategy using Licensable Patents and "Technology Evaluation Methods," as well as guidance on search methods and effective use of patent information.

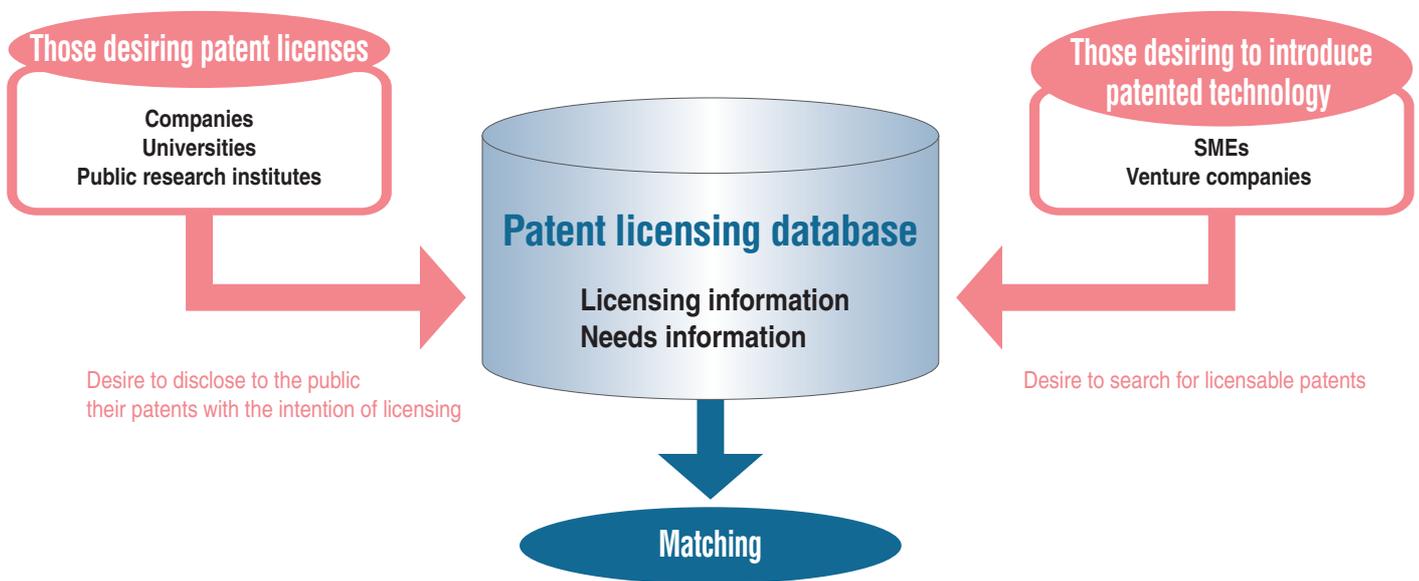
### 3. Provision of Information on Licensable Patents

(i) Patent Licensing Database (<http://www.ryutu.ncipi.go.jp/en/db/index.html>)

The patent licensing database is designed to smoothly distribute licensable patents to industries, especially local SMEs and venture companies and promote practical use thereof. This database stores and publishes via the Internet patents that are owned by companies, universities and public research institutes with the intention of licensing.

Licensing information (including assignment information) and needs information (information on applicants for technology introduction) are both open systems in which anyone can register his/her data. Users can also access patent information (patent gazettes, information on the status of applications) through the link with the IPDL as well as company information through the links with company websites.

The number of licensing information items registered in the patent licensing database has increased from 1997, when the database started, to about 47,000 as of September 2002.



(ii) Examples of Licensable Patent Utilization

Examples of Licensable Patent Utilization patents are collective business ideas presenting the effective use of helpful licensable patents selected from those registered in the patent licensing database with a high potential for commercialization. Each example consists of (i) outline of the right of the licensable patent, (ii) ideas of new businesses and products using the licensable patent, (iii) information for starting a business, and (iv) support measures for the effective use of licensable patents.

(iii) Preparation of a Patent Licensing

In order to provide reference to SMEs in introducing technology from outside of their industries, the NCIPI categorizes in a systematic manner major companies and their patents based on patent information by technology theme and provides charts (In FY 2001, the NCIPI prepared charts for 25 themes.)

(iv) IPDL Search Advisers

The NCIPI dispatches IPDL search advisers who are experts of patent information and search (53 advisers have been dispatched as of September 2002). These advisers provide basic knowledge necessary for searching patent information in the IPDL, advise on the effective use of patent information free of charge, and respond to questions on patent information search. They also provide visits for consultation and lecture at seminars upon request.

## 4. Support the growth of the Patent Licensing Agents

### (i) Patent Licensing Agent Database

(<http://www.ryutu.ncipi.go.jp/en/agents/index.html>)

As seen in the United States and European countries, where technology transfer is actively carried out, private agents play an essential role in promoting licensing of intellectual property rights including patents and technology transfer. In Japan, however, such private businesses are insufficient in quality and quantity and are not fully recognized in society. In light of this, the NCIPI started to collect information on such agents and publish it in database form on the Internet.

By using this database, those who have or search for technology and know-how based on intellectual property rights can easily obtain information on agents that provide consultations, advice and intermediary services for licensing of such technology and know-how.

### (ii) International Patent Licensing Seminars

For the purpose of improving the skills of those engaged in intellectual property licensing businesses in Japan and establishing human networks of parties concerned, the NCIPI invites experts who specialize in patent licensing and technology transfer at overseas universities, companies and local authorities and holds joint discussions and workshops with those active in this field in Japan.

#### ■ Schedule of Seminars in FY 2002

Place	Date	Keynote speakers
Royal Park Hotel (Hakozaki, Tokyo)	January 27 (Monday) to 29 (Wednesday), 2003	Tetsuya Iizuka, President and CEO of THine Electronics, Inc. Howard Braemar, Honorary Advisor to the Wisconsin Alumni Research Foundation

### (iii) Training Courses for Patent Licensing Agents

In Japan, the number of agents and other human resources engaged in patent licensing is insufficient. The NCIPI provides training courses for the purpose of developing such human resources.

## 5. Patent Licensing Fairs

With the aim of creating an environment for vitalizing the patent market, Regional Bureaus of Economy, Trade and Industry have been holding patent licensing fairs since FY 1997.

Patent licensing fairs provide "opportunities to meet" for companies, universities, research institutes, patent licensing agents, and technical consultants that wish to provide or introduce patented technologies. No charge is required for presenting licensable patents or for admission to the fairs.