# 11 Japanese Experience for Promoting Patent Exploitation and Transfer of Technology to Industry and Development of Suitable System of Patent Exploitation for Universities and Industries in Japan and Vietnam in the Future<sup>(\*)</sup>

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The goal of Vietnam is to become an industrial country by 2020. To achieve this goal Vietnam needs to promote innovation in businesses/institutions and to create new and higher value markets. To do so, the creation, protection, and exploitation of innovative ideas are crucial. Vietnamese Government hasn't got until now a strategy for IP development to promote creation, protection and exploitation of IP. For many decades and until now, IP, especially patent has been being under-utilized by almost all Vietnamese businesses/institutions. For this reason, their products cannot compete with the products of other countries in the region, not mentioned the global markets. Japan has had good lessons/experiences in developing and implementing policies/measures for creation, protection, and exploitation of innovative ideas and IP system of Japan has become one of the strongest ones in the world. Therefore, this research aimed at drawing an overview of IP/patent utilization in Japan and the way to promote the transfer technology, and innovation to industry. From Japanese experience, the Ministry of Science and Technology (MOST) in Vietnam and the National Institute of Patent and Technology Eploitation (NIPTEX) under MOST can use this research result as a guideline or reference document for building a strategy on IP for Vietnam in the near future and apply some suitable measures and projects to promote IP/patent exploitation in Vietnam. Although Vietnam and Japan have different backgrounds but we hope that experiences of Japan would be very useful for Vietnam in this regard.

### I Exploitation of Patent and Transfer of Technology in Japan

This chapter introduces that the intellectual property strategy of the Japanese government and the legal framework have been developed to facilitate the promotion of the exploitation of intellectual property (hereinafter, sometimes, IP). A series of measures and programs has been applied for activation of intellectual property cycle (supports for universities and private companies from creating stage to licensing stage).

#### 1 Intellectual Property Strategy <sup>1</sup> and Legal Framework for IP Exploitation in Japan

In this section, the Intellectual Property Strategic Program 2003 established by the Japanese government and all acts related to IP and university technology transfer in order to promote IP utilization and technology transfer are presented, creating a legal framework and favorable conditions to implement the IP Creation Cycle. Under the direction of Japanese government, the IP Strategic Programs have effectively deployed during the years and the university-industry transfer system is now at its turning point in the offing, putting that Japanese economy becomes one of the major economic powers in the world and leading on innovation.

#### 2 Measures for Activation of Intellectual property Cycle (supports for universities and private companies from creating stage to licensing stage)<sup>2</sup>

The intellectual creation cycle would be incomplete without the adequate usage of intellectual properties. In other words, the cycle will start from creating the intellectual property and then go to registering the right but will finish with its exploitation which produces earning that

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will be used for further technology development. It is with such mechanism that Japan will be able to revitalize its economy and enhance its international competitiveness<sup>3</sup>.

With the effort to encourage patent licensing, during recent years, the INPIT (National Center for Industrial Property Information and Training) in accordance with JPO (Japan Patent Office) comprehensively pushed forward many projects under three pillars: Promoting Patent Licensing by Using Expert, Provision of Licensable Patent Information and Promotion of Active Utilization of the Information; and Establishing an Environment Conducive to the Support for Fostering IP Trade Businesses.

These measures and programs have been implemented from 1997 until 2010 and many other new programs have been developed, bring the real efficiency for universities and Japanese enterprises in recent years.

## 3 Conclusion

Japan has built a great strategy, roadmap and reasonable support program implemented by the government to solve the difficulties of enterprises and universities, then, plus the spirit of the Japanese people, this strategy was really effective, giving the prosperity of the country of Japan today.

#### 4 Recommendation

Although the exploitation of patents in Japan is carried out effectively with clear roadmap but personally I found that the cooperation between universities, Japanese TLOs with universities and TLOs in the world should be intensified because it will be also an effective way to exchange and develop the new technologies.

Also from international cooperation, the Japanese TLOs and TLOs of other countries can collaborate to create a network to provide information on licensable patents together.

Japan innovation<sup>4</sup> should be taken place also in others countries as in Europe, America or Asia. The Japanese Organization Committee can focus on some priority areas of technology trend in the future. This is also a way to enhance the competitiveness and the image of Japan in the world.

The support for Asia-Pacific region by Japanese government, especially for developing countries is encouraged in order to shorten the technology gap between developed and developing countries, and will enhance the image of Japan in the international arena.

## II Exploitation of Patent and Transfer of Technology in Vietnam

# 1 Overview on Intellectual Property Law and Remarks for Business in Vietnam<sup>5</sup>

The National Assembly of Vietnam passed the Intellectual Property Law (IP Law 2005) on November 19, 2005 which came into force on July 1, 2006. The enactment of the IP Laws 2005 was a significant milestone of Vietnam in developing a modern system of intellectual property legislation which is in harmonization with the IP legislation of developed countries and meets international norms and standards. On 19 June 2009 this Law is amended to clarify the inconsistencies to ensure Vietnam's better fulfillment of the obligations under TRIPS and the US-Vietnam Bilateral Trade Agreements, especially since its accession to WTO on 11 January 2007.

But like many other developing countries in Asia, due to limited knowledge and expertise in intellectual property of staff of enforcement authorities and the concept of intellectual property in general and industrial property in particular is still something rather new to the great majority of Vietnamese people, intellectual property infringements in Vietnam are in alarm and have become more and more complicated and serious. Foreign enterprises should carefully consider applying for intellectual property protection well in time in Vietnam to which they are likely to export or license their product or service in the foreseeable future.

Therefore, it is requisite and advisable for companies and enterprises doing business in Vietnam, to obtain intellectual property rights protection in Vietnam in order to protect and develop their business.

### 2 Current situation on Industrial Property Registration in Vietnam<sup>6</sup>

From the statistics of National Office of Intellectual Property (NOIP)<sup>7</sup>, from 2000 to 2010, we can see clearly that the number of patent applications filed in NOIP is very low. There are a "gap" between application filed by Vietnamese people and the application by foreigners, and it is more worried that the gap is not shorten during the last 6 years. In 10 recent years, the East Asian countries are evaluated emerged new centers on the invention of the world, with the rate of application abroad is increasing. According to the WIPO, the number of patent applications abroad in Vietnam is still also very "modest".

According to WIPO<sup>8</sup>, the trend of patent activity is a sign for evaluation of industrial activities worldwide. In each country, development of patent activity reflects the ability of international integration of countries into the global industrial activity. Therefore, if considered by this vision of WIPO, Vietnam, with too little amount of PCT as at present, has not really entered the increasingly rapid turnover of the industry in the world.

#### 3 Current situation of Intellectual Property exploitation in Vietnam<sup>9</sup>

#### (1) Current situation

According to Information Center of NOIP in Vietnam on 2012, the exploitation and utilization of patent in Vietnam is still limited. In fact, Vietnamese researchers and enterprises have hardly ever used or paid attention to the patent information sources; therefore, they do not know how to exploit such resources to serve their R&D activities and apply into their business.

The exploitation of patent information has been settled by the National Office of Intellectual Property (NOIP) for many years. However, NOIP's main function is to examine and grant industrial property rights, so the results achieved from the exploitation of patent information are very modest.

In this context, the foundation of National Institute of Patent and Technology Exploitation (NIPTEX) which was aim to promote patent exploitation and utilization activities is necessary.

#### (2) Reasons of current situation

There are many reasons<sup>10</sup> for this situation when analyzed from the situation of enterprises, universities, inventors. In general, the business does not see the role and importance of this issue. The patent is only personal work, not collective. Universities when they do research don't pay much to the needs of the enterprise and the relationship between the University and the business is not really strong. There aren't many activities organized to match the seed of Universities, Institutes with the needs of the enterprises. Further, the use of the state budget for research activities is not really effective because the research results are not put into implementation and application...

# (3) Some proposed solutions for this current situation

From this current situation, NOIP in Vietnam have some proposed solutions 11 in order to improve the current situation, below its propositions:

- (i) Improvement of national IP policies and legal framework
- (ii) Encourage enterprises promote creation activities, protection and exploitation of patents through:
- (iii) Promoting supports and consultations:
- (iv) Strengthening the collaboration between resarci institutions, enterprises and consultative organizations making contribution to development of technology commercialization. Enhance supports for research projects ordered by enterprises toward scientists.
- (v) Promoting "Reverse Engineering" for master technology, especially to small and medium enterprises in Vietnam.
- (vi) Developing Technology/Enterprise incubators
- (vii) Developing technology transfer organizations,
- (viii)Study the experience of other countries (such as Japan, South Korea, Taiwan), and mechanisms to promote patent exploitation activities and transfers technology for enterprises.

Dr. Lê Nết, professor, researcher on IP exploitation, he also has proposed some solutions<sup>12</sup> based on the viewpoint of researcher, it's necessary to:

- (i) Enhance the awareness on IP for people working at universities, Research institutions, and Enterprises; Training human resource on IP to support IP activities in Universities and Industries.
- (ii) Use effective the State Budget reserved for Science and Technology; Promoting relations between Industries and Universities; Creation good conditions for transfer of technology from research results in Universities to industries.
- (iii) Complement and perfection of IP Law in Vietnam to promote IP creation and IP exploitation.

Another researcher, Mr. Phan Quoc Nguyen, from National University Of Vietnam have proposed some recommendations for promoting creation and exploitation of Patent in Universities from the viewpoint of IP expert after his study on experience of different countries on IP creation and exploitation

- (i) Necesities to specify IP management activities in Universities
- (ii) Fostering and enhancing the relationships between universities and bussines to matching the seed of universities to the need of industries.
- (iii) Promotion IP exploitation

In order to enhance technology transfer and promote commercialization of intellectual property, the school should have a fundamental change in perception as follows:

- Make a habit, behavior towards "commercialization" technology products.
- Encourage R&D Units in the Universities to promote its research results with high-capacity applications registering IPR for patent right.
- Apply award system to encourage scientists, based on the commercial value of their initiatives.
- Taking measures to award and celebrate the scientists having intellectual property certified by competent Agencies of IP.
- (i) Clarify ownership and distribution of royalties from research results by using the State Budget
- (ii) Etablishsement of Department in charge of IPR

# 4 Current IPR Policies in the New IP Law in Vietnam

Actually, the Movement of Vietnam has promulged the Policies in the new IP Law in order to promote IP exploitation<sup>13</sup>. The State encourages and promotes creation activities, exploitation of intellectual property assets to contribute to the socio-economic development and improve people's material and spiritual life. The state can provide financial assistance to receiving assignment and exploitation of intellectual property rights for the public encourage national and interests; foreign organizations, individuals to finance activities of creation and protection of intellectual property rights.

#### 5 Supports from Vietnamese Government for IP Activities in Recent Years

In recent years, especially after the enaction

of the Intellectual Property Law 2005, the Government of Vietnam has many efforts and important policies aimed at creating a favorable legal framework for IP activities in general and patent exploitation in particular.

#### 6 NOIP'Activities to Promote Intellectual Property<sup>14</sup>

In order to promote Intellectual property, The National Office of Intellectual Property (NOIP) in Vietnam have many efforts and carrying out many activities to promote this area, but its main function and activities focus on : Supporting the Ministry of Science and Technology for Drafting State Laws, Regulations and Documents related to IP; Receiving Application file, Examination and Grant the Rights for Patent, Utility Solution, Trademark, ... Patent Protection and settlement of disputes regarding Intellectual Property;

It is recognized that NOIP has great efforts to promote IP in Vietnam but the side of IP exploitation are still very modest. In this context, the foundation of National Institute of Patent and Technology Exploitation (NIPTEX) by Ministry of Science and technology - MOST which was aim to promote patent exploitation and utilization activities is necessary.

#### 7 Etablishsement of Institute of Patent and Technology Exploitation in Vietnam (NIPTEX) – MOST

In Vietnam, the National Office of Intellectual Property (NOIP) has stored more than 30 millions of Patent Descriptions with human precious knowledge/know-how which has not been exploited, studied and utilized yet. Over last years, the NOIP has tried to exploit and offer patent information services for readers across the country but not so efficiently.

Therefore, the National Institute of Patent Technology Exploitation (NIPTEX) is and responsible for promoting EXPLOITATION, RESEARCH AND UTILIZATION OF PATENT. NIPTEX will seek the technology from National and International Patent Resource for Supporting Vietnam through Industries in Activities: Negotiate for buying a License with reasonable price; Exploiting Patent not registered in Vietnam in order to continue the Research for Mastering Technology, Adapting with Conditions in Vietnam; Exploitation of technology from Patent expired without violation of IPRs.

# III Conclusion and Recommendations

From the analysis of the IP exploitation in each country and the current situation in Vietnam, we can see the difference of concept on "IP Exploitation "in Japan and Vietnam.

In Japan, the Patent Exploitation is deployed mainly from patents invented in the country. Japan has built an Extreme Advanced System for Transfer of Technology. This way created the prosperity of Japan today. Meanwhile, in Vietnam, the Patent Exploitation is seeking Technology International Patent from Resource for Supporting Industries in Vietnam through Activities: Negotiate for buying a License with reasonable price; Exploiting Patent not registered in Vietnam in order to continue the Research for Mastering Technology, Adapting with Conditions in Vietnam; Exploitation of technology from Patent expired without violation of IPRs.

Personally I really love, admire and respect the development of the country of Japan, the Japanese people as well as their willpower. Current success and prosperity of the country Japan thanks to science and technology development strategy appropriate policies to build a country based on intellectual property with real support effective from the government and the spirit of Japanese people, Japan has really developed and have an important role as well as the positive impact on the world.

Vietnam is now on the of wav industrialization and modernization of the country. The Major goal that the Vietnamese Government launched and would like to make is that by 2020, Vietnam will basically become industrialized. To accomplish this goal, Vietnam has built a science and technology development strategy from now to 2020, the innovation of science and technology programs. But I personally think that, to be successful, in addition to building strategic, Vietnam should learn experience from other countries, then adapt to conditions in Vietnam. Particularly in the field of patents exploitation, technology transfer patent to Enterprise, Vietnam expects to receive the Assistance and Support from different countries especially from Japan. By sharing experience, technical support and Training Human Resource in different domains.

compiled from Annual Report 2011 – Japan Patent Office and read more at

http://www.kantei.go.jp/foreign/policy/titeki/kettei/0307 08f\_e.html

- <sup>3</sup> See Hisamitsu Arai, supra note 1.
- <sup>4</sup> Information from http://www.jst.go.jp//tt/EN
- <sup>5</sup> Informations compiled from IP Law 2005; IP Law 2009, Vietnam
- <sup>6</sup> Information complied from National Office of Intellectual Property (NOIP); Project from Dr Le Net; Article from Dr. Phan Quoc Nguyen
- <sup>7</sup> Read more at http://www.noip.gov.vn/
- <sup>8</sup> WIPO report 2011
- <sup>9</sup> Informations compiled from NOIP report 2009, 2010, 2011, Project of Dr Le Net: http://www.lctlawyers.com/news/publications/DHL NC
- KH\_Patent\_Management\_2009.pdf, Article of Dr Phan Quoc Nguyen
- <sup>10</sup> Information compiled from NOIP report, project of Dr. Le Net, read more at http://www.lctlawyers.com/news/publications/DHL N
- CKH\_Patent\_Management\_2009.pdf
- <sup>11</sup> Information compiled from NOIP report 2011,2012
- <sup>12</sup> http://www.lctlawyers.com/news/publications/DHL\_NC KH\_Patent\_Management\_2009.pdf
- <sup>13</sup> Chính sách của Việt Nam về khuyến khích hoạt động sáng chế và khai thác sáng chế - Phạm Hồng Quất, Trần Giang Khuê, Nguyễn Thanh Bình
- <sup>14</sup> Informations compiled from NOIP report 2011, 2012

<sup>&</sup>lt;sup>1</sup> See Hisamitsu Arai "Intellectuale Property Strategy in Japan" International Journal of Intelectual Property Law, Economy and Management 1 (2005), pp.5-12.

<sup>&</sup>lt;sup>2</sup> Informations related measures and programs are