




縁

ENISHI

No **17**

November 2017

IP Friends Connections



This Magazine is published as part of the Intellectual Property Cooperation in Human Resource Development Program of the Japan Patent Office. The aim of this Magazine is to follow up on training programs through the dissemination of information to IP Friends, those who have completed training courses of the above program.

We very much hope that the information in this publication related to intellectual property, and the comments from either IP Friends or lectures, will prove beneficial to you in your work.



JAPAN PATENT OFFICE

【The meaning of 縁 (Enishi)】

“Enishi” refers to the bond created between people when encountering someone they were destined to meet. We have chosen this term as the title for our publication because we are all members of the Intellectual Property community, and the bonds created between us extend beyond national borders. We hope that you will use this informative publication to deepen the “Enishi” you have created with your IP Friends.

Table of Contents

1. FY 2017 Follow-up Seminars

2. FY 2017 Report of IP Trainers Course from coordinator

3. Training course experience in Japan

1) “Wareware wa IP Friends (We are IP Friends)”

Ms. Ma. Winelma Meneses Garcia (the Philippines)

2) “Sripatum University and the Opportunity for IP Education in Thailand”

Ms. Chongnang Wiputhanupong (Thailand)

3) “Policy Developer at National Science Technology and Innovation Policy Office, Ministry of Science and Technology, Thailand”

Ms. Panisa Harnpathananun (Thailand)

4. Introduction of FY 2017 Long Term Fellowship Researchers

Mr. C.N. Shashidhara (India)

Mr. Rico Collado (the Philippines)

5. Contributions from FY 2013 Long Term Fellowship Researcher “My Life in Japan as a Long-Term Researcher”

Dr. Moe Moe Thwe (Myanmar)

6. Articles from the former trainees

1) “Japan-Colombia, 11 Reasons in Augmented Reality – My experience in Tokyo during the “The JPO/IPR Training Course on Substantive Examination of Design”

Mr. Freddy Alexander Saavedra Siabatto (Colombia)

2) “Fundamental Course on Intellectual Property in Malaysia”

Mr. Mohd Ismi Aswaly Bin Hanimi (Malaysia)

3) “Intellectual Property Infringement Situation in Thailand and the Role of the Royal Thai Police”

Dr. Chavalit Chavalitphongpun (Thailand)

4) “The Situation of Well-Known Trademark Protection in Thailand”

Mr. Sutee Angsuchaikit (Thailand)

7. Messages from Committee of Human Resource Development

Mr. Kanji OKAUCHI,
KYORITSU CHEMICAL-CHECK Lab., Corp.

8. Column: “Time”

Mr. Takao OGIYA, Director General of APIC

9. Selection from TOP 100 Japanese Innovations of “Quartz Wrist Watches”

10. Happenings in Japan (Four-Flame Cartoon)

11. Editor’s Notes

FY 2017 Follow-up Seminars

The JPO are continuing to hold follow-up seminars in FY2017 as follows:

<i>No.</i>	<i>Term of Course</i>	<i>Title</i>
1	October 3 October 6	Vietnam Seminar (Hanoi)/(Ho Chi Minh) “Development trend and commercialization of patented Japanese technologies in early 21st century”
2	November 8	Lao P.D.R. Seminar (Vientiane) “Human Resources Development for Smooth Management of IPR”
3	December 12	Indonesia Seminar (Jakarta) “Comparison between Japanese and Indonesia Patents and Trademarks Protection to Support Economic Development”
4	January 24	Myanmar Seminar (Nay Pyi Taw) “Promoting IP Management for Research Collaboration between Universities and Industries”

We will report details of the Vietnam seminar in the next issue.

FY2017 Report of IP Trainers Course from coordinator

Report on FY2017 JPO/IPR Training Course for IP Trainers

June 13 – June 27, 2017

The JPO/IPR Training Course for IP Trainers was held in Tokyo from June 13 – June 27, 2017.

The purpose of this course is to provide participants involved in the dissemination and public awareness of IP rights with a deeper understanding of the necessary knowledge (IP acts and systems, treaties, utilization of patent information, etc.) and practical methods (text-books and action plans) relating to these endeavors. Participants make presentations and exchange views with each other to learn efficient and effective methods of promoting the public awareness of IP rights.

The course is designed for people who already have a reasonable knowledge of IP systems and at least three years of practical experience in (1) education about IP systems at universities and research institutions, (2) dissemination practices at IP-related organizations, or (3) dissemination practices at IP offices. This year, the course was attended by 25 participants from 11 countries: Brazil, Cambodia, India, Indonesia, Laos, Malaysia, Mexico, Myanmar, the Philippines, Thailand and Vietnam.

On the second day of the training, the trainees visited the JPO and made a courtesy call to the Director-General of the Policy Planning and Coordination Department. Then, they toured the divisions on the first floor of the JPO and the Public Gazettes Reading Room of the National Center for Industrial Property Information and Training (INPIT).



Courtesy call to the JPO



Tour on the 1st floor (entrance) of the JPO

After the tour, they listened to a lecture in the training room of the Association for Promotion of International Cooperation (APIC). The lecture mainly outlined the Intellectual Property Basic Act and IP education. The trainees listened keenly and asked the lecturer many questions on how to conduct education and dissemination based on their positions as IP professionals.



Trainees listening to the lecture

The major feature of this course is that the curriculum is composed of not only classroom lectures, but also some practical exercises including creating IP education materials.

The lecture “Youth Intellectual Property Education” introduced a case example of Tokai University, which conducts phased IP education ranging from preschool children to university students. In addition, the trainees did a practical exercise to learn a method for develop-

ing creativity. They worked in groups to build a paper tower as high as possible. They enjoyed this immensely and learned how to teach young people through practical training.

The trainees seemed to gain a deeper understanding of IP education by experiencing actual methods in the real field of education.



Group work

The trainees also visited Tokyo Metropolitan Chihaya High School, which runs various advanced curriculums. The school has programs called Chihaya Business Project (CBP), one of which focuses on IP education. In the class, the trainees were interviewed by students of Chihaya High School, and a guest lecturer invited from a Japanese company spoke about IP in business. Both activities seemed to greatly interest the trainees. After the class, the trainees had a Q&A session with Mr. Oyadomari, a teacher of the school, and asked him about the curriculums and career options for graduates of the school. Then, they toured the school, guided by the students. This visit helped the trainees understand how IP is incorporated into high school education and how students develop their interest in the IP field. They also had a chance for cultural exchange with Japanese high school students.



Trainees visiting the class of Chihaya High School

As an exercise throughout the course, the trainees created a “Teacher’s Guide” considering the present situation in their own countries where the training of IP educators remains an issue. The guide explained the points to be considered by teachers in IP education in order to provide students with effective training.

The trainees were divided into five groups, and each group created a teaching plan for one lesson covering such subjects as “Key points in teaching” and “Teaching materials and tools.” On the day before the end of the course, they made presentations of their completed “Teacher’s Guide” and had discussions throughout the whole day. It was most impressive that every group gathered for discussions after lectures every day to complete the guides.



Presentation of Teacher's Guide (1)



Presentation of Teacher's Guide (2)



Presentation of Teacher's Guide (3)

In the evaluation meeting held at the end of the course, many trainees talked about their plans after returning to their home countries. Some wanted to implement an IP education system at universities that would cooperate with nearby high schools to share knowledge. One particularly popular lecture was about active learning by Mr. Teraura, President of Manabi Co., Ltd. It received much positive feedback from the trainees, who said that they would adopt the active learning method in their IP education to overcome the challenges they had experienced.

Other trainees made comments that they realized that IP education could be conducted without using difficult terminology after listening to Mr. Uchida's lecture, "Youth Intellectual Property Education." After Mr. Kimura's lecture, "Intellectual Property Education, University," some trainees wanted to keep in contact with Yamaguchi University to learn more about their IP education model of active learning in practice.



A trainee receiving a certificate from the Director of International Cooperation Division (left)



Group photo at the closing ceremony

The trainees' evaluations of the overall training course were high, including their achievement levels. This proves that the curriculum covered practical content that could help their IP education and contribute to the dissemination of IP education and systems in their home countries.

Most participants who took this course had experience in teaching in their countries and tended to be communicative. They asked so many questions, some of which could not be answered in the time available. Lively Q&A sessions continued even after some lectures. Their enthusiasm and commitment to the training were evident in the active exchanges of opinions.

On the weekends, the trainees went out together to experience Japanese culture and customs as well as to deepen their friendship.

It is hoped that the trainees will value the IP networking built through this course, and will succeed in their future careers.



Training course experience in Japan

Wareware wa IP Friends (We are IP Friends)



Ms. Ma. Winelma M. Garcia

Ms. Ma. Winelma Meneses. Garcia (the Philippines)

(FY2016 JPO/IPR Training Course for IP Trainers, June 15 – June 29, 2016)

Did it ever cross your mind that someday you would be doing your job because you love it and not because it pays the bills? It never happened to me until I caught myself working in the IP Office for almost a decade. I used to change jobs every couple of years before after exhausting possible learning opportunities; I quit my job the moment I could no longer look forward to learning something new. Maybe it was because of my training as a scientist to always seek knowledge in everything you do; nevertheless, I got stuck on Intellectual Property, albeit accidentally. I have now cornered myself into a specialized field I would no longer get out of because in IP, the learning opportunities never stop. I belong to a special group of people who farms IP awareness towards creating an IP conscious nation. We talk about the importance of using IP tirelessly to our advantage in the hopes of supporting a globally competitive society.

More often than not, our jobs in raising IP awareness seem futile. It always feels like we are lacking despite the efforts we put into propagating Intellectual Property consciousness to as many people we can, so opportunities to interact with like minds eager to learn is always a welcome treat. A year ago I was in rainy Tokyo (it was raining everyday), with very little expectation and a “hit me with your best shot” attitude, I was there to attend an IPR Training Course for IP nerds (er trainers) like myself.

The training refers to the “JPO/IPR Training Course for IP Trainers” held from June 15 to June 29, 2016 and is conducted by the Overseas Human Resources and Industry Development Association [HIDA] and Japan Institute for Promoting Invention and Innovation (JIPII). Participants were representatives from IP Offices and Universities coming from Brazil, Cambodia, Chile, Indonesia, Lao PDR, Malaysia, Mexico, Myanmar, the Philippines, Thailand and Vietnam.

The training was viewed to provide new perspectives/methods in building capabilities among each institution’s IP stakeholders that is effective, sustainable and encourages the use of IP. The course aims to enhance one’s knowledge and deepen one’s understanding required to efficiently and effectively disseminate intellectual property information (e.g. legal systems, international treaties and methods of using patent information) through presentations and opinion exchanges with other trainees.

The organizers gathered a pool of IP experts who were former JPO examiners, patent at-

torneys, IP educators and IP practitioners to share their expertise and personal experiences in IP management, IP education and advocacy towards making Intellectual Property a way of life. A jam-packed training curriculum (we had a 10AM to 5PM daily schedule) covers extensive learning that included the history and development of Intellectual Property in Japan, IP case studies or actual IP cases to illustrate how different IPRs are practiced in Japan. The resource speakers discussed actual experiences with IP court cases and how they dealt with them. Speakers from the universities illustrated how IP is taught and inculcated in the minds of their students from early childhood to university life. A field trip at a local high school broke the monotony of classroom sessions and the participants were given the opportunity to interact with Japanese teenagers and ask their opinions about Intellectual Property education strategies. At the end of the training course, it was apparent that Japan is serious about having an IP Based Economy and make everyone's effort count in the achievement of this goal.

Prior to coming to Japan, the participants were asked to prepare a presentation of Case Studies for IP Education efforts from their home country. This was a voluntary request, but everyone ended up sharing their efforts in propagating IP education. From the presentations, it was evident that the IP Offices (Brazil, Chile, Mexico and the Philippines) have active campaign/programs geared toward IP Promotion and awareness albeit the differences in the methods of propagating IP consciousness. The universities on the other hand have their own efforts in raising IP awareness in their campuses. The majority of the universities have technology transfer offices that handle the IP produced in their schools and they work with a very lean manpower. Most of the universities have shared that IP is known only within the confines of the colleges of Law and is virtually unknown outside its walls. These findings show that there is indeed a lot of room for improvement and development of linking national efforts of IP Education to the academe, most especially to the technology developing part of the universities and colleges.



The participants were later divided into groups, separating into delegates from each country, to work with the other participants in brushing up IP Learning Modules on Patents, Industrial Design, Utility Model, Geographical Indication and Trademarks. A week was given to come up with an improved version (content-wise and appearance-wise) of the textbooks done by the previous year's course participants. This activity forced the participants to work beyond the seminar sessions to improve the textbooks contents, layout and presentation (sight-seeing Tokyo will have to wait until the weekend). This activity raised issues on the IP Laws followed in one's home country, since they vary in different countries. The textbook outputs were somewhat general (template format) and broad in scope, subject to further edits to cater

for a specific IP jurisdiction. The textbooks were then presented for comments and suggestions at the end of the training. During the presentation, different techniques and approaches surfaced that proved to be beneficial for everyone in developing IP Learning Materials to be presented to High School students. No offence was taken during the critique because the whole class focused on teaching and making IP attractive to learn for kids between 15-18 years old. The completed textbooks were also distributed among the participants to be translated in their native language and adjusted according to their IP laws.

Target goals were assessed at the end of the training to determine whether or not they had been met by the lectures and discussions during the course. The majority of the target goals set by the participants were satisfactorily met. However, a comment about the manner of presentation of the lectures was raised that pointed out some difficulty in the understanding of the lecture because the lecturer had difficulty in imparting his knowledge in a clear and concise manner. However, this comment should be taken with a grain of salt since the training was made of an international audience and done in a second language, hence much leeway should be given as long as the point is presented and that written handouts were given.

The Tokyo experience to build networks of IP Friends who share the same sentiments about IP promotion and IP education is a breath of fresh air that makes one realize that we're all in this together working towards the same goal. We may be lean in manpower but we all strive towards achieving a common objective, and that is to educate everyone as much as possible on the merits of practicing IP in almost all aspects of our lives. That we all want to make IP consciousness a way of life. Kudos to the organizers who thought of bringing this course to life annually allowing IP preachers (no pun intended) to interact with each other to exchange best practices and work challenges that help improve strategies and approaches in teaching the public about Intellectual Property.

It's been a year since we had our last lecture and our last visit to Tokyo yet many of us have stayed connected through social media, have been reminiscing about Tokyo and mulling over a possible reunion because at the end of the day, wareware wa IP Friends.



<https://www.facebook.com/groups/1761867944092863/>

Ma. Winelma M. Garcia
IP Rights Specialist
Intellectual Property Office of the Philippines

Sripatum University and the Opportunity for IP Education in Thailand



Ms. Chongnang Wiputhanupong (Thailand)

Ms. Chongnang Wiputhanupong

(FY2017 JPO/IPR Training Course for IP Trainers, June 13 – June 27, 2017)

It has been a good opportunity for me to join the JPO/IPR Training Course for IP Trainers organized by APIC, Tokyo from June 13-27, 2017. The training allowed me to learn about IP education at different levels, from kindergarten to elementary, high school, undergrad, and post-grad students.

The course that mostly inspired me was IP education for junior and high school students. Since these young people are soon-to-be adults, they have a high potential and capability to learn many things at their age through school education and activities. At this learning stage, all education would help them to find out and expand their skills and ability to think critically. Also, well-organised school education shapes their attitudes, values and aspirations, which in turn affect their ability to function as members of their communities.¹ Therefore, the IP education provided for these young people at this secondary education level is very important both for them as individuals, as well as for the future development of the whole nation.

Nevertheless, some statistics show that level of learning in secondary education is very low in the case of many middle-income countries.² For example, in the 2015 Programme for International Student Assessment (PISA), which surveyed the knowledge and skills in mathematics, science and reading among more than half a million 15-year-olds across 70 countries worldwide, the results showed that Thailand ranked 54th for maths, 57th for reading, and 54th for sciences.³

On the other hand, according to the Agreement Related to Scientific and Technical Cooperation between the Government of the United States of America and the Government of the Kingdom of Thailand 2013, there was also cooperation between the US and Thailand in the area of Science, Technology, Engineering, and Mathematics Education (STEM Education).

Briefly, STEM Education refers to the types of skills that students learn by studying science, technology, engineering, and math collectively.⁴ STEM Education allows students to learn these subjects through problem-solving; thereby encouraging them to discover their capability in terms of creation, inventions, and systematic analysis. The Government of Thai-

¹ Progress for Children: A Report Card on Adolescents Number 10, April 2012
https://www.unicef.org/media/files/PFC2012_A_report_card_on_adolescents.pdf p 16

² The State of the World's Children 2016
https://www.unicef.org/publications/files/UNICEF_SOWC_2016.pdf p 51

³ Pisa test rankings put Thai students near the bottom in Asia:
<http://www.bangkokpost.com/learning/advanced/1154532/pisa-test-rankings-put-thai-students-near-bottom-of-asia>

⁴ <https://www.ed.gov/stem>

land has enforced STEM Education through the National STEM Education Center (NSEC) and the Regional STEM Education Center (RSEC) in 12 provinces nationwide.

Sripatum University and Its Success in STEM Education

Sripatum University, in cooperation between the School of Engineering, School of Information Technology, and College of Logistics and Supply Chain, conducted STEM Education in 2017 for groups of secondary school students at the Bang Bua School through a project called *“Smart Farm by Smart Phone”*.

The project managed and instructed academics and undergrad students from these three schools of Sripatum University as STEM instructors. According to the project framework, the group of educators and students from Sripatum University had to conduct several meetings with teachers and students of Bang Bua School in order to create the STEM Education environment. During the project, three weeks of problem-based and project-based learning were implemented for those STEM groups of secondary school students and teachers for their creativity and learning achievements. Until the end of the project, the groups of people from Sripatum University and Bang Bua School who were involved in this STEM Education held more than five continuous meetings.

In August 2017, through an event called “STEM DAY 2017” that was held by the Bangkok Regional STEM Education Center and the Bodin Decha (Sing Singhaseni) School, the *“Smart Farm by Smart Phone”* won first prize in the STEM project competition.

STEM Education and IP Education: Bringing Experience from APIC

According to the lecture of Professor Haruhisa UCHIDA, Department of Human Development, School of Humanities and Culture, Tokai University, during the JPO/IPR Training Course for IP Trainers (June 13-27, 2017) at the Asia-Pacific Industrial Property Center (APIC), Tokai University has created an IP Education project in cooperation with the Japan Patent Office (JPO) called the Tokai IP Education (TOKAI Model), which aims to bring the IP education (IPE) into the country’s educational system.

The lecture emphasised that the purpose of the project is to provide IP education for students in high school, junior high school, elementary school, and kindergarten under the concept of *“IP Education as Education in Creativity”* in order to *“1) encourage creative, entrepreneurial, and a respective spirit, 2) promote IP culture, and 3) foster talented people for technology transfer”*.

Under this project, each IP education program will be specifically designed and divided according to the age and the learning capability of students. For example, students in kindergarten (3-6 years old) will basically be trained to experience the joy and pleasure of creation. Also, the IP Education project will foster these little kids to build up their sense of caring for oneself and respect for other. These are the attitudes that are likely to lead to a sense of respect for intellectual property protection in the future.

For elementary school students (7-12 years old), the project will provide an understanding regarding the importance of creation and intellectual property rights protection. As for sec-

ondary school or junior high school (13-15 years old), the “*IP Education as Education in Creativity*” project will lead students toward greater understanding about intellectual property rights and the relationship between intellectual property and society. Finally, in high school, students will be able to understand the intellectual property system, and to realise that intellectual property is valuable when it is utilised.

In order to achieve these objectives, Professor UCHIDA said in his lecture that the Intellectual Property Education (TOKAI Model) will be conducted for students at different ages, together with other effective programs of education such as Entrepreneurship Education (the Vaasa Model) and Creativity Education. The Vaasa Model refers to the Entrepreneurship Education,⁵ which originated in Finland. It educates learners to take responsibility for themselves, encourages them to take action, guides them towards recognising opportunities, reinforces learners’ confidence in their own capabilities, and develops learners’ competencies toward goal-oriented collaboration with others in society.

In practice, first of all, TOKAI Model IP Education encourages creativity generally for younger students in kindergarten and elementary school through the concept of copyrights. Afterward, the concepts of patents, trademarks, and other types of IP, as well as IP law and protection, will be offered together with Entrepreneurship Education for students in higher education such as secondary school and high school.

During the lecture, Professor UCHIDA portrayed many examples of activities that could help students build up their skills in IP, Entrepreneurship, and Creativity. These include the “Car Competition” activity, which encourages students to construct a car and later compete the running distance. Here, students must work as a team, and can use only the materials provided by the instructor and their own creativity in order to win the competition.

In addition, Professor UCHIDA let the participants from Asia-Pacific nations exercise their creativity through the “Paper Tower” activity. The mission of this activity is to build the highest self-standing paper tower within no more than minutes amongst a group of 3-5 participants using only eight paper cards.

With respect to IP education, one of the most interesting points in the lecture of Professor UCHIDA during the training course was that in junior high school or otherwise during adolescence, most learners would carry the capability of emotional development and mental stability, which would allow them to develop the ability to make wise decisions, generalise ideas, and establish skills and competencies. Therefore, education in IP, entrepreneurship and creativity at this age is highly important.

The lecture given by Professor UCHIDA, therefore, highlighted the significance of these types of education for secondary school or junior high school students, which is also consistent with the idea of UNICEF as mentioned above.⁶

Meanwhile in Thailand, on the other hand, even though the Thai Government may not have

⁵ Guidelines for Entrepreneurship Education, Ministry of Education, Department for Education and Science, 2009: <http://www.ptpest.ee/files/entrepreneursip%20education%20finland%20definition.pdf>

⁶ See. Footnote 1

an explicit idea about education in these three fields, the Ministry of Education—with cooperation between the Institute for the Promotion of Teaching Science and Technology (IPST) and the Office of the Basic Education Commission (OBEC)—has recently adopted the concept of STEM, or Science, Technology, Engineering, and Mathematics Education.

According to the IPST, Thailand has established a National STEM Education Center (NSEC) and a Regional STEM Education Center (RSEC) in 13 provinces nationwide. These STEM education centers will organise and develop learning projects that are suitable for students of different ages. Principally, those learning projects will be instructed based on problem-based and project-based learning, which are the main teaching methods that are highly beneficial for the student's skills and competencies.

In view of these points, therefore, STEM Education Centers could play an important role in encouraging IP Education amongst secondary school students. Through the four levels of integration—disciplinary, multidisciplinary, interdisciplinary and cross disciplinary⁷—STEM Education could create links between related subjects, and could therefore be one possible mechanism through which to build up IP awareness⁸, entrepreneurship, and creativity. The STEM Education Centers of Thailand could also incorporate all experiences from the Intellectual Property Education (TOKAI Model), and apply such knowledge and activities to its STEM Education projects across the country.

Sripatum University and the Opportunity for IP Education in Thailand

Sripatum University, in a cooperative effort between the School of Engineering, School of Information Technology, and College of Logistics and Supply Chain, as a STEM institution and the 2017 winner of the STEM project, could be one potential academic institution for education in IP, entrepreneurship and creativity amongst secondary school students in Thailand.

The 2017 STEM project, for example, was organised amongst groups of secondary school students at the Bang Bua School, which is a high school located in Bangkok, opposite to Sripatum University. The project is based on the idea of the Arduino micro-controller and the Internet of Things (IoT) for Smart Farm, called “*Smart Farm by Smart Phone*”. Under this project, the students learnt how to grow melons using internet technology. The project was successful, and won the 1st prize in the 2017 STEM Competition.

According to the idea of education in IP, entrepreneurship and creativity (the Vaasa Model), therefore, it would be highly beneficial for these young students if Sripatum University brought along the TOKAI Model IP Education learnt from APIC, and incorporate it to their future STEM Education projects along with education in the major subjects of science, technology, engineering, and mathematics.

⁷ Vasquez, J.A., Snelder, C. and Comer, M. (2013). STEM Lesson Essentials: Grades 3-8.

⁸ As in the lecture of Mr. Shohei YOSHINAGA, SMEs policy Planning Section, IP Promotion Division, Policy Planning and Coordination Department, Japan Patent Office, the JPO/IPTR Training Course for IP Trainers, APIC, Tokyo, June 13-27, 2017, that promoting and raising IP awareness amongst young people is a highly important issue and therefore the National IP Strategies were agreed.

Conclusion

According to the lectures of Professor UCHIDA and Mr. YOSHINAGA that were given during this training course, it was agreed that IP Education is an important mechanism to promote and raise IP awareness amongst young people—particularly those students in secondary school or junior high school (13-15 years); and that this therefore should be a national strategy.

Although the Thai Government may not yet have an explicit idea about education in IP, entrepreneurship and creativity (the Vaasa Model) as in Japan, it is presently borrowing the idea of STEM Education and has already established STEM Education Centers across the country. These centers could bring along the experience from the Intellectual Property Education (TOKAI Model) learnt from APIC, and apply such knowledge and activities to their STEM Education projects.

Also, in this regard, it would be a very good opportunity for Sripatum University, as a successful STEM institution, to also possibly incorporate Intellectual Property Education (the TOKAI Model) into their future STEM projects, not only for the benefit of secondary school students in Bang Bua School; but also for the benefit of other students and for the country in the long run.



Policy Developer at National Science Technology and
Innovation Policy Office, Ministry of Science and Technology,
Thailand



Ms. Panisa Harnpathananun

Ms. Panisa Harnpathananun (Thailand)

(FY2017 JPO/IPR Training Course for IP Trainers, June 13 – June 27 2017)

The objective of this training course was to enhance knowledge and experiences to disseminate “Intellectual Properties (IP)” as well as to learn about how to efficiently disseminate intellectual property through presentation and opinion exchanges with other participants. Moreover, all participants also learnt how to disseminate/ teach Intellectual Properties (IP) to students, trainees in all levels of education from kindergarten through university, including operators in enterprises and industries. This training course took 17 days. There were 25 trainees from various countries, including Brazil, Cambodia, India, Indonesia, Lao P.D.R, Myanmar, Mexico, Malaysia, the Philippines, Vietnam and Thailand.



The contents of this course can be divided into 2 main parts: 1) Overview of Intellectual Property Law (Patents, Design, Trademarks, and Copyrights) and 2) Intellectual Property Education for educational institutions and companies). In addition, there were other interesting activities, for instances, all trainees’ self-introductions, paper tower – creativity team building, and a high school field trip (observation for Intellectual Property education).



The first stage of this training course was orientation by HIDA (The Overseas Human Resources and Industry Development Association). Then, it was time for presentations by the course participants. There were many case studies from around the world, for instance, Brazil has the National Institute of Industrial Property (INPI) which is an official government body responsible for Industrial Property rights. This is similar to Mexico, where there is the Mexican Institute for Industrial Property (IMPI), which has one role of promotional and technological information services. In addition, a case study of agencies that are an intermediary of coordination between the government and researchers/lecturers, for instance IP clinics in Telkom University, Indonesia and National Polytechnic Institute (IPN) in Mexico. The function of IP education (dissemination and communication) is operated by Technology Information, Forecasting and Assessment Council (TIFAC), India and INPI in Brazil. The next day, all trainees joined the orientation of APIC-JIPII (Asia-Pacific Industrial Property Center, Japan Institute for Promoting Invention and Innovation) in the morning. After that, all participants had the great opportunity to visit the National Center for Industry Property Information and Training (INPIT). The lecturers were the Director of JIPII (Mr. Seiji Teraura), CEOs from private companies, patent attorneys, and lecturers from universities.



The first part of this training course was involved with an Overview of Intellectual Property Law. The course started with the policies and measures of the Japan Patent Office for “Raising Public Awareness” on IP, in which was indicated the importance and implementation from the government to raise awareness on IP. The Intellectual Property Laws for this course consisted of patents, industrial design, trademarks and copyrights, and case studies which were presented inside and outside Japan. The first lesson was “Patent”, which started with necessity, the patent system, and patent strategy for business protection, patent application especially for domestic and overseas businesses. Then, the lesson of “Design”, this was focused on design act, procedures to obtain a desire right, requirements of creativeness, cases of disputes based on the design right and the Hague System for International registration. Moreover, the lecturer shown the difference between “Patents” and “Design”, which is a confusing point for inventors and creators, including the principal of similar and non-similar forms. The third lesson of Intellectual Property law was “Trademarks”, which included act, history, framework and requirements. “Copyrights” was the next lecture, and began with the history and detail of acts. Of special interest were case studies related to Japan. The lecturer gave details of the story and results in each case.



The second part was Intellectual Property Education (IPE). In the early stage, all trainees were taught with the introduction of the Japan Patent Office (JPO) which has made efforts regarding to promotion of IP public awareness, the IP basic act and IP Human resources. The target groups of awareness-raising are students, companies (especially SMEs), and consumers. IP human resource development should be implemented with people. However, there are different methods to apply with each group. Additionally, it is important to develop educational materials. The most effective learning methodology is “Active Learning (AL)”. This teaching method is interactive learning between students and lecturers/ teachers. The stimulation of “Independence” and “Creativity” is important. In a case of Japan, Intellectual Property Education (IPE) should start from kindergarten school. The lecturer, Prof. Dr. Haruhisa Uchida, from Tokai University, indicated that kindergarten should focus on “creativity”, elementary school on “basic academic ability e.g. IP rights”, and junior – and high-school – on the “IP system”, while all levels in educational institutions should include creative activities. The next lesson was about the role of patent attorneys for IP dissemination activities. In the point of enterprises and companies, there are promotion IPs awareness for SMEs and IP education for employees. Mr. Mitsuhiro Takasaki, CEO of Engineer Inc., explained the principles of Marketing (M), Patent (P), Design (D), Promotion (P) and their application. In the final lecture, training participants learnt about IP methodology in university, the methods consist of active learning, flip teaching and full e-learning lectures. In addition, an interested and useful activity was the field trip to Tokyo Metropolitan Chihaya High School, which has a course syllabus, that includes Intellectual Property Education (IPE) about the IP system at the high-school level. All trainees learnt process of active-learning between a teacher and students and how to disseminate IP knowledge in a real classroom.



An important section for this training course was about assignments and presentations of assigned groups. There were 5 groups. The topic of the assignment was to create “a Teacher’s Guide of Intellectual Properties (IP)”. All groups had to prepare about the presentation and course outlines (goals, objectives, strategies and learning contents and activities). The topic of each group was involved with patent protection of technology (group 1), overview of the intellectual property: patent, utility model, industrial design, trademark (group 2), trademark (group 3 and 5) and industrial design (group 4). This activity has a lot of useful benefits: team work, breaking the ice, deep understanding in IP, and understanding how to design and prepare students guidelines for different levels of students.

In 2 weekends and in their free time, all participants shared meaningful time together. After the training class, we sang KARAOKE at the Tokyo Kenshu Center (TKC). Some participants went sightseeing to Nikko, a world heritage city in Japan. Another group visited Odai-ba, which is a man-made island on Tokyo bay.



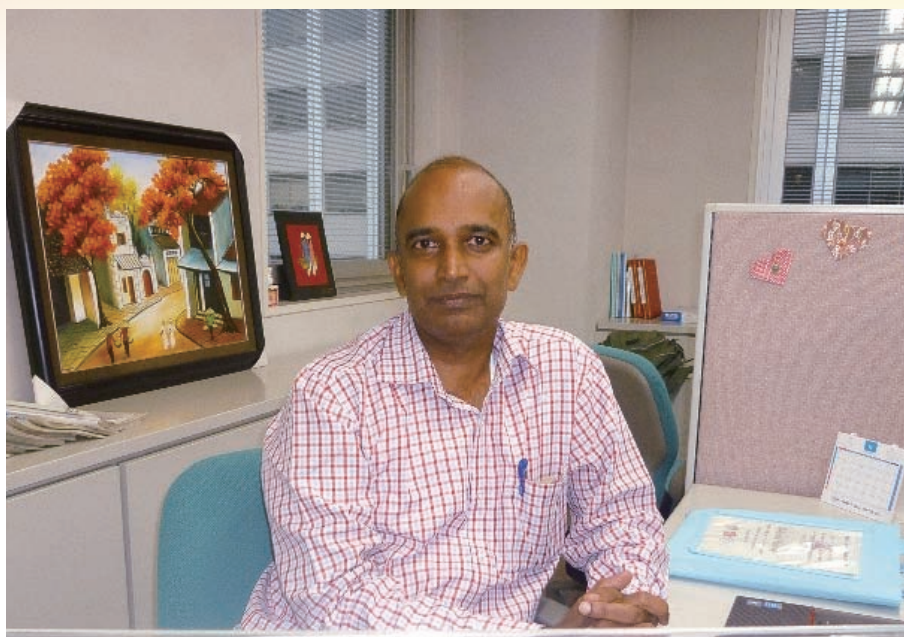
(Photo by Ms. Sheyl Cruz Tanon, a course trainee from the Philippines)



This training course of JPO/IPR Training Course for IP Trainers is very fruitful and meaningful for Intellectual Property dissemination especially IP education. Many countries of participants have a limitation of IP knowledge and dissemination. In a case of Thailand, people who know and understand IP are only lecturers in universities, researchers in research institutes and large companies or multi-national companies and IP officers in IP departments and IP offices. Moreover, the results of this training course can stimulate IP networks, which are useful and beneficial further association about Intellectual Properties (IP) for worldwide countries.

The most efficient benefits for me who works at the science, technology and innovation policy development office, is to plan and specify IP strategy and education in National Strategic Policy in Thailand: strengthening the promotion of IP awareness (the protection of intellectual property rights both domestically and overseas), and determining/ stipulating the action plans for IP education. Additionally, IP awareness promotion is included with announcement, public relation (PR) and making deep-understanding about how to utilize IP and IP management which can increase national revenues and enhance competitive competency for production and service industries in Thailand.

Introduction of FY 2017 Long Term Fellowship Researchers



Mr. Shashidhara C. N.

Mr. C.N. Shashidhara (India)

Hello! My name is C.N. Shashidhara and I am from India. I have been working for the Patent Office, Chennai since the year 2000. I worked as Examiner till Jan'2009 and from then on carrying out functions of the Controller by getting promoted as Assistant Controller in Jan'2009 and then as Deputy Controller in Dec'2015. In India the examination process has two tier system with Examiner conducting search and Examination and Controller communicating the gist of the objections to the applicant and subsequently deciding on grant or refusal of the Patent application. Controller can also direct the applicant to amend the specification before proceeding for grant. India has 4 Patent Offices at Delhi, Chennai, Kolkata and Mumbai and Patent Office, Chennai caters to the jurisdiction of southern states of India. From 2012 onwards I am working as Group Leader for Mechanical and miscellaneous subjects group of Chennai. I have been fortunate to be part of the drastic changes taking place in the Patent Office especially from the year 2000 onwards. I have conducted search as an Examiner manually using printed copies of the accepted Patents in my first year as the computers were not yet available and the scanning of the old records started much later. Then with the availability of computers Examiners conducted search with freely available databases in Internet and CDs obtained from EPO, Derwent etc.

There are many changes in the way the Patent Office functioned throughout. For example Examination based on the Request for Examination was introduced in May'2003. Prior to that all the Patent applications were examined. Pre-grant and Post-grant opposition systems were

introduced. The departments called P1 section and P2 section which were catering to pre-grant and post-grant processing of applications were replaced by three different departments, 4 different groups formed based on the subject specialization etc. from 2009. Also from 2009 onwards examination and grant/refusal of applications are done through electronic modules even though the communications to the applicants were through post. There were many cases in which Controllers decision to refuse the application were appealed at Intellectual Property Appellate Board with some decisions being upheld and others referred back for reconsideration.

Further from April'2016 the communication to the applicants are also being sent through email and the files being allotted with Examiners and Controllers sitting at different locations, hearing being conducted through video conferencing etc. There is lot of encouragement for start-up companies from Government of India and there is also fee reduction for small entities. Patent awareness at Universities, small industries etc. was very low and hence frequently the Examiners and Controllers were nominated for giving lectures on IPR and I have been fortunate to share my knowledge when nominated to give lectures at Colleges, seminars organized by MSME for small companies etc. As the link between Industry and academia was weak in most places, generally the Patent holders were not aware about commercialization of Patents. Hence I took the theme for my study as University and Industry collaboration for utilizing Patents. I sincerely hope that my study of University and Industry collaboration in Japan will benefit the Universities and small industries in my country. I am confident that with the valuable guidance and help from the experienced researchers and professionals in Japan valuable inputs will be provided that can benefit Universities and industries in India. My sincere gratitude to Japan Patent Office, Asia Pacific Industrial Property Center and Japan Institute for Invention and innovation for providing me with this valuable opportunity. I am grateful to the Hon'ble Controller General of Patents, Designs and Trademarks for nominating me for this study.



Mr. Rico Collado (the Philippines)

Konichiwa! I am Rico Collado. I am a patent examiner from the Intellectual Property Office of the Philippines (IPOPHL), Manila. I have been examining patent applications in the field of electrical and electronics at the Bureau of Patents (BOP), a flagship bureau of the IPOPHL, close to 15 years now. I am currently a Supervising Senior Patent Examiner of a newly created division called the Information and Communications Technology Examining Division (ICED) since this May 2017. This division is an off-shoot of my former division which is the Electrical and Electronics Examining Division (EEED) and was created to devolve the number of applications assigned to the EEED with Information and Communications Technology (ICT) as the main subject matter. As a senior examiner, aside from examining patent applications, I make sure that all the junior examiners under me have completed their own targets and that the notices they produce are according to the established quality requirements of the Bureau.

Construing the patentability of ICT type of patent applications pose many challenges in the conduct of their examination as these kinds of applications tend to hinge on computer programs as part of its innovation. Unfortunately, computer programs per se is currently not patentable under the IP Code of the Philippines. However, a lot of ICT applications have already been patented in most of the IP Offices in the world. How they were issued are largely dependent on their IP Laws and the examination guidelines that dealt these applications. These applications may be allowed in the Philippines as most of the examination results are shared and that the patentability of them have already been addressed. In the Philippines, the only guidance that the examiners rely upon in treating these kinds of applications, is found in

the Manual for Substantive Examination (MSEP) wherein it states that computer programs may be a subject for patentability if these programs are to be combined with a computer and the computer runs differently other than its basic functions. The guidance is open to many interpretations thereby there exist a lack of step by step procedure in examining ICT applications.

Late last year, in an attempt to rationalize the examination of ICT applications, the IPOPHL have created an Examination Guidelines for ICT applications. These guidelines are still undergoing a lot of revisions and the final content of the guidelines is dependent on the comments and suggestions by the experts which the IPOPHL had tapped. The guidelines is yet to be introduced to the examiners.

This year, I am fortunate enough to join the JPO Study-cum Research Fellowship Program, a platform where I think I could make a contribution to the policy making process in my office. My study will focus on the Japan's IP Policy and Practices with regard to patentability of ICT applications and the challenges that they had when they draw up such policy. I should find out whether having a good or strong patent regime really spur innovations and thereby increase the patent filings especially in the field of ICT innovations. How the ICT or Software patents are challenged in courts, despite having a good patenting procedures, thereby prompted the JPO to revise their examining procedures and how quality of patents are measured. The study will help me build recommendations to the IPOPHL strategy into developing IP policies that geared toward assisting development of and protecting IP innovations in the field of ICT.

My Life in Japan as a Long-Term Researcher



Dr. Moe Moe Thwe (Myanmar)

Dr. Moe Moe Thwe

One unforgettable experience in my life was the period when I had a chance to study in the Japan Patent Office (the JPO) as a long-term researcher for six months from October 2013 to March 2014.

October 15th, the first day that I arrived to Tokyo, Japan to study the Japanese intellectual property system, was quite exciting because of a typhoon. The typhoon helped me to have a deep, sound sleep for the whole day and night, as I was so exhausted by the series of meetings in our Ministry of Science and Technology (now, the Ministry of Education) before I left. It was my good luck to have a chance to stay directly in Hotel Mystay during my study period, which was very conveniently located (only 15 to 20 minutes walking to the APIC office).

Every year, the JPO invites two researchers during summer and again in winter for a six-month Study-cum-Research Fellowship Program at the Asia Pacific Industrial Property (APIC) office, as entrusted by the Japan Patent Office (JPO). My partner Inna-san, a senior trademark examiner from DGIP Indonesia, and I were invited as long-term researchers for the winter program this fiscal year. This is the very first time for Myanmar to have a chance to participate in the JPO research fellowships. I still remember the time of my first day in APIC as if it was yesterday. APIC sisters and brothers warmly welcomed and greeted us, and their sweet smiles and friendship encouraged us to have enough strength and a comfortable life for our entire study period in Japan. Completing my study would not have been possible without the kind assistance from APIC staff, especially our two long-term researcher coordinators, sisters Satoko-san and Yukiko-san. Indeed, these two lovely sisters kindly assisted and willingly supported us not only in our studying, but also in social matters in order to have a comfortable life and ease of study in Japan.

As you may know, Japan is a country which intends to develop IP-based nations elsewhere in the world. Japan itself has been experiencing an IP system for more than 100 years. To the contrary, we are very far away from an IP system in our country, as we have less knowledge in the IP field and less experience making use of IP as a tool for national economic development. As our Ministry of Education (Science and Technology) has been trying hard to establish a new IP environment in Myanmar as soon as possible, I hoped that this study project would be invaluable for my country to understand the IP system in connection with economic development of the nation.

With this high intention, I decided my study focus as the “IP Management System” for the

establishment of effective IP system in my country. I also decided that I would take this opportunity to learn about the IP system and environment in Japan to the utmost. I was impressed to be a long-term researcher for IP in the JPO, and I was convinced that my experiences could really help in extending knowledge within the IP field for my future career.

During the first half of the studying period, a really embarrassing thing happened to me due to stomach pain that delayed my effort going forward. I really worried about that, and even got depression due to the defect in health as I would have liked to study as much as possible here. Luckily, I recovered after doing a medical checkup at the Toranomon Hospital, which is one of the most famous hospitals in Japan. I do thank Yukiko-san and Satoko-san, who took great care of me during my illness with such serious pain. The JPO provided us all of the facilities needed for our study, including buying references books, translating from Japanese to English if the reference was written in the Japanese language, and also almost all of the expenses necessary for our research work.

I also had a chance to take some interesting IP courses offered by the JPO during my study period, and I conducted study visits to famous companies, law firms and IP-related organizations to learn about their IP management and strategy. I had a chance to choose the specific lectures of the subjects relating to IP that I was interested in, and I took some lectures in several courses on IP Administration, IP enforcement, the e-filing system, fundamental and advanced training for patent and trademark examiners, the international patent and trademark registration system, the JPO Industrial property management system, and IP education/awareness programs.

Listening to the interesting lectures shared by experienced lecturers, meeting with persons in the IP field from various countries who participated in these courses, discussing with them to clarify my curiosity regarding IP, making friendships during the studying period, and having future contact to exchange knowledge about IP were all invaluable experiences for me. I really enjoyed to participate in these courses. It was quite interesting and also fun taking part in one or more study visits which were included in each course. It always refreshed my memory to remember my international friends whenever I looked at the memorial and remarkable group photos during our trip.

During my six-month study, I visited the IP High Court, The Japan Patent Office (JPO), Japan Patent Information Organization (JAPIO), Industrial Property Cooperation Center (IPCC), Fuji Xerox Co., Ltd, Thomson Reuters, Toppan Printing Co., Ltd, Honda Motor Co., Ltd, TMI associates, Topcon Corporation, and more. During these study visits, all participants enjoyed learning about their IP management and strategy, as well as other IP-related activities. I believed that these trips provided us with greater understanding regarding the usefulness of IP tools in business development, and the seriousness of Japanese companies on investment in IP creation and protection.

As my research emphasized IP management for the establishment of an IP system in Myanmar, all of this knowledge acquired during the coursework and study visits were useful for my research. In order to understand how the Japanese government makes use of IP policy and a national strategic plan to promote IP creation, utilization and protection that in turn lead to the nation toward sustainable industrial development in this competitive world, I stud-

ied the whole history of the Japanese IP system from the beginning stage until the present time by conducting a literature survey.

During my study, I had a chance to meet with people working in government organizations, research institutes and technology transfer organizations in order to discuss the actual situation with respect to the networking of IP tripartite collaboration (Government-University-Industry) to promote the IP creation cycle. Based on the understanding of the Japanese IP system through a literature survey and interview results, I wrote a proposal for a proper road map to develop an IP system in Myanmar after overviewing the current national economic policy and IP environment of Myanmar.

My research could not be completed without guidance from my research supervisor, Mr. Yutaka Niidome, Adjunct Professor at the National Graduate Institute for Policy Studies (GRIPS). This was also my good luck that I met with him as my advisor, because of his competence in the IP field and his English language proficiency. I was greatly impressed by his keen interest and knowledge, kindness and understanding while we were working together in completion of this research work. I really thank him for his invaluable guidance, suggestions, advice and comments throughout my research term.

Prof Niidome kindly arranged and helped me to interview officials from MEXT, METI, AIST, Todai TLO in Tokyo University, Kansai TLO and Kyoto University to discuss my research project. I will never forget him for his kindness, patience and assistance during this study. I noticed that he is not only interested in education, but is also knowledgeable and clever in several things including singing and photographing. Besides, I had a good chance to learn several aspects while we worked together in Japan. I hope that these experiences and knowledge gained during my study period will always remind me and force me to be successful in my future career.

While during my research, the week-long internship course in GLOBAL IP Tokyo led by Mr. Akio Takahashi, Representative Partner, helped me to have a high level of knowledge regarding Japanese law firms, the patent attorney system, patent filing and registration in Japan and the United States, clerical business work, IP litigation procedures in Japan and IP-related organizations, and more. Our discussion on several topics relating to IP was so active and interesting by sharing knowledge between Takahashi san, Mr. Kevin J. Everette, and myself. I really enjoyed learning about the progress of the Japanese patent system. I would like to give my sincere appreciation to GLOBAL IP Tokyo for the opportunity to have the internship program there. Many thanks to Representative Partner Mr. Akio Takahashi, Mr. Daisuke Kimoto, Mr. Ryosuke Tajima, and Mr. Kevin J. Everette for their kind support and fruitful discussions throughout the course.

We had a good relationship with Global IP, Tokyo because I invited Mr. Akio Takahashi to give a talk about the Japanese Patent system in our Ministry of Education (Science and Technology). After I came back from Japan, Takahashi san and his colleague Kimoto san visited our MOST office in 2015 to share their knowledge with our IP section staff members. They also had a good chance to take part in our World IP day ceremony organized by MOST, and they really enjoyed to see activities including shows like posters demonstrating the IP day theme “Movies: A global passion” set up by the World Intellectual Property Organization

(WIPO), as well as IP-related articles, poems and cartoons.

Apart from a talk on IP-related titles, a discussion forum about current issues regarding IP in Myanmar was also included in the ceremony. It was quite an interesting program, and the audience also seemed very interested to take part actively. By taking this opportunity, I presented the current progress with regard to the IP system that we have been trying hard to establish in Myanmar. In addition, I discussed my research proposal for “*How Myanmar will step forward with proper road map*” that I studied in Japan as a long-term researcher.

During my study, JPO commissioner Mr. Hato kindly met with us two times and encouraged our future corporation in IPR fields. As most Japanese people were interested to invest in Myanmar, I was requested to share information about the current situation and future perspective of Myanmar—especially regarding the development of an IP environment. I gave a country report presentation five times, and we held a large seminar titled “IP system Myanmar” that was organized by The JPO, JETRO and JFBA.

Although I tried to work hard to learn about various aspects of the IP system while I studied, I also enjoyed my life in Japan because of my good friends Inna-san, Yukiko-san, Satoko-san and others who worked in APIC at that time. I also had a very good time with my JPO-Myanmar friends who were working in the JPO’s International Affairs Division.

My good partner Nuraina Bandarsyah (whom we called Inna san), from the Directorate-general of Intellectual Property Rights of the Republic of Indonesia, was very lovely and sociable, and also active to go around Tokyo. We visited somewhere every weekend and holiday, and she always planned and led me to enjoy the time in Japan with her. Sometimes, one or more APIC sisters and brothers also come along with us to visit somewhere in Tokyo. I was always impressed by her social interests, flexibility and activeness in doing interesting things while we stayed together. She was very good in cooking, dancing, singing, and shopping. It was my great pleasure that I had a chance to taste Indonesian foods sent by her mum, and we sometimes cooked our traditional foods and ate together while we stayed in our hotel. We talked about our jobs, as well as social things. We shared our life experiences with each other, and I actually learnt some concepts from her like that of enjoying life.

Besides going around Tokyo together, I also had remarkable memories with her such as taking trips to Kamakura, Hakone, Disneyland and Kyoto. I also had a good chance to enjoy the time with my JPO-Myanmar friends while I stayed in Japan. They kindly sent me to Mt. Takao during the New Year holidays, and we enjoyed climbing the mountain together and chatting about our culture and traditions regarding religion, learning about nature, and sharing life experiences. It was a quite interesting experience in Japan to do 88 wishes for the future at a temple. I wished 88 times to strengthen the friendship and collaboration between Japan and Myanmar not only from an economic point of view, but also other aspects including the diffusion of our culture and traditional things, good practices in religion, etc.

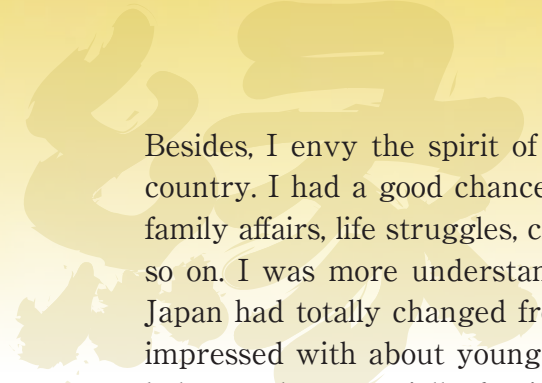
I noticed that the majority of Japanese people love their culture and traditions. The tea ceremony is a popular traditional habit among the young generation, and I had a good chance to learn about the Japanese traditional tea ceremony due to an arrangement by our kind sisters Satoko san and Yukiko san at the APIC head office. We really enjoyed that tea ceremony,

where we wore a traditional Japanese kimono. Satoko and Yukiko kindly helped us to nicely wear their traditional dress and hair style. A well-experienced teacher also explained to us the detailed procedure of the Japanese tea ceremony, and showed us how to prepare Japanese green tea and snacks. I was impressed by the mindset of the Japanese people to include their respect, polite and humble manner in this tea ceremony, as well as hospitality to serve their special guests. It was one of my most memorable days in Japan, and I loved to see my nice photos with kimono very much.



As we were in the winter program, we celebrated the New Year in Japan. Luckily, they got a nine-day holiday in Japan this year, and all offices were closed during these days. Usually, Japanese people go back to their hometown to meet with their family members to celebrate the New Year together. Actually, I felt sorry that I could not meet with my family. I did not go anywhere on that special day, and I passed the New Year's Eve night silently in my room, praying for all beings "to be well and happy in the new year". However, I accompanied Inna to enjoy the Japanese traditional New Year day on January 1, 2014. We went to the "Meiji Shrine" to wish for the New Year, and we were very surprised that it was so crowded. There was a very long queue, and it took about two hours to reach the temple. We really enjoyed the New Year days in Japan by walking around Tokyo's famous places. I would like to tell you one great experience around the New Year time. It was our very good luck as I and Inna were invited by John, an appeal examiner from the JPO, to visit his house to enjoy the traditional Japanese new year festival. John san is very sociable and friendly, and we were really happy to meet with his family in his house. We had a very good chance to learn practically how Japanese people celebrated their family holiday. John has a very nice family, and his mum welcomed us with traditional snacks and green tea that she prepared herself. His wife and sisters also explained to us how they prepared New Year's foods and some special Japanese New Year practices. We are really thankful for the hospitality of John san and his family, and it became one of my remarkable days during my study.

I gradually became familiar with the Japanese living style, and loved their foods during my stay. I loved the polite, simple, respect and helpful manner of the majority of the Japanese people. I would like to be hard working, taking seriously what I do, being punctual in making appointments, as well as being more realistic and planning for the future like Japanese people.



Besides, I envy the spirit of the Japanese people—especially regarding their love for their country. I had a good chance to learn closely several things about their living environment, family affairs, life struggles, child-rearing, taking care of their health, mindset and beliefs, and so on. I was more understanding about the Japanese people than before, and I found that Japan had totally changed from what I had learned from our history. One thing I was very impressed with about young Japanese people was that they are very helpful and willing to help people—especially foreigners—to find our way when we become lost. I still remember some lovely students that I met whenever I requested on my trip to find my destination.

During my stay in Japan, I had a very good experience tasting several Japanese traditional foods like ramen, udon, takoyaki, sushi, fish, noodles, miso soup, etc. I like miso soup and Japanese green tea very much, and these became compulsory foods for me when I went back to Myanmar. Although I was very reluctant to eat raw fish with sushi at the beginning, it became my favorite after having it several times. Inna and I enjoyed the Japanese foods of several restaurants during our stay, whenever we met with Japanese and international friends. We were also interested in learning how to cook Japanese foods, and we asked our APIC sisters whenever we tasted their foods during lunch. They also liked my Myanmar foods that I brought very much. My friends from APIC and the JPO loved our Myanmar coconut noodles that I cooked for them sometime. Inna and I visited Reiko Toyosaki's home, and we enjoyed Japanese foods and learned how to prepare some Japanese foods like sushi, miso soup, etc. We really enjoyed that time, as we were so happy and relaxed while preparing our traditional foods, and eating and chatting about our cultures and traditional foods.

I would like to share one of my great experiences in Japan. The day that I will never forget in my life in Tokyo was a snowy day in Japan. It was my first time to see snow falling with my own eyes. There was a very thick snow falling in Tokyo that I had not ever experienced before. I noticed that everyone loved to see the snow falling, and enjoyed it various ways by walking, playing, photographing, making snowballs, creating snow art, etc. Inna and I were very happy to see the lovely scenery of snow falling, and walking and touching under snow falling. All of the streets and objects were fully covered with thick snow, and everything appeared as a white snowy land and beautiful scenery of the roads and snow-covered leaves and trees. I was so busy collecting fallen snow to make snow statues, and recording the changing view of the environment after the snowfall. We played with snow and made snowmen and snow balls, and we also wrote down our desires on the snowy ground at the park near our hotel. We really loved our memorial photos that I took on this very beautiful and special day.

The last day of my six-month study in Japan was at the end of March in 2014. This was springtime in Japan, and the time of the beautiful cherry blossoms blooming. We had very good luck again, as we could have a chance to see the full blooming of sakura at the Ueno Park before we left. That was my first time to see very beautiful streets with white and pink sakura trees in full bloom on both sides of the road. People celebrated a “sakura festival” under the cherry trees at night, as they enjoyed meeting with their friends or family, eating and drinking, chatting, playing games, taking photos, etc. I was very excited to see these scenes, and was surprised by how much Japanese people love sakura. And so do I!

I enjoyed to see the cherry blossoms, and took several memorial photos under the sakura trees on my last day in Japan. It was a rainy day, and Mariko-san took me to several beautiful



places with beautiful sakura trees beside the rivers. I really enjoyed to see this beautiful scenery under the rain, and could not feel satisfied even though I took more than a hundred photos of them. At last, our trip to enjoy sakura blossoms in Tokyo ended up at the temple near Asakusa. I prayed at the temple, and wished for people's well-being in both of our countries. I was sad to leave that beautiful land and people, though I was happy to see my family again very soon.

I really thank the JPO and APIC for giving me a chance to have good memories and experiences here. This is the brief story of my life in Japan as a long-term researcher, and I still have many memories and experiences to tell about Japan and its lovely people. I hope I will have a chance to visit Japan again to meet with my beloved friends. I will try my best to apply my work experiences here for the progress of the IP system in Myanmar, and to strengthen our friendship forever. I think this is my sweet memory and unforgettable experiences from my life in Japan.



Articles from the former trainees

Japan-Colombia, 11 Reasons in Augmented Reality *My experience in Tokyo during "The JPO/IPR Training Course on Substantive Examination of Design"*



Mr. Freddy Alexander Saavedra Siabatto

Mr. Freddy Alexander Saavedra Siabatto (Colombia)

*(FY2016 JPO/IPR Training Course on Substantive Examination of Designs,
November 8 – November 21, 2016)*

On August 5, 2016, the game Pokémon Go was released, which mixes a virtual world with the reality of our environment through mobile phones: this new reality is known as “augmented reality.” It is noteworthy that in a single day as many as 45 million people were reported to be playing in Colombia, almost the entire population, looking for characters that are hidden in different parts of the world, places that Satoshi Tajiri, creator of the Pocket Monsters (Pokémon), would not even know.

This century has come with new technologies, different products and varied designs, but few have both innovated and impacted as much as mobile devices, therefore, it is a reality that is on the rise, so that in Colombia 70% of the population has a cell phone, which means some 56 million lines by the year 2016. This product is already part of our daily lives, surpassing by far other elements that accompany us in our daily routine, and in some cases replacing them. These devices have become, in addition to a means of communication, photo and video cameras, computers, keyboards, flashlights, alarm clocks, music players, voice recorders, video players, social connectors, and a part of our brain to remind us of anything, or whatever you want, depending on the applications you install.

However, apart from applications which can take us anywhere in the world, the best way to knowledge will always be direct experience. In the case of Japan, to discover its culture and its industrial property system is to immerse oneself in an existence of millennia and discover through industrial designs the fourth dimension and augmented reality that is condensed in the country’s limited physical space, which does not limit the creativity of its inhabitants, nor the novelty and originality in their environment and their products.

One discovers Japan in its narrow crowded sidewalks, in its tidy streets, in its hectic daily



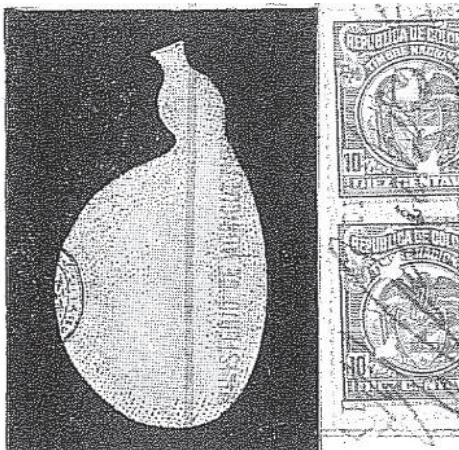
life and illuminated night life, and in its innumerable products. But it can also be defined in words, and one can find an augmented reality in their customs and designs. For its part, Colombia allows you to live and meet the culture in a contrasting, emerging and exciting reality.

Therefore, the following 11 points will make a graphic and textual parallel of the augmented reality between these two great countries.

1. Resiliency, learning and perseverance



JPO old building, Chikashi Yoshida



First Industrial Design Registered, "Cheese" 1933

Although Japan established its first patent system in 1885, and the first design protection was realized by statutes approved in the 21st year of Meiji Era (1888), resiliency, learning and perseverance clearly define what the Japanese got only 14 years after peace treaty signed after the Second World War, i.e., in 1959, when, in the middle of an admirable economic and industrial recovery, Japan adopted the existing patent law and revisions prior to this.

Colombia, for its part, lived with war for a little over 50 years and in the midst of it, in 1976, gave the administration of industrial property to the Superintendence of Industry and Commerce, which, currently, is an important part of its mission, becoming, in the last 6 years, the second fastest office in the world in the resolution of patents; and the fastest, with substantive examination, in the register of industrial designs.

2. Respect

How the Japanese fundamentally think about each other in how they treat one another is in itself remarkable, as shown in their infrastructure, goods and services. An example of this is how people bring to the police an average of 9,38 million yen (approximately \$280 million COP), of lost cash they have found every day. The country is equally respectful in its industrial property law, which protects the right to an industrial design for 20 years.



Shibuya Station corner



Hachiko Statue in Shibuya



Consumer Protection training. Magda Pachón Superintendence Psychologist

The Superintendence of Industry and Commerce manages industrial property and also ensures respect for the rights of the consumers, competition, legal metrology, personal data, and the office delegates to jurisdictional issues working as a judge of the Republic, resolving conflicts related to industrial property rights. In addition, the law in Colombia (Decision 486 of the Andean Community of Nations in 2000), establishes the protection of industrial designs for 10 years.

3. Discipline

Japan showed the world its discipline and efficiency in its quick and organized recovery from the tsunami in 2011, and also, how it reconstructed a street completely destroyed in Fukuoka (November 8 of 2016) in 3 days. In the same way, Japan studies more than 30,000 designs that are received per year, and builds its own classification of design, composed of 13 classes (from A to K) with respective sub-classes.

Disciplined, as are the Colombian flower growers who do their work every day to get the most beautiful and colorful flowers in order to decorate to the world, being one of the export products of Colombia, amounting to 225,000 tons in 2016. Moving such amount of flowers means that the packing designed for transport is special, so that this delicate product is delivered as fresh as it was harvested. The packaging, as the contents in the international Locarno classification class 09, are the most popular products in Colombia to be protected by an industrial design registration.

4. Work

The Japanese are tireless workers. Proof of this is the growth that has interconnected Tokyo through mass transit: bus, tram, train and metro, carrying around 20 million passengers daily, and it is moved, in large part, by Mitsubishi Electric, a company that in 2015 registered 3364 patents and 445 designs.

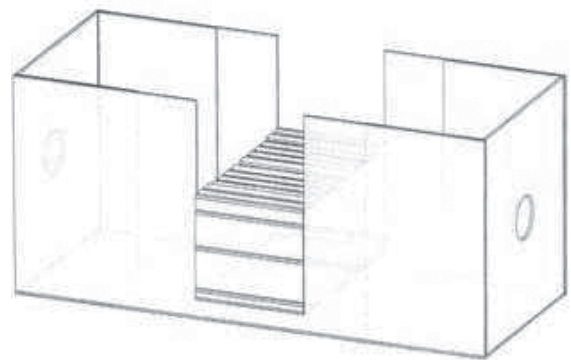
Coffee is the Colombian product most known worldwide for its quality and unique taste, a process requiring hard work, including research,



Ueno Zoo, Tokyo 2016



Colombian Flowers, Portafolio Magazine



Flowers packaging, Design



Tokyo 2016

care, harvesting, selection (1900 coffee fruits to make a pound), pulping, washing, drying, roasting and grinding, to be subsequently packaged, transported, sold, distributed and the end of all this work is to for it to be enjoyed; in other words, for us to taste a delicious cup of Colombian coffee (Designation of Origin), preferably that of Juan Valdez ®, a trademark with presence in 22 countries, 5 of them in the Asia-Pacific region, with more than 5,500 coffee shops around the world.



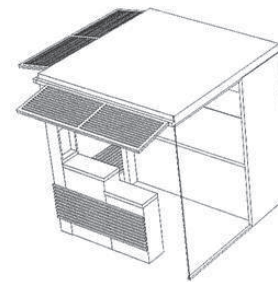
Designation of Origin,



Coffee outlet, Juan Valdez, Jardín Plaza Mall



Japanese product of Colombian coffee



Coffee outlet, design registered

5. Improvement "Kaizen"

Improvement in Japan goes hand in hand with learning and is present from the family level, as is evident in the processes, products and daily lives of the Japanese, so much so, that *kaizen*, or "continuous improvement" was adopted around the world as a method of quality management. An example of improvement was when Japan acceded, on 13 May 2015, to the Hague Agreement Concerning the International Registration of Industrial Designs.

In Colombia, an example of continuous improvement is the reduction of response time in the registration of industrial design, reducing the time required for the final decision from 23 to 4 months. This was achieved by eliminating the repetition of processes, digitization of all documents and conducting of work in a fully digital environment, the implementation of teleworking, and the reduction of two to a single appeal.



Improvement is response to a Magnitude 7.4 earthquake (November 22, 2016), because in a few minutes the people, businesses, communications and emergency services were totally prepared for this event and on alert against possible tsunamis.

Each emergency has been an opportunity to improve.



Pelanas Toy, design

6. Tradition

Japan is a country known for respect for their traditions, and this gives it an identity that is transmitted from generation to generation, that there is a marked and clearly defined and perceptible pride in: the costumes, crafts, gestures and customs of all Japanese, without distinction of age. The tradition is also evident in the protection of their designs, where approximately 9% of requested designs include such products: food, recreation, basic goods (classes: A, E and M of the Japanese classification).



The Colombian tradition translates into tangible and intangible products, craft or industrial, for example: the “vueltaio” hat and the Basketry of Guacamayas (Designations of Origin), music, like “Cumbia”, “Vallenato” and “Carranguera” (copyright), and others, materialized in domestic industrial designs, which reaches 50% in contrast to foreign applications.



“Basketry of Guacamayas”,
Artesanías de Colombia



Emerald ring, <http://www.emeraldsandjewelry.com/>



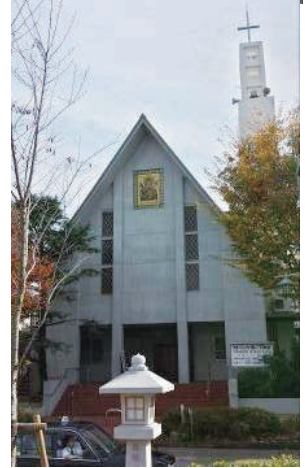
Fruit market, Plaza de Paloquemao (Bogotá D.C.)



“Vueltaio” hat, Artesanías de

7. Spirituality

The Japanese respect and live their beliefs, practice them and transmit them; preserve them and are proud of them, and they are part of daily life. In Tokyo alone there are 2,872 temples (Agency for Cultural Affairs). The two great religions are Buddhism and Shintoism, with a presence of Catholic Christians, around 510,000 in all Japan. It is common to walk around Tokyo and find a temple or a shrine, as well as rows of statues known as *Jizōs* where tribute is paid to the children that died prematurely and *Jizō* is asked to accompany them to the 'other side.' It is common to see them with hats, scarves and red bibs placed by way of offering. It is also spiritual having a room for prayer in APIC (Asia-Pacific Industrial Property Center) where students can meet their religious needs. Also the spiritual is contained in much of the class C7 (Japanese classification of industrial designs), for example, while the class C7-17 applies to "Buddhist Statue, Shinto God Image, Halo for Buddhist Statue".

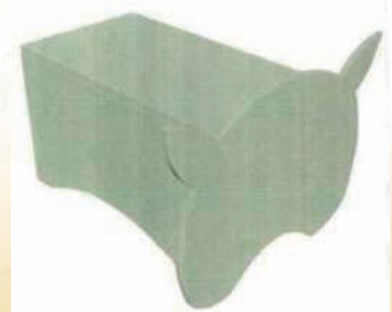


Cerro de Monserrate, <http://www.eltiempo.com>

In Colombia (Bogotá D.C.), an emblematic place of practice and spiritual belief is the "Cerro de Monserrate", where 3,152 meters above sea level one can see and listen to the entire city. At the top of Monserrate towers is a Catholic Christian Church where, in the year 2015, more than 2 and a half million visitors were recorded, of which 71 per cent were foreigners (IDRD and Teleférico S.A. data). Spirituality is also registered, proof of this are some of the products requested as Industrial Design, for example: the ballot box to deposit the ashes of deceased humans or pets, or the jewels, belonging to the class 11 of the International Locarno Classification.



Ballot box, Industrial Design



Ballot box, Industrial Design Registered

8. Education

By the year 2015, Tokyo had nearly 13 million establishments engaged in public education (Tokyo Metropolitan Government data), text books are free, parents in Japan are better educated than in the majority of countries (according to the OECD and the PISA tests) and the same study says that Japanese students who read fiction, show a better performance in reading assessments. No less important details are how the JPO (Japan Patent Office), which along with APIC (Asia-Pacific Industrial Property Center), JIII (Japan Institute of Invention and Innovation) and HIDA (The Overseas Human Resources and Industry Development Association), through courses lasting from 1 to 3 weeks, trained 328 people of different countries in 2016, in issues related to industrial property.



Miraikan, National Museum of Emerging Science and Innovation, Tokyo 2016



Vehicle, Industrial Design Registered, National University of Colombia



"Steel Pencil" award, www.proyectod.com

In Colombia, the first industrial design school was founded in the Universidad Pontificia Bolivariana in Medellín in the year of 1972. Currently, 23 universities offer this career at a professional level. Because of graduates in this field, companies and entrepreneurs have succeeded in increasing the supply of design, created specialized publications on design, architecture and decoration, awarding the annual prize "Steel Pencil," and raised the number of applications for registration, which, in the past 11 years increased from 383 to 718 designs per year.

9. Innovation

Innovation is seen all over Tokyo, from the ancient area of Asakusa (Edo period 1603 to 1868), where can find around 90 shops of Japanese typical products; to Aki-

habara, an electronics and technology sector, place of the innovative “Maid Cafes.” It is also innovative to create tourist attractions such as “Tokyo Tower” or “SkyTree”, where thousands of creations are born that are related to the site, filling their own shops with products that gather various dimensions of intellectual property: copyright, trademarks and designs; in addition to tradition, tourism, and the economy.



Tokyo Tower. Odaiba and Akihabara, 2016



In Colombia in 2013, Medellin was named the most innovative city in the world, in the “City of the Year” contest organized by The Wall Street Journal and Citigroup. Innovation (novelty) is also a requirement by which the Colombian Office of Patents and Designs (New Creations) of the Superintendence of Industry and Commerce, study and register an Industrial Design. At the same time, the office has innovated by sharing its database in Design View (EUIPO) and through its claim to adhere to the Hague Agreement Concerning the International Registration of Industrial Designs.



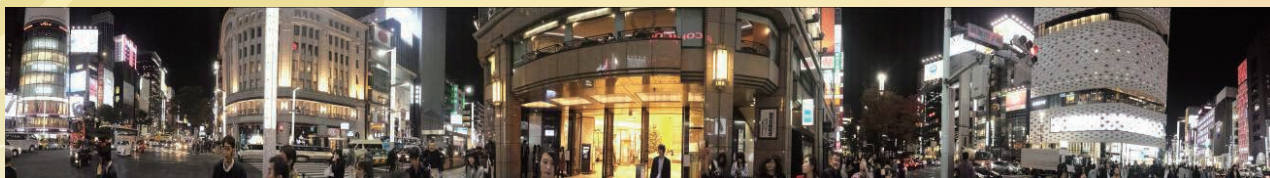
Sculpture and painting, Fernando Botero

Medellín, Colombia

10. Protection

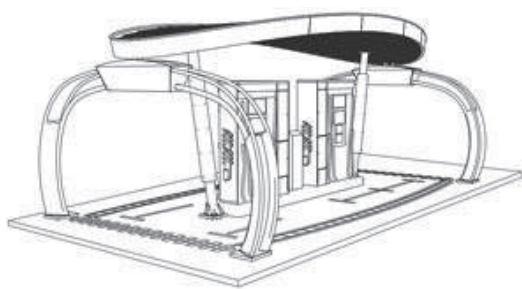
Aside from the shape of a product, the Japanese industrial designs law also protects partial designs, sets of designs, accepting broken lines and cuts of the design inside of which it is displayed, with objects open and closed in the same application; designs that are transformed, related designs, and, in addition to novelty, evaluates the creative difficulty .

While in Colombia, to register an industrial design or part of one, it must be innovative, not be a portion of a design, nor a form dictated by technical function. In addition, it is stipulated

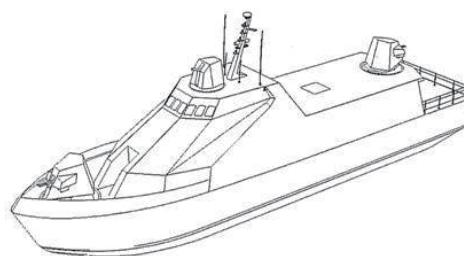


Ginza, Tokyo 2016

that no attempt is being made against public order or morality, and finally, the Colombian Office accepts no broken lines.



Motorcycle Gas station, Industrial Design Registered by Terpel S.A.



Military Boat, Industrial Design Registered by Cotecmar

11. Relationships and friends

Relationships built on two weeks of activities; interaction with the different participants from 9 countries as well as our hosts; the enriching exchange of knowledge, experiences and sharing together in different scenarios—these all give a real dimension to the category of “IP Friends,” granted by the JPO to the end of “The JPO/IPR Training Course on Substantive Examination of Design”: this is the fourth dimension.



It can be concluded that Japan is clearly one of the world powers in science and technology. On the other hand, Colombia has great natural wealth and it is considered one of the emerging economies (JPMorgan GBI-EM Index), but it is the people, customs, traditions, and products that define a country and create a link connecting different cultures—in this case, industrial design is the node that joins Japan with Colombia; far away in distance, but so close in augmented reality.



Mr. Mohd Ismi Aswaly Bin Hanimi (Malaysia)

Mr. Mohd Ismi Aswaly Bin Hanimi

(FY2016 JPO/IPR IP Training Course for IP Trainers, June 15 – June 29, 2016)

An intensive short course on intellectual property was successfully completed on April 26-28, 2017. Proudly hosted by the Community College of Hulu Langat, the course involved all 10 colleges around the state of Selangor, including the Community Colleges of Sabak Bernam, Tanjong Karang, Hulu Selangor, Selayang, Kuala Langat, Klang, Kelana Jaya, Ampang, Shah Alam and Hulu Langat. With the main aim of disseminating knowledge on intellectual property, this course invited senior lecturers and support staff who are involved with innovation-related initiatives in their workplaces.

On July 5th, 2000, the Cabinet of the Malaysian Government considered Memorandum No. 398/2225/00, a general overview of community colleges, which was submitted by the Minister of Education on the concept of establishing and implementing community colleges in each parliamentary constituency. The Community College of the Ministry of Education Malaysia will be an institution that provides training and skills at all levels, and also provides educational opportunities to high school graduates before entering the job market or going for further higher education.

To date, all community colleges are administered by the Department of Community College Education (JPKK)¹, which is placed under the Ministry of Higher Education Malaysia. Its vision statement is to be a pioneer of education in technical and vocational training, as well as a hub of life-long learning by the year 2025.



¹ Official website of JPKK - <http://www.jpkk.edu.my>

This course was held in line with the Malaysia Education Blueprint,² which took effect in the year 2015 to 2025 and was specially focused on the higher education sector. There are 10 shifts outlined by the government to further push the higher education sector forward, and one such shift that is closely related to this course is the 7th, known as an innovation ecosystem. By exposing these participants to foreground knowledge on intellectual property (IP), they will be more aware of the importance of IP-based innovation, which will in turn definitely create a better ecosystem of innovation in their institutions.

The course has successfully gathered around 42 participants from various grades of rank. The involvement of various grades and level of gender is important. Innovation most certainly involves everyone in the workplace, and the creation of intellectual property consequently needs to be protected in order to help maintain a sustainable ecosystem of innovation. Basic demographic details of participants are tabulated as shown in Table 1 below.

Table 1 : Participant Details in terms of Gender and Rank

Classification of Gender	Female	38 persons
	Male	4 persons
Classification on Rank	Executive Level	29 persons
	Support Level	13 persons

Figure 1 shows a brief explanation of the course, which focused on the dissemination of basic knowledge regarding different types of intellectual property: namely, patents, trademarks, copyrights and industrial design. This three-day long course covered the following topics: an introduction to intellectual property; a brief discussion on patents, trademarks, copyrights and industrial design; in-group practice exercises; group presentations and assessments of participants' previous innovation projects; hands-on online IP searches; a brief overview of international patent classifications; patent drafting exercises; a few case studies and their legal implications; and, last but not least, procedures on applying for four different types of intellectual property.



Figure 1—Course Introduction on the First Day

² Malaysia Education Blueprint: <https://www.mohe.gov.my/en/download/public/penerbitan/pppm-2015-2025-pt>

Preceding the course, a pre-quiz and personality test were carried out among all participants as shown in Figure 2 below. The quiz is aimed at assisting the trainer to assess the initial understanding of all participants before proceeding to the course, and also helps identify specific topics to be more focused.



Figure 2–Pre-Course Quiz & Personality Test Conducted for the Participants

Figure 3 below shows the attainment of the pre-course quiz for all participants. There were 10 multiple-choice questions asked encompassing a basic understanding of various intellectual property types. This quiz took about 15 minutes to be completed before moving on to the personality test. According to the data below, there are almost equal numbers of participants who scored above and below 50 marks. This indicates that prior knowledge of half the participants was good at the beginning of the course.

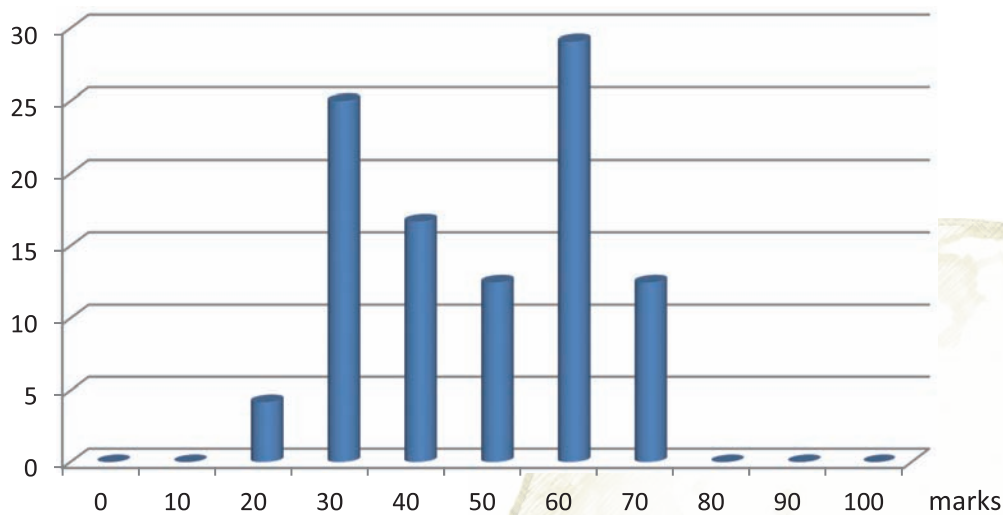


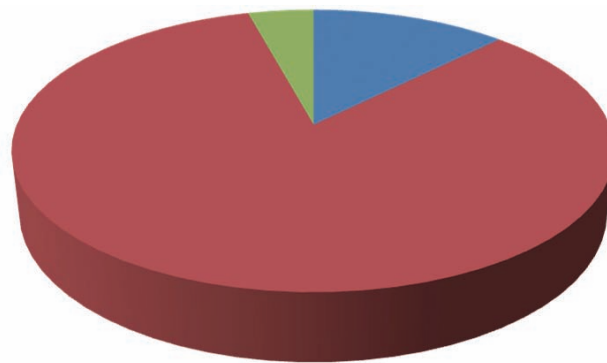
Figure 3–Pre Course Quiz Attainment

The personality test is another important instrument for assessing participants' true identity in regard to being an innovator. The test instrument used in the course was both copyrighted and owned by Drew Boyd & Jacob Goldenberg.³ Drew Boyd is a 30-year global leader in creativity and innovation for global businesses such as Johnson & Johnson, as well as governments, while Jacob Goldenberg is a marketing professor at the Interdisciplinary Center in Herzliya and a visiting professor at Columbia University in New York, USA.

³ Authors & owner of the personality test instrument - <http://www.insidetheboxinnovation.com>

The test consists of 15 objective questions, with each having either A or B as a preferred answer.

According to the pie chart shown in Figure 4 below, 83.3% of participants were assessed as medium-level innovators, whereas 4.2% and 12.5%, respectively, were said to have high and low innovative traits.



■ low ■ medium ■ high

Figure 4–Innovator Personality Test

To make the course more holistic, activities were carried out to connect participants' real work nature, technical knowledge, and specific interests so that the course learning would become more meaningful. Figure 5 shows the activity of presenting topics on past innovation projects that participants have already completed. There were 25 innovation projects that were previously developed as final year projects undertaken by the students. Interestingly, these projects covered various disciplines such as automotive studies, information technology, electrical engineering, and tourism hospitality. A detailed discussion relating to common issues on their projects, such as the type of intellectual property they can apply, the component of projects they can protect, and the level of project inventiveness, took place among all participants, who also served as developers (i. e. supervisors) of these projects. This session was met with an overwhelming response, thus creating a positive two-way environment of holistic learning.



Figure 5–Presentation by the Participants

Once a discussion of IP confusion over the projects ess completed, a practical online IP search was practiced as shown in Figure 6 below. A step by step navigation on the official web portal of MyIPO (Intellectual Property Corporation of Malaysia)⁴ was performed simultaneously among all participants. Since the web page is fully informative and comprehensive, a descriptive explanation was done in detail including registration forms and prescribed fees, along with a process flow chart for each type of IP and the terms of protection.

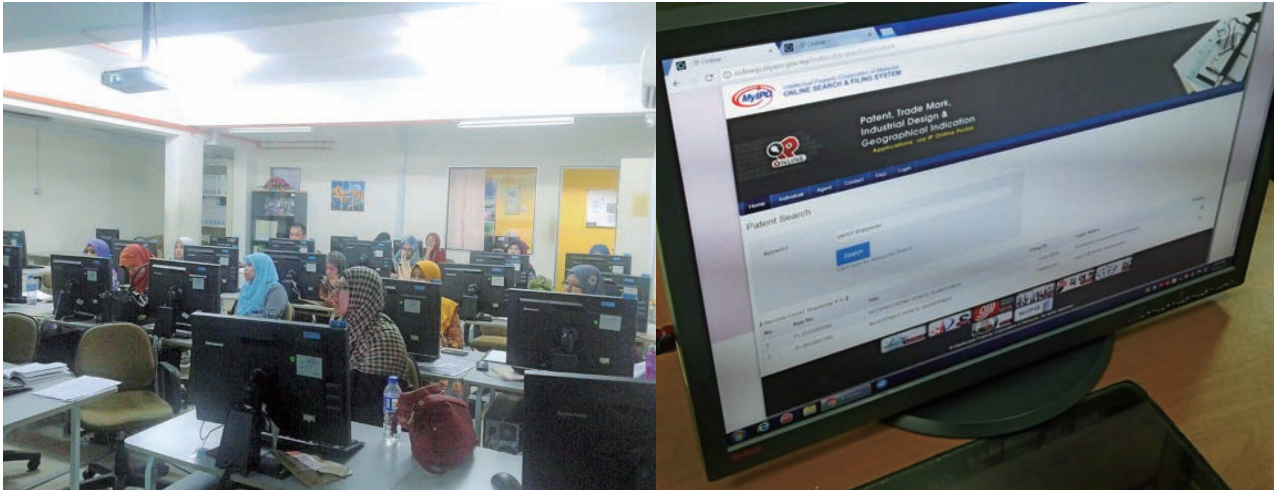


Figure 6–Practical Online IP Search via MyIPO Web Portal

After completing the three-day course, a post quiz was conducted as shown in Figure 7 below to re-evaluate the overall understanding among participants with respect to the course content. There were 20 multiple choice questions this time, which was twice the number of questions from the previous pre-quiz.

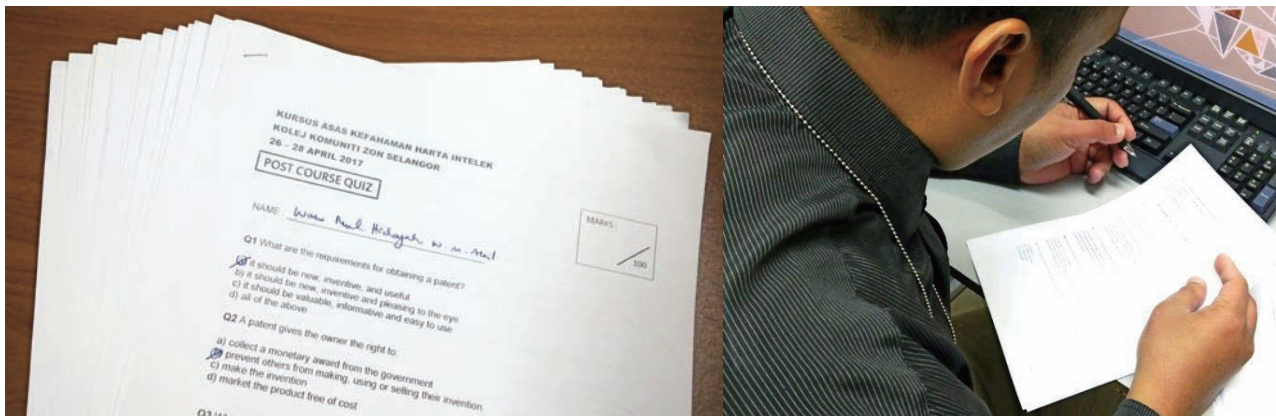


Figure 7–Post-Course Quiz Conducted Among Participants

Figure 8 below shows the post-quiz attainment, where only 20% of participants scored below 50 marks, while the remaining 80% scored in excess of 50 marks.

Figure 9 shows a comparison on the attainment of the pre and post quiz. It is clear to say that before starting the course, only 54% of all participants had a good understanding of intellectual property. After implementing various teaching and learning methods, however, it was found at the end of the course that 80% of all participants had attained a passing score on the

⁴ Official web portal of MyIPO - <http://www.myipo.gov.my>

No. of participants (%)

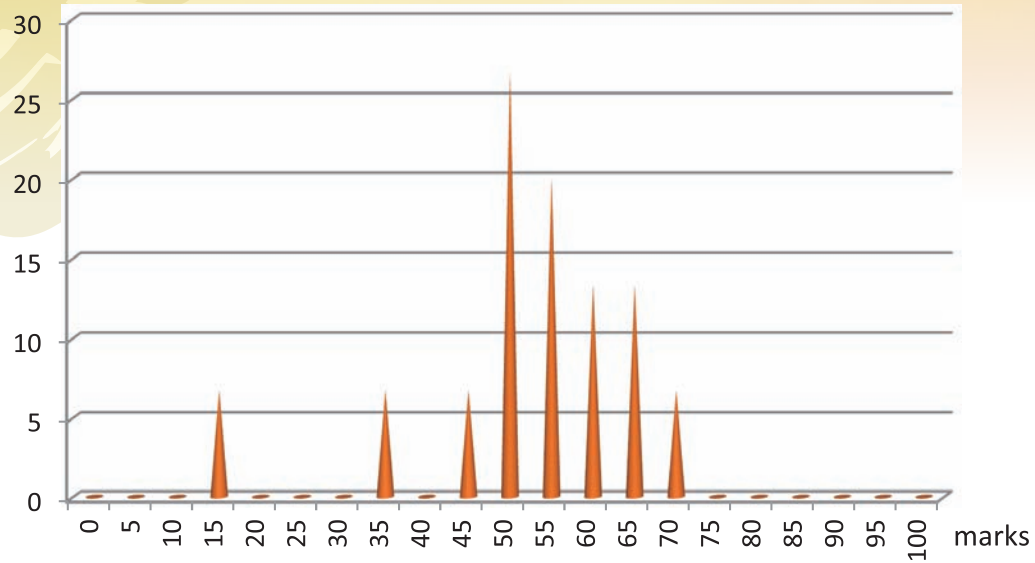


Figure 8–Post Course Quiz Attainment

post-quiz, which was a bit trickier than the pre-quiz because it involved questions up to the fourth-level cognitive domain, including knowledge, understanding, application and analysis. As a result, this course has been proven to have an impact in terms of increased knowledge and understanding of intellectual property among participants.

No. of participants (%)

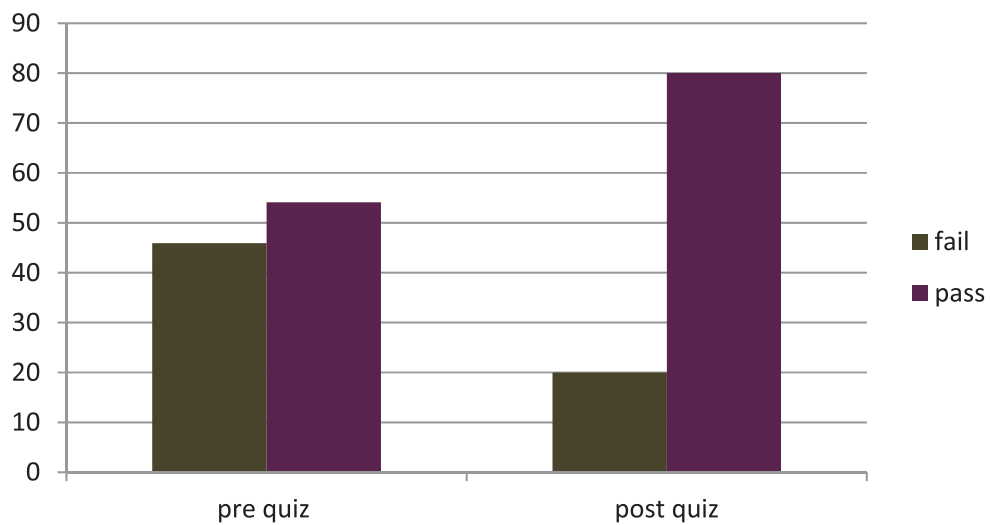


Figure 9–Attainment Comparison of Pre and Post Quiz

Upon completion of the course, all participants were asked to fill out a form to evaluate course delivery by the trainer. Figure 10 shows the completed forms collected from all participants. Ten questions were asked, which were divided into three sections: the effectiveness of the trainer, course implementation, and improvement of skills/knowledge. Each question was answered by choosing a Likert scale of 1 (strongly disagree) to 5 (strongly agree). An excellent overall score of 94.8% was recorded on the outcome, where the breakdown of scores for the three sections was 96.5%, 94.7% and 94.2% respectively.

Throughout the course, as shown in Figure 11 above, some of the materials used were the

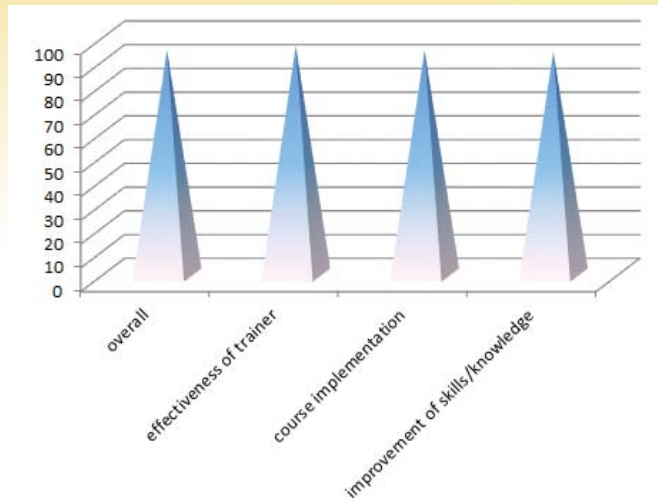
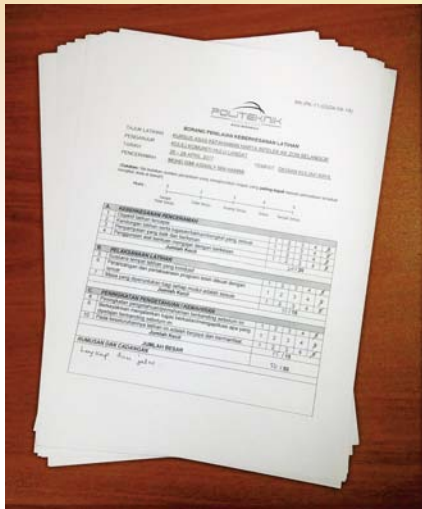


Figure 10–Course Evaluation Form and Outcomes



Figure 11–Our Textbook Previously Published by JPO/APIIC/JIPII

textbook that was previously published by the Japan Patent Office (JPO) in cooperation with the Asia-Pacific Industrial Property Center (APIC) and the Japan Institute for Promoting Invention & Innovation (JIPII), which we successfully wrote and compiled during the last year's IP Trainer Course FY2016 held in Tokyo, Japan from June 15th-29th, 2016, alongside 11 other countries. On behalf of all 26 IP participants, we would like to express our grateful highest appreciation to the Government of Japan for this fully-funded exclusive invitation.



Acknowledgement and special thanks shall also be given to Community College of Hulu Langat Director, Mr. Zaidi Bin Zakaria, and the Head of Staff Training Unit, Mdm. Wan Nurul Hidayah Binti Wan Mohd Akil, for organizing this course, which was fully funded by a special fund allocation through a Warrant No. W1033 and a Serial Object No. 29000, dated April 3rd, 2017 from the Department of Community College Education, Ministry of Higher Education, Malaysia.



Mr. Zaidi Bin Zakaria Director Community College of Hulu Langat



Mdm. Wan Nurul Hidayah Binti Wan Mohd Akil
Head of Staff Training Unit Community College
of Hulu Langat



**FUNDAMENTAL COURSE
ON INTELLECTUAL PROPERTY
(PATENT, TRADEMARK, COPYRIGHT, INDUSTRIAL DESIGN)
COMMUNITY COLLEGES OF THE SELANGOR STATE, MALAYSIA
26 – 28 APRIL 2017**



Intellectual Property Infringement Situation in Thailand and the Role of The Royal Thai Police



Dr. Chavalit Chavalitphongpun (Thailand)

Dr. Chavalit Chavalitphongpun

(FY2017 JPO/IPR Training Course for IP Trainers, June 13 – June 27, 2017)

I. Introduction

Over the last 5 years, the amount of intellectual property infringements in Thailand was still high, causing an increased rate of litigation. According to records between 2011 and 2015, almost 75% of intellectual property litigation at the Court of Central Intellectual Property and International Trade were comprised of criminal cases,¹ indicating that such cases have not decreased in the least. This is not consistent with the intention of the government, since the high rate of intellectual property infringement affects not only State capability², but also the creditability and reputation of the country, as well as the economy in other sectors, as these problems are routinely taken into consideration by other countries in order to exclude Thailand from trade rights. As a result, the US has put Thailand on the Priority Watch List (PWL)³, and uses this issue as an excuse to erect trade barriers for goods imported from Thailand. Therefore, Intellectual Property infringement in Thailand is still a problem of great concern for rights owners, officials and the government.

It can be said that Thailand faces problems regarding intellectual property right infringements like most developing and less developed countries. However, the Thai government does not ignore this problem and tries to strictly enforce the law.

In 2016 the Thai government established the National Committee on Intellectual Property Policy, chaired by the Prime Minister and comprised of the Deputy Prime Minister as Vice-chair. Moreover, the top-level representatives are from 20 agencies such as the Ministry of Commerce, Permanent Secretary Ministry of Finance, Permanent Secretary of Ministry of Commerce, Permanent Secretary of Ministry of Justice, Permanent Secretary of Ministry of Information and Communication Technology, Director-General of the Budget Office, Office of Attorney General, the Royal Thai Police, etc.⁴ Its stated missions are to formulate policies and strategies for promoting intellectual property, effective interagency cooperation for intellectual property right enforcement, fighting against intellectual property right infringements, and improve the intellectual property laws and their implementations.

¹ Statistics from the Court of Central Intellectual Property and International Trade 2011-2015.

² Sanjay Pradhan, "Improving the State's Institutional Capability," <<http://www.imf.org/external/pubs/ft/fandd/1997/09/pdf/pradhan.pdf>>, February 2011.

³ <https://ustr.gov/sites/default/files/301/2017%20Special%20301%20Report%20FINAL.PDF>, May 2017

⁴ Regulations of the Office of the Prime Minister on the National Committee on Intellectual Property Policy (No. 3) B.E.2559 (2016). Formerly, Thailand had the National Intellectual Property Center of Enforcement, established in 2013.

For the suppression and protection against intellectual property rights infringement, the Thai government has stressed its policy to force the suppression on intellectual property right infringement seriously.

This article will present, expressly, the roles of the Royal Thai Police, under the direction of the National Committee on Intellectual Property Policy, regarding cooperation and coordination with relevant agencies in law enforcement to deal with intellectual property violations followed as the government policy.

II. Cooperation and coordination mechanisms

Thailand has been listed on the U.S. Trade Representative's Priority Watch List for the past several years for providing insufficient intellectual property protection. Therefore, in March 2016, the National Committee on Intellectual Property Policy established the Suppression of Intellectual Property Infringement Sub-committee⁵ which has as its main missions the goals of solving issues on preventing intellectual property infringement, reducing problems for intellectual property right holders, increasing intellectual property protection in accordance with international standards, and building Thailand's image as an intellectual property-friendly country.

The Sub-committee is tasked with the support of 16 relevant governmental agencies and individuals, as follows:

- Deputy Prime Minister as chairman of the Sub-committee
- Minister of Commerce or Assigned Deputy Minister of Commerce
- Permanent Secretary of Ministry of Commerce
- Permanent Secretary of Ministry of Information and Communication Technology
- Commander in Chief, the Royal Thai Army
- Secretary-General of Internal Security Operations Command
- Secretary-General of Food and Drug Committee
- Attorney General of the Department Intellectual Property and International Trade
- Director-General of the Customs Department
- Director-General of the Department of Special Investigation
- Secretary-General of the Prevention and Suppression of Money Laundering Committee
- Secretary-General of the National Broadcasting, Television, and Telecommunications Committee
- Commissioner-General of the Royal Thai Police
- Assigned Deputy Commissioner-General of the Royal Thai Police
- Director-General of the Department Intellectual Property
- Deputy Commissioner-General of the Police Strategy Division Office

With its structure, the inclusion of the Sub-committee is a clear indication that the government has recognized the importance of linkage between intergovernmental agencies that work on intellectual property.

This Sub-committee is strengthening the intellectual property linkage by connecting inter-

⁵ Order of the National Committee on Intellectual Property Policy No.1/2559 (2016), 29 Mar, 2559 (2016).

agency, through communication lines and complementary processes (landline, cell phone, video call and video conference), to other government agencies that work on intellectual property. This generally includes agencies tasked with suppressing intellectual property infringement, in order to ensure not only that there is fast and proper communication between the officials of both agencies, but also that each agency's regulations are in line with each other's, and the agencies do not promulgate conflicting requirements. Intellectual property linkage is also useful in suppressing Intellectual property infringement, especially when official agencies in the Sub-committee will be able to work closely with others.

In addition, the Sub-committee is the highest managing (tactical) level of coordinating all tasks and activities at preventing and fighting the infringements of intellectual property rights, then has responsibilities to frame the structure and timelines of the National Intellectual Property Suppression operational plan, and ensure that it complies with the plan, direct, control, accelerate, examine, follow up, and evaluate governmental operational parts, as well as other organizations involved in intellectual property suppression, appoint a workgroup to be responsible for certain matters or assign government sectors, officers, employees, or officials to proceed as instructed, invite experts, government officers or employees, or involved persons to declare or give information, facts and opinions, and documents or evidence, distribute news and promote intellectual property suppression operations, periodically report performance results to chairman of the Sub-committee and Cabinet, and proceed with assignments as instructed by the National Committee on Intellectual Property Policy.

The Sub-committee has formulated an action plan to intensely combat intellectual property infringement. In the short term, the chairman of the Sub-committee is able to instruct the Department of Intellectual Property to cooperate with other involved agencies including the Royal Thai Police, the Department of Special Investigation, the Internal Security Operations Command, and Royal Thai Army to take immediate action in suppressing pirated goods nationwide, particularly 27 areas of Thailand which were known as "notorious" for violating intellectual property, will be targeted in the hope of reducing the number of counterfeit merchandise by the middle of 2017 and eradicate them completely by 2021. There are notorious markets in Thailand including MBK, Pantip Plaza, Sukhumvit Road, Patpong Market, Chatuchack or JJ Market in Bangkok, Night Bazaar in Chiangmai, Huahin Market in PrachuapKhinri Khan, KohSamui in Surat Thani, Ao Nang in Krabi, Santisook Market and Kimyong Market in Songkhla, RongKluea Market in Sa Kaeo, and the other border provinces adjacent to Cambodia. To suppress these markets, relevant agencies will send teams to each place without any warning and concentrate on large traders of illegal goods.

III. The roles of the Royal Thai Police

After launch of the Sub-committee's action plan, the relevant government authorities, such as the Royal Thai Police, the Department of Intellectual Property, the Customs Department, the Department of Special Investigation and the Royal Thai Army, with the support and cooperation of rights owners, actively took various measures to suppress the infringement of intellectual property, exercised their respective authorities to encourage public awareness of the prevention of intellectual property infringement and provided information relating to infringement throughout the period. Some examples of these activities are as follows:

A. Enforcement efforts

From its inception until March 2017, the Department of Intellectual Property reports a total of 9,658 enforcement actions and a seizure of 6,178,482 pieces of counterfeit and pirated goods⁶. Many of these actions led to the arrest of significant infringers and seizure of dangerous counterfeit consumer products. For instance;

The Royal Thai Police coordinating with the Department of Special Investigations seized nearly 900,000 pairs of fake designer sunglasses in a series of raids against a counterfeit gang. Two aliens were arrested at a warehouse in the Chinatown area of Bangkok and a very large number of counterfeit goods were seized. These included designer brands: Ray-Ban, Oakley, Louis Vuitton and Dior. The haul was worth more than 130 million Thai Baht if sold as genuine goods⁷.

The Royal Thai Police, together with the Department of Intellectual Property, the Customs Department, and the Department of Special Investigations, and with business entities who owned IP rights, arrested producers and vendors of counterfeit products. Raids were conducted on major production facilities, most of which were located in Udon Thani, Songkhla and Sa Kaeo provinces, resulting in the apprehension of several suspects. As a result, a total of 37,953 of intellectual property infringing products, worth in total over 30 million Thai Baht, were seized, ranging from clothing and bags to electrical appliances and cosmetics⁸.

The Royal Thai Police, a peacekeeping force from the 19th Army Circle, troops from Burapa Task Force and local officials joined hands in stamping out the sale of pirated goods at the Rong Kluea Market, in the Aranyaprathet district of Sa- Kaeo province, to set the market totally free of illegal counterfeit products⁹.

These suppression operations aimed at intensely cracking down on intellectual property infringement, as well as giving confidence and morale to those who use talents and creative ideas to develop new products for commercialization.

B. Task force

Police officers from the Economic Crime Suppression Division, the Royal Thai Police, with the cooperation of the Department of Intellectual Property and the IP rights owners join the Task Force for inspection of shopping areas and targeted areas that are common for intellectual property infringement. In addition, the Task Force regularly inspected and arrested many potential infringers and infringing products. The statistics on the performance of the Task Force only in Bangkok, from January to December 2016, found that there were a total of 2,425 intellectual property infringing products, worth a total of over 1.3 million Thai¹⁰.

⁶ Statistic from Office of Prevention and suppression of Intellectual Property Rights Violation.

⁷ <https://www.lawplusltd.com/download/Z004.0322.Seizures%20of%20Counterfeit%20Goods%20in%20Thailand.pdf>, April 2017

⁸ <http://www.pattayamail.com/thailandnews/lots-counterfeit-goods-seized-march-171395>, April 2017

⁹ <https://www.pressreader.com/thailand/bangkok-post/20170226/281612420176420>, May 2017.

C. Destruction of infringing goods

The destruction of confiscated products as a result of intellectual property violation is one of the most important means to ensure that the violated products will not reenter the market. Accordingly, Article 75 of the Copyright Act B.E. 2537 (1994), Article 115 of the Trademark Act B.E. 2534 (1994), and Articles 32-35 of the Thai Penal Code empower judges to confiscate and destroy products that violate intellectual property, as well as other goods that are used to commit the violation. Meanwhile, the prosecutor processes a guideline to prosecute intellectual property violations and request the judges to order the destruction of the seized products in every case, a request which has been approved by the judges in most of the cases. On the other hand, in cases of the import and export of pirated products which are seized by the Customs Department, under current legislations, the Customs Department is empowered to destroy the products immediately after the completion of customs procedures, an action which has been carried out on a regular basis by the Customs Department.

On Friday, March 10, 2017, there was a destruction event of confiscated counterfeit and pirated products at the 11th Infantry Regiment, Royal Thai Army Base in Bangkok. This event was organized by the Department of Intellectual Property in collaboration with the Royal Thai Police, the Customs Department, the Department of Special Investigation, and attended by both Thai and foreign intellectual property right holders. At this event 3,639,679 counterfeit and pirated products, weighing an estimated 300 tons, and worth 1,756 million Thai Baht, were demolished.¹¹ Destruction of the illegal counterfeit goods at this event is one of the ways to ensure that illegal counterfeit goods will be removed by every means from all channels of commerce.

D. Coordination on justice procedure

In order to enhance the suppression on intellectual property violation and ensure it is carried out on a consistent basis with maximum outcome, the Royal Thai Police has continuously placed emphasis on the legal proceedings and adjudication process of intellectual property infringement cases. Apart from the Royal Thai Police and the Department of Special Investigation, the agencies that are directly involved with legal processes are the Office of the Attorney General and the Central Intellectual Property and International Trade Court. As such, the Royal Thai Police has also worked closely with the latter two agencies sharing the common aim of strengthening the legal system and the ability to prosecute the violators and have received their full cooperation.

1) Coordination with the public prosecutor

In intellectual property infringement cases, the inquiry officials from the Economic Crime Suppression Division, Royal Thai Police, will conduct the criminal investigation, interview witnesses and analyze information or conduct and give their opinion on whether the case should be prosecuted. It then submits the file of inquiry to the public prosecutor and coordinates

¹⁰ Statistic from Sub-Division 3, Economic Crime Suppression Division, the Royal Thai Police.

¹¹ http://nwnt.prd.go.th/centerweb/newsen/NewsDetail?NT01_NewsID=WNPOL6003100010007, Feb 2017.

with him/her who may send a request to the police for further investigation, or send them any witnesses for their own inquiry. Thus, a good coordination of the inquiry officials with public prosecutors will ensure effective enforcement of intellectual property rights.

2) The issuance of a search warrant on suspected premises of Intellectual Property violations

The speed of issuing a search warrant depends on the completeness of the documents and the reliability of the evidence submitted with the application requesting a warrant. Most of the problems that had hindered the issuance of search warrants include an incomplete power of attorney from the intellectual property right owner, or the requested search was deemed as too excessive, especially those involving a search of the whole office building for pirated software. In this connection, the Central Intellectual Property and International Trade Court has assigned standing judges to facilitate the issuance of search warrants at night-time in the case of emergency.

E. Capacity building for enforcement agencies

The Economic Crime Suppression Division, Royal Thai Police, together with The Department of Intellectual Property, has organized yearly training seminars on the prevention and suppression of intellectual property violations to police officers at the level of inspector and deputy inspector, who are responsible for the suppression of intellectual property violations nationwide, on an annual basis. In this respect, there were 4 training seminars were held last year in Bangkok, Chonburi, NakornPathom, and Surat Thai. Thus, in total, there were approximately 1,000 police officers who participated in the seminars last year. Essentially, the purpose of the training seminar is not only to enhance the knowledge and understanding of police officers on the laws and regulations relating to intellectual property, but also to increase their capacity to investigate cases of intellectual property violations as well as their ability to identify authentic goods from counterfeit ones, which will no doubt help to increase the efficiency of their operations to prevent and suppress intellectual property violations in the future.

F. Trainings on the separation of authentic and counterfeit goods

As for the cooperation with the owners of intellectual property, the Department of Intellectual Property and other related agencies and the private sector, such as Thai-Italian Chamber of Commerce, Pfizer Co. Ltd. (Thailand), and Ferrari Co. Ltd (Thailand), have jointly organized seminars and trainings on the separation of authentic and counterfeit goods for officers who are involved in law enforcement. In this respect, each of the seminars has gained wide interest and participation, especially officers from the Royal Thai Police, the Customs Department, and the Department of Special Investigation.

G. Raising the awareness of intellectual property

The Economic Crime Suppression Division, Royal Thai Police, in cooperation with the intellectual property right owners also plan to organize “STOP PIRACY Buy Original Now: Stop IP Infringement, Don’t Buy, Don’t Carry, Don’t Use Knockoff” campaigns at “Commart Thai-

land Fair 2017” In addition, as requested by a number of government and private agencies, the representatives from ECD have given speeches regarding “Problem and solutions for managing intellectual property infringement in Thailand” at various forums organized by government agencies and companies, namely the institute for the Promotion of Teaching Science and Technology and the SE-ED Pub Co., Ltd.

IV. Challenge

Digital piracy has intensified in Thailand with the rise of social media applications such as Facebook, Line and YouTube. The widespread availability of social media applications makes piracy easier, more accessible and more convenient. These are the challenges of the digital age. Online copyright infringement is a widespread problem. Infringing content that is uploaded to the Internet in one jurisdiction can be easily accessed from anywhere around the world. Internet service providers (ISPs) host and transmit vast amounts of data, and the sheer amount makes it impossible for ISPs to monitor all uploaded contents. Consequently, it would be very difficult or nearly impossible for ISPs to prevent copyright infringement completely. That is the challenges of the Thai government and relevant agencies in the digital age.

V. Conclusion

The Royal Thai Police is an agency that plays an important role in the enforcement of intellectual property rights. Especially its role in suppressing intellectual property infringement by cooperating and coordinating with other agencies. In addition, the Royal Thai Police also play a role in promoting intellectual property knowledge to the people. As a result of the continued proactive action of the Royal Thai Police, under the direction of the Sub-Committee, the situation of violent intellectual property violations has been reduced. Especially, physical piracy has decreased mainly, and piracy has shifted to online and mobile platforms.

Thailand is currently listed on the U.S. Trade Representative’s Priority Watch List. However, with the strong intention of the Thai Government to protect the Intellectual Properties and enhancing all legalized measures to seriously combat counterfeit and pirated products, Thailand will gain a better reputation as a country which substantially protects Intellectual Properties, and will be looked upon more positively in the near future.



Mr. Sutee Angsuchaikit (Thailand)

Mr. Sutee Angsuchaikit

(FY2017 JPO/IPR Training Course for IP Trainers, June 13 – June 27, 2017)

Thailand is currently experiencing rapid development in intellectual property laws. The country announced its Trademark Act (No. 3) BE 2559 (2016), which was put into place to amend the Trademark Act BE 2534 (1991). There are many entrepreneurs who recognize the importance and necessity of trademark registration with the Department of Intellectual Property. In general, the protection of trademarks under the Trademark Act of Thailand will only be granted when a trademark is registered in the country protection is being applied for. There are some cases where trademarks can receive protection without registering, such as those where the owner of a trademark can prove that the status of a trademark is well-known in Thailand. Thailand became a member of the TRIPS Agreement on 1st January 1995, whereby members may set out the minimum standards of Well-Known Trademark protection.

History of Well-Known Trademarks in Thailand

Trademark protection in Thailand began in BE 2450 (1907). It enacts legislation for those guilty of offenses, and penalties for counterfeit and imitating others' trademarks through the Penal Code of the Kingdom of Siam R.S.127. In the year 1914, Thailand promulgated the Law on Trade Marks and Trade Names of BE 2457 (1914). This is the first Thai trademark law with provisions on the registration of trademarks. The Trademark Act BE 2474 (1931) was next enforced in its place, and was subsequently amended two more times in the years 1933 and 1957. After the Trademark Act, BE 2474 (1931) came into effect for a long time. The provisions have become obsolete, however, and can no longer provide adequate protection for trademark owners. The Trademark Act, BE 2534 (1991) came into force later in the year 1991, and continues to be enforced today. It was amended two more times, in the year 2000 and 2016.

The Trademark Act BE 2474 was the first law to protect Well-Known Trademarks in Thailand. Although there is no written provision for the protection of well-known trademarks in general, well-known trademarks are still protected in practice by section 5 (7) of The Trademark Act BE 2474 said "Trademarks could not be against the public policy and morality", as can be seen from the Trademark Board's ruling and the court decision, it had been diagnosed with the trademarks are same or similar well-known trademarks. It is considered that this action is dishonest intended to take advantage from well-known marks of others. It is against the public policy and morality. As provided for in Section 5 (7) of the Trademark Act BE 2474. The court also protects well-known trademarks. The enactment of the Trademark Act BE 2534 (1991) was the first written provision for protecting well-known trademarks. Although the definition of a well-known trademark is not written in the Trademark Act BE 2534, well-known trademarks obtain protection by this act, which regards the prohibition of

trademark registration by an officer if it is like a well-known trademark or similar to a well-known trademark, and may mislead the public in the ownership or origin of the goods, regardless of whether the mark is already registered or not. For well-known trademark infringement, the owner of a well-known trademark can protect by the second paragraph of section 46 in the Trademark Act BE 2534. It regards the enforcement against the unauthorized use of the trademark to be same or similar to well-known trademarks with any goods and services, including any registered or unregistered trademark. The owner of a well-known trademark can use the litigation process against an infringer through the court in civil and criminal cases.

Well-Known Trademark Protection in Thailand

In Thailand, the main organization related to well-known trademark protection can be divided into two organizations. The first is the Department of Intellectual Property of Thailand (DIP), and the second is the intellectual property and international trade court of Thailand. Its responsibilities are as follows:

1. The Department of Intellectual Property of Thailand (DIP): According to section 8 (10) of Trademark Act BE 2534, a trademark cannot be registered if it is identical to a well-known mark as prescribed by the Ministerial Notifications, or is so similar thereto that the public might be confused as to the owner or origin of the goods. This results in the filing of a trademark application identical to a well-known trademark or similar to a well-known trademark, which may mislead the public as to the ownership or origin of the goods through such well-known marks, regardless of whether the well-known trademark is already registered or not. In the year 2005, The Department of Intellectual Property of Thailand (DIP) issued a regulation governing the recordation of well-known trademarks. The main purpose was to announce the notification. It is used as a database for inspecting authorities to check the similarity of a well-known trademark for trademark registration. To ensure the protection of well-known trademark under section 8 (10) of the Trademark Act BE 2534, effective protection can be obtained. Nowadays, the Department of Intellectual Property of Thailand (DIP) announced that it would abolish the regulation governing recordation of well-known trademarks. Ministerial Notifications are effective nowadays, and the Board of Trade Marks already has criteria to determine whether a mark is well known, as follows:

a) For the product or service that is to be used, the trademark must be distributed or have used advertising or can use the mark by any means, such as the mark of the football team that is widely practiced in good faith, no matter whether it is performed by the owner or an agent or licensee of the mark, whether Thailand or abroad to the extent that it is well-known among the general public or those in the relevant field.

b) The trademark must have a good reputation and acceptance among consumers.

Well-known trademark decisions will be considered by the board of trademark in accordance with the Ministerial Notification, taking into account other factors such as acknowledgment of the public in Thailand, the amount of sales or revenue generated by the mark, etc.

2. The intellectual property and international trade court of Thailand: In case of well-known trademark infringement, the owner can litigate against the infringer in court. The second paragraph of section 46 of the Trademark Act BE 2534 said: "The provisions of this Section shall not affect the right of the owner of an unregistered trademark to bring legal proceedings against any person for passing off goods as those of the owner of the trademark." Under this

section, the owners of a well-known trademarks are given the right to protect their trademarks from infringement by passing off. Passing off mean infringer intended to mislead the public on their products are related to the well-known trademarks of others. The owners of the well-known trademarks has a duty to prove the fact to the court as follows:

a) Well-known trademarks that are protected in a passing off can be unregistered or registered trademarks in Thailand. In case of unregistered trademarks, some owners of well-known trademarks have companies, factories, distribution and registered trademarks outside Thailand, but the products are well-known among Thai people. There is a risk, therefore, of well-known trademarks in Thailand being infringed. Under section 44, a registered trademark is subject to the exclusive right of use for the goods to which it is registered. If someone uses the registered trademark with other goods not registered with the trademark—such as Mr. A registered his trademark for a pen, but Mr. B using the same trademark for a phone—Mr. A has to prove to the court that his trademark is well-known in public, and the use of Mr. B's trademark with phone products are misleading related of trademark to the public that the phone may be made by Mr. A.

b) Passing off must be done in such a way that infringer sold the product in a misleading way whereby the public would understand that the product belonged to the owner of the well-known trademark. For the definition of “misleading to public,” the supreme court of Thailand had many decisions to rule on regarding the protection of well-known marks by passing off in cases of misleading the public. First, in cases where the trademark of the infringer is not the same as a well-known trademark, but is similar, the court had cases whereby the same class of goods, and a trademark similar to well-known trademarks, was misleading to the public (Supreme Court Decision No.3737/2549). Second, in cases whereby the class of goods of the infringer is not the same or is related to the class of goods of well-known trademarks, but the trademark is the same as well-known trademarks, the court decided that this could be misleading to the public (Supreme Court Decision No.38/2503). Third, in cases where the trademark of the infringer is not the same or similar to well-known trademarks, it has the same or similar appearance or packaging of the product, the court decided this could be misleading to the public if the same or similar required special observation on the part of consumers in order to distinguish the product (Supreme Court Decision No.677/2532). Fourth, in cases of similar or well-known trademarks or classes of goods, where the defendant can prove to the court that the consumers of the defendant and the owner of well-known trademarks are different, the court decided it was not misleading to the public if the product of the defendant was sold only in drug stores, but the product of the owner of well-known trademarks was sold to the consumers only in hospitals with a doctor's prescription (Supreme Court Decision No.3686/2551). Fifth, for consideration to the same or similar to well-known trademarks, the court uses pronunciations to read the well-known trademarks considered to be the same as or similar to well-known trademarks (Supreme Court Decision No.2504/2553).

c) Well-known trademarks must have a reputation among consumers in Thailand. In cases where a trademark is well-known in many countries, but the owner cannot prove that it is well-known in Thailand, the court decided that this did not constitute a well-known trademark (Supreme Court Decision No.995/2550).

If the owner of the well-known mark cannot prove all of the facts in a) to c), the court will decide that it is not a well-known trademark infringement.

Conclusion

Well-known trademarks had a reputation among consumers or were well-known in public. The owner of well-known trademarks uses perseverance to make goods or services be accepted in public. For this process, the owner of well-known trademarks must invest a lot of time and capital to build a reputation for their trademarks. The Trademark Act requires protecting well-known trademarks from infringement. In Thailand, the system of well-known trademark protection has been divided in two ways. First, well-known trademarks should be protected from registration by another person. It is the responsibility of the Department of Intellectual Property of Thailand (DIP). Although this department announced to abolish the regulation governing recordation of well-known trademarks, it makes more duties for owners of well-known trademarks to prove that their marks will be well-known among consumers. Second, well-known trademarks should be protected by litigation through the intellectual property and international trade court of Thailand. The Trademark Act gives the owners of well-known trademarks the right to stop the infringement of well-known trademarks, but such owners have a duty to prove that their trademarks are well-known, and that it is misleading to the public by passing off. The criteria is to determine whether a mark is well-known, and the standard of the court's decision is to prove the well-known and publicly misleading aspects of the trademark. This is the important key to help the owner of well-known trademarks protect their trademarks from hijacking and infringement.

References:

- Agreement on Trade-Related Aspects of Intellectual Property Rights
- History of Trademark <<https://goo.gl/fzbUun>> (July, 19th 2017)
- Ministerial Notifications of criteria to determine whether a mark is well-known
- Supreme Court Decision No.2504/2553
- Supreme Court Decision No.3686/2551
- Supreme Court Decision No.3737/2549
- Supreme Court Decision No.38/2503
- Supreme Court Decision No.677/2532
- Supreme Court Decision No.995/2550
- The regulation governing recordation of well-known trademarks
- Trademark Act BE 2474
- Trademark Act BE 2534
- Well-Known Marks <<https://www.dip.go.th/th>> (July, 19th 2017).
- Well Known Marks http://thaitradebrand.com/knowledge/4_Well_Known_Marks.pdf (July, 18th 2017)

Messages from Committee of Human Resource Development

Intellectual property management by small- and medium-sized companies

Mr. Kanji OKAUCHI
KYORITSU CHEMICAL-CHECK Lab., Corp.



Mr. Kanji OKAUCHI

Our company, founded in 1952, specializes in the research, development, manufacturing and marketing of simplified water quality analysis products. The company has 50 employees, including part-time staff. Simplified analysis products are chemical analysis apparatus that can be used “by anyone,” “anywhere.” It is fairly difficult to develop these products because all the following factors must be met: 1) operability, 2) reliability, 3) speed, 4) safety, 5) portability and 6) cost-effectiveness. We are the only company in Japan who is dedicated to the production of simplified water analysis products. Our representative product is the “PACKTEST” series, which is a tightly sealed, 100×80mm polyethylene tube containing pre-mixed reagent that develops specific color. To use PACKTEST, you need to pull out the “line” in the tube to make an opening. Next, draw test water into the tube through the hole like a dropper. After letting it sit for a designated period of time, compare the resulting color with the standard color sheet. The value for the same or closest color on the sheet shows the concentration of the substance. It only takes about five minutes to assess water quality. PACKTEST has currently 71 different analyte, and if we count other product lines, it will be more than 200 different types of products are available, most of which have been developed by our company.

The basic measurement principle for many of our products is based on the colorimetric assay. This is a very old method but, because you can measure concentrations by a change in the color, you don’t need a power source, you don’t have to worry about failure of the assay, and you can measure concentrations at low cost. Our products are suitable for customers who do not expect high precision and need to obtain assessment results immediately, onsite, even if only approximations.

The basic principle is already publicly known. We therefore cannot apply for a patent for it. Nevertheless, this gives us some advantages. First, there are no restrictions on its use. In addition, there are many published papers that discuss this principle, affording high credibility to our products and allowing users to readily accept our explanations. However, we can hardly develop new products if we based only on findings reported in such papers. We need to find ingenuity and should keep confidentiality as our technical know-how. I may have acquired this way of thinking while I was still young. At the age of 18, when I was in high school, I filed a patent application. To prepare for this application, I read as many patent publications as possible in the Public Gazettes Reading Room of the Japan Patent Office. Although I received a patent rejection notice for my “automatic page turner,” for which I had even made a prototype, I think my experience at that time has helped me a lot.

Because of this experience, I was able to develop an awareness of intellectual property

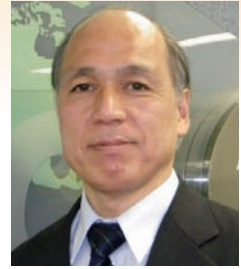
early in the company. It is difficult to decide whether to apply for a patent for an innovation or keep it to ourselves. In the latter case, we should build evidence of proper use. Deciding on these processes may be a struggle to our employees, but nevertheless, I hope they will feel proud of being part of such a process.

In Japan, 99.7% of companies are small- and medium-sized enterprise. Large companies only account for 0.3% of the total. Of all the patent applications filed by companies, those filed by small- and medium-sized companies account for 12%, which is quite a small percentage. It is particularly difficult for small-sized companies with 20 or fewer employees, which account for 87% of all companies, to conduct original research. In small companies, one or two employees, or the president alone, develop new technology during their spare time away from their main job. The prototype may be created by the president him/herself. The patent application is also prepared by the president. If the application is rejected, a written opinion must be prepared. Even if the application is approved, it is rare for the patent holder to receive compensation for infringement of the patented invention through the court. Even under these circumstances, small companies still file patent applications for their inventions. Twelve percent may be a small figure, but I think it shows the strength of Japanese small- and medium-sized companies. It is proof of their efforts.

I hope that people around the world come to understand the importance of intellectual property, appreciate the hard work of pioneers, and direct their efforts to improve their technology.



Column: Some Thoughts on Time



Mr. Takao OGIYA

Mr. Takao OGIYA
Director General of APIC

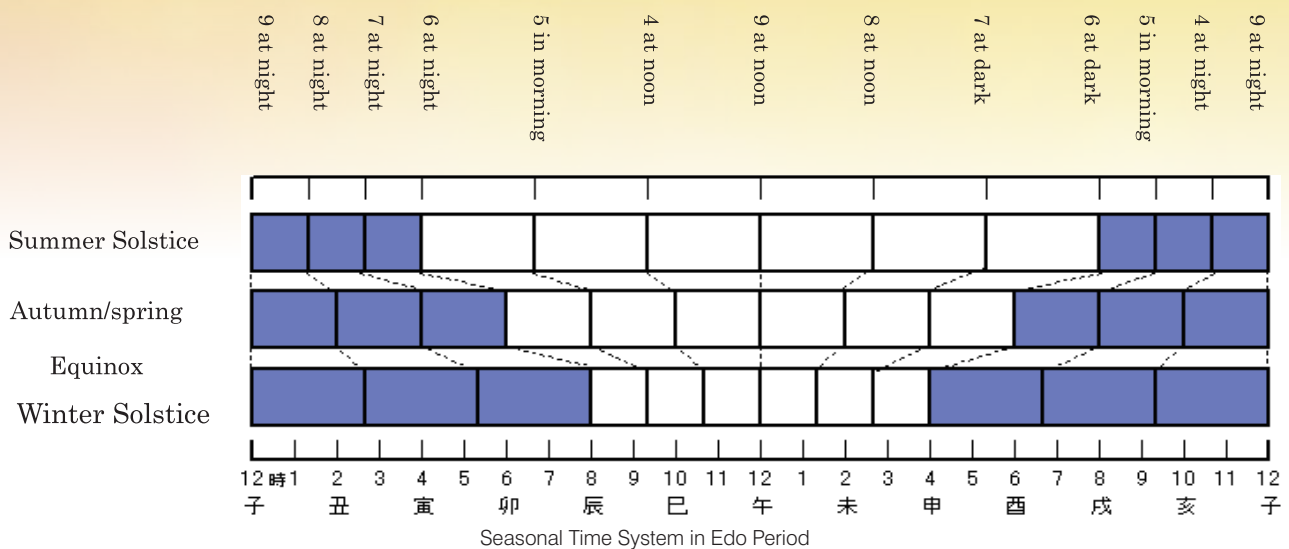
Recently, I have begun to feel that time passes amazingly fast. For one thing, I find that it is already September!

In my view, there are three types of time. One of them points to a certain moment in the passage of time. A second one refers to the length of time between one moment and another. And the last one is philosophical time, or the eternal passage of time from the past to the present, and on to the future.

Our ancestors used to live by synchronizing their daily lives with the periodic movements of astronomical objects. Prior to the invention of lighting, ancient hunters began their activities at sunrise and stopped working at sunset in order to protect themselves from wild animals. After the advent of agriculture, early farmers performed farm operations according to the seasons, from sowing to reaping. Units of time were determined based upon this routine of life. Our ancestors determined the interval between the sunset of one day and that of the next day as a *day*. They established a *month* based on the wax and wane of the moon, and decided a *year* in accordance with the sun's varying altitude, which is linked to the change of seasons.

Since most ancient civilizations adopted the duodecimal system, the duration from sunrise to sunset was divided by twelve—and the period between sunrise and the next day's sunrise was divided by twenty-four—in order to determine an *hour*. One hour was further divided by 60 into one *minute*, and again by 60 into one *second*. This type of time measurement was common among many civilizations and ethnic groups, since the recognition of time was closely linked with astronomy. Even today, we have inherited this recognition of time from our ancestors.

During the Edo Period (1603–1868) in Japan, however, the length of an “hour” differed from one season to another. Japanese people at the time measured time by equally dividing the duration between sunrise and sunset. In midsummer, when the daytime is the longest in the year, the sun rises at around 4:30 a.m. and sets at around 7:00 p.m. on the Japanese archipelago. This means that the daytime continues for as long as 14.5 hours, while nighttime lasts only 9.5 hours. On the other hand, in midwinter, when the nighttime is the longest, the sun rises at around 7:00 a.m. and sets at around 4:30 p.m. This means that the daytime lasts only 9.5 hours, while nighttime extends to 14.5 hours. Since the durations of daytime and nighttime were equally divided, one hour in midsummer comprised 72.5 minutes in the daytime, while it was only 47.5 minutes at night, and the reverse during midwinter.



Contemporary people might consider this system to be confusing. During the Edo Period, however, people did not find any demerits in this system. After all, ordinary people did not have watches or clocks. They learned what time it was by the toll of bells from the temples in their communities. When they heard the bell at noon, they had lunch. Hearing the bell of *kure mutsu* (lit. sixth time of the evening; around 6:00 p.m.), they stopped working and went home. At that time, it was getting dark throughout the year, regardless of the season. During the Edo Period, the length of time arose from people's sensory perception, rather than existing as an objective measurement.

Today, on the other hand, the basic unit of time is defined by the radiation cycle of a cesium atom. Accordingly, the duration of time can be measured objectively.



The bell that rings to announce the time

Going back to my initial remark, wherein I stated that I have recently begun to feel that time passes amazingly fast, I would like to discuss why we feel time goes by more quickly when we become older. When I am absorbed in something enjoyable, I feel that time passes much too quickly. In contrast, when attending a tedious meeting, I feel that time goes by too slowly. During such meetings, I often feel very disappointed when I look at my watch only to find that just five minutes have passed since I last looked. On the other hand, I feel as if time flies swiftly when I concentrate on a certain task, no matter whether I like it or not.

Numerous scientists have provided various explanations regarding this phenomenon. While some are understandable, many such explanations are far from convincing; at least for me personally. According to one researcher, when you begin something new, or when you visit some unknown place or meet some unknown person, this activates your brain and you will feel that time passes very slowly. I don't believe so. When my brain is activated, I feel that time passes quickly. Another researcher said that when you have a cold or fever, you feel that time travels very slowly. I don't support this view, either.

I have asked my friends, who are of the same generation as me, about how they feel regarding the lapse of time. One said he never feels that time passes more quickly than before. Another told me that even when he was a child, he felt that a day passed utterly in a moment. This led me to consider that people all have different senses regarding the passage of time. One individual said to me, “You are happy, so you feel time passes so quickly. When you are suffering from something, you feel time goes by very slowly.” To some degree, I agree with this statement. However, I don’t believe that I have recently begun to feel that time flies by so fast because I have become happier than before.

We all live in the eternal passage of time. To measure it, our ancestors invented objectively measurable units of time: year, month, day, hour, minute, and second. However, apart from these universally measurable units, everyone has a different sense of time.

There is a saying that goes like this: “There is a time for everything, and a season for every activity under the heavens: a time to be born and a time to die, a time to plant and a time to uproot, a time to kill and a time to heal, a time to tear down and a time to build, a time to weep and a time to laugh...”

Life does not go as we expect it. We often encounter something we have not expected at all. However, when we review past incidents, we sometimes find that we owe what we are now to an unexpected event in the past. I truly feel that I am guided and supported by a higher force in the eternal flow of time.

We should entrust ourselves to this flow of time. Without resisting it, we should patiently wait until the advent of an optimal time. We should enjoy each moment given us, and when that time comes, we must strive to fulfill our mission with all our might.

If we live in this way, it would not matter whether time passes swiftly or slowly.

At this moment, however, I have yet to reach this state of mind.



Time

Selection from TOP 100 Japanese Innovations "Quartz Wrist Watches"

Brief Description

A quartz wrist watch is a watch with a crystal (quartz) oscillator, which uses vibrations generated when voltage is applied to quartz crystal, as the key component. The first quartz wrist watch in the world was launched by Seiko in 1969. For the watch industry, it was a discontinuous innovation. Firstly, a quartz wrist watch consists of a fewer number of components than a conventional mechanical wrist watch. For this reason, it is more suitable for automated production. While a mechanical wrist watch consists of more than 100 components, an analog quartz wrist watch consists of 50 to 80 components, and the number of components of a digital quartz wrist watch, which was developed in later years, was reduced to about 40 (Table 1). The number of manufacturing processes was also reduced, making production easier (Table 2). This innovation allowed the production of wrist watches to shift from a hand-made style to one of mass production, making them affordable enough for many people. Watches, which had been luxury products, were thus turned into daily commodities that anyone could purchase.

Table 1: Number of components in a mechanical wrist watch and a quartz wrist watch

	Type	Number of components
Mechanical wrist watch	Manually wound	76 - 95
	Automatic	90 - 116
	Chronograph	124 - 137
Quartz wrist watch	Digital	37 - 50
	Analog	58 - 80
	Digital-analog	52 - 73

Source: Shintaku, J. *Nihon Kigyo no Kyoso Senryaku* (The competitive strategy of Japanese firms), Yuhikaku; 1994: 99.

Table 2: Comparison of the numbers of base plate manufacturing processes of a mechanical wrist watch and a quartz wrist watch

Process	Mechanical	Quartz
Cutting	18	8
Grinding	2	0
Pressing	8	3
Deburring	1	1
Total	29	12
Manufacturing method	One-piece flow	Hoop material supply
Machine configuration	Single-function machine	Integrated production line

Source: Kumakawa, S. *Kikai-shiki kara quartz e* (From mechanical to quartz), Journal of the Japan Society of Mechanical Engineers; Vol. 100, No. 941; 1997: 25

Quartz wrist watches were also more convenient for users. Above all, they were more accurate than mechanical ones. Mechanical wrist watches were becoming more technically mature in the 1960's, but the daily error even of a high-end model was 10 to 30 seconds. Compared with this, the daily error of a quartz wrist watch was only around 0.2 to 0.5 seconds. In addition, while mechanical wrist watches exhibited disadvantages, such as low shock tolerance and the necessity of regular maintenance, quartz wrist watches were easier to use. The birth of quartz wrist watches using revolutionary technology played an innovative role in causing a significant change in the watch industry.

As for change in the number of wrist watches manufactured in Japan, the annual production in around 1972, when the mass production of quartz was started, was 24 million, which increased to about 100 million in 1981 and further rapidly increased to about 200 million in 1986. The state of the watch industry changed significantly not only in Japan but also around the world. Both in Japan and the United States, electronics manufacturers started producing digital display quartz wrist watches. In Hong Kong and China, there emerged a watch assembling industry using movements imported from Japan and other countries, taking advantage of cheap labor in these places. While there are no statistics on world production, according to an estimate by the Japan Clock & Watch Association (JICWA), more than one billion wrist watches are manufactured every year.

As the market for quartz wrist watches expanded, component technologies also advanced. Initially, CMOS-IC, liquid crystal display (LCD) and other component technologies were mainly applied to quartz wrist watches. As the production of wrist watches expanded, these component technologies accumulated. They were also applied to calculators and other products, and later became some of the fundamental technologies in the Japanese electronics industry.

Background of Innovation

(1) Prehistory of Quartz Wrist Watches¹

Before quartz wrist watches were developed, the Swiss watch industry accounted for the majority of watch production. The quality of Swiss mechanical wrist watches largely depended on the final assembly by skilled craftsmen. Under the horizontal specialization structure, small-sized manufacturers specialized in manufacturing individual parts. They used high-precision machine tools to manufacture watch parts with excellent quality, but adjustments for the final assembly needed to be made by skilled craftsmen.

In comparison with the superiority of Swiss manufacturers, Japanese companies had two weaknesses: Firstly, it was difficult for them to import high-precision machine tools, the source of the competitive superiority of Swiss manufacturers; secondly, Japan lacked skilled craftsmen.

Japanese companies therefore started promoting advanced mechanization in around the early 1960s to establish an integrated mass production system competitive enough to compete against Swiss companies.

Among them, Seiko occupied a particularly leading position. By 1960 it had already launched the high-precision Grand Seiko, and was closest to its Swiss competitors in terms of the number of certified chronometers.

Along with these innovations in manufacturing process technology, efforts were also made to develop a completely new principle for watches. While the precision of a watch depends on the precision of assembly and parts processing, one of the most important factors is the accuracy of the oscillator, the key component. The higher the frequency of vibration is, the

smaller the error of the watch as a finished product is. A mechanical wrist watch works as follows: Rotary motion caused by a balance—which is composed of a round-shaped balance wheel and a balance spring—is imparted to a gear called the “escape wheel” to regulate the timekeeping. In the 1950s, the oscillation frequency of a balance was between 2.5 and 5 Hz. Because the accuracy of the balance and the balance spring directly affects the accuracy of the watch, adjustments by skilled craftsmen in the final assembly phase are needed.

In 1960, Bulova, an American manufacturer of watches and clocks, launched a tuning-fork wrist watch using a tuning fork as an oscillator, reducing the daily error to about two seconds. The tuning-fork wrist watch was highly accurate but Bulova had a patent monopoly on it, which prevented other companies from entering the market of tuning-fork wrist watches until a license agreement was signed in 1968. Swiss manufacturers attempted to manufacture an improved version of a mechanical wrist watch with higher accuracy by increasing the oscillation frequency of a balance to between 8 and 10 Hz. However, it turned out that the higher the oscillation frequency, the more severely parts were worn out, making it difficult to maintain durability. Under these circumstances, the development of a watch using a new oscillator that was neither a balance nor a tuning fork was demanded.

(2) Miniaturization and Power Saving of Quartz Watches

In Japan, Seiko launched a research project on crystal (quartz) to be used as a new oscillator in 1959. One of the reasons for the company’s decision to start this research and development project might have been that research on crystals to transmit radio waves was being conducted in Nagano, where one of Seiko’s manufacturing plants was located. When the end of a piece of crystal is plated and attached to an electrode, the electrode vibrates when voltage is applied. The frequency of the caused vibration is between several thousand and several million Hz, which enables crystal to act as an oscillator. In 1927, a table clock using crystal and vacuum tubes was invented in the United States. In 1958, Seiko commercialized a quartz crystal clock for broadcasting stations, and, in 1959, the first unit was delivered to Chubu-Nippon Broadcasting Co., Ltd. Seiko also attempted to develop a quartz crystal clock the size of a wrist watch. Early quartz crystal clocks using a crystal oscillator were as big as large cabinets. About 100 watts of electrical power was required to run them. In order to run a battery-powered quartz crystal wrist watch for about a year, power consumption needed to be reduced to one ten-millionth, or $10\ \mu\text{W}$.

One of the important milestones in reducing the power consumption to one ten-millionth was the 1964 Tokyo Olympics.² The Seiko Group was responsible for official time measurements at the Tokyo Olympics and successfully, comprehensively introduced a quartz-based electronic timer. The power consumption of the crystal chronometer was reduced to about one-hundred-thousandth of that of the early quartz crystal clocks, and the length of the crystal oscillator was reduced to about 10 cm.

Crystal chronometer

After the Tokyo Olympics, more efforts were needed to reduce the power consumption to $1/100$ and the size to a few percent in order to realize a wrist watch-sized version. There were three important technological development goals to achieve. Firstly, the crystal oscillator itself had to be made smaller. This goal was successfully achieved as follows: A bar-shaped crystal was processed into a U (tuning fork) shape, which was then enclosed in a vacuum; this allowed the company to successfully manufacture a small-sized crystal oscillator that maintains a steady vibration and also has durability.

The second goal was to develop a frequency divider to convert the high frequency of a crystal oscillator into a rate of vibration of one oscillation per second. To achieve this conversion, a vacuum tube or transistor was used for a clock. It was necessary to make this frequency divider smaller and more power-saving. In the early phase, Seiko used a hybrid integrated circuit (HIC) to achieve miniaturization and power saving. However, because HICs were not suitable for mass production, the transistor and other parts needed to be individually mounted on a substrate. This disadvantage was later improved after quartz wrist watches became practical.

The third was the miniaturization of a motor that moves the hands. In a mechanical wrist watch, kinetic energy is transferred from spring to gear. For a battery-powered wrist watch, a motor that converts electric energy into kinetic energy was needed. This motor needed to be newly developed because it was difficult to miniaturize the conventional motor. The approach they took was to regard a motor not as a single product but as one system consisting of multiple parts. They placed all the necessary parts, such as the coil, stator and rotor, in such a way as to be fitted inside the wrist watch. They also developed a motor that was operated once a second and not at other timings, instead of using a continuously rotating motor, allowing them to achieve power saving and longer durability. This type of motor is called a stepping motor or pulse-driven motor.

A quartz wrist watch was thus developed using miniaturized and power-saving components. In December 1969, Seiko launched the Seiko Quartz-Astron 35SQ, the world's first quartz wrist watch. The price was 450,000 yen and its movement was slightly larger than that of a mechanical wrist watch, with an external diameter of 30 mm and a thickness of 5.3 mm. This wrist watch was more expensive than passenger cars in those days.

Seiko Quartz-Astron 35SQ

Seiko continued its efforts towards mass production of quartz wrist watches. One of the most important challenges was to change the hybrid integrated circuit (HIC) to CMOS-IC to enable mass production. They initially commissioned the production of CMOS-IC to Intersil Corporation, a U.S. venture company, but the yield rate was low and the product was not good enough for practical use. Seiko therefore mass produced CMOS-IC on its own and, in 1972, launched a wrist watch for the mass market. In merely a few years, quartz wrist watches occupied a large portion of the watch market.

The new quartz wrist watches using CMOS technology were well-matched with the automated integrated manufacturing system that had been promoted since around 1950, rapidly boosting the productivity of the assembly processes. It became possible to assemble a new quartz watch about 150 times faster than a mechanical wrist watch.

The production capacity of each Swiss manufacturer of mechanical wrist watches was not more than half a million annually, and some of the manufacturers only produced about tens



Photo provided by Seiko Holdings Corporation, Seiko Watch Corporation



Photo provided by Seiko Holdings Corporation, Seiko Watch Corporation

of thousands. The Swiss mechanical wrist watch industry was a handicraft industry that relied on skilled craftsmen. The annual production capacity of Japanese manufacturers was not very high either, at about 24 million pieces. The birth of quartz enabled mass production, and as a result, the annual production quantity in 1981 was about 100 million pieces and, in 1986, exceeded about 200 million, showing expansion at an unprecedented scale and speed.

(3) Birth of Digital Display Wrist Watches

The change from mechanical to quartz wrist watches changed the core technology from mechanics to electronics. In the 1970s, digital display wrist watches were developed. Elemental technologies applied to these watches were entirely different from those applied to mechanical wrist watches. They were categorized as electronics, and, in addition to conventional watch manufacturers, manufacturers of electronics, such as semiconductors and electronic parts, also entered the market.

U.S. manufacturers of mechanical wrist watches purchased CMOS-IC from U.S. semiconductor companies to manufacture quartz wrist watches.³ For example, Timex, a competitive manufacturer of inexpensive mechanical wrist watches, acquired an RCA liquid crystal display plant to manufacture digital display quartz wrist watches. Some semiconductor manufacturers that supplied CMOS-IC acquired manufacturers of liquid crystal displays to enter the markets of finished and semi-finished digital display wrist watches. Intel acquired Micro-ma, a liquid crystal display venture, in 1972 to enter the market of digital display wrist watches. Other companies entering the market included Fairchild, Motorola, and Texas Instruments.

During this period, some U.S. manufacturers considered using a light-emitting diode (LED) as a display device instead of a liquid crystal display (LCD). However, due to the large power consumption of LEDs, the watch was made so that the only way you could check the time was by pressing the that would turn on the LED light. The inconvenience of this eventually led to the decline of LED digital displays.

In Japan in 1973, Seiko launched an LCD digital display wrist watch, which virtually became the standard for later models of digital watches. Companies from industries outside the watch industry, such as CASIO Computer Co., Ltd. also entered the market of digital display wrist watches. Citizen Watch Co., Ltd. developed a product called 8900, which had both digital and analog displays.

Seiko Quartz LC V.F.A. 06LC Launched in 1973

(4) Sales of Movements and de facto Standard

After shifting their manufacturing of crystal oscillators and integrated circuits (ICs) from external to in-house, Seiko started external sales of these components. In 1973, they established the Semiconductor Sales Department, which exclusively focused on the marketing of semiconductors. In 1976, they also started external sales of crystal oscillators.

In 1982, Citizen Watch Co., Ltd. started sales of analog quartz watch movement “2035.” It was $(6 \text{ ligne} + 3/4) \times 8 \text{ ligne}$ (1 ligne = about 2.255 millimeters) in size and had three hands (hour, minute, second), which could be used both for men’s and women’s watches. By mass-producing item No. 2035, Citizen Watch



Photo provided by Seiko Holdings Corporation, Seiko Watch Corporation

made this quartz movement the de facto standard for wrist watches in the popular price range. Seiko followed suit. As more companies started external sales of their movements, many manufacturers in Hong Kong started assembling finished products. They also expanded their assembly production to mainland China because of the cheap labor there. The development and subsequent improvements of quartz wrist watches, external sales of movements, and increase in companies newly entering the market have enabled wrist watches to become widespread around the world as everyday necessities.

The popularized application of quartz also helped to add multiple functions, such as stopwatch and calculation functions, as well as to promote the diversification of wrist watches, such as dress watches designed in a slim size.

Furthermore, new and innovative watches have been developed in recent years, including radio-controlled clocks, which receive standard radio waves to maintain the same accuracy as atomic clocks, and GPS solar watches, which receive signals from a GPS satellite to immediately display the local time in any place around the world.

(Descriptions in the text)

* For names of companies and products, each company's brand names or registered trademarks are used.

* Names are shown with no title.

Major awards received

- 2004: IEEE Milestone Prize (The Institute of Electrical and Electronics Engineers, Inc.) Electronic quartz wrist watch, Seiko

References

1. This article mainly refers to: Shintaku, J. Nihon Kigyo no Kyoso Senryaku (The competitive strategy of Japanese firms), Yuhikaku; 1994; Sakakibara, K. Profiting from technological innovations, Yuhikaku; 2005; Aizawa, S. Quartz Udedokei no Kaihatsu: 100 no gijyutsu-sha-damashii: Ano seihin wa koshite umareta 1-kan (Development of quartz wrist watches: Spirit of 100 engineers and how the product was developed Vol 1), The Japan Machinery Federation; 1995: 17-21, 73-106.
2. Aizawa, Note (1) above: Page 79
3. Numagami, T. History of liquid crystal display technology, Hakuto-shobo; 1999: 113-115.

Other References

- Oda, I. Quartz ga kaeta toki no sekai, Nihon Kogyo Shinbunsha; 1988
- Kumakawa, S. Kikai-shiki kara Quartz e – Ippenshita tokei no seisan-gijyutsu, Journal of the Japan Society of Mechanical Engineers; Vol. 100; 1997: 22-27
- Nakamoto, D. Seihin no module-ka no shinten to kohatsu kigyo no keiei senryaku, Yokohama Journal of Social Sciences; Vol. 8, No. 4; 2003: 147-164
- Hara, Y. Kokusai kyoso to kodoka no innovation – Wagakuni seizogyo no kyoso kiban, The bulletin of Nagaoka University (2003); 1-20
- Yasukawa, H. Seiko analog quartz 35SQ, Journal of the Japan Society of Precision Engineering; Vol. 47, No. 6; 1981: 117

Happenings in Japan (Four-Flame Cartoon)



Editors' Note



Hi! It's Mitty here.

The feature for the Innovation 100 selection for this edition is “quartz watch”.

In Japanese we have the expressions “time goes by” and “marking time”, however personally I prefer the expression “marking time”.

When it comes to time, we are all equal. Without doing anything time passes, but if we choose to we can “mark” something, whether it be recollections, memories, or knowledge. I feel that by building on something and making a “mark” I can leave my mark on the world. The hands on a clock mark the time with every second.

I received my first watch when I started high school. In Japan education is compulsory up until the end of junior high school, so I have many good memories of when I first broke free from that obligation and chose my own path of education, studying, gaining knowledge and having fun with friends – and my watch was with me as I did all those things. Before I knew it, my collection of watches increased with each milestone, however my original watch is still marking time with me.

Going forward I hope not just to “pass time” but each day do something to “mark time”. I hope when you read this edition of “Enishi” it will also leave a mark on you.



Bento

Hi! It's Hiroko.

Japanese lunch boxes (“bento”) have lately been drawing attention from all over the world. Many foreign tourists buy colorful lunch boxes and utensils for making “chara-ben” as souvenirs. Chara-ben, which is short for character bento, are boxed lunches that are elaborately decorated with adorable animals, anime/cartoon characters, cars, etc. using edible ingredients. This style of bento was originally intended to interest children who are fussy eaters to encourage them to enjoy eating. As a child, my lunch boxes were very simple, and I was simply happy to see an octopus-shaped sausage or a rabbit-shaped apple in the bento box on a special occasion. Japanese lunch boxes have now evolved to a form of pop art. Like “bonsai” we love to create a delicate world in a limited space. Bento is a symbol of culture unique to Japan. I wonder how far it will evolve in the future.

Publication of this Magazine is consigned to the Japan Institute for Promoting Invention and Innovation by the Japan Patent Office.

[Consigner]



Japan Patent Office(JPO)

Address: 4-3, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8915, Japan
Telephone/Facsimile: 81-3-3503-4698 / 81-3-3581-0762 (International Cooperation Division)
Web site: <http://www.jpo.go.jp/torikumi/kokusai/kokusai2/training/index.htm>

[Publisher]



Asia-Pacific Industrial Property Center(APIC),

Japan Institute for Promoting Invention and Innovation (JIPII)

Address : 4-2, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-0013, Japan
Telephone/Facsimile: 81-3-3503-3026 / 81-3-3503-3239
Email: apic-jiii@apic.jiii.or.jp