EU-JAPAN CENTRE FOR INDUSTRIAL COOPERATION

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Seminar Report

"Artificial Intelligence and Intellectual Property, Patentability Trends in the Life Sciences and Recent Developments of the EU Unitary Patent System"

Tokyo 28 September, 2017

The EU-Japan Centre for Industrial Cooperation co-organized a seminar on recent development of intellectual property (IP) on 28 September 2017 in Tokyo, together with three IP-related firms, i.e. Sonderhoff & Einsel Law and Patent Office (Tokyo), Preu Bohlig & Partner (Munich) and Pruefer & Partner (Munich).

Experts from Europe, Japan and the United States provided most recent information on the following subjects which were closely related to business activities:

- a) The EU Unitary Patent.
- b) Legal protection under Japanese and European copyright and patent laws to the invention generated by artificial intelligence (AI).
- c) Interpretation of the European Patent Convention (EPC) on biotechnology/life science in interaction with EU law.

The seminar obtained highly positive evaluation from the audience which totaled more than 100.

The first presenter, Dr. Christian Kau of Preu Bohlig & Partner gave an "Update on the EU Unitary Patent System," referring to the prospect for the start of the new system. He suggested the first quarter of 2018 would be the "best guess" but it could be delayed until the end of 2018 due to various factors including British withdrawal from the EU ("Brexit") and the constitutional dispute in Germany. He also gave explanation on merits and demerits of an "opt out" from the new Unitary Patent System, staying with present nation-based applications to major countries.

Mr. Grant Tanabe and Ms Ayuko Nemoto of the Sonderhoff & Einsel Law and Patent Office explained the "Application of Artificial Intelligence and its IP Law Aspects in Japan with Regard to Copyright," referring to the current regulation and recent discussions. They explained that AI created works are not protected under Japan's Copyright Law and it would be necessary to monitor future discussions. As regard to the rights and

liability of AI used works, they indicated the necessity to establish an agreement between the AI developer and the AI using work's creator if they were different.

Dr. Axel Oldekop of Preu Bohlig & Partner spoke on the corresponding situation in the EU. It was raised that because of the "Human Author" requirement, the invention made independently by the AI cannot be accorded EU protection of copyright. However, he also pointed out that the treatment of the computer generated works are different under U.K. law.

Prof. Noriko Otani of the Tokyo City University showed example of "Music Made in Collaboration between an Al and a Musician." The demonstration helped the audience to have a first-hand knowledge of actual case of Al-assisted work.

Dr. Christian Einsel of Pruefer & Partner and Mr. Felix-Reinhard Einsel of Sonderhoff & Einsel Law and Patent Office discussed the "patentability" of AI invention in the EU and Japan. Dr. Christian Einsel, first of all pointed out that the world AI market is forecasted to reach between 6.8 and 13.4 billion euros by 2022. In addition, the number of annual patent filings related to AI in the EU tripled between 2004 and 2014.

Both presenters reported that the AI systems are not allowed to be inventors in the EU nor Japan. However, it is necessary to follow the future evolution carefully because "the EU is aware of the new industrial revolution with respect to AI" and it is recognized in Japan that "there are fields the current patent system cannot handle and fields for which new legal framework is required".

Dr. Dorothea Hofer of Pruefer & Partner gave a comprehensive explanation on "The Recent Practice of the European Patent Office Regarding Life sciences/biotechnology" According to Dr. Hofer, EPO filings in the life science field is still a small number as compared to other fields but increasing and problems are underlined in such field as stem cell patents.

Prof. Toshiko Takenaka of University of Washington School of Law/Keio University Law School made comments on the patent protection on AI and life science/biotechnology from the US perspective. She drew attention to the fact that the US system of IP protection was different ("US isolation") from the EU and Japan due partly to the recent court decisions. In addition, it is noteworthy that no statutory exclusion as regard to patent eligibility exists in the US but there are common law exclusions. Prof. Takenaka stressed that because of these and other differences, it became possible that the US patent was not accorded to the invention which had already obtained EU and/or Japanese patent.

Mr. Luca Escoffier, Project Manager of the EU-Japan Technology Transfer Helpdesk, EU-Japan Centre for Industrial Cooperation moderated the panel discussion. He addressed a couple of questions to the panelists for obtaining clearer vision of their presentations. He also raised a question on the future prospect of AI technology and whether it can replace human invention. Dr. Christian Einsel indicated that the boundary of human and AI invention is becoming "thinner and thinner" because AIs have started to learn on its own. Prof. Otani pointed out the most outstanding characteristics of AI was its ability to repeat exactly the same thing in music performance, for example. In deciding inventor, Mr. Felix--Reinhard Einsel suggested to accord IP protection to the one who perceived the concept of invention.

Evaluation of the seminar given by the general audience was very positive. Most of them found the seminar informative as saying, "Examples of judicial decision on AI from the perspective of the EU and the US were very helpful" or "The updates on AI, Life science and Biotech gave me hints in my day-to-day work." In addition, some people already submitted request for organizing similar seminar next year since "I realized there was much to be done in the area of AI intellectual property" and "This kind of matter continues to change quickly. "

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