Statements by Japan
at the Second Session of WIPO Conversation
on Intellectual Property (IP) and Artificial Intelligence (AI)
(July 7 to 9, 2020)

Session 2: AI inventions: Patentability, disclosure and guidelines Issue 3, 4 and 5 (Oral Presentation)

Thank you, Mr. Chairman.

On behalf of Japan, I extend my gratitude for your dedicated work as the chairman of the WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (AI), and I also express my appreciation to Director General Francis Gurry and the Secretariat for their efforts in holding this Conversation.

When determining the patentability of inventions that can be applied in a wide variety of technical fields, such as artificial intelligence (AI), IP offices are required to establish standards for determination, so that users can ensure greater transparency and predictability in terms of obtaining patents, regardless of the technical fields in which AI is applied.

Therefore, the Japan Patent Office (JPO) has listened to users of the patent system for several years, through public comments and other methods regarding AI-related inventions, which are created by applying AI to various technical fields. Also, concurrently, the JPO has been seeking challenges in patent examinations on AI-related inventions and solutions to them.

Also, in 2019, the JPO hosted the "International Symposium on Patent Examination Practices for AI-related Inventions," in which IP5 and their users gathered together.

Here today, we would like to contribute to discussions on some of the issues based on these experiences.

The JPO believes that it is not necessary to create new specific examination standards for AI-related inventions. And, the patentability of the AI-related inventions which utilize computer software should be determined in the same way as non-AI-related inventions which utilize computer software. JPO’s users also support this concept.

Instead, the JPO feels it is very important to provide specific case examples in order to clarify how examination standards are applied in various technical fields where AI can be applied.

The JPO has published many case examples of patent examination with opinions from users reflected in order to share its examination practices of AI-related inventions in an easy-to-understand manner to other IP offices and users of the patent system.

For example, users are concerned whether the degree of disclosure requirements may differ depending on the technical features of the AI-related inventions. Correspondingly, case examples created by the JPO clarifies that AI-related inventions using generic AI algorithms and well-known combinations of training data possibly meet the disclosure requirements without detailed description of the algorithms

and the combination of training data.

The JPO will continue to focus on user opinions regarding the patent system and practices in the field of AI. Based on this, the JPO will contribute to discussions on this matter with WIPO and other IP offices.

I thank you, Mr. Chairman.

Session 2: AI inventions: Patentability, disclosure and guidelines
Issue 3, 4 and 5 (Full Version (Written Statement))

When determining the patentability of inventions that can be applied in a wide variety of technical fields, such as artificial intelligence (AI), IP offices are required to establish standards for determination, so that users can ensure greater transparency and predictability in terms of obtaining patents, regardless of the technical fields in which AI is applied.

Therefore, the Japan Patent Office (JPO) has listened to users of the patent system for several years, through public comments and other methods regarding AI-related inventions, which are created by applying AI to various technical fields. Also, concurrently, the JPO has been seeking challenges in patent examinations on AI-related inventions and solutions to them.

Also, in 2019, the JPO hosted the "International Symposium on Patent Examination Practices for AI-related Inventions," in which IP5 and their users gathered together. At the Symposium, discussions were conducted on how to deal with AI-related inventions, including points for examiners to make determinations in patent examinations and points that users should be aware of to obtain patents.

Here today, we would like to contribute to discussions on some of the issues based on these experiences.

First, we will touch upon Issue 3, Patentable Subject Matter

and Patentability Guidelines.

The JPO believes that it is not necessary to create new specific standards on Patentable Subject Matter for AI-related inventions. And, the patentability of the AI-related inventions which utilize computer software should be determined in the same way as non-AI-related inventions which utilize computer software. JPO's users also support this concept.

Instead, the JPO feels it is very important to provide specific case examples in order to clarify how standards for patentability are applied in various technical fields where AI can be applied.

The JPO has published many case examples of patent examination with opinions from users reflected in order to share its examination practices of AI-related inventions in an easy-to-understand manner to other IP offices and users of the patent system.

Next, we will move on to Issue 4, Inventive Step or Non-Obviousness.

The JPO believes that a peculiar concept of AI is not required in terms of determining the inventive step of AI-related inventions.

However, examiners must be aware of the level of a person skilled in the art when judging the inventive step of AI-related inventions. If AI is recognized to have been widely used in the technical field of the claimed invention, then the level of a person skilled in the art should be set so that a person skilled in the art can use AI technologies as standard and the ordinary

technical means for research and development.

In addition, as with Patentable Subject Matter, it is beneficial to use case examples to clarify how the standards for determining inventive step are applied in various technical fields where AI can be applied. Case examples of AI-related inventions published by the JPO include those related to inventive step.

Finally, we would like to provide remarks on Issue 5, Disclosure.

The JPO believes that the disclosure requirements for AI-related inventions should be determined as in the case of inventions not related to AI.

When a person skilled in the art needs the specific disclosure of algorithms and training data in carrying out the claimed AI-related invention, such information is required to be described in the specification. On the contrary, if a person skilled in the art can carry out the claimed invention without revealing specific details, there is no need to disclose them.

Users are concerned whether the degree of disclosure requirements may differ depending on the technical features of the AI-related inventions. Correspondingly, case examples created by the JPO clarifies that AI-related inventions using generic AI algorithms and well-known combinations of training data possibly meet the disclosure requirements without detailed description of the algorithms and the combination of training data.

The JPO will continue to focus on user opinions regarding the

patent system and practices in the field of AI. Based on this, the JPO will consider the best possible patent system and practices, so as to contribute to discussions on this matter with WIPO and other IP offices.

Session 3: Data: Copyright in Training Data, Further Rights in Data and Trade Secrets
Issue 11(ⅰ) (Oral Presentation)

(i) Are current IP rights, privacy laws, unfair competition laws and similar protection regimes, contractual arrangements and technological measures sufficient to protect data or should IP policy consider the creation of new rights in relation to data?

Thank you, Mr. Chairman.

In Japan, in 2017, at the Secretariat of Intellectual Property Strategy Headquarters, a "Committee to Review Intellectual Property regarding New Data-related Assets" was established to examine how to protect valuable data. At the Committee, discussions were held with emphasis on (1) the viewpoint of strengthening industrial competitiveness and (2) the balance between protection and utilization.

The committee examined the copyright, industrial property rights, and other intellectual property systems as a framework for protecting valuable data. As a result of the above discussion, it was pointed out that setting an exclusive property right may impede data utilization because the right may limit other's use of the property, and it was concluded that it was not desirable at the time.

Based on the discussions in the Committee, we decided to assist advancing B to B contracts and to adopt an action

regulation approach as the minimum measure to stop misappropriation of valuable data for the protection of the data. Then, in addition to trade secrets, we introduced a concept of "protected data," aiming at protecting valuable data, in the 2018 revision of the Unfair Competition Prevention Act.

At that time, as another possible approach, we examined the introduction of a conditional right, which imposes an obligation to grant a license to a person who intends to obtain a license agreement under certain conditions and the right to remuneration. As for the conditional right, it was not adopted because even if a new right with a FRAND condition is created, companies will try to avoid obtaining the license and thereby is not suitable for data utilization. As for the right to remuneration, it was not adopted because it cannot be expected to deter the illegal distribution of data with the use of an injunction.

I thank you, Mr. Chairman.

Session 3: Data: Copyright in Training Data, Further Rights in Data and Trade Secrets
Issue 11 and 14 (Full Version (Written Statement))

Issue 11: Further Rights in Relation to Data

(i) Are current IP rights, privacy laws, unfair competition laws and similar protection regimes, contractual arrangements and technological measures sufficient to protect data or should IP policy consider the creation of new rights in relation to data?

In Japan, in 2017, at the Secretariat of Intellectual Property Strategy Headquarters, a "Committee to Review Intellectual Property regarding New Data-related Assets" was established to examine how to protect valuable data. At the Committee, discussions were held with emphasis on (1) the viewpoint of strengthening industrial competitiveness and (2) the balance between protection and utilization.

The committee examined the copyright, industrial property rights, and other intellectual property systems as a framework for protecting valuable data. As a result of the above discussion, it was pointed out that setting an exclusive property right may impede data utilization because the right may limit other's use of the property, and it was concluded that it was not desirable at the time.

Based on the discussions in the Committee, we decided to assist advancing B to B contracts and to adopt an action

regulation approach as the minimum measure to stop misappropriation of valuable data for the protection of the data. Then, in addition to trade secrets, we introduced a concept of "protected data," aiming at protecting valuable data, in the 2018 revision of the Unfair Competition Prevention Act.

At that time, as another possible approach, we examined the introduction of a conditional right, which imposes an obligation to grant a license to a person who intends to obtain a license agreement under certain conditions and the right to remuneration. As for the conditional right, it was not adopted because even if a new right with a FRAND condition is created, companies will try to avoid obtaining the license and thereby is not suitable for data utilization. As for the right to remuneration, it was not adopted because it cannot be expected to deter the illegal distribution of data with the use of an injunction.
Please refer to (ii) and (iii) for more details of the requirements for “protected data”.

(ii) If new IP rights were to be considered for data, what would be the policy reasons for considering the creation of any such rights? What would be the specific purpose of new rights of protection in relation to data?

As described in (i), based on the results of the examination by the "Next Generation Intellectual Property System Review Committee", Japan adopted an action regulation approach to the UCPA through the revision in 2018. The concept of “protected data” is as follows.

Useful data is easy to duplicate and, once illegally obtained, can be immediately redistributed in its entirety, meaning that investors may lose the chance to recoup their investments. Therefore, there have been calls for the introduction of legal measures against such illegal conduct in order to reassure data providers.
Under such circumstances, we newly introduced "protected data" in the UCPA in consideration of the data provided to third parties through transactions, etc., and defined the fraudulent acquisition, use, and disclosure acts related to "protected data" as unfair competition.
Unfair competition such as unauthorized acquisition, use or disclosure of "protected data" is subject to civil measures (claim for injunctions and claim for compensation for loss and damages), and it has become possible to stop unfair competition regarding protected data.
Criminal measures have not yet been introduced as a result of balancing data providers and data users.

(iii) If new IP rights were to be considered for data, what types of data would be the subject of protection? Which standards should be considered? Would any new IP rights be based on the inherent qualities of data (such as its commercial value) or on protection against certain forms of competition or activity in relation to certain classes of data that are deemed to be inappropriate or unfair, or on both?

We considered both "inherent qualities" and "competition or activity" in relation to "protected data" under the UCPA.
Regarding "inherent qualities", "protected data" is stipulated

as data which satisfies the following three requirements regardless of its type or industry; 1) limited provision, 2) electromagnetic management and 3) significant accumulation. Then, in order to prevent wrongful acts regarding “protected data”, acts such as illegal acquisition and unlawful disclosure are defined as unfair competition, and the civil measures are stipulated against them.

(iv) If new IP rights were to be considered for data, what IP rights would be appropriate, exclusive rights or rights of monetary compensation for use of the data or both?

As described in (i), based on the results of the examination by the " Committee to Review Intellectual Property regarding New Data-related Assets ", it was pointed out that setting an exclusive property right may impede data utilization because the right may limit other’s use of the data, and it was concluded that it was not desirable at the time. In addition, the conditional right which imposes an obligation to license a person who intends to obtain a license agreement under certain conditions and the right to remuneration were also examined. Regarding the conditional right, it was pointed out that even when governed by an open contract with reasonable remuneration, companies were actually trying to avoid license contracts and thereby data utilization would not proceed. Regarding the right to remuneration, it was pointed out that they creators could not recover the investment related to data creation because they could not make an injunction request for remuneration claims.
Therefore, we did NOT introduce a new IP right but adopted an action regulation approach.

(v) *If new IP rights were to be considered for data, how would any such IP rights affect innovation in the AI field? How would a balance be struck between protection of data and the access to and free flow of data that may be necessary for the improvement of AI, science, technology or business applications of AI?*

It should be noted that excessive protection in a rapidly growing field will adversely affect the progress of innovation. Both the protection of data, and the degree of freedom in access and distribution are important, and it is desirable to consider an appropriately balanced system. We have adopted the idea of introducing the minimum necessary civil measures as a remedy against fraudulent acquisition/unauthorized use, etc. which is highly malicious, on the premise of free transactions based on contracts, as long as it does not interfere with normal legitimate business activities.
For this reason, firstly, after taking a bird's eye view of the entire IP system, we chose an action regulation approach instead of granting exclusive rights.
Second, in a new system design, that is, a legal system of "protected data", considering the balance between data holders and users, only very malicious acts are subject to regulation. The introduction of criminal measures was also postponed. In this way, care was taken not to impede data utilization.
Regarding the impact of the introduction of this system on the distribution of data, there are no quantitative statistics at this time though, from the data provider's perspective, by providing measures to stop illegal distribution of data, we

believe we have prepared an environment where data providers can provide data with peace of mind.

(vi) How would any new IP rights affect or interact with existing policy frameworks in relation to data, such as privacy, security or unfair competition laws or regulations?

(No comment)

(vii) How would any new IP rights be effectively enforced?

As describe above, we did not introduce a new IP right but adopted an action regulation approach for data protection. Unfair competition such as unauthorized acquisition, use or disclosure of “protected data” is subject to civil measures (injunction and claim for damages), and it has become possible to stop unfair competition regarding data.

(viii) If no new IP rights were to be considered for data, should the frameworks of current IP rights, unfair competition laws, trade secrets laws and similar protection regimes, contractual arrangements and technological measures be amended in favor of a stronger economic protection of data?

As described above, based on the opinions of industry, we have just revised the UCPA in 2018 from the viewpoint of data protection in addition to trade secrets. This revision makes it possible to protect data that is not protected by trade secrets.

(ix) If no new IP rights were to be considered for data, which <u>other tools</u> could be proposed to ensure that data producers maintain the capacity to decide to whom and under which conditions they can grant access to their non-personal data?

As “other tools”, Japan has prepared and published "Contract Guidelines on Utilization of AI and Data” in 2018 (updated in 2019 responding to a law revision) which provide reference information for matters that the contracting parties should set in advance in providing and using data.
Also, with regard to trade secrets and “protected data” of the UCPA, we are trying to promote proper understanding of businesses by preparing guidelines.

<u>Issue 14: Trade secrets</u>

(i) Does the current law of trade secrets strike the right balance between protecting innovations in the AI field and the legitimate interests of third parties in having access to certain data and algorithms?

The profit of the trade secret holder should be secured. Under the contract, a third party can use the technology that is a trade secret. Thus, the current legal system seems to be in balance.

(ii) Should data and AI applications be protectable by trade secrets or is there a social or ethical interest[1] to override existing trade secret protection?

If data or an AI application derive value from the fact that they are kept secret, it should be protectable as a trade secret if legal requirements are met. However, for legal purposes, harmful information that violates public order and morals is not protected by the Unfair Competition Prevention Act.
We recognize that there are no public or ethical requirements to treat data or AI applications specially and ignore existing trade secret protection legislation.

(iii) If data and AI applications should not be protected by trade secrets, should any such exception be limited to certain areas of AI, such as data and applications used in judicial decision-making?

We have a TRIPs agreement that defines trade secrets, and we believe that information should be protected as trade secrets as long as the requirements for trade secrets are met. As such, sectoral or industrial exceptions should not be made and should be carefully considered.
In Japan, even data that is not protected as trade secrets can be protected under the UCPA if it meets the requirements for "protected data".

[1] For example, in line with draft guiding principle 6, Transparency, of the UNESCO constituted Ad Hoc Expert Group for the Preparation of a Draft Text of a Recommendation on the Ethics of Artificial Intelligence, 2020, https://unesdoc.unesco.org/ark:/48223/pf0000373199.

(iv) If data and AI applications should not be protected by trade secrets, should data and AI applications be protectable by other IP rights?

As described in (i) of issue 11, regarding data, we have introduced the concept of “protected data” into the UCPA to protect data that is intended to be shared with others. Data used for AI can be protected as “protected data” if the requirements are met. Japan already has a system to protect data under legal systems other than trade secrets, so we believe that the current legal system for protecting data in Japan is sufficient.

(v) If data and AI applications should be protected by trade secrets, should there be a mechanism for evidentiary support and practical mechanisms for preserving the confidentiality of trade secrets?

Since it is difficult to prove the validity of trade secrets, there should be a mechanism for evidentiary support. In Japan, Article 5-2 of the UCPA has “Presumption of a Person Using a Technical Secret they Acquired” for reducing the burden of proof of plaintiffs. This provision shifts the burden of proof to the defendant regarding the fact "whether or not the trade secret was used" (that is, the defendant should prove he/she did not use the trade secrets), on condition that the plaintiff proves following facts; (i) trade secrets (technical information) such as production methods were acquired unlawfully by the defendant and (ii) the technical secret was clearly used to undertake actions (for example, the defendant is producing a product that can be produced using the production method).

(vi) Given the global importance and scope of AI applications, is there a need to harmonize the law of trade secrets at the international level?

We believe that the outer edge of trade secrets has been established in accordance with the TRIPs agreement, but so far there has been no discussion on the harmonization of trade secret legislation at the international level. It is, therefore, important to collect information and discuss various issues regarding trade secrets.

(vii) Are there seen or unforeseen consequences of trade secrets on bias or trust in AI applications as trade secrets may increase the lack of reproducibility and explainability of AI?

At this time, we are not aware of such issues. It is important that there is a system where the data holder can choose whether to protect the data in an open form or in a confidential state, anyway.

(End of file)