I. Current law and practice

1. Does your current law contain any statutory provisions which specifically apply only to CII?

No

Please Explain

2. Please briefly describe the general patentability requirements in the written statute based law of your jurisdiction which are specifically relevant for the examination of the patentability of CII.

Subject matter eligibility (hereinafter simply referred to as “eligibility”), novelty, and inventive step are prescribed in law as general patentability requirements.

a. As regards eligibility, the main paragraph of Article 29(1) of the Patent Act provides that a patent shall be granted for an invention as defined in the Patent Act. Article 2(1) of the Act defines an “invention” as “the highly advanced creation of technical ideas utilizing the laws of nature.” Accordingly, as in the case of inventions of other subject matters, CII must meet the definition of “invention” in order to be patented. More specifically, the common eligibility test applicable to both CII and inventions of other subject matters is whether the invention “utilizes the laws of nature” and embodies “technical ideas.”

b. Novelty and inventive step are prescribed in Article 29(1) and (2) of the Patent Act, respectively. Both requirements apply to CII as they apply to inventions of other subject matters.

3. Under the case law or judicial or administrative practice in your jurisdiction, are there rules which specifically apply only to CII? If yes, please explain.

Yes
Please Explain

The provisions in Chapter 1 "Computer software related Inventions" of Annex B "Application examples of the specific technical fields" in the Examination Handbook for Patent and Utility Model in Japan (hereinafter "Examination Handbook"), are rules that apply only to CII.

However, it should be clarified that Annex B of the Examination Handbook only explains the points to note when applying the Examination Guidelines to CII, or more specifically, only sets forth the criteria for interpretation of the "use of the laws of nature" in CII, which we referred to in our answer 2) above, and it does not lay down a different criteria for CII from those for inventions of other subject matters. The following is cited as the points to note when applying the Examination Guidelines to CII.

a. Eligibility

A two-part test is provided for the determination of eligibility of CII (or construed in the context of the Japanese law as determination as to whether CII meets the definition of an "invention," that is, whether it is "creation of a technical idea utilizing a law of nature").

The first test is whether CII meets the definition of an "invention," which is a general test prescribed in the Examination Guidelines as one that applies to all types of inventions including CII. The details of this test are explained in our answer 4) below.

The second test is specific to the eligibility of CII and this applies only if the first test fails to give a clear answer. The second test determines the eligibility of a software-related invention (CII) by examining "whether information processing by the software is concretely implemented by using hardware resources," or more specifically, by examining, "based on the recitation of the claims (i.e., claimed language), whether or not specific calculation or processing of information directed to the intended use is implemented by specific means or procedures on which software and hardware resources cooperate with each other."

It should be noted that, if it is obvious for those skilled in the art that information processing by the software is specifically implemented by using hardware resources, the software-related invention (CII) may be found to be eligible for patent even when the hardware resources are not explicitly recited in the claim.

b. Novelty/Inventive-step

In connection with the determination of novelty and inventive step, when examining a software related invention, it is considered appropriate to understand the claimed invention as a whole, rather than dividing it into an artificial arrangement (i.e., human-conceived rule) or the like and a systemization method. Thus, there are no rules specific to CII regarding the determination of novelty and inventive step. Nor is there such practice as determining these factors by distinguishing technical and non-technical features of the claimed invention and eliminating the non-technical features.

Under the Examination Guidelines, the general criterion for the determination of eligibility (which means, in the context of the Japanese law, the criterion for the determination as to whether the claimed invention meets the definition of an "invention," that is, whether it is "creation of a technical idea utilizing a law of nature"); the first test mentioned in our answer 3)) applies.

With regard to the first test, Annex B of the Examination Handbook gives the following as examples of an invention that is found to be eligible for patent under the general criterion: (i) those concretely performing control of an apparatus or processing with respect to the control and (ii) those concretely performing information processing based on the technical properties such as physical, chemical, biological or electric properties of an object.

Also in relation to the first test, the Examination Guidelines enumerate the following as subject matters that do not meet the definition of "invention": (I) a law of nature as such; (II) mere discoveries that are not creations; (III) those contrary to a law of nature; (IV) those in which a law of nature is not utilized; (V) those not regarded as technical ideas; and (VI) those for which it is clearly impossible to solve the problem to be solved by any means presented in a claim. Among these categories, (IV) and (V) are related to CII.

The Examination Guidelines subdivide Category (IV), those in which a law of nature is not utilized, into the following: (i) any laws other than a law of nature (e.g., economic laws); (ii) artificial arrangements (i.e., human-conceived rule) (e.g., a rule for playing a game as such and a computer language); (iii) mathematical formula; (iv) mental activities of humans; and (v) those utilizing only (i) to (iv) (e.g., methods for doing business as such). Category (V), those not regarded as technical ideas, includes, for example, the mere presentation of information (where the feature resides solely in the content of the information, and the main object is to present information).

If the eligibility of CII can be determined by applying the first test (general criterion), the second test (specific criterion for CII) is no more applied.

As for the case laws, courts deny the patent eligibility of an invention if an essentiality or a nature of the invention is an artificial arrangement as such or is exclusively directed to the mental activities of humans as such. In the past, both the JPO and courts used to apply a strict
criterion to determine the eligibility of CII. However, over the last decade, the JPO seems to have relaxed the criterion and more often found CII to be eligible for patent. Accordingly, in most court cases in which the patent eligibility of CII was raised as a question, the claimed invention did not recite computer-related elements as its constituent elements and none of these cases denied the patent eligibility of CII for the said reasons.

For the discussion on novelty and inventive step, refer to our answer 3).

Exclusion of non-patentable subject matter per se.

Do the statutory provisions, case law or judicial or administrative practice (hereinafter collectively referred to as Law / Practice) in your jurisdiction exclude any particular subject matter relating to CII from patentability per se? In this context, “per se” means that the non-patentable subject matter is identified without any implicit or explicit examination of the contribution to the state of the art the claimed CII makes.

If yes, please answer questions 5.b-5.e, if no, please go to question 6.a

No

Please Explain

Any subject matter, not limited to those relating to CII, is excluded from patentability per se if it falls within the categories of subject matters that are excluded from patentability in the course of determining eligibility under the main paragraph of Article 29(1) of the Patent Act, such as " those in which a law of nature is not utilized" and " those not regarded as technical ideas." In other words, whether the claimed invention meets the definition of an "invention" is examined explicitly as the common test that is applicable regardless of whether the subject matter is related to CII or not.

The Examination Guidelines enumerate the following as "those in which a law of nature is not utilized":

(i) any laws other than a law of nature (e.g., economic laws);
(ii) artificial arrangements (i.e., human-conceived rule) (e.g., a rule for playing a game as such);
(iii) mathematical formula;
(iv) mental activities of humans; and
(v) those utilizing only (i) to (iv) (e.g., methods for doing business as such).

"Those not regarded as technical ideas" refers to, for example:

the mere presentation of information (where the feature resides solely in the content of the information, and the main object is to present information).

In addition to the above, inventions that are liable to injure public order as prescribed in Article 32 of the Patent Act (e.g. a method used exclusively for committing a massacre of people) are excluded from patentability per se.

See Examination Guidelines for Patent and Utility Model in Japan

*Part III Patentability Chapter 1 Eligibility for Patent and Industrial Applicability (Main Paragraph of Article 29(1) of Patent Act)*

*Part III Patentability Chapter 5 Category of Unpatentable Invention (Patent Act Article 32)*

Please describe the subject matter excluded from patentability per se and explain in detail how it is identified in practice
If there is any subject matter identified in a patent claim relating to CII that is excluded from patentability per se, is it possible to overcome a rejection of the patent claim by adding other subject matter to the claim?

If yes, please answer questions 5.d-5.e, if no, please go to question 6.a

Does the “other subject matter” need to have a certain quality, e.g. does it need to be inventive?

Can you describe the areas of human endeavour the “other subject matter” needs to relate to?

Requirement of a contribution in a field of technology.

Does the examination of the patentability of CII in your jurisdiction implicitly or explicitly involve an examination of the contribution the claimed CII makes to the state of the art (such examination may be part of a general “patentability” test or part of the novelty and inventive step/non-obviousness test)?

If yes, please answer questions 6.b-6.d, if no, please go to question 7

No

Please Explain

We provide our answer to this question, assuming that the term "patentability" used therein mean "eligibility."

The contribution to the state of the art is not examined in the course of determining whether the claimed CII is eligible for patent as prescribed in the main paragraph of Article 29(1) of the Patent Act, whereas, in the novelty and inventive-step test of CII, the contribution to the state of the art is necessarily examined.

We assume that the "contribution to the state of the art" referred to in the question means the contribution to prior art. It should be noted that, in Japan, the state of the art is considered to consist of both technical and non-technical features. Therefore, in our answers given below, we assume that non-technical features also constitute "the state of the art."

It should be also noted that, under the Patent Act of Japan, the claimed invention is not regarded as an "invention" as defined in Article 2(1) of the Act unless it is "the highly advanced creation of technical ideas utilizing the laws of nature." The phrase "highly advanced" used here is interpreted as meaning the degree of advancement as compared to the requirement under the Utility Model Act, rather than referring to an "inventive step," which is a patentability requirement.

Also, the novelty and inventive step test does not derive a conclusion solely based on the areas of human endeavour the claimed invention is related to. Accordingly, non-technical features of the claimed invention are also taken into consideration together with its technical features in the course of determining its inventive step.

Does this test implicitly or explicitly involve excluding contributions from areas of human endeavour which are not deemed to be sources of patentable inventions? In other words, does patentability of CII implicitly or explicitly require a contribution from areas of human endeavour which are deemed to be sources of patentable inventions (e.g. engineering, natural sciences)? If yes, please explain.

Does this test also implicitly or explicitly require that the relevant contribution the CII makes to the state of the art qualifies as inventive/non-obvious? This additional test may be integrated into the general inventive step / non-obviousness examination, or may be a stand-alone test. If yes, please explain.
II. Policy considerations and proposals for improvements of your current Law/Practice

5.c Is there an implicit or explicit consensus in your jurisdiction as to the areas of human endeavour which are accepted as sources of patentable CII? If yes, are these areas of human endeavour defined, and if so how?

6.d Is there an implicit or explicit consensus in your jurisdiction as to the areas of human endeavour which are accepted as sources of patentable CII? If yes, are these areas of human endeavour defined, and if so how?

7 Does the Law / Practice in your jurisdiction contain any specific claim drafting or other formal requirements which are applicable to CII, i.e. which deviate from the Law / Practice applicable to inventions which are not CII? If yes, please explain.

Yes

Please Explain

As explained in our answer 3), Annex B of the Examination Handbook provides for the two-part test for determining the eligibility of CII, which consists of the first test that applies to all areas and the second test that applies exclusively to CII. Only if the first test fails to give a clear answer to determine the eligibility of CII, the second test is applied.

In the second test, the eligibility of CII is determined by examining, based on the statement of the claims, "whether or not a specific calculation or processing of information directed to the intended use is implemented by concrete means or procedures on which software and hardware resources cooperate with each other." These two tests function to deny excessively abstract ideas claimed as CII.

The second test is regarded only as an exclusive test for determining the eligibility of CII, and it is originally not intended to impose any additional formal requirements such as claim drafting with regard to CII. Yet, we answered yes to this question, because the eligibility of CII could resultantly rely on claim drafting. Meanwhile, as mentioned in our answer 4), if CII is found to be eligible for patent by the first test, the second test is no more applied.

Regarding the claim format, Annex B of the Examination Handbook provides that CII can be cited in a claim as an invention of a process (or method) or invention of a product. An "invention of a product" covers a "program," "data structure," and "computer readable recording medium." However, if CII is recited as a "program signal (array)," a "data signal (array)," or a "program product," it fails to meet the clarity requirement (with regard to a claim containing the phrase "a program product" as the main noun at the beginning of the claim, cases where it is clear from the description, etc. that the claimed invention is a product are excluded).

8 Does the Law / Practice in your jurisdiction contain any specific requirements as to sufficiency of disclosure and/or enablement which are applicable to CII, i.e. which deviate from the Law / Practice applicable to inventions which are not CII? If yes, please explain.

No

Please Explain

There is no particular requirement as to the sufficiency of disclosure or enablement that is exclusively applied to CII. Therefore, no greater disclosure is required for CII beyond the general level of sufficiency of disclosure or enablement, such as disclosure of a detailed algorithm.

In other words, in determining the sufficiency of disclosure, a common test applies to CII as it applies to inventions in other areas, i.e. whether the claimed subject matter can be understood by persons skilled in the art as something that can solve the problem to be solved. Similarly, in determining enablement, whether the detailed explanation of the invention describes the invention clearly and sufficiently to the extent that it enables any person skilled in the art to practice the claimed invention is a common test that applies not only to CII but also to inventions in other areas.

9 Do courts and administrative bodies in your jurisdiction apply the Law / Practice for patentability of CII in your jurisdiction in a harmonized way? If not, please explain.

Yes

Please Explain

II. Policy considerations and proposals for improvements of your current Law/Practice
Is the current Law/Practice in your jurisdiction regarding the patentability of CII considered by users of the patent system and practitioners to be understandable and workable? If not, please explain.

Yes

Please Explain

As we indicated in our answer in Section I. Current law and practice, it is considered appropriate in Japan to examine and determine the eligibility of the claimed CII as a whole, by applying the Patent Act, the Examination Guidelines, and the Examination Handbook, and by following the procedures for determining the eligibility of CII.

Although this process of determining eligibility is exclusively applied to CII and relies on claim drafting to some extent, it is considered to effectively work as a clear and sufficiently predictable test. In the stage of determining eligibility, the claimed CII's contribution to the state of the art is not determined. This also facilitates predictability in the determination of eligibility of CII.

From a post-grant aspect, even if a would-be eligible invention that is actually not eligible for patent is overlooked and erroneously patented, a third party is guaranteed a means for invalidating the patent ex post fact on the grounds of lack of eligibility.

Does the current Law/Practice in your jurisdiction regarding patentability of CII provide appropriate outcomes, in particular from an economic perspective? If not, please explain.

Yes

Please Explain

Japan catches up with progress in computer technology by adapting the patent practice to it promptly.

More specifically, Japan has made revisions to the Examination Guidelines, etc. as well as legislative amendments as appropriate (to include recording media in which computer programs are recorded in the scope of protection in 1997, and include computer programs, etc. in the scope of "invention of a product" in 2000). In the examination of CII, eligibility is determined first and then novelty and inventive step are determined.

The patent grant rate for business-related CII, which was below 10% in 2000, has been on a gradual rising trend, recently reaching around 70%, almost on a level equal to the rate for inventions in other technical areas. *1

Active efforts have also been made in addressing the research and development of IoT-related technology and the application thereof in business. Case examples of IoT-related technology have been added to the Examination Handbook (in September 2016 and March 2017). *2

In particular, the case examples introduced in March 2017 show clear standards for handling trained models (AI-related technology) and 3D printing data. The determination of eligibility of inventions involving IoT-related technology is conducted in accordance with the current legal provisions as well as the provisions of the Examination Guidelines, Part III, Chapter 1 Eligibility for Patent and Industrial Applicability, and the Examination Handbook, Annex B, Chapter 1 Computer software related Inventions.

In an immediate future, with a view to ensuring that patents necessary for promoting innovation can be obtained and put into use with certainty in the areas of business using IoT, the Japanese patent authorities will, by the end of FY2017, review the Examination Guidelines, etc. focusing on software-related inventions that are closely connected with IoT-related inventions, and discuss methods for using patents for business-related inventions through the use of IoT, and will disseminate the outcomes of such review and discussion at home and abroad in due course. More information will be made available with regard to procedures and methods to obtain and use patent rights for these inventions. *3


*2. Case examples pertinent to IoT related technology

https://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/files_handbook_sinsa_e/app_z_e.pdf

In your jurisdiction, is copyright protection of CII regarded as sufficient from an economic standpoint? Please state why in either case.

No

Please Explain

Under the Copyright Act of Japan, works of computer programming are enumerated as a type of copyrightable work (Article 10(1)(ix)). The term "computer program" refers to "something expressed as a set of instructions written for a computer, which makes the computer function so that a specific result can be obtained" (Article 2(1)(x)-2). Instructions given from CII to hardware deserve protection under the Copyright Act. However, "work" as defined under the Copyright Act means a "production in which thoughts or sentiments are creatively expressed and which falls within the literary, academic, artistic, or musical domain" (Article 2(1)(i)). In short, a copyrightable work is not an idea but its expression (so-called "theory of distinction between ideas and expressions"). Consequently, the protection of works of computer programming is limited within the area of expressions.

On the other hand, the main role of a computer program resides in its function of having a computer perform a desired calculation or processing, rather than its expression. However, a function falls within the category of ideas, which are outside the scope of protection under the Copyright Act. Furthermore, there is a limit to expressions that can fulfill the intended function. As a result, computer programs are less likely to be recognized as copyrightable, and even if they are found to be copyrightable, the scope of adaptation right is limited.

In consequence, protection under the Copyright Act for computer programs is likely to be limited to the narrower scope (e.g., mere protection against the "dead copy"). Thus, copyright protection cannot be regarded as sufficient, and the amount of damages against copyright infringement is also limited in most cases.

Alternatively, is there an explicit or implicit consensus that patent protection of CII is required to ensure sufficient reward on investments made into the development of CII? If yes, please explain.

Yes

Please Explain

As mentioned in our answer 12), copyright protection is not sufficient to protect CII. The substance of CII is not expressions but ideas, and the protection of ideas should be realized by the Patent Act.

In your jurisdiction, is there an implicit or explicit consensus that availability of patent protection should be limited to contributions from certain areas of human endeavour, excluding contributions from all other areas of human endeavour, no matter how advanced these contributions?

No

Please Explain

However, there are statutory provisions and an established interpretation thereof regarding this point, although they are not directly related to CII.

An "invention" is defined as "the highly advanced creation of technical ideas utilizing the laws of nature" (Article 2(1) of the Patent Act). Artificial arrangements (i.e., human-conceived rule) and economic rules are not regarded as laws of nature. Discoveries are not regarded as inventions.

The subjects to be protected by patents are limited to "industrially applicable inventions" (the main paragraph of Article 29(1) of the Patent Act). It is a common view that medical activities cannot be regarded as "industrially applicable inventions" and therefore should be excluded from the scope of patent protection.

III. Proposals for harmonisation
Do you consider that harmonisation regarding patentability of CII is desirable?
If yes, please respond to the following questions without regard to your Group’s current Law/Practice.
Even if no, please address the following questions to the extent your Group considers your Group’s current Law/Practice could be improved.

Yes
Please Explain

Obviously, inconsistencies among jurisdictions in terms of requirements and criteria for determination applicable to the eligibility of CII and determinations resulting therefrom would have an adverse effect on the patent protection of CII, and therefore it goes without saying that harmonisation regarding the eligibility of CII is desirable.

Exclusion of non-patentable subject matter per se.
Should there be any exclusion from patentability per se of subject matter relating to CII?
In this context, “per se” means that the non-patentable subject matter has to be identified without any implicit or explicit examination of the contribution to the state of the art the claimed CII makes.

If yes, please answer questions 16.b-16.e, if no, please go to question 17.a

No
Please Explain

In light of the importance of CII in modern industries, appropriate patent protection should be ensured for CII, and it is inappropriate to uniformly exclude subject matters relating to CII from patentability per se without any further substantial examination simply because the subject matter claimed falls within CII.

Furthermore, it is possible to prevent subject matters that are obviously not eligible for patent from being patented, by conducting examination of the eligibility of CII-related subject matters appropriately. Also, it should be noted that, as there is a sufficient accumulation of prior art documents relating to CII unlike in the past, it is also possible to prevent the patenting of inventions that are excessively abstract and unsuitable to be monopolized, by conducting examination of novelty and inventive step appropriately.

Accordingly, we consider it possible to ensure balanced patent protection for CII without making the examination of eligibility too strict, and therefore it is not necessary to exclude subject matters relating to CII from patentability per se without any further substantial examination.

Please describe the subject matter that should be excluded from patentability per se and explain in detail how it should be identified in practice.

If there is subject matter identified in a patent claim related to CII you consider should be excluded from patentability per se, should it possible to overcome a rejection of the patent claim by adding other subject matter to the claim?
If yes, please answer questions 16.d-16.e, if no, please go to question 17.a

Should such “other subject matter” be required to have a certain quality, e.g. should it need to be inventive? Please state why in either case.

If yes to question 16.d above, please describe the areas of human endeavour to which such “other subject matter” should relate.
**Requirement of a contribution in a field of technology.**

Should the examination of subject matter eligibility of CII involve an examination of the contribution the claimed CII makes to the state of the art? If not, please explain.

*If yes, please answer questions 17.b-17.e, if no, please go to question 18*

No

Please Explain

To begin with, we propose that tests to determine the eligibility of subject matters relating to CII to be clear and sufficiently predictable.

The examination of the "contribution to the state of the art" should originally be left to the examination of novelty and inventive step, which is intended to make an objective assessment of the invention's contribution to the state of the art through comparison with particular prior art. If the examination of the contribution of the claimed CII to the state of the art is involved in the examination of eligibility, this could lead to redundancy at least partly in the examination and we can hardly find the necessity to conduct such redundant examination.

Furthermore, the existence of two different criteria for examining the same matter, i.e. the claimed invention's contribution to the state of the art, could bring about inconsistency in the resulting determinations (the application of completely the same criterion in the two examination stages leads to the complete duplication of examination). If the criterion based on the "contribution to the state of the art" is used in the process of determining eligibility which does not involve comparison with any specific prior art, the resulting determination would be more dependent on the subjective view of the person authorized to determine, as compared to the determination made in the examination of novelty and inventive step, and also to the determination regarding the general formality requirements.

Consequently, the application of such criterion that is so subjective could result in inventions that meet the substantive requirements for patentability (e.g. novelty and inventive step) not being patented. To put it differently, we consider this could undermine the clarity and predictability of the determination that is required for an eligibility test and it is problematic from the viewpoint of ensuring stable patent protection for CII.

We also consider that, when assessing the eligibility as well as novelty and inventive step of CII which contains both technical and non-technical features, it is inappropriate to separate technical and non-technical features of CII and make an assessment while ignoring the non-technical features, but the claimed CII as a whole should be subject to assessment. This is because a determination as to whether a particular feature is technical or non-technical is largely dependent on the subjective view of the person authorized to determine, and an objective determination method that is free from such subjective aspects is desirable.

**Should such examination be made under a test specific to CII, or should it be part of the usual novelty and inventive step/non-obviousness test? Please state why in either case.**

**Under this test, should patentability of CII require a contribution from areas of human endeavour which are deemed to be sources of patentable inventions (e.g. engineering, natural sciences)? In other words, should contributions from areas of human endeavour which are not deemed to be sources of patentable inventions be disregarded? If not, please explain.**

*If yes, please answer questions 17.d-17.e, if no, please go to question 18*

**Should this test also require that the relevant contribution the CII makes to the state of the art qualifies as inventive/non-obvious? This additional test may be integrated into the general inventive step / non-obviousness examination, or may be a stand-alone test. Please state why in either case.**

**Should there be a non-exhaustive list of areas of human endeavour which are accepted as sources of patentable CII, taking into account the ultimate purpose of patent law (protecting unforeseen, non-obvious subject matter)? If yes, please provide such a list. If not, why?**
Should there be any specific claim drafting or other formal requirements which are applicable to CII, i.e. which deviate from the rules or practice applicable to inventions which are not CII? Please explain why in either case.

No

Please Explain

There should not be any restrictions on claim drafting for CII, such as specific claim drafting or other formal requirements which are exclusively applied to CII and different from those applied to inventions in other areas.

Nevertheless, we propose, as a rule exclusively applicable to CII that is intended to clarify an eligibility criterion in accordance with the nature of CII, a criterion for assuring to concretize or make practical the processing by CII should be necessary and permissible. As we mentioned in our answer 3), Japan implements the two-part test not as a formality requirement concerning claim drafting, unlike being considered in some jurisdictions, but as a criterion for determining the eligibility of CII.

Then, the second test determines eligibility on the basis of "whether information processing by the software is concretely implemented by using hardware resources." This test makes it possible to reach a clearer and more objective determination as compared to a determination on other factors such as the claimed CII's contribution to the state of the art, ensuring a higher level of predictability of eligibility of CII (that is, "use of laws of nature").

Furthermore, the second test also helps with eliminating excessively abstract inventions. While this second test is adopted in Japan as a test for determining whether the claimed CII is a "creation of a technical idea utilizing a law of nature" that is a definition of a statutory invention in Japan, we consider that it can also be adopted as a universal rule for determining the eligibility of CII in other jurisdictions, irrespective of whether they have statutory provisions on the definition of an invention.

Meanwhile, in view of diversified distribution systems of CII-related products, harmonisation is desirable regarding admissible claim categories for CII, such as those containing terms such as "program," "data structure," "computer readable recording medium," and "program product" as the main noun at the beginning of the claim.

Should there be any specific requirements as to sufficiency of disclosure and/or enablement which are applicable to CII, i.e. which deviate from the rules or practice applicable to inventions which are not CII? Please explain why in either case.

No

Please Explain

For all inventions including CII, the sufficiency of disclosure and enablement should be assessed from the standpoint of persons skilled in the art. In this respect, harmonisation is desirable regarding the scope and level of persons skilled in the art.

Please comment on any additional issues concerning patent protection of CII your Group considers relevant to this Study Question.

We are concerned that the patent protection of CII does not fully cover CII-related products that are currently on the market, from the following aspects.

a) Protection of data structure per se

As mentioned in 7), "data structure" or "data having structure" is admissible as claim categories in Japan. In this respect, as we pointed out in Section II, 11), examples of claims of data structures, etc. that may be found to be eligible for patent have been added in the list of examples concerning IoT-related technology in March 2017. However, in the current practice, there may be cases where it is inevitable to include particulars of the information processing to be performed by means of the data in the description of a claim of a data structure. In such cases, the claim of a data structure would be in effect no different from claims of apparatuses, methods, or computer programs, and an invention characterized by the data structure per se would not be appropriately protected.

b) Protection of modules

The development of software in recent years uses a number of modules and libraries. Some of these modules and libraries may deserve patent protection. However, the function of a module which is a subdivided component of software is so simple that it would be difficult to understand the technical meaning of the module in information processing and the difference between the module and prior art, in which case
appropriate protection would not be available for each module. In consideration of the possibility that software is distributed in the form of modules and libraries, how to protect each module or library would be an issue to address in the future.

Please enter the name of your nominee for Study Committee representative for this Question (see Rule 12.8, Regulations of AIPPI). Study Committee leadership is chosen from amongst the nominated Study Committee representatives. Thus, persons not nominated as a Study Committee representative cannot be in the Study Committee leadership.
Kay Konishi / Manabu Miyajima