Allowability of Amendments During Patent Grant Procedure:

Comments on Yali Zheng v. Epson Corp., et al. Supreme People's Court's 2010 Zhi-Xing-Zi Case No.53

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Zheng Yali v. Epson, Patent Reexamination Board (PRB), et al. (hereinafter "the Epson case"), is one of the important cases decided by the Supreme People's Court (SPC) in 2011. The SPC has singled it out for its persuasive guidance. In this case, the Court established "new rules" governing amendment during patent grant procedure. Ever since the amendment to Guidelines for Patent Examination (hereafter referred as GPE) in 2006, Article 33 of the Chinese Patent Law (CPL) has been applied in an increasingly formalistic, mechanic manner. The Epson case is to stop this trend, and thus is applauded. On the other hand, it raises concerns. It seems to have gone too far. This paper is to examine the issue in depth.

I. Legal context

Article 33 of the CPL as of 2008 provides: "an applicant may amend his application for a patent, but any amendment made to an application for an invention patent or utility model may not go beyond what is described in the description and claims as filed, and any amendment to an application for a design patent may not go beyond or extend what is shown in the drawings or photographs as filed". This Article has remained almost unchanged ever since the Chinese Patent Law came into effect in 1985.

The application of Article 33 of the CPL, however, has seen an upheaval since the amendment to the GPE in 2006.

Before this amendment, the GPE regarded "what is described" as "what is disclosed" in the application as filed. According to the GPE 2001, "if, after the addition, change and/or deletion of part of the contents of the application, the information as seen by the person skilled in the art is different from those disclosed in the initial application and such information cannot be directly or unambiguously derived from those disclosed in the initial application, such amendment shall not be allowable". 1 After the 2006 amendment, the GPE makes a distinction between "what is described" and "what is disclosed": under the requirement that the claims shall be supported by the description, the generalisation of the claims shall not go beyond the disclosure of the application as filed; under Article 33 of the CPL, any amendment made to an application may not extend what is described in the initial description and claims.2 As applied, "what is described" had a narrower meaning and scope than "what is disclosed".3 Furthermore, the State Intellectual Property Office (SIPO) has established quality measures, stipulating that failure to find extension of subject matter under Article 33 of the CPL is a severe malpractice. No surprise, the standards for inadmissible amendment grew ever more formalistic. This trend continues into the GPE 2010. Since the GPE 2006, both office actions and decisions to reject applications involving non-compliance with Article 33 have been increasing rapidly.4 For this increasingly mechanic standard, practitioners have piled up criticisms.5

II. Proceedings

The Epson case involves the invention patent (No. 001318004) (the patent in suit), the grant of which was published on 23 June 2004. It is a divisional application of the invention patent application (No.99800780.3) (hereafter referred to as "Application '780"), which is an international application (PCT/JP99/02579, hereafter "International Application '579") having entered the national phase in China. Claim 1 of the patent in suit was in dispute, which reads: "1 An ink cartridge disposed on the overhang member of ink jet printing apparatus ..., said ink cartridge comprising plural walls; a ink supply port ...; a storage means ... storing information of the ink; a circuit board ...; and plural connection points ... for connecting said storage means with the ink jet printing apparatus ... "

The term "storage means" in the claim 1 is not present in the published Application '780. Instead, the term "semiconduct storage means" is used, or the term "said external storage means" is used to refer to "semi-conductor storage means". For example, claim 1 in Application '780 reads: "An ink-jet printing apparatus, comprising an overhang member moving to and fro ... and access said semi-conductor storage means from said external control means through said connection points." For another example, Claim 2 in Application '780 reads: "An ink jet printing apparatus according to claim 1, wherein: said connection points are connected to said external control means at different time in the course of attaching and detaching said ink cartridge."

Besides, the term "storage means" appears independently only once in the description of the published text of Application '780. Under the subtitle "Prior Art" (lines 19 to 24 on p. 1), it says: "... print quality may be enhanced when ink property and driving method are both improved ... In practice, however, this solution is impossible, taking into consideration the cost, labor and other factors ... because the printing apparatus has to be shipped to the manufacturer and storage means where control data is recorded must be changed." In the rest of the description, the term "semi-conductor storage means" is used. For example, in lines 25-28 on p. 1 of the description it is said: "To cope with such a problem, there has been proposals (for example, Japanese Patent Publication No.2594912): a printing apparatus in which semi-conductor storage means and electrode connecting to the storage means are arranged on an ink cartridge, a group of electrodes is also arranged on the body of the printing apparatus, data stored in the semiconductor storage means is read, and recording operation is controlled in accordance with the data." And under the subtitle "Object of Invention" (lines 1 to 4 on p. 2), it says: "In view of such a problem, the object of this invention is to provide an ink-jet printing apparatus to prevent data stored in semi-conductor storage means from being lost, regardless of mistakable attaching or detaching of ink cartridges."

It is worth noting that, according to the original text of the International Application '579, "the storage means" within "semiconductor storage means and electrode connecting to the storage means are arranged on an ink cartridge" should indicate "semiconductor storage means".6

Epson filed a divisional application from Application '780 and two amendments thereto respectively in 2000 and 2002. In the amendment filed in 2002, the term "semi-conductor storage means" is not used in the claims any more; the terms "storage means" or "said storage means" is used instead in the several new claims. Upon examination of the amendment, the SIPO issued the first Office Action in November 2002, pointing out that part of the claims newly filed, not mentioning the amendment with respect to the term "storage means", extended what was described in the original description and claims in violation of Article 33 of the CPL. In May 2003, Epson responded to the first Office Action by amending original claim 23 into claim 1 of the patent in suit and using the term "storage means" instead of "semi-conductor storage means" in the new claims. Moreover, Epson observed in its reply that "claim 23 is related to Figs. 6 and 7, and the applicant explains that 'storage means' refers to 'semi-conductor storage means 61' shown in Fig. 7 (b)".

In 2007, Zheng Yali (Ms. Zheng) filed a request with the PRB for declaring the patent in suit invalid, in particular, on the ground that the patent was amended in violation of Article 33 of the CPL.

The PRB found that the term "storage means" in claim 1 was a product of amendment in the substantive examination. The terms "storage means" and "memory means" were neither present in the description and claims of International Application '579, nor Application '780. Instead, there was only the term "semi-conductor storage means". A "storage means" is a means for storing information and data. Apart from the semi-conductor storage means, it further included magnetic bubble memory means and ferroelectric memory means. The original description and claims of the patent in

suit described "semi-conductor storage means", and did not mention any other storage means at all. It was impossible for a person skilled in the art to directly and unambiguously derived the "storage means" from the "semi-conductor storage means" described in the original description and claims. Therefore, the PRB made Decision No. 11291 in April 2008, declaring the whole patent invalid.

Dissatisfied with the above decision, Epson brought an administrative action. The Beijing No. 1 Intermediate People's Court affirmed the decision. The court found that "storage means" was a clear term coming from amendment in the grant procedure and that a person skilled in the art knew from general common knowledge that "storage means" were not confined to "semi-conductor storage means". The court held that by amending "semi-conductor storage means" into "storage means" in the patent grant proceedings, the applicant broadened the extent of protection to all types of "storage means", and thus violated Article 33 of the CPL.

Dissatisfied with the above judgment, Epson appealed to the Beijing Higher People's Court. This court held that whether there was an extension of subject matter under Article 33 should be assessed against "what is described" and "what is disclosed" in the original description and claims, that is, whether a person skilled in the art reading the original description or claims can directly and unambiguously derive the amended content from what is described in the application as filed. For this purpose, it was also important to consider whether the resultant technical solution after the amendment constitute a new technical solution. Furthermore, observations made by the applicant during the patent grant proceedings may assist in assessing inadmissible amendment.

Upon examining the present case, the court held that a person skilled in the art reading the original claims and description could unambiguously determine that the applicant used "storage means" in the sense of "semi-conductor storage means". In particular, the court pointed out that the patentee defined the term "storage means" in its observations made in response to the first Office Action: "Applicant explains that 'storage means' refers to 'semi-conductor storage means 61' shown in Fig. 7 (b)". Furthermore, the court found that both before and after the amendment, the "storage means" was actually used in the sense of "semi-conductor storage means", and such an amendment did not result in a new technical solution. Accordingly, the count de-

cided that the judgment below and Decision No.11291 erred in interpreting the term "storage means" and that the amendment of "storage means" was in conformity with Article 33 of the CPL.

Dissatisfied with this judgment of second instance, Ms. Zheng petitioned the SPC for certiorari review. In the SPC's view, Article 33 of the CPL is established to keep a balance of interests between the patentee and the public. On the one hand, it gave the applicant an opportunity to amend his application in order to ensure, as much as possible, that an invention may be granted with patent and accorded proper protection; on the other, it forbad an applicant from unwarranted advantages for anything that was not disclosed on the filing date in the application, and thus protected the public interest in reliance of the application as filed. Specifically, the reasons for confining amendment to what was described in the original application were: (1) to encourage the applicant to disclose his invention sufficiently when filing his application, so as to ensure smooth examination; (2) to forbid the applicant from unwarranted advantages by introducing subject matter not made at the filing date into the application, in line with the first-to-file principle; and (3) to secure public reliance so that any third party would not be unduly damaged for his acts in reliance on the original application.

In so holding, the SPC took the view that "what is described in the description and claims as filed" should be assessed from the eyes of those skilled in the art in view of what is disclosed in the original description and claims. Specifically, "what is described" included: (1) anything explicitly described in the original description, drawings and claims; and (2) anything that a person skilled in the art can directly and unambiguously derived from the original description, drawings and claims as a whole. Anything derived from the application as filed that was "obvious" to a person skilled in the art should be regarded as described in the original application. Where the amended application introduced no new matter in view of the original description, drawings and claims as a whole, the amendment did not extend what was described in the application as filed. Furthermore, the SPC cautioned that what a person skilled in the art can directly and unambiguously derived from the application as filed should not be equaled to what one can obtained from the application in a mathematically precise manner.

Applying the above standard, the SPC held that, it was easy for a person skilled in the art, when reading the original description, claims and drawings of Application '780 as

published, to associate "semi-conductor storage means" with other storage means, and to conclude that the technical solution remains good where the semi-conductor storage means was replaced with non-semiconductor storage means. For this reason, amending "semi-conductor storage means" into "storage means" did not introduce new matter, and thus not run afoul of Article 33 of the CPL.

III. Analysis and comments

1. Rules of law governing amendment made during patent grant procedure

One reason for the Epson case to be selected for persuasive guidance is that SPC has clarified the principles for applying Article 33 of the CPL. SPC pointed out that to confine amendment to what is described in the application as filed is to forbid an applicant from unwarranted advantages for anything that was not disclosed on the filing date in the application, so as to protect the public interest in reliance of the original application. This holding is compatible with the EPO Enlarged Board of Appeals' holding in G1/93, where the Board pronounced that "Applicant shall not be allowed to improve his position by adding subject-matter not disclosed in the application as filed, which would give him an unwarranted advantage and could be damaging to the legal security of third parties relying on the content of the original application."7

In so holding, however, the SPC made no mention of any specific rules of law under the CPL. There is a risk that the interpretation of Article 33 of the CPL in Epson case might be too theoretical and detached from the Chinese patent regime. Specifically, third parties' reliance resides in Article 13 and Article 34 of the CPL. Such reliance is legally defined by the disclosure of the published application and the possibly maximum protection founded upon that disclosure. Under Article 34, an application which passes the formal examination under the Chinese Patent Law will be published after the expiry of eighteen months from the date of filing, unless the applicant requests an earlier publication. After the publication of an invention patent application, the applicant has the right under Article 13 of the CPL to ask any third party using the invention to pay an appropriate amount for that use. This is the so-called "provisional protection". This provisional protection, however, does not mean that third parties may legally rely on the claims of the application. First, the patentee may only enforce this right after the patent is issued and according to the claims of the issued patent. Second, the applicant may amend the claims of the application in the grant procedure. Nevertheless, third parties may rely on the disclosure of the published application. Under Article 59 of the CPL, the extent of protection for an invention patent shall be determined by the terms of the claims; the description and drawings may be used to interpret the claims. Therefore, third parties may rely legally on the possibly maximum protection founded on the disclosure of a published invention patent application. In sum, where the applicant adds new matter to the application as filed, he may gain unwarranted advantages to the detriment of the above public interest in reliance of the published application.

Moreover, the legal standard for extension of subject matter under Article 33 of the CPL implicates the "first-to-file doctrine" through the working of Article 22, paraph two, which provides for conflicting applications, and Article 29 of the CPL, which provides for right of priority. If an applicant is allowed to add new matter, he may request priority date as of the original application in respect of the new matter. Regardless of whether he claims such matter or not, the application containing the new matter would be a conflicting application which may unfairly anticipate later applications. Thus, an amendment adding new matter may not only allow the applicant unwarranted advantage for priority which he is not entitled to, but may also deprive a later applicant claiming the new matter of the opportunity to be granted with a patent which he is entitled to.

Besides, the allowability of amendments has a direct effect on the legal certainty of an issued patent. The timing of amendments is rather uncertain, and may thus significantly delay examination of the application amended. If the substantive examination of a later patent application depends upon the final decision upon an earlier one, the patent grant proceedings of the later one will be unduly prolonged. Therefore, each patent application is examined independently. As a result, if patent applications may be amended in a rather freely manner, an issued patent is liable to be declared invalid because an earlier application might be amended after its issuance to anticipate earlier ones, or render them obvious. That is, the wider the room for allowable amendments is, the more uncertain an issued patent is.

Therefore, the legal standard for extension of subject matter under Article 33 of the CPL should be tied to provisions for priority right and conflicting applications, both of which is related to the novelty test. The Epson case, however, relates extension of subject matter under Article 33 of the CPL to the doctrine of non-obviousness and the doctrine of equivalents. The SPC emphasized that "anything derived from the application as filed that is obvious to a person skilled in the art should be regarded as described in the original application"; and anything with which the person skilled in the art is easy to associate belongs to what is described in the original application. In so holding, there is a risk that the room for allowable amendment is too wide. I will address this important legal issue below.

2. Implicit disclosure versus obvious disclosure

The Epson case has made another major development in that SPC points out: "what is described in the description and claims as filed" should be assessed from the eyes of a skilled person in view of what is disclosed in the description and claims as filed", rather than in view of what is literally described in the original application. This holding may help to stop the formalistic approach to extension of subject matter under Article 33 of the CPL since the GPE 2006.

However, in the SPC' view, anything obvious to a person skilled in the art in view of the original application should be deemed to be directly and unambiguously derivable from the original application, and thus is part of its implicit disclosure. In so holding, the SPC might well have overdone its job in coping with the formalistic trend. With regard to patent prosecution, the Chinese patent system has borrowed much from the European Patent Convention; and the above holding has long been discarded by the European Patent Office. In as early as 1992, in T685/90, the Board of Appeal pointed out that "'implicit disclosure' should not be construed to mean matter that does not belong to the content of the technical information presented in a document, but may be rendered obvious on the basis of that content". In the Board's judgment, "implicit disclosure" relates solely to matter which is not explicitly mentioned, but is a clear and unambiguous consequence of what is explicitly mentioned. "whilst common general knowledge must be taken into account in deciding what is clearly and unambiguously implied in the explicit disclosure of a document, the question of what may be rendered obvious by that disclosure in the light of common general knowledge is not relevant to the assessment of what is implied in the disclosure of that document."8

Under the European Patent Convention, this standard for implicit disclosure is applicable not only to extension of subject matter under Article 123, but also to conflicting applications under Article 54 (3) of the EPC as of 2000 and right

of priority under Article 87 of EPC as of 2000, for it defines the scope of disclosure for an application. Under the EPC as of 2000, well-known equivalents in a reference which has not been disclosed is not part of its teaching, and thus may not be considered for assessing novelty. ⁹ Equivalents, however, may be considered for assessing inventive step. ¹⁰

Under the Chinese patent system, what is rendered obvious by the original application should not be regarded as what is implicitly disclosed, either. According to Section 3.2.3, Chapter 2 of Part 2 of the GPE as of 2006 (GPE 2010 provides the same), if the difference between a claimed invention and a reference is merely a "direct substitution of customary means" in the art, the invention does not possess novelty. Therefore, for the purpose of assessing novelty, besides what is explicitly disclosed in an earlier application, the "direct substitution of customary means" of what is explicitly disclosed is deemed disclosed. Nevertheless, "direct substitution of customary means" could hardly include all equivalents, let alone all features rendered "obvious" by what is explicitly disclosed.

If the non-obviousness test were good for establishing extension of subject matter under Article 33 of the CPL, where the original application discloses only a limited number of combinations of features, an amendment might include "all" the obvious combination of the features even though they had never been disclosed in the applications as filed. To make the matter worse, the legal standard in Epson case in effect deems anything rendered obvious by the original application as disclosed by it. Consequently, the applicant may introduce matters obvious to a person skilled in the art in view of the matters rendered obvious by the original application, and equivalent features to equivalent features already introduced by an amendment. If this were the case, it would be very hard, if not impossible, to tell where the limits lie for an inadmissible amendment.

In short, the SPC held in the Epson case that implicit disclosure covers anything rendered obvious by the original application. This legal standard leaves the room for allowable amendment under Article 33 of the CPL too wide. It may prejudice the working of other rules, for example, the rules governing conflicting applications provided for in Article 22 of CPL and right of priority provided for in Article 29 of the CPL, and shake the legal certainty of the validity of issued patents.

3. Allowable amendment and applicant's observations

In the Epson case, the SPC noted that the applicant's observations made during the patent grant procedure may

be used to interpreter the description and claims, and thus be used to assess extension of subject matter under Article 33 of the CPL. Its weight depends on the relevance of observations to the description and claims.

This opinion, however, lacks legal basis. "Observations" may be divided into two categories: those made toward matters in the original application and those made toward mattes resulting from amendment. On the one hand, an applicant's observations do not constitute "amendment" to an application under Article 33 of the CPL. Even if observations have introduced new matter, and thus has extended what is described in the original application, it is not prohibited by law. On the other hand, observations do not constitute "what is described" in the original application. In the Epson case, the SPC held that what is described in the original application shall include: what has been explicitly disclosed in the original application; and what a person skilled in the art can directly and unambiguously derived from the explicit disclosure. Therefore, an applicant's observations do not at all form part of what is described in the original application. In sum, an applicant's observations bear no legal relation to assessing extension of subject matter under Article 33 of the CPL.

True, an applicant's observations made during the grant procedure are part of the prosecution history, and thus may be resorted to for the purpose of claim construction and doctrine of estoppel respectively under Articles 3 and 6 of the Supreme People's Court's Interpretation of Several Issues Relating to Application of Law to Adjudication of Cases of Dispute over Patent Infringement (No. Fashi 21/2009), but this does not mean that they may be used to assess extension of subject matter under Article 33 of the CPL. They are two distinct legal issues. In the former context, observations are used to limit the scope of protection for an issued patent. In contrast, the latter concerns only whether new matter is introduced. Even if the scope of protection is narrowed by adding new matter, such an amendment must be prohibited under Article 33 of the CPL. To assess extension of subject matter, there are objective legal standards for identifying "amendment" and "what is described in the original application", both of which have nothing to do with an applicant's observations made in the patent grant proceedings.

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- ¹ Section 5.2.3, Chapter 2 of Part 2 of the GPE as of 2001.
- ² Compare Section 3.2.1, Chapter 2 of Part 2 of the GPE as of 2006 with Section 5.2.3, Chapter 2 of Part 2 of the GPE as of 2006.
- ³ Wu Guanle, "Scope of "what is described in the original application" under Article 33 of Chinese Patent Law in view of legislative intention", in the Proceedigns of High-level Academic Symposium 2010: Jurisprudence and Practices of Article 33 of Chinese Patent Law, National Patent Attorneys Associations of P.R. China, P.16.
- ⁴ Ibid.
- ⁵ See, e.g., Song Xiantao and Weizheng, Rethinking Extension of Subject Matter, in High-level Academic Symposium 2010: Jurisprudence and Practices of Article 33 of Chinese Patent Law, National Patent Attorneys Associations of P.R. China. See also supra note 3.
- ⁶ The Supreme People's Court's Administrative Judgment No. Zhixingzi 53/2010.
- ⁷ See the EPO Enlarge Board of Appeal, G1/93, point 6.
- 8 See T 823/96.
- ⁹ See Section 9.2, Chapter IV Patentability of the EPC Guidelines 10 Ibid.