

Understanding of Issue of Amendments Going beyond Scope of Original Application Disclosure and under and Application of Article 33 of the Patent Law:

Probing into the legal issue involved in the administrative litigation involving invalidation of Epson's ink cartridge patent

Jiao Yan

Article 33 of the Patent Law provides: "an applicant may amend his or its application for a patent, but the amendment to the application for a patent for invention or utility model may not go beyond the scope of the disclosure contained in the initial description and claims..." Under this law provision and the associated provisions of the Implementing Regulations of the Patent Law and the Guidelines for Examination, an applicant or patentee may amend his or its patent application documents in the patent application phase and in the patent invalidation proceedings, but the amendment should be made only within the scope of the initial or original application as filed. These provisions, on the one hand, gives an applicant or patentee the right to amend his or its patent documents, and, on the other, imposes limitation on the right, namely disallowing addition, to the application, of any matter that was not an inventor's contribution by virtue of amendment thereof. In recent years, in the patent application prosecution, examiners have rejected more and more patent applications on the ground of amendments going beyond the scope of the disclosure contained in the initial descriptions and claims or the original application disclosure; during the patent invalidation proceedings, requesters frequently filed requests for invalidation of patents on this ground. The writer will be discussing an administrative patent invalidation litigation and presenting his view on how to determine amendment of patent documents going beyond the scope of the disclosure contained in the initial description and claims for exploration and discussion by people of the IP community.

Facts of the case¹

The Epson Co., Ltd. (Epson for short) is the patentee of

the patent (00131800.4) for the invention of ink cartridge. In November 2002, the State Intellectual Property Office (SIPO) sent its first Office Action in respect of said patent, in which the examiner pointed out the matter of amendment going beyond the scope of the disclosure contained in the initial description and claims relating "storage means" and "memory". Regarding the matter the applicant explained: "claim 23 relates to Figs. 6 and 7, in which 'storage means' refers to 'semiconductor memory 61 as shown in Fig. 7 (b)'; 'the 'memory' mentioned in said claim and claims following it refers to the circuit board and the semiconductor memory disposed thereon mentioned in the description and drawings". The examiner accepted the applicant's explanation, and the patent was granted and published. On 15 June 2007, a person by the name Zheng filed a request with the Patent Reexamination Board (PRB) of SIPO for invalidation of said patent on the ground that said patent was contrary to the provision of Article 33 of the Patent Law.

On 15 April 2008, the PRB made its Decision (No. 11291) on Examination of Invalidation Request (Decision No. 11291 for short), holding that the "storage means" and "memory" were not, and only "semiconductor memory" was, described in the original description and claims of the patent in suit. The storage means, those for storing information data, include many types of means, such as magnetic bubble storage means and ferroelectric storage means, in addition to the semiconductor memory. The original description and claims of the patent in suit were directed to semiconductor memory, not related to any other types of storage means, nor was it possible to directly and undoubtedly infer that the ink cartridge contained any other type of storage means. For that matter, it was impossible for a person of skill in the art to

directly and undoubtedly determine that the “storage means” here was “semiconductor memory”, likewise, nor could he directly and undoubtedly determine that the “storage means” referred to “semiconductor memory”, which rendered independent claims 1, 8, 12, 29 and 40 and the associated dependent claims contrary to Article 33 of the Patent Law. Accordingly, the PRB declared the whole patent in suit invalid.

Dissatisfied with Decision No. 11291, Epson sued in the court of first instance, which upheld the Decision upon hearing the case, and Epson appealed to the second-instance court.

The second-instance court took the view that the “semiconductor memory” and “storage means” were mentioned in the relevant claims in the initially disclosed text of the patent. Besides, it was stated in the initial description of the patent that “the printing apparatus be taken to the manufacturer, and the storage means recording control data be replaced or changed”. Also, it was stated in the background technology that “on one of the ink cartridges is disposed the semiconductor memory and it is connected to an electrode of the storage means”. Reading the original claims and description, a person of skill in the art could undoubtedly determine that the patent applicant had used the “storage means” in the sense of “semiconductor memory” in the description, and a person of skill in the art would not construe it as a generic concept of “storage means”. Accordingly, claims 1 and 40 complied with the provision of Article 33 of the Patent Law, and the construction of the “storage means” in the first-instance judgment and Decision No. 11291 was erroneous. While the amendment of “memory” in the patent was derived from the amendment made in the substantive examination phase, it differed from the amendment of “storage means”. “Memory” was never mentioned in the original claims and description, and it was something that the patent applicant added. While the patent applicant explicitly defined the “memory” in its observations made in response to the Office Action during the substantive examination phase, the explanation made merely in the observations could not serve as the basis for proving allowable amendment. Therefore, claims 18, 12 and 29 of the patent in suit were contrary to Article 33 of the Patent Law, and the second-instance court reversed the first-instance judgment and the Decision No. 11291.

Comments and analysis

What is at issue in the case is whether the amendment made by Epson during the patent application prosecution complies with Article 33 of the Patent Law. Therefore, the writer will try to comprehensively analyse the matter of amendment going beyond the scope of the disclosure contained in the initial description and claims from the perspective of the legislative aim of Article 33 of the Patent Law.

1. Application of Article 33 of the Patent Law as shown from the perspective of the legislative aim

Article 33 of the Chinese Patent Law provides: “an applicant may amend his or its application for a patent, but the amendment to the application for a patent for invention or utility model may not go beyond the scope of the disclosure contained in the initial description and claims” In the substantive examination phase², a patent applicant is allowed to amend his or its patent documents, and examination is made as to whether the amendment has gone beyond the disclosure originally contained for two purposes³: (1) giving the patent applicant the right to amend his or its patent application documents to correct and eliminate wrong information and flaw of the initial application documents, help improve the quality of the granted patent and stabilise the patent right; and (2) preventing a patent applicant or patentee from acquiring any benefits he or it is not entitled to by way of imposing limitation on his or its amendment to the patent application documents. The provision of Article 33 of the Patent Law embodies the legislators’ intention to keep a balance between the interests of the patentees and those of the public at large and between encouragement to invent and protection of free competition. In China, the first-to-file doctrine is followed, and the date of filing is of vital importance to a patent applicant. For that reason, a patent applicant usually tries to file his or its patent application with the patent application examination authority as early as possible, which often makes it possible for some patent application documents to be filed in haste, with the invention or utility model not correctly and clearly described in the initial application and with some resultant flaws. Failure to rectify these flaws would make it impossible to clearly define the extent of protection of the patent right, affect public’s reasonable expectation of the extent of protection of the patent, and impede the spread and exploitation of the patented technology. For that reason, on the one hand, it is highly necessary for the law to give a patent applicant the right to amend his or its patent

application at the right time; on the other, in the amendment possible addition of new matter will result in unduly broadened the extent of protection claimed and prejudice public interests. Therefore, it is also highly necessary to impose limitation on amendments to patent documents by requiring that they be made within certain scope and under certain conditions.

Invalidation by the PRB in the patent invalidation proceedings will inflict irreparable injury to the patentee on the ground of amendment going beyond the scope of disclosure contained in initial description and claims of a patent, granted upon amendment, has been exploited for years and produced significant financial benefits. For that matter, with a view to keeping the stability of the patent right, safeguarding the safe transaction and public use of patented information, the criteria for determining amendments going beyond the scope of the disclosure should be stringently observed, and Article 33 of the Patent Law prudently applied in the patent invalidation proceedings mainly for these reasons:

i) The invalidation system has been put in place to make it possible to re-examine granted patents with the help of the general public to find out, based on the “inexhaustible search doctrine”, whether a granted patent lacks patentability or a patent has been obviously unduly granted to prevent the patentee from seeking undue benefits. A patentee’s amendment made in the application phase has been accepted by the substantive examination department, and it should, as a rule, not be declared invalid unless the amendment obviously goes beyond the scope of the application disclosure, otherwise, it would do harm to the authority of the Patent Office and to the trust interests of the patentees in the patent documents;

ii) Since the legislative aim of Article 33 of the Patent Law is to keep a balance between the interests of patentees and those of the public at large by giving applicants the right to make amendments and by preventing them from making amendments going beyond the scope of the application disclosure to prejudice the public interests, it is undue to hold non-substantial amendment having no impact on the public interests to be amendments going beyond the scope of the disclosure contained in the initial description and claims; and

iii) It is good to maintain the stability of relations between the patent system and the patent law and to encourage innovation not to deem amendment made by a patentee in the right-acquisition procedure and having no impact on the claimed extent of protection to be one going beyond the

scope of the disclosure contained in the initial description and claims.

To sum up, where a requester requests invalidation of a patent right on the ground that the amendment of the patent application is contrary to Article 33 of the Patent Law, criteria should be correctly observed in making the determination as frequent application of said law provision would not only affect the authority of the Patent Office, but also impede protection of the patent rights.

2. Definition of the scope

There are two provisions in the Implementing Regulations of the Patent Law that concern amendments going beyond the scope of the disclosure contained in the initial description and claims: Rule 43, paragraph one, and Rule 68 of the Implementing Regulations of the Patent Law. The former, an additional provision directed to division applications, provides: “a divisional application filed in accordance with the provisions of Rule 42 of these Implementing Regulations …, provided that the divisional application does not go beyond the scope of the initial application disclosure.” But in Article 33 of the Patent Law it is expressed as “… may not go beyond the scope of the initial application”.⁴ There is a view in the community that the criteria under Article 33 of the Patent Law concerning amendments going beyond the scope differs from that under Implementing Regulations of the Patent Law in that the Patent Law provides: “… may not go beyond the scope of the description and claims of the initial application.” while the Implementing Regulations of the Patent Law provides: “… provided that the divisional application does not go beyond the scope of the initial application disclosure”. In other words, the criterion under the Implementing Regulations of the Patent Law is more lax than that of the Patent Law. In Section 3.2, Chapter 6 of Part 2 of the Guidelines for Examination is used the same wording as those of the Implementing Regulations of the Patent Law, namely: “the contents of a divisional application shall not go beyond the scope of the initial application disclosure. For the writer, according to the doctrine that “a lower-level law should not conflict a higher-level law, the “scope of disclosure” here should be construed as “the scope of the initial application” as mentioned in Article 33 of the Patent Law. That is, the expressions “the scope of the application disclosure” and the “scope of the application” are not different from each other in any substantial way.

The writer’s preceding analysis may get support from Section 5.2.1 “Requirement of Amendments”, Chapter 8 of

Part 2 of the Guidelines for Examination, in which it is specified “the scope of the description and claims of the initial application includes or covers the literal contents of the initial description and claims, and the contents that can be directly and undoubtedly determined according to the initial description and claims and the appended drawings of the description”.⁵ The part, added to the Guidelines for Examination as of 2006, has put the “scope of the description and claims of the initial application” into two levels: 1) the “contents of the initial description and claims”; and 2) “the contents that can be directly and undoubtedly determined according to the initial description and claims and the appended drawings of the description”. As shown in said provisions of the Guidelines for Examination, determination of amendments going beyond the scope of the original application should cover two levels of determination. First, an examiner needs to determine whether the amendment is literally mentioned in the initial application. If he cannot directly determine it, he then needs to further determine whether it can be directly and undoubtedly arrived at from the literal statement and the drawings of the initial application. Evidently, the first-level determination focuses on the presence of objective literal statements, and the second-level determination requires a person of skill in the art to make a subjective inference to an extent. In other words, amendments going beyond the scope should not be determined strictly according to literal expressions used, but in the light of the understanding of a person of skill in the art in combination with the description and the drawings.⁶

For the writer, how to understand “directly and undoubtedly” is a matter of crucial importance. First, literally, “directly” means “not via any intermediate information, and is relative to “indirectly”. In this aspect, “anything that has been directly determined” should be something that can be inferred by a person of skill in the art on the basis of his own professional knowledge without resorting to any other evidence or tools, including contents literally mentioned or implied. Second, “undoubtedly” means the possibility to be clearly determined, without producing any ambiguity. Accordingly, “what is directly and undoubtedly determined” should be something that can be clearly determined by a person of skill in the art upon reading the initial application and according to the literal description; it is not limited to one single interpretation.

3. Factors to be considered when applying Article 33 of the Patent Law in patent invalidation proceedings

For the writer, if amendments are clearly described in the original application, then it is not difficult to determine whether the amendments have gone beyond the scope of the application, so the matter will not be elaborated here. Generally speaking, the amendments that are described in the original application are not to be exactly the same. For that reason, it may start with a specific analysis of the following factors when mainly considering whether material changes have taken place to the amended technical solution in determining amendments going beyond the scope of the original application disclosure:

i) Whether a person of skill in the art understands the technical solution materially differently from the amended technical solution upon reading the original application⁷; and

ii) Whether the amendments have gone beyond the professional knowledge and capability of a person of skill in the art and whether he has to resort to experimental equipment, tools or any professional knowledge not within the art.

In making the above determination, use should be made of the patent prosecution files in construing the relevant technical features. During the patent application prosecution, the Patent Office often send to the patent applicant office actions in respect of the flaws of a patent application, the latter makes explanation as to the technical features in his or its observation made in response to the office actions. The patent prosecution files have an important role to play in construction of the technical features to an extent. But only the patent prosecution do not suffice, a comprehensive determination should be made of the common knowledge known in the art in combination with the prosecution files.

Following is a determination made in the aforementioned ways of whether the amendments made to the “storage means” in claims 1 and 40 and “memory” in claims 8, 12 and 29 of the patent in suit are contrary to Article 33 of the Patent Law.

In the present case, the “storage means” in claims 1 and 40 and “memory” in claims 8, 12 and 29 of the patent in suit were both derived from the amendment made during the substantive examination phase. Information of the “semiconductor memory” and “storage means” was present in the original text of the patent. For example, it is stated in lines 22-23 on Page 1 of the description that “it is stated in the background of technology that “the printing apparatus be taken to the manufacturer, and the storage means recording control data be replaced or changed”. Also, it was stated in the background of technology that “on one of the ink cartridges

is disposed the semiconductor memory and it is connected to an electrode of the storage means". Additionally, "semiconductor memory" was used in the other parts of the description. A person of skill in the art can undoubtedly determine that the patent applicant used the "storage means" in the sense of "semiconductor memory" in the description after reading the original claims and description. Besides, in the technical solution before or after the amendment, the "storage means" was actually used in the sense of "semiconductor memory". Mere change in technical term did not generate a new technical solution, nor could a person of skill in the art construe it as such. The patent applicant clearly explained the "storage means" in its observations made in response to the office action during the substantive examination phase, that is, the "storage means" meant the "semiconductor memory 61" as shown in Fig. 7 (b). Further, it is said in the last paragraph but one on page 1 of the description that "on one of the ink cartridges is disposed the semiconductor memory and it is connected to an electrode of the storage means", which shows that the "storage means" is a shorter name of the "semiconductor memory".

As is determined from the perspective of a person of skill in the art, who should be a person of ordinary skill having the professional knowledge in the art and capable of understanding the technology in the art. While a "storage means" has its general meaning and covers semiconductor memory, and, as well, other types of memories, such as magnetic bubble memory and ferroelectric memory, the patent in suit related to the particular art of ink cartridge of printing apparatus, and a person of skill in the art should know that it was the semiconductor memories that were used. Not the magnetic bubble memory or ferroelectric memory was used, nor necessary to be used, in such ink cartridges in the prior art before the application was filed for the patent.

Where it was specified in the description and drawings that it meant "semiconductor memory", in the context of present patent application, a person of skill in the art would not understand it as covering other types of "storage means". Accordingly, it should not be determined that the amendment made by the patent applicant had gone beyond the scope of the original application.

As far as the "memory" was concerned, while it was derived from the amendment made in the substantive examination phase, it differed from the "storage means" amendment. The "memory" was never present in the initial claims and description of the patent. It was a term that the patent

applicant had added, and it was not a technical term in the art having a specific meaning. Besides, while the patent applicant clearly defined the "memory" in its observations made in response to the office action during the substantive examination phase, that is, the "memory" referred to the circuit board and the semiconductor memory disposed thereon as stated in the description and shown in the drawings, the scope is determined depending on what a person of skill in the art could undoubtedly determine according to what was stated in the application. An explanation made merely in the observations should not serve as the basis for an allowable amendment. A person of skill in the art cannot clearly determine that the "memory" is the "the circuit board and the semiconductor memory disposed thereon" according to the original description and claims. ■

The author: Judge of the IP Tribunal of the Beijing Higher People's Court

¹ For detail of the case see the PRB's Decision (No. 11291) on Examination of Request for Patent Invalidation, the Beijing No.1 Intermediate People's Court's Administrative Judgment No. Yizhongxingchuzi 1030/2008, and the Beijing Higher People's Court's Administrative Judgment No. Gaoxingzhongzi 327/2009. For Decision (No. 11291) on Examination of Request for Patent Invalidation, visit <http://211.157.104.77:8080/reexam/searchdoc/decidedetail.jsp?jdh=WX11291&lx=WX>.

² Epson amended the patent application documents twice in the application prosecution and patent invalidation proceedings. During the patent invalidation proceedings, since the PRB accepted its amendment, the dispute focused on whether the amendment the applicant made in the patent substantive examination proceedings went beyond the scope of the original application. The article will be discussing only the amendment made in the proceedings.

³ See Cui Guozhen, Application of Article 33 of the Patent Law in Patent Invalidation Proceedings, the China Intellectual Property Daily on 18 September 2009.

⁴ Rule 43 of the Implementing Regulations of the Patent Law as of 1984 echoes Article 33 of the Patent Law as of 1984, providing "a divisional application filed in accordance with the provisions of Rule 42 of these Implementing Regulations ... , provided that the divisional application does not go beyond the scope of the original description". That is, the wording "shall not go beyond the scope of the original description" in the Implementing Regulations of the Patent Law as of 1992 was changed into "shall not go beyond the scope of the original application disclosure", which was kept unchanged in the Implementing Regula-

tions of the Patent Law as of 2001. But Article 33 of the Patent Law has been amended three times, and the wording “the scope of the description” has been kept unchanged all the time.

⁵ See the Guidelines for Examination as of 2006, P.237.

⁶ In Article 2 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 provides: “the people’s courts shall determine the contents of the claims provided for in Article 59, paragraph one, of the Patent Law by the terms of the claims in combination with the understanding of the claims by a person of skill in the art upon reading the description and the appended drawings”. This shows that the uniform criteria are observed in claim construction and determination of amendments going beyond the scope of the original application disclosure.

⁷ It needs to be specially stressed that broadening the extent of protection and amendments going beyond the scope of the original application disclosure are two different concepts. One should not naturally believe that amendments that broadens the extent of protection are amendments as

such. This actually involves the matter of how to determine the benchmark for making comparison. According to Article 33 of the Patent Law, amendments as such as determined on the basis of the original patent application while whether the extent of protection is broadened is determined on the basis of the claims before amendment. For that matter, the two are different in the benchmark for comparison making. In the patent invalidation proceedings, under Rule 68 of the Implementing Regulations of the Patent Law, amendment can only be made to the claims and should not go beyond the original extent of protection for the patent. Since it is the claims that are examined in the patent invalidation proceedings, whether amendments going beyond the scope of the patent disclosure should be determined on the benchmark of comparison in respect of the patented claims. The facts in dispute in the present case involved whether the amendment made in the substantive examination proceedings had gone beyond the scope of the application disclosure, and the determination should be made on the benchmark of comparison in respect of the original patent application.