

Determination of Disclosure and Technical Motivation in the Sense of Patent Law

Thoughts from the Supreme People's Court's Case No. Zhixingzi 3/2012

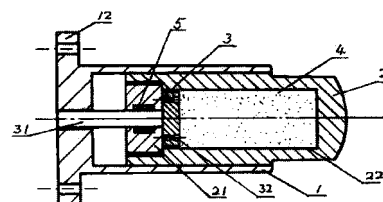
Yang Cunji

Determination that a reference has disclosed the technical feature of a claim or given technical motivation of the technical solution defined by the claim requires not only that the reference contains the relevant technical feature, but also that the relevant technical feature performs the same function in the reference as that of the disclosed technical feature in the claim. The function of the corresponding technical feature in the technical solution disclosed in the reference merely refers to the actual function of the relevant technical feature in the reference, excluding other functions the relevant technical features perform.

Brief of the case

The Supreme People's Court's Case No. Zhixingzi 3/2012 was directed to the Patent Reexamination Board's (PRB) Invalidation Examination Decision No. 14603, in relation to the patent for the utility model of "fast-in-and-slowly-out elastic damping buffer". The claim of the patent in suit went as the following: "1. a fast-in-and-slowly-out elastic

damping buffer, mainly comprising sleeve seat (1), bearing hit head (2), piston (3), elastic damping part (4) and sealing means (5), characterised in that elastic damping buffer (4) is mounted inside the intracavity (22) of bearing hit head (2), piston (3) is connected to piston rod (31), and mounted inside the intracavity (22) of bearing hit head (2), cylinder lid (21) and bearing hit head (2) are connected to form a whole, unidirectional current limiting means (32) is deposited along the rim of piston (3), during compression stroke, the unidirectional current limiting means (32) opens, during returning stroke, unidirectional current limiting means (32) closes, and a gap exists between the outer diameter of piston (3) and intracavity (22).



View of the patent in suit

On 12 November 2000, the invalidation requester filed, with the PRB of the State Intellectual Property Office, a re-

判決書；二審：北京市高級人民法院(2011)高行終字第213號行政判決書。

³ 最高人民法院(2012)知行字第3號行政裁定書。

⁴ 《專利審查指南》(2010版)第156頁。

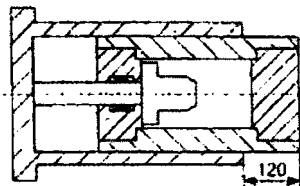
⁵ 《專利審查指南》(2010版)第173至174頁。

⁶ 如在第5674號複審請求審查決定中，專利複審委員會以BaO在對比文件2和發明專利申請中所實現的技術效果並不相同，認定對比文件2沒有公開權利要求中BaO的技術特徵。

⁷ 如在第33617號複審請求審查決定中，專利複審委員會指出：在判斷對比文件是否給出技術啟示時，技術特徵本身及其所解決的技術問題兩者都應當加以考慮。如果對比文件僅記載了某技術特徵，但該技術特徵所解決的技術問題及所能獲得的技術效果並未記載在對比文件中，而且本領域普通技術人員亦無法根據該對比文件記載的技術內容確定該技術特徵所能解決的技術問題和所能獲得的預期技術效果，則不能認為對比文件已經給出了應用該技術特徵以解決特定技術問題的技術啟示。

quest for invalidation of the patent in suit on the ground that claim 1 thereof lacked inventiveness compared with the first issue of the journal *Railway Vehicles Abroad*, 2000 (referred to below as evidence 1)

Evidence 1 disclosed two types of elastic clay buffers, and view (a) showed the solution with unidirectional valve. As view (a) showed, said elastic clay buffer comprised sleeve seat, shell, piston, elastic clay and sealing rim; in the shell and intracavity was put elastic clay, piston and piston rod were connected to each other, and mounted inside the intracavity of the shell, the cylinder lid and the shell were connected to form a whole, and a gap exists between the outer diameter of the piston and intracavity (22) View (a) did not show the specific shape and position of the unidirectional valve. In the text of evidence 1 was mentioned the main difference between the structural solutions of the two buffers in terms of the principle underlying the piston rod returning to its initial position after compression.



View (a) Solution of unidirectional valve in Evidence 1

The PRB concluded that evidence 1 implicitly disclosed the technical feature “unidirectional current limiting means was deposited along the rim of piston” of claim 1 of the patent in suit; claim 1 of the patent in suit differed from evidence 1 in that the feature “during compression stroke, the unidirectional current limiting means opens and during returning stroke, unidirectional current limiting means closes. The technical problem it actually solved was to make it possible for the buffer to go in fast and out slowly in the gap between the outer diameter and intracavity of the piston through coordination with the unidirectional valve. A person skilled in the art can easily contemplate reversely mounting the unidirectional limiting means to make it possible for the buffer to move in fast and out slowly. Accordingly, it was obvious for a person skilled in the art to derive the technical solution of the claim of the patent in suit in his regular design on the basis of evidence 1, and claim 1 of the patent in suit lacked inventiveness¹.

Outcome of court review

It was concluded, in the trial and appellant decisions², that the specific shape and position of the unidirectional valve were neither indicated, nor described, in the drawing

and text of evidence 1 used as the reference, and the PRB's conclusion that evidence 1 implicitly disclosed the technical feature of the claim was not based on facts, nor conform to the relevant provisions of the Guidelines for Patent Examination. In the decision of appeal, it was more clearly pointed out that it was not mentioned in the reference whether the unidirectional valve here was one in the same position and of the same function as the patent in suit.

The Supreme People's Court concluded that the unidirectional current limiting means (unidirectional valve) of the patent in suit functioned to make it possible for the bearing hit head to get in fast and out slowly to protect the equipment and reduce noise. The unidirectional valve in evidence 1 functioned to make the compressed piston rod to return to its initial position. Since the function of the unidirectional valve in evidence 1 differed from that of unidirectional current limiting means in claim 1 of the patent in suit, the technical feature “unidirectional current limiting means is deposited along the rim of piston” of claim 1 of the patent in suit could not be directly and unambiguously derived. The Supreme People's Court finally upheld the two former decisions on the same ground.³

Thoughts from the case

The claims of an issued patent should possess novelty and inventiveness. The relevant documents cited for assessing whether the claims of an issued patent possess novelty and inventiveness are generally referred to as references. If the technical features of a claim are disclosed in a reference, then said claim does not possess novelty and inventiveness, and no patent would be granted thereto in the patent examination procedure, or the patent issued would be invalidated in the patent invalidation proceedings. To this effect, it is specifically provided in section 2.3, Chapter 3 of Part II of the Guidelines for Patent Examination that when a reference is cited to assess novelty and inventive step of an invention or utility model, the technical contents disclosed in the reference shall be based upon. Said technical contents include not only those technical contents expressly described in the reference, but also those implied technical contents that can be derived directly and unambiguously from the disclosure by a person skilled in the art. However, it is not allowable to broaden or narrow down the scope of the contents of the reference at will. Where a reference has drawings, the drawings may also be cited. However, when

citing the drawings, the examiner shall note that only those technical features that can be derived directly and unambiguously from the drawings belong to the drawings, the examiner shall note that only those technical features that can be derived directly and unambiguously from the drawings belong to the contents of disclosure. The contents inferred from the drawings, and the dimensions with their relations measured from the drawings without any written description should not be taken as the contents of disclosure⁴. But in the *Guidelines for Patent Examination* are not set forth the standard for determining that the technical features of a claim is disclosed in a reference, nor mentioned the specific meaning of “those implied technical contents that can be derived directly and unambiguously from the disclosure by a person skilled in the art”, which has resulted in divided opinions as to whether a reference has disclosed a certain technical feature of a claim or whether technical motivation is present. Regarding this, this writer believes that determination that a reference has disclosed a certain technical feature of a claim or whether technical motivation is present requires not only that the reference contains the relevant technical features, but also that the relevant technical feature performs the same function in the reference as that of the disclosed technical features in the claim. The function of the corresponding technical feature in the reference merely refers to the actual function of the relevant technical feature in the reference, excluding other functions the relevant technical features perform.

Following is a further analysis of the matter.

Determination that a technical feature is disclosed in a reference means that the relevant technical feature of the reference is equivalent, in value, to a technical feature of the claim. In the technical solution of the claim, a technical feature *per se* is closely related to the function it performs in said technical solution. Separating the two would separate the technical feature from the technical solution and the *technical problem the technical solution is intended to solve*. That in the technical solution of a claim, a technical feature *per se* is closely related to the function it performs in said technical solution determines that a reference has disclosed a technical feature of a claim requires not only that the reference contains the corresponding technical feature, but also that the function of the corresponding technical feature in the reference is the same as that in the claim. In some situations, a technical feature is expressed in a claim differently from the way a corresponding technical feature is expressed in a reference, but, with the same function they perform, it is still

possible to determine that a reference has disclosed a technical feature of a claim. As this point shows, in determining whether a technical feature of a claim is disclosed in a reference or not, it is vital to consider the function the corresponding technical feature performs. Of course, “the function the corresponding technical feature performs in a reference” mentioned here refers to the function it actually performs in the technical solution of the reference, excluding other functions it may perform.

In assessing novelty, if a claim is found not possessing novelty compared with a reference, it means that the two are identical in technical solution, technical problem and technical effect. Since every technical feature is intended to help solve a technical problem, and a technical feature works with, and restricts, other technical features, so do the technical features with each other, when the technical solution of a claim is identical with that of a reference, all the technical features generally perform the same function in their respective technical solution. For this reason, less attention is paid to the function a technical feature performs in a reference in assessing novelty.

Nonetheless, in assessing inventiveness, with a plurality of references (or technical solutions) cited, which do not work with and restrict one another, when a claim has its distinguishing technical feature compared with the closest prior art, determination of whether any other reference (or another technical solution) has given its technical motivation requires consideration of the function of the relevant technical feature performs in the reference. Regarding this, it is provided in section 3.2, Chapter 4 of Part II of the *Guidelines for Patent Examination* that “Under the following circumstance, it is usually thought there exists such a technical motivation in the prior art: ... (ii) The said distinguishing feature is a technical means related to the closest prior art, such as a technical means disclosed in other part of the same reference document, the function of which in the other part is the same as the function of the distinguishing feature in the claimed invention in solving the redetermined technical problem. ... (iii) The said distinguishing feature is a relevant technical means disclosed in another reference document, the function of which in that reference document is the same as the function of the distinguishing feature in the claimed invention in solving the redetermined technical problem.”⁵ As this shows, when the function of a technical feature in a claim is different from that in a reference, the *Guidelines for Patent Examination* provides that it gives no technical motivation. Also, “the

functions of a technical feature in other part” and “the function of the technical feature in the reference” should not include the other functions the technical means performs, or it would reduce the provisions of the Guidelines for Patent Examination to empty expressions.

There are mainly two circumstances about the different function of technical feature in a claim and in a reference: where the function of the technical feature is mentioned in the reference, but differs from its function in the claims⁶; and where the function of the technical feature is not mentioned in the reference and a person skilled in the art cannot determine that the function of technical feature in a claim is identical with that in a reference.⁷ Under the two circumstances, even if the same technical feature is present in the claim and reference, it is impossible to determine that the reference has disclosed the technical feature of the claim.

A reference is invariably directed to a special group of readers on a certain technical problem, so it is impossible to cover all detailed information. Any information irrelevant to a particular technical problem or well known to the readers is likely to be omitted or simplified in the reference. In case of a reference in the form of a patent, it is ok if a person skilled in the art can work its technical solution. In other words, it is ok so long as a person skilled in the art can work the technical solution of a patent, solve its technical problem, and produce its expected technical effect according to the disclosure of the reference. For a person skilled in the art, the indispensable technical features of the technical solution of a reference and the expected technical effect said technical solution can produce are all identifiable. Any indispensable technical features and inevitable technical effect of the technical solution not mentioned in a reference are self-evident and what have been implicitly disclosed in the reference to a person skilled in the art. For example, as for a fuel automobile disclosed in a reference, in which it is not mentioned whether the automobile has an engine, a person skilled in the art know that to drive it engine is an indispensable technical feature, and for this reason, presence of engine is something implicitly disclosed in the reference. Under the Guidelines for Patent Examination, what is implicitly disclosed is what is directly, unambiguously determined in the reference. For this, the writer believes that the so-called “direct determination” is meant to exclude continued derivation based on a determined technical feature to such an extent as to conclude that the function of the technical feature is no longer an indispensable one to achieve the technical solution of the reference. For example,

an engine has a cylinder, which is of certain mass and can be used alone as loading block, but one should not be believed that a reference of a fuel automobile has implicitly disclosed the loading block. The so-called “unambiguous determination” is meant to exclude determination of what is implicitly disclosed as a technical feature of a specific concept when a reference implicitly discloses a technical feature of a generic concept. For example, a reference discloses a cellphone, the cellphone antenna is what said reference has implicitly disclosed, but the outer or inner antenna is not.

Let's return to the case under this study. The PRB and invalidation requester both contended that evidence 1 implicitly disclosed the technical feature “unidirectional current limiting means is deposited along the rim of piston” of claim 1 of the patent in suit. But, on the one hand, since evidence 1 did not mention a whole technical solution of a buffer with unidirectional valve and the interested party failed to produce relevant evidence about the whole technical solution, it was impossible to conclude from the technical solution of evidence 1 that it is inevitable to deposit unidirectional current limiting means along the rim of piston to make it possible for the piston to come in fast and out slowly or in slowly and out fast. On the other hand, it was clearly said in evidence 1 that the buffer used unidirectional valve for moving the piston back to its initial position, a function different from that of the unidirectional valve in claim 1 of the patent in suit, hence, as the standard for determining reference disclosing the technical features of a claim shows, the Supreme People's Court's determination that evidence 1 did not disclose “unidirectional current limiting means is deposited along the rim of piston” of claim 1 is not unjustifiable. The Supreme People's Court affirmed the standard for determining that a reference discloses a technical feature of a claim in the form of a decision, which is undoubtedly of an important guidance to the judicial practice in relation to patent in the future.

The author: Examiner of the Patent Reexamination Board of the State Intellectual Property Office

¹ The PRB's Invalidation Examination Decision No. 14603.

² The first instance: Beijing No.1 Intermediate People's Court's Administrative Judgment No. Yizhongzhixingchuzi 2005/2010; the second instance: the Beijing Higher People's Court's Administrative Judgment No. Gaoxingzhongzi 213/2011.

³ The Supreme People's Court's Administrative Judgment No. Zhixingzi 3/2012.

⁴ The Guidelines for Patent Examination as of 2010, P.175

⁵ The Guidelines for Patent Examination as of 2010, Pp.197-198

⁶ For example, in the PRB's Invalidation Examination Decision No. 5674, the PRB determined that reference 2 did not disclose the technical feature of BaO in the claim on the ground that the technical effect of BaO in references differed from that in the patent in suit.

⁷ For example, in the PRB's Invalidation Examination Decision No. 33617, the PRB pointed out in determining whether a reference has given a technical motivation, both the technical feature and the technical

problem it is to solve should be considered. If in the reference some technical feature is mentioned, but not the technical problem it is to solve and the technical effect it is to produce in the reference, and a person skilled in the art is not sure of the technical problem the technical feature is to solve and the expected technical effect it is to produce according to the technical information mentioned in the said reference, it cannot be concluded that the reference has given the technical motivation in relation to the solution of the technical problem by applying the technical feature.

China Amended Four IP-related Regulations to Enhance Administrative Penalty

On 16 January 2013, Wen Jiabao, Premier of the State Council of China, presided over the executive meeting of the State Council, at which decisions were made to amend the provisions relating to the amount of fine of four administrative Regulations, namely the Implementing Regulations of the Copyright Law (Rule 24, paragraph two), the Regulations for the Protection of Right of Communication on Information Network (Rules 18 and 19), the Regulations for the Protection of Computer Software (Rules 24, paragraph two), and the Regulations for the Protection of New Varieties of Plants (Rules 39, paragraph three, and 40) in an effort to step up the fight against activities of IP infringement and manufacture and marketing of counterfeit and fake commodities. The amended four administrative Regulations shall enter into force as from 1 March 2013.

The amended four administrative Regulations have uniformly increased the amount of the fine imposed in relation to civil activities of infringement of the relevant IP rights, with detriment to the public interests. The former provisions along the line were inconsistent in that the fine imposed for infringement of copyright was calculated on the basis of the amount of illicit business turnover as it was originally provided that the competent administrative authorities may impose a fine at an amount less than three times the illicit business turnover, and if it is difficult to calculate the illicit business turnover, they may impose a fine of less than RMB 100,000 yuan; the fine imposed for infringement of the right of a new variety of plant was calculated on the basis of the illicit revenue as it was originally provided that the relevant administrative authorities may impose a fine no more than five times

the illicit revenue; regarding infringement of the right of communication on information network, it was not specified that a fine was calculated on the basis of the amount of illicit business turnover or illicit revenue as it was originally provided that the relevant administrative authorities may impose a fine of RMB 100,000 yuan. In the amended Implementing Regulations of the Copyright Law, the Regulations for the Protection of Right of Communication on Information Network and the Regulations for the Protection of New Varieties of Plants all has been set the amount of RMB 50,000 yuan of illicit business turnover or value of the commodity as a mark of dividing line and provided that where the illicit business turnover or value of the commodity exceeds RMB 50,000 yuan, a fine is to be imposed of more than one time or less than five times the illicit business turnover or value of the commodity; where there is no illicit business turnover (or value of the commodity) or where the illicit business turnover (or value of the commodity) is less than RMB 50,000 yuan, a fine of no more than RMB 250,000 yuan is to be imposed.

The revision made in the amended Regulations for the Protection of Computer Software is that on activities, performed without consent of the copyright proprietor of a piece of software, of willfully circumventing or encrypting technological measures for the protection of the copyright in the software, willfully deleting or altering right management electronic information in the software, and assigning or licensing to others the owner's copyright in the software shall be imposed a fine of no more than RMB 200,000 yuan, rather than the former less than RMB 50,000 yuan.

In the amended Regulations has been uniformly used the expression of "more than one time and/or less than five times," instead of the rather fuzzy and inconsistent expressions of "less than three times" and "less than five times" used in the former Regulations.