

The Analysis of the Temporary Patent Application System in the United States through Specific Cases

Rao Mengsha

Department of MATERIAL, Guangdong Center for Examination and Cooperation of the Patent Office of the China National Intellectual Property Administration, Guangzhou, Guangdong, China

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Abstract: The temporary patent application in the United States is a characteristic system that facilitates the applicant to apply for the patent in advance with the improved technical scheme and gives it an earlier application date. However, most applicants know little about the legal requirements for temporary patent applications. Therefore, this paper will explain in detail the laws of the priority involved in the provisional patent application system in the US. The purpose is to help the applicant understand the application of temporary patent applications, deeply understand the patent infringement cases involving temporary patent applications, and provide suggestions for the applicant's U. S. patent planning.

1. Introduction to the United States provisional patent Application System

One of the features of US patent law is a "provisional patent application". Its characteristics are as follows: First, a temporary patent application should only provide a detailed specification, without providing a claim. In addition, if a formal application is filed within 12 months after the filing of the temporary patent application, the date of filing of the temporary patent application is the date of application. If the applicant chooses the temporary patent application as the priority basis of the formal application, the substantive patent protection will be extended to 21 years.

2. Important Legal requirements of the temporary patent application system

Article 112 of the United States Patent Law includes a priority requirement for temporary invention applications and provides for the necessary legal conditions for each confirmation of the priority involved. According to Article 112 of the Patent Law of the United States, for a provisional patent application, the explanatory document describing the conception of the invention and the ways and steps of making and using the invention shall be complete, clear, succinct, and accurate so that those skilled in the art can manufacture and use the invention. Article 112 of the United States Patent Law also requires: (1) that the patentee shall fully disclose his invention to the public; and (2) that the patent enables others to reproduce the invention. This American legal clause is essentially close to the combination of Articles 26.3 and 26.4 of our Patent Law and "The Same invention Theme". Compared with the requirement of "the same invention theme", the recognition of priority in the US patent law is more complicated, and the US patent law considers the interests of both the applicant and the patent office, and makes a balance between the public interest and the private interest. Next,

this paper will further explain the legal essence of article 112 of the United States Patent Law and the common legal strategies and the acceptance of the American courts in questioning the priority of temporary patent applications.

(1)Pharmacyclics LLC sued Alvogen Inc. [1]

Pharmacyclics LLC (hereinafter referred to as Pharmacyclics Company) accuses the defendant Alvogen Inc (hereinafter referred to as Alvogen Company) of infringing on the patent rights of its five invention patents, of which Claim 10 of US Patent No. 8008309 ("309") relates to a temporary patent application.

Claim 10 of Patent No.309 states that an ibrutinib compound is:

10. The compound of claim 1 [asking in a BTK inhibitor compound] has the following chemical structure: - ((R) -3- (4-amino-3-3- (4-phenyl) -1H-pyrazole and [3, 4-d] pyrimidine-1-group) piperidine-1-group) propyl-2-ene-1-ketone.

In the face of the above-mentioned infringement lawsuit, the defendant Alvogen Company argued that the content of claim 10 (compound claim) of patent No. 309 was publicly disclosed in an article by an author surnamed Pan. The plaintiff and defendant both acknowledge that the article records Ibrutinib, but the plaintiff Pharmacyclics Company believes that the applicant for claim 10 of patent number 309 was earlier than the publication date of the article by the author surnamed Pan.

The article by the author surnamed Pan was published on December 12, 2006, and the "309" patent was filed on December 28, 2006. However, because the "309" patent has a priority date for the provisional patent application, the plaintiff Pharmacyclics Company believes that the priority date of claim 10 is the date of the filing of the provisional patent application, namely September 22, 2006. Defendant Alvogen maintains that the above provisional patent applications do not establish priority because they do not meet the requirement for full disclosure of ibrutinib compounds under section 112 of the U. S. Patent Law. Therefore, the defendant Alvogen Company believes that the article surnamed Pan published "Patent 309" claim 10.

Temporary patent application for disclosing the synthesis of ibrutinib and ibrutinib requires another compound, called "compound 4". The start of the synthesis step 4 of ibrutinib is "compound 4" and another compound "intermediate 2". Defendant Alvogen argued that compound 4 could not synthesize ibrutinib because the provisional patent application did not disclose how to synthesize the intermediate 2.

However, the district court did not accept the defendant's defense. The district court ruled that the "intermediate 2" in the synthesis scheme of "compound 4" could be synthesized by any person skilled in the field. The court based this ruling on two considerations. First, the court held that "intermediate 2" was mentioned in the "provisional patent application citation patent WO 2001019829 (" WO 829 ")". The court found that "anyone in the field could cite" WO 829 "to explain how to synthesize" intermediate 2 ". Second, the district court determined that "a technician in the field can also synthesize intermediate 2 even without the help of" WO 829 "" because the structural formula based on "intermediate 2" is disclosed in the "compound 4" synthesis scheme. Dr. Paul Reider, an expert in plaintiff Pharmacyclics, testified that his undergraduate students could easily synthesize the product based on the "Intermediate 2" construction. Based on these findings, the district court concluded that the specification for the provisional patent application was fully disclosed and supported the "309" patent claim 10.

Thus, the court concluded that claim 10 of the patent "309" was entitled to the priority date of September 22, 2006, and that the article surnamed Pan did not disclose claim 10 of the patent "309".

From the above cases, first of all, the US Patent Law recognizes the "reference disclosure" in the patent specification, that is, the content of the patent disclosure includes the literature that it cites. Therefore, the cited patent literature in the case can explain the way that "intermediate 2" is synthesized. Next, in accordance with Article 112 of the Patent Law of the United States, a detailed

written description of the mode and process of the manufacture and use of the invention is required. The description should be complete, clear, concise, and precise, so that technicians can make and use the invention. It is substantially acknowledged that the conventional technical means in the art comply with the above requirements even if they are not recorded in the specification. The situation of this case is basically consistent with the provisions of Article 26.3 of the Chinese Patent Law.

(2) Silver State Intellectual Techs., Inc. sued Foursquare Labs, Inc. [2]

Silver State Intelligent Tech, Inc. (hereinafter referred to as Silver State Company) sued Foursquare Labs, Inc. (hereinafter referred to as Foursquare Company) for infringement of its invention patent "165". However, Foursquare Company argued that the "165" patent does not have the right to claim a priority date for its temporary patent application.

Foursquare Company defends that the "165" patent is not entitled to the priority date of the temporary patent application because the temporary patent application does not record in writing any information in the formal patent application in claim 1 about "associate the mobile communication device with the user" or "associate PCD, with the individual" as described in claim 2.

The provisional patent application discusses the technology to identify a PCD or mobile communications devices, but it never discusses how these devices connect to their users. The provisional patent application also does not include the following words "association", "association" or any other derivative words. The provisional patent application states "the PCD provides the wireless GPS server and identifies the identity of the PCD". However, the provisional patent applications do not link the PCD to the user.

The court accepts the defendant Foursquare company defense, because "165" patent temporary patent application does not directly record "mobile communication equipment with users" or "associated PCD, and individual" any information, and technical personnel in the field can no doubt that the technical scheme "mobile communication equipment with users" or "associated PCD, and individual" is the only possible conclusion.

Thus, the court concluded that the "165" patent was not entitled to the provisional patent application and that Foursquare Company did not infringe Silver State Company's "165" patent.

In accordance with the foregoing example, Article 112 of the United States Patent Law expressly requires that the specification for a provisional patent application must "contain a written description of the invention and the methods and procedures for making and using the invention, which shall be complete, clear, concise and precise so that persons skilled in the art can manufacture and use the invention. In essence, the applicant is required to record a complete technical scheme in the temporary patent application, especially if the technical characteristics are not uniquely determined. The situation of this case is basically consistent with the "same invention theme" confirmed by the Chinese patent law.

(3) Speedfit LLC sued Woodway USA, Inc.[3]

The plaintiff Speedfit LLC (hereinafter referred to as Speedfit Company) filed a lawsuit against the defendant Woodway USA, Inc. (hereinafter referred to as Woodway Company), accusing Woodway Company of infringing on the patent rights of US Patent No. 8308619 and US Patent No. 8343016 (hereinafter referred to as "Litigation Patent"). The litigation patents belong to Speedfit Company and involve a manual powered treadmill, including a closed-loop treadmill strap designed to maintain a concave running surface and a tight lower part. The court ruled out the expert testimony provided by James Whelan, the plaintiff's technical expert, regarding Temporary Patent Application No. 61/280265 ("265" Temporary Application).

Defendant disputes the opinion disclosed by plaintiff's technical expert, Whelan, in his July 27, 2015, report. The task of the report is to "to determine whether the invention described in the provisional patent application" 265 "is sufficient for anyone skilled in the field to repeatedly produce the invention required in the patent involved.

Technical expert Whelan performs its task by manufacturing test fixtures, testing inventions disclosed in litigation patents and "265" provisional patent applications, and then comparing the performance of these test fixtures. The report also extracts a "265" provisional patent application that discloses a method of tightening the lower belt part of the treadmill: the spring applies pressure in the opposite direction to keep the length of the lower belt part within a range of about 23 inches. The test structure includes a control model without "method of keeping the lower belt portion taut", two models "construct consistent with the description of the" 265 "provisional patent application" and three models "construct consistent with the claims and description of the litigation patent". Whelan loading the weight to each test structure, and pay attention to whether the upper belt part is kept depressed, and whether the lower belt part is tight. In addition, Whelan makes similar observations on the empty load state of each model.

The first model manufactured by technical expert Whelan from the information disclosed in the "265" provisional patent application uses a "tension-loaded spring so that the load is generated in the opposite direction to the end of the spring and makes the lower belt partially strained". The second model uses "bending the loaded plate spring so that the load results in the opposite direction to the end and midpoint of the spring and tens the lower belt portion".

The technical expert Whelan concluded that (1) the common elements of the temporary patent application; (2) the "different methods of keeping the" 265 "temporary patent application and the litigation patent; and (3) the different methods claimed by the litigation patent and the methods disclosed in the" 265 "temporary patent application are mechanical and similar.

The court interpreted Article 112 of the US Patent Law as that a provisional patent application must disclose sufficient detail so that one skilled in the field can implement an invention without inappropriate experiments. The specific explanation of the expert testimony of James Whelan, the "265" provisional patent application, is as follows.

First, the technical expert Whelan did not explicitly conclude that the description of the invention in the "265" provisional patent application was sufficient to allow him to make the invention claimed in the litigation patent. He concluded only that the provisional patent application and the litigation patent claim common elements; they include similar advantages to the concave belt section; the provisional patent application has similar models to the patent model involved. However, similar performance and common elements are not the criteria of whether implementation can be implemented, and similar performance does not represent implementation.

Second, the court held that the method of technical expert Whelan test was not reliable. Even if the technical expert Whelan clearly concludes that the patent can be implemented, the report does not state what steps he took, which common technologies in the art, or what guidance was obtained in the disclosure of the "265" provisional patent application, to manufacture and use the invention required by the litigation patent. In fact, as the report notes, technical experts Whelan manufactured the third, fourth and fifth models directly from "the content contained in the claims and descriptions of the litigation patent" rather than that disclosed in the "265" provisional patent application. Even assuming that technologist Whelan only used the "265" provisional patent application to make these models, his report is conclusive because it does not discuss the methods he requested to invent from the public content of the "265" provisional patent application. He did not explain what experiments were required to "infer about what is outside the published embodiment. Instead, he jumps from the "265" temporary model to a model based on claims and descriptions in the litigation patent.

Finally, technologist Whelan even distinguishes litigation patent-based models as "mechanical" models, but does not explain why this distinction is important or not.

Therefore, because the court was unable to determine whether technical expert Whelan relied on the methods and disclosed content in the "265" provisional patent application and then applied its technical expertise to the task before him. These analytical leaps make the report's conclusions about whether a patent can be implemented unreliable. Therefore, his opinion on whether a patent could be implemented was excluded.

In fact, the court can learn from the report that the "265" temporary patent application is not the

same way as the litigation patent to tighten the lower belt part of the treadmill. The "265" temporary patent application uses a "tension-loaded spring to tighten the lower belt part". The litigation patent uses "bent loaded plate springs to tighten the lower belt". Despite their similar characteristics, the two methods differ significantly in nature because they adopt different elastic structures. The technician in the field cannot undoubtedly obtain the formally applied technical scheme from the temporary patent application, and naturally cannot repeatedly produce the invention required in the patent involved. The situation of this case is basically consistent with the provisions of "the same invention theme" and Article 26.3 of the Patent Law.

3. Analysis and summary

According to the analysis of the US patent invalidation judicial case, when the US Patent Office confirms the priority, it mainly confirms the priority text with "the claim should be based on the specification". Therefore, there have been many judicial cases in the United States that invalidate patents by denying priority. Simply put, the priority system for temporary patent applications is a "wide in, narrow out" strategy, which sets relatively low standards for the specification of temporary patent applications and the rights and interests of formal applications in the process of obtaining priority. However, when a patent is invalidated, we must strictly comply with the provisions of Section 112 of the United States Patent Law. The specification of a temporary patent application must include a detailed description of the invention concept, production, and use methods and processes, which should be complete, clear, concise, and accurate, enabling professionals in the industry to create and apply the invention. This is a far cry from many applicants that temporary patent applications are lenient. If the applicant is too hasty in preparing the temporary patent application documents and misses many important technical features or technical solutions, he / she will face the challenge of the patent examination stage or patent infringement and invalidation stage.

4. Thinking and giving advice

The temporary patent application in the United States is a patent system that facilitates the applicant to quickly submit the perfect technical scheme and obtain the earlier application date, which belongs to a kind of priority. However, most applicants' awareness of temporary patent applications in the U. S. only limited on the earlier application and the extension of patent protection. Therefore, combined with the judicial trial cases of invalid patent infringement cases in the United States, this paper explains the specific law of the priority confirmation involved in the temporary patent application system, and puts forward the following suggestions for the applicant.

For temporary patent applications, the technical attributes and strategies contained in them need to be displayed in detail and clearly, so as to ensure that their content is clear, comprehensive and accurate. In this way, those skilled in the field can execute or copy these temporary patent applications, providing a solid priority for subsequent formal applications and avoiding any possible doubts and provocation against them.

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