Featured Article

Determining Whether the Substantial Content of an Invention-creation is Completed within the Territory of China in Confidentiality Examination

In consideration of increasing international collaboration in technological research and development, provisions for confidentiality examination on foreign patent applications have been introduced into the third revision of the Chinese Patent Law[1] in order to prevent invention-creations that need to be kept secret from being disclosed due to filing foreign patent applications. The Patent Law not only stipulates the obligation to submit a confidentiality examination request before filing a foreign patent application in Article 20(1)[2] ,

1. The third revision of Patent Law came into effect on October 1, 2009, while the fourth revision of Patent Law came into effect on June 1, 2021 and is currently in force.

2. Article 20 of the Patent Law (Article 19 in the fourth revision of the Patent Law) stipulates in paragraph 1 that " where any entity or individual intends to file an application in a foreign country for patenting an invention or utility model accomplished in China, it or he shall report in advance to the patent administration department of the State Council for confidentiality examination. The provisions of the State Council shall be followed in regard to the procedures and time limit for the confidentiality examination."

but also explicitly states in Article 20(4)[3] that, if a foreign patent application is filed before a confidentiality examination thereon is made in China, the counterpart Chinese application shall not be granted a patent right. Accordingly, confidentiality examination has become a necessary procedure for any invention or utility model made in China to be filed in a foreign patent application, and the provision on confidentiality examination has become one of the grounds for invalidation requests.

To accurately define the scope of inventions or utility models that require confidentiality examination, the Implementing Regulations of the Patent Law, which came into effect in 2010, further interpreted "inventions or utility models accomplished in China" as "inventions or utility models whose substantial content of the technical solution is completed within the territory of China."[4] Nevertheless, there is not a relatively clear criterion for determining whether the substantial content of a technical solution is completed within the territory of China in practice. This makes it difficult for applicants to determine whether they need to file a request for confidentiality examination before filing a foreign patent application. Moreover, corresponding criteria are absent in practice on how to prove that the substantial content is completed within the territory of China, which has resulted in that very few invalidation petitioners have successfully used the confidentiality examination provisions as a ground for patent invalidation.

I. General procedure for determining the necessity for confidentiality examination

In the patent examination procedure, when determining whether the provisions regarding confidentiality examination in Article 20(1) of the Patent Law are violated, the following four aspects are usually considered:

1. Whether the Chinese patent application (or patent) to be examined is subject to Article 20(1) in terms of timing.

3. Article 20 of the Patent Law (Article 19 in the fourth revision of the Patent Law) stipulates in paragraph 4 that "For an invention or utility model, if a patent application has been filed in a foreign country in violation of the provisions of the first paragraph of this Article, it shall not be granted a patent right while filing a patent application in China"

4. Rule 8 (1) of the Implementation Regulations of the Patent Law stipulates that "The invention or utility model accomplished in China as mentioned in Article 20 of the Patent Law refers to an invention or utility model of which the substantial content of the technical solution is completed within the territory of China".

2. Whether the technical solution of the Chinese patent application (or patent) is consistent with the technical solution of the foreign patent application in terms of substantial technical content.

3. Whether the substantial content of the Chinese patent application (or patent) is completed within the territory of China.

4. Whether the technical solution of the foreign patent application has undergone a confidentiality examination in China as required.

Clearly, it is critical to determine whether the substantial content of the technical solution of an invention-creation (referring to an invention or a utility model in this context) is completed within the territory of China for the determination of whether a request for confidentiality examination needs to be filed therefor in China before a foreign patent application is filed. The substantial content of the technical solution usually refers to the inventive concept of the invention-creation, i.e., the improvement made by the invention-creation over the prior art.

Therefore, when determining where the substantive content of a technical solution for which a patent application is to be filed is completed, generally, it is necessary in practice to determine the substantive content of the technical solution, i.e., to determine how the core inventive concept is formed and how the technical solution is improved over the prior art based on the state of the art and the R&D of the technical solution. Furthermore, it is necessary to confirm where the substantive content of the technical solution is completed by considered such relevant information as the location of the patentee, the location of the inventor, and/or the location of the R&D activities.

II. Case study

Considerations for determining whether the substantial content of a technical solution is completed within the territory of China will be discussed in the following in combination with two typical cases from Chinese patent invalidation proceedings.

Case 1: Invalidation Request Examination Decision No. 41283

The patent involved in the Invalidation Request Examination Decision No. 41283 (hereinafter referred to as "the Invalidation Decision No. 41283") is an invention patent entitled "Testing cartridge for an in vitro medical diagnostic device" (hereinafter referred to as "the involved patent"). The Invalidation Decision No. 41283 provides clear guidance on determining where the invention was made. It states that the determination of "being made in China" is based on judgement of where the substantial technical content of an invention was actually completed during the R&D phase, considering such factors as the place where the inventors' R&D activities occurred and the place where the substantial content was completed. If the

R&D activities have taken place in different places, the contribution to the substantial content should also be considered to determine where the substantial content was formed.

The specific information of the involved patent is as follows: the patent number is 201310322066.8, the patentee is Edan Diagnostics Inc. (hereinafter referred to as "Edan US"), the priority date is December 6, 2012, and the application date is July 29, 2013.

The petitioner argues that the priority patent cited by the involved patent is US13/707513 (hereinafter referred to as "the US patent"), with a priority date of December 6, 2012. The US patent have two inventors who are both overseas talents introduced through the "Peacock Plan" Project of Shenzhen. The petitioner further argues that the inventors of the US patent have been employed by Edan Instruments, Inc. (hereinafter referred to as "Edan Shenzhen") since September 19, 2011 and relevant evidence indicates that the substantial technical content of the involved patent was completed within China, and Edan US had not filed a request for confidentiality examination procedure for the technical solution of the involved patent. Therefore, the petitioner considers that the involved patent should be invalidated in its entirety.

In response, the patentee provides relevant counter-evidence, claiming that the substantial content of the involved patent was already completed in the United States in the first half of the year 2010. The patentee argues that the involved patent is based on the main concept completed before April 2010, and the subsequent improvements in China were made merely for industrialization and are not relevant to the substantial content of the involved patent.

After examination, the panel considers that the actual situation of research and development often involves continuous improvement or refinement of the inventive concept throughout the R&D process, where are always recorded in R&D files and other materials. The panel further considers that drawings are carriers of the inventive concept proposed by inventors, typically directly presenting the main content of the technical concept, and reflecting the weight of the "substantial content" of the technology, and thus drawings can usually serve as a basis for judging whether the technical concept has been substantially completed.

Therefore, the panel, based on the evidence provided by the patentee, including correspondences among the inventors and their team members during the R&D process, concludes that the correspondences can demonstrate the general situation of the formation of the technical concept. Additionally, the panel confirms that the drawings attached to the correspondences until March 2010 already show the basic structure and components of the developed testing cartridge, which

are essentially consistent with the testing cartridge shown in the drawings of the involved patent.

Finally, the panel supports the patentee's claim that "the substantial content of the involved patent's technology was substantially completed in the United States in the first half of the year 2010" and upholds the validity of the involved patent.

Case 2: Invalidation Request Examination Decision No. 55586

The Invalidation Request Examination Decision No. 55586 (hereinafter referred to as "the Invalidation Decision No. 55586") is directed to a utility model patent entitled "Telescopic transmission assembly device and lift stand"(hereinafter referred to as "the involved patent"). This case was selected as one of the top ten annual patent reexamination and invalidation cases of the year 2022. It is a typical case where the patent right is invalidated based on the reason of confidentiality examination provisions introduced into the Chinese Patent Law. It particularly clarifies the applicable standards for the allocation of burden of proof and addresses the difficulties encountered by the petitioner in proving the place where an invention-creation is made.

The specific information of the involved patent is as follows: the patent number is 201720389490.8, the patentee is Zhejiang Jiechang Linear Motion Technology Co., Ltd., the priority date is January 10, 2017, and the application date is April 14, 2017. Upon investigation, it was found that the patentee personally submitted a U.S. provisional application with the application number US62/436730 on December 20, 2016, including the technical content which is identical to the technical content of the involved patent, and the patentee has never submitted the technical content of the involved patent for a confidentiality examination. Therefore, this case is focused on whether the substantial content of the involved patent was completed within the territory of China.

The petitioner argues that relevant evidences shows that all the inventors of the involved patent are Chinese, and the R&D addresses of the inventors and the applicant of the patent are both located in mainland China. It can be proven that the technical solution of the involved patent was completed within the territory of mainland China based on the prospectus released by the patentee on December 12, 2017 which shows that the patentee did not have any oversea R&D company. On the other hand, the patentee contends that the invention-creation of the involved patent was mainly completed by the first inventor during a business trip to the United States in 2016, and the travel records of the first inventor could prove that the he visited the United States before submitting the U.S. provisional application.

In the Invalidation Decision No. 55586, the panel presents a guiding principle that the

evidence provided by the petitioner only needs to preliminarily demonstrate with high plausibility that the substantial content of the technology was completed within China. Specifically, the Invalidation Decision No. 55586 states that "if the patent applicant/patentee first files a foreign patent application for the invention or utility model abroad and fails to file a request for confidentiality examination procedure therefor in China, and there is preliminary evidence indicating, with high plausibility, that the substantial content of the invention or utility model is completed within China, and the patent applicant/patentee fails to provide sufficient evidence to prove that the substantial content of the invention or utility model is completed abroad, then the patent applicant/patentee should bear the legal consequences of the invention or utility model being ineligible for patent protection". Based on the above, the panel conducted a detailed argumentation in combination with the allocation of the burden of proof.[5]

Regarding the evidence provided by the petitioner, the panel comprehensively considers the place where the invention is made from two perspectives: the domicile of the patentee and the nationality of the inventors. On the one hand, the relevant evidence indicates that the domicile of the patentee and their research institution are both located within the territory of China, and there is no evidence to prove that the patentee has an institution abroad having R&D or product design capabilities. On the other hand, the four inventors recorded in the involved patent should all be considered as individuals who have made creative contributions to the substantial content of the involved patent, and their workplaces should be considered as being in China. Therefore, the panel concludes that the evidence provided by the petitioner can preliminarily demonstrate with high plausibility that the substantial content of the involved patent was completed within China.

Regarding the evidence provided by the patentee, the panel primarily believes that the travel records of the first inventor cannot provide any information indicating the R&D process of the patent, but can only prove that he went to the United States from November 13 to 24, 2016, which is not directly relevant to where the invention is made and is not sufficient for supporting the patentee's claim (i.e., the invention was primarily completed by the first inventor in the United States). Furthermore, as a prospective listed company, the patentee should have the ability to provide direct evidence to prove that the invention was developed and completed abroad. Therefore, since the patentee failed to provide sufficient counterevidence to

5 Reexamination and Invalidation Department of the Patent Office, CNIPA, "Case Study - Collection of Typical Cases of Patent Reexamination and Invalidation (2018-2021)" [M]., Intellectual Property Press, 2022.11:346-347.

demonstrate that the invention of the involved patent was completed abroad, the patentee should bear the legal consequences of unfavorable proof.

Ultimately, the panel concludes that the patentee failed to fulfill their obligation to request a confidentiality examination by the Patent Administration Department of the State Council for their invention completed within China before filing a U.S. provisional patent application on December 20, 2016. Based on this, the utility model patent is invalidated in its entirety.

III. Insights from the Cases

Although the Chinese Patent Law and its Implementing Regulations do not provide specific criteria for determination of where the substantive content of a technical solution is completed, the considerations therefor in Chinese patent practice can be seen more specifically from the two typical cases as mentioned above. For example, in Case 1, the panel considers the R&D conducted for the formation of the fundamental concept of the testing cartridge as the R&D of the substantive content of the technical solution, and do not regard the subsequent improvement made to enable mass production of the testing cartridge as the substantive content of the technical solution. Furthermore, in Case 2, when determining whether the substantive content of the involved patent is completed in China, the panel comprehensively considers the domicile of the patentee and the workplace of the inventors. With well understanding of the provisions regarding confidentiality examination, the following aspects should be considered in practice.

1. For applicants, when considering filing a foreign patent application for an invention-creation, attention should be given to whether the substantive content of the invention-creation is completed within the territory of China. If so, the obligation to file a request for confidentiality examination must be fulfilled before filing the foreign patent application. Additionally, it should be noted that the confidentiality examination requirements are different in different countries. For instance, China, the United States, and Brazil determine whether confidentiality examination is necessary based on where the invention is made, whereas the United Kingdom, South Korea, and India determine whether confidentiality examination is necessary based on the domicile of the applicant. Therefore, it is essential to make a patent application strategy in advance considering such factors as the applicant's domicile, the inventor's location, and the primary place of business, in order to comply with the confidentiality examination requirements of different countries and to avoid the risk of losing patent rights.

2. When determining where the substantive content of a technical solution to be included in a foreign patent application to be filed is completed,

although the law does not provide explicit criteria, reference can be made to Case 1. Generally, the place where the fundamental inventive concept is developed or where improvements over the prior art are made can be considered as the place where the invention is made. Moreover, when an invention is completed in multiple places, consideration must be given to the levels of contribution of R&D activities in different places, as different levels of contribution may lead to different conclusions regarding the place where the invention is made.

3. It is noted that applicants should establish comprehensive R&D records during the process of technological innovation. It is important to keep relevant documentations, such as project progress plans, team correspondences, product drawings, and test results which can demonstrate the progress of R&D. These records can provide useful support when it is necessary to prove where the substantive content of a technical solution is completed. Among others, it is crucial for applicants to recognize the importance of reserve product drawings at different stages of R&D.

4. In cases where the provision of confidentiality examination is used as a ground for invalidation, both the petitioner and the patentee should fulfill their obligations of proof. Considering that the patentee is more likely to possess information and documents regarding the invention's R&D process, the petitioner bears the preliminary burden of proving that the substantive content of the patent is completed in China, and in case where the petitioner's evidence meets the requirement of high plausibility, the patentee should provide sufficient counterevidence to demonstrate that the invention is made abroad. Otherwise, the patentee should bear the legal consequences of unfavorable proof.

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Ms. NIE has started her profession as a patent attorney since 2004, and is one of the first batch of litigation attorneys recommended by the All-China Patent Attorneys Association in 2013. She was awarded “Three-star Patent Attorney” by the China Intellectual Property News in 2017 and was awarded “Outstanding Patent Attorney” by the Beijing Patent Attorneys Association in 2018. Ms. NIE has written many articles on patent practice, including the article "How to Objectively Determine the Technical Facts Disclosed by a Reference Document" which was rated as an excellent paper in 2015 by the All-China Patent Attorneys Association and the article "How to Use Technical Effects and How to Describe the Same" which was rated as an excellent paper by ACPAA at the 7th IP Forum held in 2017.