Strategies and Pitfalls of Filing U.S. Patent Applications Based on Prior Chinese Applications

By Hengyi Jiang and Kirk Sigmon

Given the difference between Chinese and U.S. patent law, there are many pitfalls for applicants filing U.S. utility patent applications based on previously-filed Chinese applications. This article surveys procedural routes for filing such utility applications in the United States and details common drafting and procedural pitfalls for such applications, including issues with translation, disclosure sufficiency, and claim strategy.

INTRODUCTION

The best practices for Chinese patent applications often differ from the best practices for filing U.S. patent applications. That said, it is still very common for applicants who already filed applications in China to translate their Chinese applications and file corresponding U.S. applications without additional review or editing effort. This is a dangerous mistake: this approach almost always invites unnecessary rejections and objections during prosecution, slows down what otherwise might be a quick patent application, and may even inject a degree of uncertainty during any subsequent litigation.

As will be detailed below, there are at least three primary options for applicants seeking to file U.S. applications based on previously-filed Chinese applications, and applicants are best served by using methods that permit correction of both the specification and the claims prior to filing. That is because there are many substantive and procedural traps for applicants when filing U.S. applications based on previously-filed Chinese applications, and several of these traps cannot be corrected merely through acquiring a faithful translation of a Chinese patent application. The following sections provide a roadmap both for U.S. attorneys looking to help Chinese clients protect their patent rights as well as Chinese organizations seeking to protect their innovations in the United States. These sections primarily cover utility patents and some of them are not applicable to design patents.

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HOW TO FILE A U.S. PATENT APPLICATION BASED ON A PRIOR CHINESE APPLICATION

There are three primary options available to applicants interested in filing a U.S. application based on a previously-filed Chinese application: (i) filing a separate U.S. application claiming priority under the Paris Convention of 1883 (a Paris Convention Priority Filing); (ii) filing a Patent Cooperation Treaty (PCT) application in China and then filing a national stage entry into the United States (a PCT National Stage Filing); and (iii) filing a U.S. application that claims priority to a PCT application filed in China as a continuation, divisional, or continuation-in-part of that PCT application (a so-called "Bypass Application," referring to the bypass of the national stage entry). These options are surveyed below, and a table of their benefits and drawbacks is included at the end of this section.

Paris Convention Priority Filing

Within twelve months of the filing of an earliest-filed foreign patent application, a U.S. utility patent application may be filed claiming priority to that earliest-filed foreign patent application.[1] For example, if an applicant files a first patent application in China, the applicant can file, within twelve months, a U.S. patent application claiming priority to that Chinese patent application. Additional procedural requirements apply: for example, a "certified copy of the foreign application must be filed within the later of four months from the actual filing date of the application, or sixteen months from the filing date of the prior foreign application."[2] In rare cases, the Examiner may request an English language translation of the certified copy along with a "statement that the translation of the certified copy is accurate."[3]

In any event, this filing can be flexible: applicants can make various minor changes to a translated specification for clarity and precision so long as the revisions are supported in the original filing, and applicants are free to revise the claims to prepare them for U.S. prosecution. As will be discussed in further detail below, this is a powerful option for applicants, as it allows applicants to proactively ensure that the application is in a proper condition for examination.

PCT National Stage Filing

This process entails filing a PCT application in China and then, within the 30-month time limit from the earliest priority date,[4] filing a national stage entry in the United States pursuant to 35 U.S.C. § 371. The procedural requirements for the national stage entry process are very formal: for instance, no modifications to the translation are permitted other than those formally requested under PCT Rule 26 or 91.[5] That said, amendments to the claims are permitted under PCT Article 19,[6] and any amendments made during any international preliminary examination phase (i.e., Chapter II) will be entered so long as those amendments were made in English.[7] Moreover, upon national stage entry, normal United States Patent and Trademark Office (USPTO) rules (including those pertaining to amendments to the specification) apply.[8] Practically speaking, it is often significantly more cumbersome for applicants to revise the specification (e.g., to correct translation inaccuracies or to improve precision). Moreover, Track One prioritized examination requests are currently not available to national stage filings until after a Request for Continued Examination (RCE) has been filed in those applications.[9] There are, however, some notable benefits to U.S. national stage filings. For example, since priority documents are automatically transmitted by the International Bureau, applicants might not be required to file certified copies of priority documents.[10] As another example, U.S. national stage filings are subject to a different (and, in practice, slightly more permissive) unity of invention practice under 37 CFR § 1.499, rather than the slightly stricter U.S. restriction practice under 37 CFR §§ 1.141-1.146. As yet another example, for a U.S. national stage filing, applicable fees may be somewhat lower than the fees incurred from a direct filing in the United States if a search report has been prepared and provided to the USPTO, although the amount of difference is also minimal given that most USPTO fee discounts are based on the United States being selected as the International Searching Authority (ISA) and/or the International Preliminary Examining Authority (IPEA), which is currently not permitted when filing a Chinese PCT application.[11]

Bypass Application

A "bypass" application avoids the national stage entry under 35 U.S.C. § 371 by filing a U.S. application that claims priority to a PCT application as a continuation, divisional, or continuation-in-part of that PCT application pursuant to 35 U.S.C. §§ 120 and 365(c). A bypass application must be filed by the same 30-month deadline that applies to a typical U.S. national stage filing, since a PCT application designating the United States is considered abandoned after 30 months from its priority date. Like a Paris Convention Priority Filing, the applicant can benefit from the ability to proactively revise the claims, improve the precision and correctness of the translation, and perform other corrective actions that might help prepare the application for U.S. prosecution.

In sum, when seeking to file a U.S. application claiming priority to a previously-filed Chinese application, it is often far preferable to file a Paris Convention Priority Filing or a Bypass Application. As will be detailed below, such approaches permit applicants to avoid common drafting pitfalls by, among other things, preparing claims based on U.S. best practices, correcting imprecision and non-substantive issues in the translated specification, and the like. In contrast, it is usually only worth pursuing national stage entry in the United States when it is cumbersome to file copies of the priority documents (e.g., a Digital Access Service (DAS) code cannot be obtained), when international examination is sought, and/or when the nominal cost savings are considered worthwhile. In other words, the pitfalls detailed below are often more easily handled using a Paris Convention Priority Filing or a Bypass Application, whereas the same pitfalls are often far harder to fix after filing a national stage entry in the United States.

COMMON DRAFTING PITFALLS

While there are far too many differences between the process of Chinese patent preparation and U.S. patent preparation to itemize here, this section

Table 1. Comparison of Primary Options for Filing U.S. Patent Application Claiming Priority to Previously-Filed Chinese Filing

	***Paris Convention Priority Filing* (U.S. filing directly claiming priority to original Chinese application)**	***PCT National Stage Entry into United States* (Chinese PCT Application)**	***Bypass Application* (U.S. filing claiming priority to Chinese PCT application as a continuation, divisional, or continuation-in-part of that PCT application)**
Examination	**Immediate:** Triggered by filing and subject to USPTO timeline(s)	**Two Rounds:** Early option(s) for examination and preliminary opinion in PCT application. Sometimes streamlines later prosecution in U.S. application.	**Immediate:** Triggered by filing and subject to USPTO timeline(s)
Speed/Timing	**Fast:** Must be within 12 months of *earliest* foreign filing (in China or otherwise).	**Slower:** Often significantly slower (~30 months to file in United States based on the earliest Chinese application), but this can be valuable for strategic reasons.	**Slower:** Same as PCT National Stage Entry
Translation Requirements	**Flexible:** applicant can make minor changes to specification to improve clarity/precision as long as supported in priority document. No new matter permitted.	**Inflexible:** strict translation of PCT application required, although subsequent specification amendments possible. No new matter permitted.	**Flexible:** applicant can make minor changes to specification to improve clarity/precision as long as supported in priority document. No new matter permitted.
Claim Strategy	**Flexible:** May freely present new/revised claims as long as supported in priority document.	**Moderately Flexible:** Can revise/amend PCT application. Can revise/amend U.S. application after national stage entry (e.g., via a preliminary amendment).	**Flexible:** May freely present new/revised claims as long as supported in priority document.
Unity/Restriction Approach	**Stricter:** U.S. restriction practice under 37 CFR §§ 1.141-1.146	**More permissive:** Unity of Invention practice under 37 CFR § 1.499	**Stricter:** U.S. restriction practice under 37 CFR §§ 1.141-1.146
Fees	**Standard:** Traditional USPTO fees	**Slightly Lower:** In practice, rarely significantly so.	**Standard:** Traditional USPTO fees
Track One Examination in United States	**Available**	**Not Available until later in prosecution**	**Available**
Additional Document Filing Requirements	**Must file all documents,** including references (which may need to be translated)	**May avoid filing *some* documents,** such as priority documents.	**Must file all documents,** including references (which may need to be translated)

focuses on several key distinctions in patent drafting practices between the two countries and the potential pitfalls of failing to tailor those practices to U.S. requirements when a Chinese application enters the United States.

Issues in Translation

Applicants should never assume that a translation is suitable for the purposes of a patent application merely because the translation was prepared by a trusted translation vendor. When translating from Chinese to English, even "correct" translations can result in undesirable loss of nuance and can involve word choice that can create undesirable implications or ambiguities in English. Thus, it is important to have a U.S. patent attorney review the translations before filing. U.S. patent attorneys can add significant value in Paris Convention priority filings and bypass applications by making minor revisions to the English-translated specification for clarity and precision so long as the revisions are supported in the original filing. U.S. patent attorneys can also add additional value by revising the claims based on U.S. best practices, which can significantly speed up U.S. prosecution. Ideally, the U.S. patent attorney should be able to read and understand the original Chinese application to verify the accuracy and intent of the translation when necessary.

One of the most significant traps in Chinese to English translations is the issue of word choice. It is not uncommon for Chinese applications, when translated into English, to contain so-called "patent profanities" (e.g., "invention," "essential," "always," "necessary," "must," "required to," "preferably") that unduly limit the scope of the specification or the claims. Such patent profanity terms should be avoided when drafting the original application and (if possible) when translating the original application into English.

Other terms, such as "optional" or "optionally," may also create unintended claim construction issues during litigation. While these terms are acceptable and often encouraged to use in the specifications of Chinese applications to indicate that a feature is optional, in the United States, these terms may imply that other features in the specification are mandatory, which could potentially affect the claim scope.

More generally, there are many words in English with implications that are not present in their Chinese counterparts. For example, certain terms in Chinese may translate in English to "investigate" or "inquire," such as in the claim language "*inquire* whether the computer has completed processing of the image." This translation might be correct in the sense that the correspondence might be found in a translation dictionary, but the use of words like "investigate" and "inquire" in English often suggest human activity. In other words, a technically strict translation from Chinese to English can imply human involvement in a process that was not intended to involve humans.

Another common problem introduced by Chinese-to-English translation involves grammatical issues, particularly via unclear attachments between different words. Chinese patent drafting practices often involve the use of long sentences including multiple semicolons which, when translated literally, can result in confusing or ambiguous English. Preferably, when translating from Chinese to English, breaking those long sentences into shorter sentences with clear connections between them can enhance clarity and readability. This approach helps prevent confusion and ensures that the intended meaning is accurately conveyed.

That said, even when those sentences are broken into shorter sentences, grammatical issues may still be introduced. For example, many Chinese-to-English strictly-translated applications feature language like "adjust the pressure in the chamber based on the temperature readings." In English, it is not clear whether "based on the temperature readings" attaches to the verb (that is, we "adjust" the pressure based on some temperature reading being received in the first place), whether it attaches to the second noun "chamber" (that is, we select or identify the chamber based on the temperature reading), or whether it attaches to the first noun (that is, we adjust the pressure of the chamber by an amount that is somehow based on the temperature reading). A preferable correction in English may include revising the language to be slightly longer and to use comma clauses: for example, "determine, based on comparing the temperature readings to a threshold, a target pressure; and adjust, based on the target pressure, the pressure in the chamber." This change in the claim can potentially help avoid claim construction in the future if the patent is litigated.

Yet another common problem involves undesirably implying separation of concepts in the

disclosure. Some Chinese applications, when translated into English, can imply that certain embodiments are somehow separate from others under the U.S. patent law. For example, some translated applications will use language like "In one embodiment, the ball is red. In another embodiment, the ball has a 5cm diameter." This and similar language can be read by the USPTO to imply that the ball is either red or 5 cm, but not both. In U.S. prosecution, it is often better to avoid the word "embodiment" (and instead use the word "example"), to provide a wide variety of examples, and to liberally use words like "may" and "can." For instance: "The ball *may* be a variety of colors, such as, *for example*, red, green, or blue. The ball *may* be a variety of sizes. *For example*, the ball may be 5cm, 10cm, *or the like*."

Another example of a common problem in Chinese to English translations involves not assigning an actor to verbs. When translated, some Chinese patent applications can use language that does not specify a particular actor for a verb (e.g., "it is determined that the car is moving"). This is grammatically permissible in English, but it can introduce ambiguity and can result in a wide variety of prosecution issues unless the specification is carefully drafted. Instead, it is often preferable to specify an actor, even if a generic element such as a "computing device." For example: "the *computing device may determine* that the car is moving." The specification can elsewhere specify that the "computing device" could be a variety of different devices (e.g., servers, laptops, cell phones, or the like) or even multiple different devices.

Insufficient Detail in Disclosure

Even outside of word and grammatical choices, stylistic differences between Chinese and U.S. patent prosecution can often result in difficulties when U.S. applications are filed claiming priority to Chinese patent applications.

Experience indicates that U.S. applications can appear deceptively longer than their Chinese counterparts. In the context of translations from Chinese to English, many of these distinctions are merely the product of imprecise Chinese-to-English translations and the nature of Chinese texts being more compact and denser in information compared to English. And, even outside of the context of translations, U.S. patent examiners writing in English for the USPTO tend to be a bit more long-winded and repetitive than their Chinese counterparts. As one example, many U.S. patent applications relating to computer engineering still recite the basics of computers (e.g., processors, memory), even when doing so might be largely unnecessary for the proper disclosure of those inventions. Regardless, these differences often mean that Chinese applications, even if literally translated, can appear shorter than similar U.S. applications, even if they contain the exact same material. This can introduce disclosure trouble in U.S. prosecution and litigation, particularly since U.S. examiners often expect fairly voluminous disclosure to support claim amendments.

One of the broader problems exhibited by applications filed in the U.S. based on Chinese applications is that they can lack the detail preferred by some USPTO examiners. Increasingly, USPTO examiners have demanded a greater detail of specificity regarding processes described in patent applications, including details on how algorithms are performed, the relationship between various components of a device or devices in a network, and the like. Failure to provide such disclosure can result in a variety of rejections, including in particular based on 35 U.S.C. § 112 (e.g., for lack of sufficient "written description").

Specifically, under the U.S. patent law, "[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention."[12] Without adequate technical details, an examiner may reject the claims under 35 U.S.C. § 112 because the examiner may believe that the claim is indefinite, and/or because the examiner believes that the inventor did not have possession of the invention. For example, some Chinese specifications may merely repeat the claim language without providing additional technical details or examples. This approach would not help a U.S. examiner who may not fully understand the claims or who questions how a claimed feature is achieved and tries to look for further explanations in the specification.

Despite these expectations and requirements by the USPTO, applicants are not required to limit their inventions to overly-specific implementations. As discussed above, it is advisable to draft specifications that include sufficient technical details and a wide variety of examples in the original Chinese

application, and to liberally use words like "may" and "can" to maximize disclosure and to provide sufficient support if the claims are later questioned by examiners.

Claim Strategy

One of the most important preparations for a Chinese patent application to enter the United States is to refine the claims before filing, regardless of how the application is filed in the United States. This is because Chinese claims, when translated literally, may not satisfy the distinct requirements and preferred style of U.S. patent claims. In turn, if Chinese applicants ignore these requirements and differences and choose to file in the United States, they may face unnecessary and difficult rejections in prosecution and potential problems in litigation.

As one example of how Chinese claim strategy can result in unoptimized U.S. claims, some Chinese applicants may file only ten claims in the United States because China charges an additional fee for each claim exceeding ten. In contrast, in the United States, excess fees only apply for more than three independent claims and/or more than twenty total claims.[13] This often means that U.S. applications are filed with double the number of claims relative to their Chinese counterparts. In other words, filing only ten claims loses additional opportunities to present unique independent and dependent claims to the Examiner (and, thus, opportunities for a faster allowance).

A far costlier mistake often exists with multiple dependent claims. In China, multiple dependent claims are permissible, but can only refer to preceding claims, must refer to those in the alternative, and cannot refer to other multiple-dependent claims.[14] Regardless, multiple-dependent claims are sometimes still in use. U.S. law is similar; however, due to fees applicable to multiple-dependent claims, it is extremely rare for multiple dependent claims to be filed in U.S. applications. If an applicant accidentally files a multiple-dependent claim from a Chinese application into an U.S. application, that applicant may incur significant excess claim fees.

Further, because Chinese claims may be drafted without considering the complex and evolving subject matter eligibility requirements under 35 U.S.C. § 101, those claims may face difficult subject matter eligibility rejections in the United States. While applicants could amend claims after a subject matter eligibility rejection is issued, overcoming this type of rejection can be challenging because the examiner has often already formed an initial impression that the claims are directed to, for example, an abstract idea. A more effective strategy is to proactively revise the claims before U.S. filing: for example, removing or replacing non-technical terms, adding sufficient technical details, and revising the claim language to tell a better "story." This approach can substantially reduce the likelihood of receiving a subject matter eligibility rejection from the beginning.

Moreover, some Chinese applications may inadvertently file claims including means-plus-function language without realizing that such language does not cover every means for performing a recited function. This may lead to rejections under 35 U.S.C. § 112 if the specification fails to provide specific structures corresponding to the functions. For example, both the claims and the specification might use certain overly vague terms such as "member," "module," "unit," or "element" to describe a physical component without describing the actual physical structure of that component. As a specific example, reciting a "rotating member" in the claim without additional details in the specification explaining how rotation is performed may be acceptable in China, but in the United States, this term can be interpreted as invoking means-plus-function treatment under 35 U.S.C. § 112(f) and can be rejected under 35 U.S.C. § 112(a) and/or 35 U.S.C. § 112(b), which can cause trouble both during prosecution and during litigation.

COMMON FILING PITFALLS

There are many procedural traps for applicants when filing U.S. patent applications claiming priority to a previously-filed Chinese application. The major traps are listed below.

Improper Priority Claim or Certified Copy Filing

The process for claiming priority to a foreign application (such as a Chinese application) in a U.S. application requires several procedural steps, and many applicants make mistakes during this process. Particularly, in addition to the requirement that a priority claim to the Chinese application be made,[15] a certified copy of the Chinese application must be filed (with the time period for filing depending on

the method with which the U.S. application was filed).[16] Applicants often make mistakes during this process (e.g., by forgetting to file the certified copy and/or by including a typographical error in the priority claim), which can lead to delay and additional fees. One way to easily satisfy this requirement (and avoid those mistakes) is to, within the time frame set forth in 37 CFR § 1.55(i), use the Priority Document Exchange (PDX) process, which allows applicants to provide a DAS code in an Application Data Sheet (ADS) to allow the USPTO to obtain a copy of the previously-filed Chinese application.[17] And, after filing the application and preferably within four months of the filing date, applicants should check the USPTO Patent Center[18] website to confirm that a copy of the foreign priority application has been successfully retrieved and acknowledged because the USPTO sometimes may fail to retrieve to a copy of the foreign priority application even if a correct DAS code was timely submitted.

Information Disclosure Statement (IDS) Issues

The USPTO imposes a very strict duty of disclosure for patent applications, and many applicants make mistakes when trying to comply with this duty. Under U.S. patent law, any individuals "associated with the filing or prosecution of a patent application" have a duty to disclose "duty to disclose to the Office all information known to that individual to be material to patentability."[19] This is a duty that is very broadly defined, and failure to comply can result in the USPTO refusing to grant the patent application, even if it is otherwise allowable.[20]

Some applicants do not realize that this duty of disclosure extends to a wide variety of documents (e.g., foreign office actions, search reports, the results of internal search) and extends to many individuals (including the inventors, in-house counsels, and attorneys).[21] To comply with the duty of disclosure, applicants should maintain records of all the documents that are material to patentability and timely submit those documents to the USPTO. For example, whenever applicants receive a foreign office action in a counterpart application, applicants should review the foreign office action and timely submit the relevant references in the foreign office action unless the references are cumulative of the references already submitted to the USPTO or already considered by the examiner. The timeliness of the submission not only helps applicants better track the documents, but also helps avoid paying the IDS fee in some situations.

CONCLUSION

Given the complexity of filing Chinese patent applications in the United States, it is very important to hire U.S. patent counsel familiar with Chinese-to-U.S. patent filings. After all, even correctly-translated Chinese patent applications can, when filed in the United States, face additional (and expensive) rejections due to everything from how claims are structured to minor issues such as word choice, sentence structure, and how examples are discussed in the specification. Avoiding these issues early can make U.S. patent prosecution faster, easier, and cheaper.

Notes

1. 35 U.S.C. § 119.
2. 37 CFR § 1.55(f).
3. 37 CFR § 1.55(g).
4. https://www.wipo.int/en/web/pct-system/texts/time_limits.
5. Manual of Patent Examining Procedure (MPEP) § 1893.01(d).
6. MPEP § 1893.01(a)(2).
7. MPEP § 1893.01(a)(3).
8. MPEP § 1893.03.
9. https://www.uspto.gov/sites/default/files/documents/pe-faq.pdf.
10. MPEP § 1896.
11. https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule.
12. MPEP § 2163(I).
13. https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule.
14. https://english.cnipa.gov.cn/transfer/lawpolicy/patent-lawsregulations/915571.htm.
15. See MPEP § 601.
16. 37 CFR § 1.55(f).
17. https://www.uspto.gov/patents/basics/international-protection/electronic-priority-document-exchange-pdx.
18. https://www.uspto.gov/patents/apply/patent-center.
19. 37 CFR § 1.56.
20. Id.
21. Id.