Intellectual Property & Technology Law Journal

Edited by the Technology and Proprietary Rights Group of Weil, Gotshal & Manges LLP

VOLUME 35 • NUMBER 10 • NOVEMBER-DECEMBER 2023

The Ins and Outs of Incorporation by Reference

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Material that is recited in the specification of a patent application is certainly part of the disclosure. In the United States (and in many other jurisdictions), additional material that is not explicitly written into the specification can also become part of the disclosure. This additional material may be incorporated into the patent application from another document through an express reference to the document. This type of inclusion is referred to as incorporation by reference.

Generally, incorporation by reference may be found in two different contexts in a patent application. When a priority claim is made to another application, referred to as a parent application, to obtain the earlier filing date of the parent application (relative to the actual filing date of the patent application, referred to as a child application), the parent application may be incorporated by reference in its entirety.

Incorporation by reference of the entirety of a parent application with the earlier filing date is regarded as a precaution, because inadvertent omission of any description or drawing from the parent application in the child application can be remedied based on the incorporation by reference of the parent application in the child application. In some cases, the incorporation by reference of all preceding applications in a chain of multiple priority claims can prove critical to maintaining the priority chain and benefiting from the earliest filing date in the chain. A simple example of a priority chain involves three applications: an application claims priority to a priority application via a parent application for which the priority application is a parent.

In the priority context, a section of the patent application entitled "Cross-reference to Related Applications" may be used to list and incorporate by reference each application in a priority chain. Incorporation by reference of a priority document is generally part of the discussion of priority claims and is not detailed herein.

Another context in which incorporation by reference may be used in a patent application is in the description (e.g., background, detailed description). Unlike in the context of a priority claim, incorporation by reference within the body of the patent application may not be limited to only the incorporation of another patent or patent application. In some circumstances, the incorporated material may be in any previously published document (e.g., article, journal paper) and can have authors who are

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not among any of the inventors of the application incorporating the document by reference.

Portions or the entirety of a separate document, published before the filing of a patent application, may be included in the disclosure of a patent application through an express reference. In this context, incorporation by reference can allow the drafter of the patent application to efficiently include necessary or helpful material, use incorporated material as a safety net to ensure sufficient description of a claimed feature, or avoid mistakes that may result from trying to summarize or paraphrase material that may be necessary for a complete description of the claimed invention.

While incorporation by reference can be a valuable tool in patent application drafting, understanding how to properly incorporate material from another source, what material to incorporate, and how much of the material to incorporate can make the difference between enhancing a patent application and ultimately putting the patent in jeopardy.

Essential and Nonessential Material

Material incorporated into the description of a patent application may be regarded as essential or non-essential.[1] These two types of material are incorporated for different purposes and are subject to different rules.

Essential Material

Essential material, as the name implies, is material that is needed to fulfill one or more of the requirements for a patent application.[2] Incorporated material may be deemed essential if it is necessary to fulfill the written description requirement,[3] to ensure that the claims are not indefinite,[4] or to provide the requisite description to support a means or step for claim.[5]

Essential material may only be incorporated by reference to a U.S. patent or a U.S. patent application publication that contains the essential material and does not, itself, incorporate the essential material by reference.[6] That is, a chain of incorporation to an ultimate source of the essential material is not permitted. Instead, the document that is incorporated by reference must recite the essential material.

Incorporation by reference of essential material may be advantageous in different situations. For example, to provide support for multiple embodiments of an invention, such as a new compound of rubber which can be used in multiple types of tires, a drafter may incorporate by reference a U.S. patent or published patent application that discusses the design and manufacture of different types of tires such as bicycle tires, car tires, and construction tires. In the exemplary case, the incorporated reference provides written description support and enables embodiments directed to the manufacture of tires using the new compound. By using incorporation by reference for essential material related to aspects of the tire manufacturing, the drafter does not need to write those manufacturing details, which the inventors of the new compound of rubber may not even know, into the patent application. Yet, by incorporating that supporting material, the drafter may include claims that are not strictly limited to the new compound itself and may include claims to a larger system (e.g., a bicycle or bicycle tire including the new compound).

Similarly, a drafter may incorporate, by reference, a U.S. patent or published application that provides support for claims to a method of manufacturing a new circuit which may be manufactured using methods previously described. As another example, incorporation of essential material may support claims to a system, such as an electric vehicle or mobile device, when the application is focused on a specific component of that system, such as a new battery technology.

Proper incorporation by reference of essential material may also provide a safety net for patent drafters and help drafters to avoid mistakes. For example, a patent or published application may thoroughly discuss one or more features that are closely related to an invention that is the focus of a new application. By incorporating the patent or published application by reference into the new application, a drafter may include those features in claims directed to the invention in the current application. In the case where a discussion of previously known features is included in an application, additionally incorporating a document describing the features by reference within the current application can ensure that a complete disclosure of the features is included by way of the incorporation, even if a minor error was made in the description in the current application or information was inadvertently left out from the description.

Nonessential Material

Nonessential material is any material that is not required for a sufficient description of the claimed invention. Nonessential material may be incorporated by reference to U.S. patents, U.S. patent application publications, foreign patents, foreign published applications, prior and concurrently filed commonly owned U.S. applications, or non-patent publications.[7]

Incorporation by reference of nonessential material may be used to provide background information on a particular field or technology. Such background information may be used to establish the state of the art and demonstrate the benefits or improvements provided by the claimed invention over existing approaches. Incorporation by reference of nonessential material may be useful in differentiating an invention from prior art or conventional technologies and techniques known in the field of the invention.

Incorporation by reference to nonessential material, like incorporation of essential material, may allow a drafter to save time and the effort of learning aspects that are related, rather than central to the core inventive concept, when preparing a patent application. Incorporation by reference facilitates discussion or use (e.g., in the claims) of the relevant material without the need to specifically recite the material.

Follow the Rules

Once a drafter determines that material should be incorporated by reference, the drafter must be clear on the mechanics of the incorporation. In addition, understanding whether the material to be incorporated is essential or nonessential can ensure that the permitted type of reference is incorporated.

Say the Words

To properly incorporate material by reference, the incorporation by reference must be in the specification of the application, express a clear intent to incorporate by reference using the words "incorporat(e)" and "reference," and clearly identify the referenced patent, application, or publication.[8] An example of a proper incorporation by reference recites, "locomotive steam engines are discussed in U.S. Patent No. 1, the entirety of which is incorporated by reference herein." A specific order of the words is not required and may be changed without changing the effect (e.g., "U.S. Patent No. 1 is incorporated herein by reference in its entirety"). This type of statement is necessary for the incorporation of both essential and nonessential material.

By failing to use the words "incorporat(e)" and "reference" when referring to material, an application may fail to properly incorporate the material by reference.[9] However, if an error in the mechanics of incorporation by reference is brought to light during prosecution of the patent application, the applicant may be able to remedy the deficiency if the intent to incorporate the material by reference is deemed to be clear.[10]

For example, a United States Patent and Trademark Office (USPTO) examiner may issue an office action rejecting a claim as being insufficiently supported, because the material that the drafter intended to use for support was improperly incorporated. In a subsequent response, the applicant may be allowed to amend the specification to properly incorporate the material by reference, but only if the examiner agrees that the intent to incorporate by reference was clear in the original specification.[11] In this regard, the Manual of Patent Examining Procedures (MPEP) advises the examiner to consider the language used in referencing the material, the context in which the material is disclosed in the specification, and any arguments or evidence presented by the applicant.[12]

An unsuccessful incorporation by reference may result from a failure to properly say what is incorporated, as well as from a failure to say the words that convey the intent to incorporate by reference.[13] And, this failure, too, need not be fatal. If the published document that is intended to be incorporated by reference is sufficiently described to uniquely identify it, an incorrect citation to the document may not ultimately defeat the incorporation by reference.[14]

While corrections of improper incorporations by reference are contemplated, they may not always be permitted. Sufficiency of intent to incorporate by reference and of identification of the document to be incorporated are judged by an examiner during prosecution to determine if a correction may be made. Thus, successfully correcting an error in an original incorporation by reference statement may not be straightforward. Further, correction of an improper incorporation by reference is barred at the close of prosecution[15]. Following issue of a

patent with an incorrect incorporation by reference, a reissue process may have to be pursued. An issue of improper incorporation by reference being raised after allowance, when the patent with the improper incorporation is challenged in an invalidity action, for example, can be avoided through careful drafting in the first instance.

A 2018 case illustrates the advantage of using the correct language and clearly identifying the document to be incorporated. An application in a priority chain that led to a patent at issue was alleged to limit written description support for claims in the patent at issue because it recited "[t]his application discloses a number of improvements over and enhancements to the hybrid vehicles disclosed in the inventor's U.S. Pat. No. 5,343,970 (the '970 patent), which is incorporated herein by this reference. Where differences are not mentioned, it is to be understood that the specifics of the vehicle design shown in the '970 patent are applicable to the vehicles shown herein as well."[16] The USPTO Patent Trial and Appeal Board (PTAB) used the second sentence to limit the incorporation to only the disclosure of the '970 patent that does not differ from the subject patent, thereby excluding the material relied on for written description support.[17] However, even without an explicit recitation of a phrase like "in its entirety," the Federal Circuit found the language of the first sentence to be plainly sufficient to incorporate the '970 patent in its entirety and found that the second sentence has no bearing on the extent of incorporation.[18]

Understand the Purpose of the Material

Even if the mechanics of incorporation by reference are implemented correctly by using the words "incorporat(e)" and "reference" and clearly identifying the referenced document, incorrect selection of the type of document incorporated by reference may prove problematic.

The type of reference that may be incorporated as essential material (i.e., U.S. patent or U.S. patent application publication) is more limited than the type of reference that may be incorporated as nonessential material (i.e., U.S. patent, U.S. patent application publication, foreign patent, foreign published application, prior or concurrently filed commonly owned U.S. application, or non-patent publication). [19] Thus, the intended purpose of the material being incorporated by reference (e.g., whether it is fulfilling a requirement of the specification and is, therefore, essential, whether it is providing background information and is nonessential) should be clearly understood during drafting, especially when a document other than a U.S. patent or U.S. patent application publication is being incorporated by reference.

If the incorporation by reference is properly set out in a patent application but incorporates the wrong type of document (e.g., a foreign patent incorporated to provide written description support and, thus, serve as essential material), material from the document may be required to be added to the application.[20] Such a correction may be done during prosecution and would at least allow subsequent reliance on the material. However, considering the purpose of material being contemplated for incorporation by reference during drafting and selecting the appropriate type of document with the material based on the purpose can avoid the need for such corrective action.

Substance of Incorporation

While the procedural rules of incorporation by reference are fairly straightforward, substantive decisions about which material to incorporate can be fraught.

Incorporate Some or All?

When incorporating a document by reference, an important consideration is whether to incorporate all or only one or more portions of the document by reference. There are benefits and drawbacks to both options that should be considered.

Incorporating a document by reference "in its entirety" without review can prove to be problematic. The stakes of this decision can seem lower for nonessential material, because determining the material to incorporate may mean determining which portions of a document provide relevant background. Even in the case of nonessential material, however, a drafter should review the material being incorporated by reference.

Regardless of the purpose of the incorporation by reference (e.g., for background, to fulfill a requirement of the specification), the incorporated material is prior art. This is a significant distinction from the incorporation of a reference in the context of a priority claim. In the priority context, a prior application designated as a parent (or part of

a priority chain) and incorporated by reference in the application cannot be used as prior art against the application.

In the non-priority context, essential or non-essential material incorporated by reference from a prior publication in an application is still prior art against the application. Thus, the application drafter should ensure that none of the incorporated material could be seen as suggestive of the claimed invention in the subject application. For example, another (published and/or commonly owned) patent application or patent that is incorporated by reference in an application may discuss a feature that is part of the claimed invention in the application as being within the ordinary skill in the art. This type of discussion could be used to assert obviousness of the claimed invention. The incorporated application or patent may discuss modifications that could be made to a device or process, the suitability of features or functions of a device or process, and document-specific terminology, which may impact the prosecution of the subject application. It can also be problematic to incorporate material that may contradict or misconstrue aspects of the application.

On the other hand, not incorporating the entirety of a document by reference carries its own risks. In the case of essential material, incorporating only a portion of a document by reference may result in the application with the partial incorporation failing to provide requisite support for the claims. In addition, a drafter should bear in mind that all portions of the document, whether incorporated or not, are still prior art to be reviewed and understood to determine if (incorporated or unincorporated) material must be addressed within the application (e.g., by narrowing the claims or including a discussion distinguishing the material).

Know What You Are Adding

In addition to reviewing a document to determine whether to incorporate some or all of the document by reference, a drafter should review a document to understand the implications of the disclosure that the document will add to the patent application and how that disclosure, regarded as prior art, relates to the inventive concept.

In circumstances where the incorporated material is directly related to the inventive concept or needed to enable aspects of the claimed invention, the material to be incorporated should be considered even more closely. Ensuring that the incorporated material properly discloses aspects of the inventive concept (e.g., to satisfy the written description requirement for an embodiment) while making it clear that the material does not anticipate or render obvious the claimed invention may require discussion of the incorporated material in the application or additional review of the claims.

In a 2023 case, the Federal Circuit found that the '127 patent of Arbutus was anticipated by a commonly owned '069 patent that was not included in a priority claim, as it could have been. Under the applicable rules at the time of filing of the '127 patent, the failure to include the '069 patent in its priority chain rendered the '069 patent as prior art against the '127 patent. The finding of anticipation of the '127 patent by the '069 patent was based, in part, on the incorporation by reference of several documents in the '069 patent, including the '031 publication, which was also incorporated by reference in the '127 patent.[21] The court noted that the effect of incorporation by reference of the various documents was to make them effectively part of the '069 patent as if they were explicitly contained in the '069 patent.[22]

Although the '069 did not explicitly teach a limitation in the '127 claim, the limitation was found to be inherently anticipated by the '069 patent based on the commonly incorporated '031 publication.[23] Specifically, the limitation was found to naturally result from a method (Direct Dilution Method (DDM)) disclosed in both the '127 patent and the '069 patent through incorporation of the '031 publication.[24]

Generally, Arbutus' incorporation by reference of the '031 publication to provide support for DDM in many applications in its portfolio could be regarded as an effective strategy, especially when DDM is not at the core of a specific invention. However, this strategy introduces risks, as seen in the disposition of the '127 patent. The generic disclosure of DDM, incorporated by reference from the '031 publication, did not differentiate the '127 patent from Arbutus' own prior art (the '069 patent) that also incorporated the '031 publication by reference. In this case, additional disclosure in the '127 patent that detailed how novel features were obtained and that distinguished from the general

description incorporated from the '031 publication may have been helpful.

Conclusion

In summary, patent practitioners should be aware of the rules pertaining to incorporation of a document by reference to avoid potentially leaving out disclosure that may be necessary for sufficiency of the specification. In addition, knowing the risks posed by choices of which material and how much of the material to incorporate can help patent practitioners use incorporation by reference as an effective tool to provide efficient disclosure of features, processes, and other information related to a claimed invention.

Notes

1. 37 C.F.R. §§ 1.57(d), 1.57(e).
2. 37 C.F.R. § 1.57(d).
3. 35 U.S.C. § 112(a).
4. 35 U.S.C. § 112(b).
5. 35 U.S.C. § 112(f).
6. 37 C.F.R. § 1.57(d).
7. 37 C.F.R. § 1.57(e).
8. 37 C.F.R. § 1.57(c).
9. 37 C.F.R. § 1.57(c)(1).
10. 37 C.F.R. § 1.57(h)(1).
11. Id.
12. MPEP 608.01(p)(I)(2).
13. 37 C.F.R. § 1.57(c)(2).
14. 37 C.F.R. § 1.57(h)(2).
15. 37 C.F.R. § 1.57(h).
16. Paice LLC v. Ford Motor Co., 881 F.3d 894 (Fed. Cir. 2018).
17. Id. at 906.
18. Id. at 907.
19. 37 C.F.R. §§ 1.57(d), 1.57(e).
20. MPEP 608.01(p)(I)(2).
21. Arbutus Biopharma Corp. v. Modernatx, Inc., 65 F.4th 656 (Fed. Cir. 2023).
22. Id. at 663.
23. Id. at 665.
24. Id. at 664.