Secret Prior Art: Does Prior Art in a Provisional Patent Application Bar Future Patents

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NOTE


_In re Giacomini_, 612 F.3d 1380 (Fed. Cir. 2010).

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I. INTRODUCTION

The recent case of _In re Giacomini_ presented the United States Court of Appeals for the Federal Circuit with the issue of whether a provisional patent application could contain prior art that would bar a subsequent patent from registration. In this matter of first impression, the Federal Circuit interpreted the plain language of 35 U.S.C. sections 102(e) and 119 as permitting a provisional patent application to shift a patent application’s priority date, thereby enabling prior art to be found in an otherwise unpublished provisional patent application. With this ruling, the Federal Circuit increased the scope of “secret” prior art that is unavailable to an inventor until well after his patent filing.

_Giacomini_ could prove problematic because provisional patent applications are not published to the public, and thus an inventor – even one who researches diligently – may be unable to discover this “secret” prior art. Erroneously believing that nothing will prevent the granting of a patent, this inventor will continue to invest time and resources into developing his invention only to have his patent application denied due to the later revelation of the previously undiscovered provisional patent application. Though the Federal Circuit barely touches on this issue of “secret” prior art, its ruling will

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1. _In re Giacomini_, 612 F.3d 1380, 1384-85 (Fed. Cir. 2010). Provisional patent applications can be filed when an inventor is not ready to enter the official examination process, but it allows one to establish one’s filing date.

2. 35 U.S.C. § 122(a)(2)(A) (2006) ("An application shall not be published if that application is . . . (iii) a provisional application filed under section 111(b) of this title.") (referring to 35 U.S.C. § 111(b) (2006)).
have this very consequence. Thus, it appears that the court has expanded section 102(e) further than it intended.

This Note will examine whether prior art found in a provisional patent application can (and should) act as prior art to defeat a subsequent application by a second inventor. In looking at this issue, this Note will ask if Giacomini can be reconciled with the principles and policies that underlie patent law. To do so, this Note will first review the facts and holding of Giacomini. Then this Note will survey the patent statutes, giving particular attention to those statutes that deal with priority and prior art. Next, this Note will examine the reasoning of the Giacomini court. Finally, this Note will look at that reasoning in light of 35 U.S.C. sections 102(e) and 119 and the policy concerns behind these statutes, concluding that Giacomini expands section 102(e) beyond its intended purpose.

II. FACTS AND HOLDING

Four men – Peter Joseph Giacomini, Walter Michael Pitio, Hector Francisco Rodriguez, and Donald David Shugard (hereinafter referred to as “Giacomini Group”) – invented a new selective storing cache system that “efficiently populat[es] a cache with resources.” Shortly after conception and reduction to practice, the Giacomini Group sought protection on its invention by filing a nonprovisional patent application on November 29, 2000, with the United States Patent and Trademark Office. As its first claim, the Giacomini Group's patent application listed the following: “A method comprising: populating a cache with a resource only when at least i requests for said resource have been received; wherein i is an integer and is at least occasionally greater than one.” Simply put, this invention relates to a means of selectively storing data gathered on the Internet.

The method of “selectively storing data” can best be explained in terms of the World Wide Web. When one requests a website over the Internet, the request travels from “the user’s computer to the Web server that has the

3. See infra Part II.
4. See infra Part III.
5. See infra Part IV.
6. See infra Part V.
8. See In re Giacomini, 612 F.3d 1380, 1382 (Fed. Cir. 2010).
9. Id. This first claim was representative of the dozens of other claims contained in the Giacomini Group patent application. Id.
10. Id.
11. Brief of Appellants at 4, In re Giacomini, 612 F.3d 1380 (Fed. Cir. 2010) (No. 2009-1400), 2009 WL 3186100. Giacomini’s brief describes the invention in the terms of the Internet but acknowledges that the “invention is equally applicable to data processing systems and computer networks.” Id.
As the requests for this page filter in, the server has to fulfill all of these thousands of requests, which often leads to congestion. In order to help with this congestion problem, Web servers use “auxiliary Web servers” (also known as a “cache”) that help direct some of this traffic. Since a cache is made up of physical memory, it has a finite amount of space. Because of this, a cache is most helpful when it is designed to efficiently decide “which resources are stored in the cache and when.” If the cache is designed this way, it becomes more efficient and cuts down on the congestion problem. The Giacomini Group’s invention did just this: It decided which resources were stored in a cache and when.

After the Giacomini Group filed its patent application for the selective storing technique, the primary patent examiner rejected the claim and denied the patent. The examiner rejected the Giacomini Group’s patent application because it was anticipated by prior art found in the “Tran” patent, as well as the “Teoman” and “Chamberlain” patents. After the Giacomini Group received a non-final rejection of its claim, it appealed to the Board of Patent Appeals and Interferences (hereinafter “Board”).

On appeal, the Board affirmed in part and reversed in part the Primary Patent Examiner’s rejection of the Giacomini Group’s patent. The Board found that the Examiner erred in finding that the Teoman and Chamberlain patents were prior art to the Giacomini Group’s patent, and the Board therefore reversed this portion of the patent examiner’s decision. As to the Tran patent, the Giacomini Group argued to the Board that its patent was not anticipated by prior art contained within the Tran patent, and the patent examiner

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12. Id.
13. See id. at 4-5.
14. Id. at 5.
15. Id. at 6.
16. Id.
17. Id.
18. See in re Giacomini, 612 F.3d 1380, 1381 (Fed. Cir. 2010).
19. Ex parte Giacomini, No. 2009-0139, 2009 WL 1031659, at *1 (B.P.A.I. April 15, 2009). The Tran patent is patent number 7,039,683. Id. The other two patents, which this Note will not discuss, were patent number 6,463,509 (the “Teoman” patent) and patent number 6,408,360 (the “Chamberlain” patent). Id.
20. Id. The claims that were rejected were 1, 2, 8, 9, 11, 12, 15, 16, 22-25, 27, 28, 31, and 32 of their patent application. Id. The Giacomini Group was able to appeal this decision to the Board based on two non-final rejections of its original patent application. 35 U.S.C. § 134 (2006) (“An applicant for a patent, any of whose claims has been twice rejected, may appeal from the decision of the primary examiner to the Board of Patent Appeals and Interferences. . . .”).
22. Id. This Note will not discuss this aspect of the Board’s decision as it is not discussed in In re Giacomini.
had therefore erred in rejecting the Giacomini Group patent on this separate ground.\textsuperscript{23}

The crux of the Giacomini Group’s argument to the Board was that the Tran patent should not be considered prior art because the 102(e) filing date\textsuperscript{24} was December 29, 2000, which was after the filing date of the Giacomini Group’s patent, November 29, 2000.\textsuperscript{25} The Giacomini Group argued that because its patent application was filed before the Tran patent, the Tran patent could not possibly contain prior art.\textsuperscript{26} In addition to this argument, the Giacomini Group argued that Tran does not qualify as prior art because the provisional patent application should not lead to a shifting of the priority date and a finding of effective prior art.\textsuperscript{27}

After hearing the Giacomini Group’s argument, the Board affirmed the section 102(e) rejection of the Giacomini Group’s patent, stating the appropriate date for determining domestic priority is not the date of the patent application, but the date of the \textit{provisional} patent application.\textsuperscript{28} To this end, the court noted that the date of the Tran provisional patent was September 25, 2000, which preceded the filing of the Giacomini Group’s patent on November 29, 2000, by almost exactly two months.\textsuperscript{29} The Board reasoned that 35 U.S.C. § 119(e) “shifted the effective reference date of Tran’s patent to the effective reference date of Tran’s provisional.”\textsuperscript{30} The Board also held that, as a matter of law, a provisional patent can contain prior art that will anticipate a subsequently filed application.\textsuperscript{31} The Giacomini Group appealed this point of law directly to the United States Court of Appeals for the Federal Circuit.\textsuperscript{32}

On appeal, the Giacomini Group presented the same arguments to the Federal Circuit.\textsuperscript{33} The Federal Circuit focused its decision on whether a provisional patent can be used to anticipate a patent for purposes of prior art.\textsuperscript{34} The court first looked at both the text and the underlying policy of 35 U.S.C. § 102(e) to determine whether a provisional patent could constitute a valid

\begin{itemize}
\item 23. \textit{Id.} at *4.
\item 24. 35 U.S.C. § 102 ("A person shall be entitled to a patent unless . . . (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention . . . .") (emphasis added).
\item 26. \textit{Id.}
\item 27. \textit{See id.}
\item 28. \textit{Id.} at *4-5 (emphasis added). The court relied on 35 U.S.C. § 119(e) as authority to point to the provisional Tran patent. \textit{Id.} at *4. \textit{See discussion infra} Part III. A.
\item 30. Brief of Appellants, \textit{supra} note 11, at 1.
\item 32. \textit{In re Giacomini}, 612 F.3d 1380, 1382 (Fed. Cir. 2010).
\item 33. \textit{Id.} at 1383-84.
\item 34. \textit{Id.} at 1385.
\end{itemize}
filing date for prior art. The court found that both the statute’s language and the patent law policy of preemption dictated that the court should affirm the Board’s ruling. Therefore, the court held that because the first inventor is entitled to the patent for the invention, a provisional application “shows that someone else was the first to invent.” The court reasoned that failing to affirm the Board’s decision would “create an anomalous result [in which] someone who was not the first to invent in the United States receives a patent.” Because of this, the Federal Circuit affirmed the Board’s rejection of the Giacomini Group’s patent.

III. LEGAL BACKGROUND

This section will be broken down into three distinct parts. First, this section will explore the history of American patent law and its foundational “first to invent” principle. Next, this section will address two of the requirements of patentability: Novelty and nonobviousness. The sections on novelty and nonobviousness will attempt to tie together these patent ideas with the principle of the “first to invent.” The third and final part of this section will survey the statutes of Title 35 and its effect on the patent principle of prior art. Title 35 section 102(e) and the principle of prior art need to be covered in this part of the Note because it is important to understand the history of this patent law theory to see how the holding in the instant decision has expanded the theory behind prior art beyond its underlying policies.

A. General Historical Framework and the Idea of the First to Invent

Patent law seeks to award a patent to the first person to create a protectable invention. To that end, the Supreme Court has stated, “the patentee must be the first inventor.” However, achieving this goal is often easier in theory than in practice due to the difficulties of determining who the “first” inventor is. Responding to this problem, Congress codified the rules for “loss of right to patent” in the 1952 Patent Act. While it remains true that the policy and

35. Id. at 1383.
36. “A person shall be entitled to a patent unless . . . (c) the invention was described in . . . (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent.” 35 U.S.C. § 102 (2006).
37. “The rule stems from the principle that . . . ‘one really must be the first inventor in order to be entitled to a patent.’” In re Giacomini, 612 F.3d at 1384 (quoting Alexander Milburn Co. v. Davis-Bournonville Co., 270 U.S. 390, 400 (1926)).
38. Id.
39. Id.
40. Id. at 1385.
theory of patent law is to give the first to invent priority for the patent, the statutes of the 1952 Patent Act govern the right of priority of patents. Under that body of law, the issue of “first priority” and prior art relating to provisional patents is a complicated process of statutory interpretation, and it was an issue of first impression for the Federal Circuit in Giacomini.

Policy and historical reasons underlie the current rule in the United States that patents are granted to the first to invent, rather than the first to file for an application. The United States is in the minority on this issue. Whereas most other countries award patents to the first to file, under American law the “party who is second to file may establish priority by showing the earliest date of invention.” Historically, there have been few changes in patent law in the United States, and the rule that the patentee must be the first to invent has been exhibited early in American history. America enacted its first Patent Act in 1790 and allowed for one seeking a patent to challenge a patent where the patent holder was not the “first and true inventor.” Under this Act, an individual could prove himself to be the true inventor and thereby block another from claiming patent rights. Forty-six years later, Congress enacted the 1836 Act and affirmed the rule that in the United States, the first to invent is entitled to a patent, not the first to file. As in the 1790 Act, the plain language of the 1836 Act did not expressly define the right of priority, but it was implied in the defense available to one challenging the validity of a patent. Under this defense, an applicant attempting to establish patent priority could invalidate another’s patent by showing that individual “had surreptitiously or unjustly obtained the patent for that which was in fact invented or discovered by another, who was using reasonable diligence in adapting and perfecting the same.” In other words, if the plaintiff could show that he or she was diligently working to reduce an invention to practice, he or she could preempt someone else who swooped in and filed the patent before the first inventor could. This interpretation of the 1836 Act can be found in a Massachusetts Circuit Court case of the time, Reed v. Cutter. The policy reason behind this law is obvious – it protects

43. 35 U.S.C. §§ 102, 119, 111.
44. Brief of Appellants, supra note 11, at vii (“No other appeal from this application has previously been before this or any other appellate court. Counsel knows of no case pending in this or any other court that will directly affect or be directly affected by this Court’s decision in this appeal.”).
45. 3A DONALD S. CHISUM, CHISUM ON PATENTS § 10.01 (MB 2011).
46. Id. § 10.02.
47. Id. (citing Act of Apr. 10, 1790, ch. 7, §§ 1, 5, 6, 1 Stat. 109).
50. Id.
51. Id.
52. Reed v. Cutter, 20 F. Cas. 435, 438 (Mass. Cir. Ct. 1841) (“The clause of the fifteenth section, now under consideration, seems to qualify that right, by providing
the true inventor from being undercut by another who is simply able to file a patent application more quickly.

Another important case in establishing the concept of the "first inventor" came in 1893 out of the U.S. Court of Appeals for the Sixth Circuit. In that case, *Christie v. Seybold*, the court applied the "reasonable diligence" test when deciding whether the creator of a power press was truly the first inventor. The facts of the case show that the appellant developed the concept for the power press, but the second inventor was the man who actually put the invention to use (reduced the invention to practice) and filed the patent application. The court reasoned as follows:

The [person] who first reduces an invention to practice is prima facie the first and true inventor, but that the person who first conceives, and, in a mental sense, first invents, a machine . . . may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part, so that they are substantially one continuous act.

By this rule, the court placed the burden on the first inventor to show that he or she was using "reasonable diligence" in applying the invention.

In 1926, *Alexander Milburn Co. v. Davis Bournville Co.* further solidified the idea of "first to invent" based on the previous Acts. The rule of *Milburn* is best described as follows: "If X files today, and there is already pending Y's application which completely and adequately describes the invention, and X cannot carry his or her date of invention back of the date of Y's application, X is not entitled to a patent . . ." The phrase "carry his or her date of invention" may refer to the idea of "reasonable diligence" that the Sixth Circuit set out in *Christie*. The *Milburn* case is considered one of the seminal cases that established the "first to invent" rule in patent law.

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54. Id. at 72, 75.
55. Id. at 71-72.
56. Id. at 76 (emphasis added).
57. Id.
58. See 270 U.S. 390, 399 (1926).
59. 60 AM. JUR. 2D Patents § 118 (2005).
60. See Christie, 55 F. at 76.
61. See 3 CHISUM, supra note 45, § 3.07.
The next big change in patent law occurred upon the enactment of the 1952 Patent Law Act, which expressly codified the rules of Reed, Christie, and Milburn in statutory form. In this Act, the express terms enacted by Congress helped solidify the idea of the “first to invent” theory. The 1952 Act and its subsequent amendments created 35 U.S.C. sections 102, 119, and 120, which are at the center of the dispute in Giacomini.

B. Historical Framework of Prior Art, Loss of Novelty, and Nonobviousness

After establishing the framework of the “first to invent” doctrine and other foundations of patent law, one must turn to the other main issue at work in Giacomini – the principle of prior art. Apart from issues of priority, a patent application can also be rejected or barred from receiving a patent if the invention’s claims are anticipated by prior art references. Prior art constitutes “those references which may be used to determine the novelty and nonobviousness of claimed subject matter in a patent application or patent.” Novelty and nonobviousness are two of the three basic conditions of patentability that can preclude one from being granted a patent. Accordingly, a patent will be denied if it is shown that the prior art has rendered the patent either obvious or no longer novel; that is, loss of novelty and nonobviousness are two distinct issues that can operate independently to block a patent.

1. Loss of Novelty

The requirement of novelty was explicitly added to patent law in the 1836 Patent Act. In that act, Congress required “novelty over the prior art.” Case law of the time displayed the same idea that was later codified in the 1836 Patent Act. A quote from one important case concisely states the policy behind novelty: “To entitle a man to a patent, the invention must be new to the world.” The reason we give patent protection is to encourage the

63. See id. at 797-98; Alexander Milburn Co., 270 U.S. at 399; Christie, 55 F. at 75; Reed v. Cutter, 20 F. Cas. 435, 438 (Mass. Cir. Ct. 1841).
64. See 66 Stat. at 797-98, 800-01, 803.
65. In re Giacomini, 612 F.3d 1380, 1381-83 (Fed. Cir. 2010). These statutes will be examined infra Part III.B.
67. 1 CHISUM, supra note 45, § 1-Glos.
68. Id. The other requirement is utility. Id.
69. Id.
70. Id. OV-1.
71. Id.
disclosure of new and useful inventions. If an invention is not new, there is no reason to give it patent protection.

Today, the novelty rule is expressly codified in 35 U.S.C. section 102. Under this statute, loss of novelty is established if "(1) all the elements of an invention, as stated in a patent claim, (2) are identically set forth, (3) in a single prior art reference." The Federal Circuit has held that lack of novelty is not established by merely finding that the "prior art disclosed substantially the same things" as the challenging patent. Rather a finding of lack of novelty must be "established by clear and convincing evidence." Section 102 is noteworthy in that most of its requirements concern either disclosed inventions or inventions that were "known or used by others." It is this language of section 102 – that the invention must be known or described to be prior art – that is at issue in Giacomini. This requirement of publication makes sense in terms of novelty. If an invention is going to be denied patent protection because it was considered to be no longer novel, the only way to test this is to see if the invention was known by others. Novelty would lose much of its weight as a requirement of patentability if it could be satisfied by things unknown to the public.

2. Obviousness

Arguably, the most important requirement of patent law is that of obviousness. An invention must be nonobvious at the time of invention in order to receive patent protection. This requirement is codified in section 103(a), which states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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75. 1 CHISUM, supra note 45, § 3.02 (citations omitted).
77. Id.
78. Id. at 1557.
79. In re Giacomini, 612 F.3d 1380, 1383-85 (Fed. Cir. 2010).
81. Id. (emphasis added).
Nonobviousness means that "an invention must not have been obvious to one with ordinary skill in the art to which the subject matter of the invention pertains at the time of the invention and in the light of the teachings of the prior art."\(^{82}\)

Though the concept of nonobviousness is somewhat similar to novelty, it remains distinct as a broader concept.\(^{83}\) Thus, while novelty bars a patent based on things that are known to the public, "the nonobviousness requirement extends the field of unpatentable material beyond that which is known to the public under § 102, to include that which could readily be deduced from publicly available material by a person of ordinary skill in the pertinent field of endeavor."\(^{84}\) In other words, if an invention could easily be deduced (created) from knowledge or information already around and in use, then it would fail the nonobviousness requirement. The policy reason behind the rule of nonobviousness is pretty, well, obvious – mere improvements on well known, public inventions should not be able to gain patent protection.

Along with being a statutory requirement under section 103(a),\(^{85}\) there are underlying policy reasons for mandating nonobviousness as well. An economic justification for having a nonobviousness requirement is that the American patent system does not want to grant patent protection for trivial advancements on already patented inventions.\(^{86}\) Instead, the patent system would rather give protection to significant advances.\(^{87}\) This is partly because society gains more from the disclosure of large advancements in technology than small ones.\(^{88}\) Since the purpose of the patent system is a quid pro quo exchange of knowledge for protection, America tries to encourage as much disclosure as possible.\(^{89}\)

In keeping with this policy, it has been said that the only inventions that should be patentable are those inventions that are patent induced.\(^{90}\) This means that only those inventions that were inspired by the allure of patent protection should be able to gain that protection. Any other invention even-

\(^{82}\) 2 CHISUM, supra note 45, § 5.01.
\(^{84}\) Id. at 150 (emphasis added).
\(^{85}\) 35 U.S.C. § 103(a).
\(^{87}\) See id.
\(^{88}\) See id. at 9.
\(^{89}\) Id. at 9 ("Only inventions and discoveries which furthered human knowledge, and were new and useful, justified the special inducement of a limited private monopoly. Jefferson did not believe in granting patents for small details, obvious improvements, or frivolous devices.").
\(^{90}\) Id. at 11 ("The inherent problem was to develop some means of weeding out those inventions which would not be disclosed or devised but for the inducement of a patent.").
tually would have been invented regardless of the patent system and thus is considered too obvious to gain protection.

Section 103(a)'s nonobvious requirement is consistent with section 102's loss of novelty in that they both speak in terms of the subject matter of the claims having been previously disclosed or described. This points to the policy underlying these two requirements: If an invention is made public — "disclosed or described" — then the public has no interest in granting patent protection to one who subsequently attempts to file a patent application. In addition, if something is obvious or no longer novel then one seeking patent protection is not the true first inventor. On the other hand, if something is both nonobvious and novel then one can possibly gain patent protection despite being the second to invent.

While the rules of novelty and nonobviousness are distinct, they are intertwined in that they both work together to prevent inventions from receiving patent protection if they are not truly the brainchild of the patentee. This policy ties in with the "first to invent" doctrine in that our patent system seeks to reward those who create innovative inventions rather than those who merely make improvements to inventions that are already known, non-novel, or obvious. In a way, however, the rules of novelty and nonobviousness work as safeguards against the rule of "first to invent" in that, so long as an invention meets these requirements of novelty and nonobviousness, then the "first to invent" doctrine will not bar a "second" inventor from being granted patent protection. If a patent applicant has performed his "due diligence" by searching for prior art and has found none (because none exists), then that person, theoretically, should receive a patent despite not being the true first inventor.

Two examples from the Giacomini Group are illustrative. First, consider the following:

Alice invents a widget and writes a magazine article describing the widget. After Alice writes the article but before it is published, Bob independently invents the widget and files a patent application claiming the widget. Pursuant to United States law, Bob would re-

92. As mentioned, those two requirements are novelty and nonobviousness. See 1 CHISUM, supra note 45, § 1-Glos.
95. See infra notes 98-99.
97. Id.
receive a patent for the widget even though he was not the “first” to invent. 98

In this scenario, Bob would not be barred by any prior art because even though he was not first to invent, there was no published prior art under section 102(a) or 102(c) and thus his invention remained novel and nonobvious.

Next, consider the following scenario:

Alice conceives of a widget. Afterwards, Bob independently conceives of the widget and files a patent application claiming the widget. Subsequently, Alice files a patent application claiming the widget. An interference is declared with Alice as the junior party. It is deemed that Alice cannot show diligent reduction to practice and Bob is granted the patent for the widget even though he was not the “first” to invent. 99

On these facts, Bob would receive the patent for the same reasons as in the first example.

While these two parts of prior art – novelty and nonobviousness – are distinct from the first to invent, all three requirements play an integral part in Giacomini.

C. Statutory Interpretation of Title 35 and Prior Art

Giacomini revolved around the proper interpretation of sections 102 and 119. The operative language in section 102 states:

A person shall be entitled to a patent unless . . . (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent. 100

98. Id. at 11-12 (emphasis added). This hypothetical works well to describe why Bob would not be barred by 102(a) or 103(a), but it does not consider 102(g) which is not the focus of this Note. See 35 U.S.C. §§ 102(a), 102(g), 103(a). Under 102(g) it is possible that Bob would not receive patent protection depending on how diligently Alice was pursuing her invention. Id. § 102(g).

99. Reply Brief of Appellants, supra note 96, at 13 (emphasis added). This hypothetical, unlike the previous one, does not have any 102(g) issues because it explains that Alice has not shown diligence in reducing her invention to practice. 35 U.S.C. § 102(g). Again, this is not the focus of this Note.

100. 35 U.S.C. § 102. Other parts of § 102 that are not relevant to this Note include:
This statute codifies the idea found in *Milburn* and *Reed* that if the invention is described in a filed patent application, then a second inventor cannot be granted the patent.  

There are strong policy reasons for granting a patent to the first to invent rather than the first to file. Even before the current statutory language, these policy reasons were found in *Alexander Milburn v. Davis-Bournville Co.* In *Milburn*, the Court recognized that the underlying policy of granting the patent to the first to invent arises from the danger that the invention was publicly described, and therefore the second to invent could have stolen this idea out from under the first actor. The *Milburn* justification — the danger of publicly described inventions — is in accord with sections 102(a), (b), and (c) but does not fit with section 102(e). While section 102(a), (b), and (c) deal with situations where prior art is found in publicized references, section 102(e) applies to the earlier filed patent application which often “does not publish,” and, in terms of a provisional patent after the decision of the instant case, “[t]he inventor who files a provisional hasn’t made any effort to make his description public.”  

The 1952 Patent Act also created 35 U.S.C. section 119, titled “Benefit of earlier filing date; right of priority.” This statute describes how the filing date of a provisional patent application can, in certain circumstances, become the priority date for that patent. The pertinent language of section 119(e)(1) reads as follows:

An application for patent filed . . . for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in a provisional application filed under section 111(b) of this title,  

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

*Id.*

101. See 35 U.S.C. § 102 (“A person is entitled to a patent unless . . .”) (emphasis added). While this is the part of the statute that the appellee’s rely on to say that the Tran patent should be prior art, it should be noted that this statute seems to try to codify the idea of “first to invent” but does so in a roundabout way. See Reply Brief of Appellants, *supra* note 96, at 20-24.

102. 270 U.S. 390 (1926).

103. *Id.* at 402.

104. See 35 U.S.C. § 102(a) (“The invention was known or used by others . . . or described in a printed publication . . .”); 35 U.S.C. § 102(b) (“[T]he invention was patented or described in a printed publication in . . . a foreign country or in public use or on sale in this country . . .”).


by an inventor or inventors named in the provisional application, shall have the same effect, as to such invention, as though filed on the date of the provisional application . . . if the application for patent filed under section 111(a) or section 363 of this title is filed not later than 12 months after the date on which the provisional application was filed and if it contains or is amended to contain a specific reference to the provisional application. 107

The plain language of this statute seems in line with section 102(e)(2). While section 119 certainly applies to provisional patent applications, it is more traditionally applied to foreign priority rights. 108 One reading of section 119 shifts the reference date of a patent to the earliest filing date and moves back the priority date of a patent to the earlier provisional application date. 109 Patents have both a reference date and a priority date. The reference date of the later “child” continuation patent may be shifted, based on section 120, to the reference date of the earlier “parent” patent under certain circumstances. 110

A leading case interpreting section 119 and its effect on prior art is In re Hilmer, which was decided by the United States Court of Customs and Patent Appeals in 1966. 111 In that case, the court was asked to interpret 35 U.S.C. section 119 in order to determine if a patent had an “effect as prior art as of a foreign filing date.” 112 The court held “that section 119 does not modify the express provision of section 102(e) that a reference patent is effective as of the date the application for it was ‘filed in the United States.’” 113 Hilmer shows how section 119 has traditionally been used to decide the prior art with a foreign filing date. However, this case was decided before 119(e) was added to section 119 and thus “broad language in Hilmer concerning section 119 is not applicable to provisional applications.” 114 Subsection 119(e) was added in 1994. 115

107. Id. § 119(e)(1).
108. Applying § 119 to provisional patents is an issue of first impression because most of this section refers to patents filed in a foreign country. See 35 U.S.C. § 119(a) (“An application for patent for an invention filed in this country by any person who has . . . previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States . . . shall have the same effect as the same application would have if filed in this country . . . .”).
110. Id. at 18-19. The “child” patent is the application filed after a “parent” but wants to claim the reference or priority date of the “parent” application.
111. 359 F.2d 859 (C.C.P.A. 1966).
112. Id. at 861.
113. Id.
114. In re Giacomini, 612 F.3d 1380, 1384 (Fed. Cir. 2010).
115. Id.
Now that the background and policy behind sections 102 and 119 have been explored, this Note moves to the instant decision in *In re Giacomini*. With sections 102 and 119 in mind, as well as the various decisions interpreting these statutes, the question before the court in *Giacomini* becomes: How do these statutes apply to provisional applications and the references found therein?

**IV. INSTANT DECISION**

Writing for a unanimous court, Chief Judge Randall Rader identified the issue before the Federal Circuit in *Giacomini* as the “eligibility of the Tran patent to serve as prior art under 35 U.S.C. § 102(e).” The court did not focus on the factual question of whether the subject matter of the two patents’ claims was sufficiently similar because the Board found that “Giacomini does not dispute[] that the Tran patent teaches all of the claimed features in Giacomini’s application.” After the court acknowledged that its review of the Board’s legal conclusions, “including statutory interpretation,” was without deference and that anticipation of prior art was a question of fact, the court proceeded to answer the question of the prior art based on the provisional patent.

The court first interpreted the language of 35 U.S.C. § 102(e). The court focused on the plain language which states in pertinent part, “[a] person shall be entitled to a patent unless . . . the invention was described in . . . (2) a patent granted on an application for patent.” The court emphasized the “application for patent” language and then defined that term “application” as encompassing “provisional applications for patent.” Because the court read section 111(b)(8) as applying to both provisional and nonprovisional patents, it therefore interpreted section 102(e) to mean that a provisional ap-

116. *Id.* at 1382.
117. *Id.* The Federal Circuit has jurisdiction over this appeal from the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office. 28 U.S.C.A. § 1295(a) (West 2006 & Supp. 2011) (“(a) The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction . . . (4) of an appeal from a decision of – (A) the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office with respect to patent applications and interferences, at the instance of an applicant for a patent or any party to a patent interference, and any such appeal shall waive the right of such applicant or party to proceed under section 145 or 146 of title 35.”).
118. *In re Giacomini*, 612 F.3d at 1382.
119. *Id.* at 1383.
120. *Id.* (quoting 35 U.S.C. § 102(e)(2) (2006)).
121. *Id.* (citing 35 U.S.C. § 111(b)(8)) (“The provisions of this title relating to applications for patent shall apply to provisional applications for patent, except as otherwise provided, and except . . . [in] sections 115, 131, 135, and 157 of this title.”).
plication can be used for a suit of anticipation for prior art purposes. The court stated that “an applicant is not entitled to a patent if another’s patent discloses the same invention, which was carried forward from an earlier U.S. provisional application or U.S. non-provisional application.”

The court went on to interpret the other important Title 35 statute – section 119. The court wrote that 119(e) “treats a nonprovisional application as though filed on the date of its corresponding provisional application.” The court interpreted the “specific reference” language of section 119 to mean that “the provisional application must provide written description support for the claimed invention” before this provisional application can be used to shift the reference date. This means that the provisional patent must describe the claimed invention that the patent applicant is hoping to patent. However, the court concluded the validity of the “specific reference” was not at issue because the Giacomini Group “never argued before the Board that the Tran provisional failed to provide written description support for the claimed subject matter,” and thus the Giacomini Group had waived this argument. Because the court found that the Tran provisional patent sufficiently described the claimed subject matter to satisfy section 119(e), it ruled that this provisional patent “shall have the same effect, including a patent defeating effect, as to the claimed invention as though it was filed on the date of the Tran provisional.”

By interpreting the statutory language in a way that permits the provisional patent to shift the reference date of a patent filed at a later date, the court believed it reached a ruling that was consistent with the “fundamental rule . . . that the patentee must be the first inventor.” The court reached its ruling to adhere to the traditional “first to invent” rule codified in Title 35, thereby avoiding an “anomalous result where someone who was not the first to invent in the United States” was able to receive a patent. Furthermore, the court rejected the Giacomini Group’s attempt to distinguish Milburn on the grounds that Milburn dealt with a nonprovisional application by stating that “a provisional application similarly shows that someone else was the first to invent.”

122. Id.
123. Id. (emphasis added).
124. Id.
125. Id. (citing 35 U.S.C. § 119(e)).
126. Id.
127. Id. The court never discussed the fact that provisional patents are often not disclosed and thus there may be a problem of “secret” prior art. See discussion infra Part V.
128. In re Giacomini, 612 F.3d at 1384 (internal quotation marks omitted).
129. Id. (quoting Alexander Milburn Co. v. Davis-Bournonville Co., 270 U.S. 390, 402 (1926)).
130. Id.
131. Id.
The alternative argument the Giacomini Group presented to the court was that section 119 deals with foreign filing dates and thus the court’s interpretation of this section as to provisional patents was erroneous. As discussed previously, the court in In re Hilmer found that there was a distinction between a priority date under section 119 and the reference date under section 102. Giacomini attempted to distinguish Hilmer by pointing out that at the time of Hilmer, section 119 dealt only with foreign priority. Because it was not until 1994 that Congress added section 119(e) to address provisional patents, the court concluded that the “broad language in Hilmer concerning section 119 is not applicable to provisional applications.”

Based on the reasoning above, the court found that because the Tran provisional application was filed on September 25, 2000, and the Giacomini Group’s patent application was filed on November 29, 2000, then the Giacomini Group was neither the first to invent nor the first to file. Also, because Tran’s patent referenced the claims in Giacomini’s patent, the Tran patent acted as prior art to anticipate the Giacomini Group’s patent. By finding that Tran’s provisional application was valid prior art, the Giacomini Group’s patent lost its novelty under section 102(e). Therefore, the court affirmed the Board’s rejection of the Giacomini Group’s patent based on the anticipation of prior art found in the Tran patent’s previously filed provisional application.

V. COMMENT

The Federal Circuit’s very short decision in Giacomini failed to recognize and address the real issue the case proposed. Though Giacomini certainly concerned the establishment of a date of priority, the more important issue before the court was whether or not prior art could, or perhaps should, be found in a provisional patent. Looking forward, the Federal Circuit has expanded patent policy and the plain language of section 102(e) in a way that may have a detrimental effect on future inventors attempting to patent a new invention.

Two policy reasons exist as to why a provisional patent should not be able to contain prior art or shift the reference date of a subsequently filed patent, but the court addresses neither policy issue. The first policy reason is

132. Id. (relying on In re Hilmer, 359 F.2d 859 (C.C.P.A. 1966)).
133. See supra notes 111-13 and accompanying text.
134. In re Giacomini, 612 F.3d at 1384.
135. Id.
136. Id.
137. Id. at 1385.
138. Id.
139. See id. at 1383-85.
140. Id. at 1385.
that a provisional patent "cannot publish," thus it cannot become known to the public at large or the first inventor looking to file for patent protection.  

The second policy reason is that there is no prohibition against adding new matter "to a non-provisional that succeeds a provisional," thus the inventor of a minor provisional patent could greatly expand that invention and effectively block future inventions.  

For these two reasons, any prior art found in a provisional patent is in essence "secret" and undiscoverable to the second inventor.

A. Non-Publishability of Provisional Patents

This section will begin with the first policy question raised – the fact that a provisional patent does not publish. Historically, through the first to invent doctrine, a patentee receives protection for his or her invention because the patentee has invented something new and useful. Before an inventor seeks patent protection, it is wise for that inventor to do a thorough search for any prior art references that could possibly block the inventor's patent. A search for prior art will tell the inventor whether to pursue the patent process or abandon patent protection since the invention will have been anticipated. With this point of view in mind, consider again the situation facing Giacomini Group.

The Giacomini Group filed its nonprovisional patent application on November 29, 2000. Prior to doing so, it is assumed that the Giacomini Group did in fact conduct research to determine whether the Patent Office had on file any prior art references. It is also assumed that the Giacomini Group did outside research to see if any prior art had been published anywhere. However, the Tran provisional patent was filed on September 25, 2000, two months prior to the Giacomini Group's application. This application did not publish, and the Giacomini Group had no way of knowing of its existence. The result is that regardless of how thoroughly the Giacomini Group researched, it never could have found this prior art reference in the Tran provisional. This is because of the long-standing rule that provisional patent applications "shall not be published."

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141. Brief of Appellants, supra note 11, at 32 ("A provisional cannot publish."). See 35 U.S.C. § 122(b)(2)(A) (2006) ("An application shall not be published if that application is . . . (iii) a provisional application filed under section 111(b) of this title." (emphasis added)).

142. Brief of Appellants, supra note 11, at 12, 21.


144. In re Giacomini, 612 F.3d 1380, 1382 (Fed. Cir. 2010).

145. Id.

146. Brief of Appellants, supra note 11, at 14.

Therefore, the Giacomini Group mistakenly thought the selective storing cache invention was clear of any prior art interference.\footnote{148} This outcome creates an enormous problem in patent law. When a provisional application does not publish, its prior art references remain secret, and no amount of due diligence can protect a future inventor from rejection. While it is true that we want to award a patent to the first to invent, and Tran most likely was the first to invent, the reason that the patent system operates this way is to encourage disclosure and efficient use of an inventor’s time and resources. By saying that secret prior art is sufficient to bar a patent based on novelty or nonobviousness, the court vitiates the point of these requirements. If no amount of research can reveal that an invention is no longer novel or has become obvious, then these once rigorous requirements have lost their effect. Not only has this requirement lost its effect, but now this holding will undercut the policy of patent law by making inventors question whether or not there is unpublished prior art that will block their attempt to patent. This will chill creativity and keep possible inventions from the hands of the public, which is the opposite of the outcome the patent system intends to promote.

In fairness, this Note’s stance on the policy outcome of \textit{Giacomini} does not in and of itself resolve the problem where a provisional application does not publish the prior art, and thus two inventors claim the same subject matter. However, this Note does not need to resolve this problem, because a statutory solution already exists where multiple parties claim the same subject matter. In 35 U.S.C. section 102(g), an inventor is barred from receiving a patent if the same invention was previously made by an inventor (as is the case with 102(a) and (e) as well).\footnote{149} The solution comes at the end of 102(g), which says,

\[
\text{In determining priority of invention \ldots there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.}\tag{150}
\]

This gives a possible solution to a second party in an interference suit to demonstrate that the first inventor did not show reasonable diligence in attempting to reduce to practice. In this hypothetical, it is possible for the second inventor to receive a patent. To be clear, this is not the case in \textit{Giacomini}, as it deals with whether there was prior art. But again, this statute provides a solution to a potential problem with the stance of this Note.

The Giacomini Group put forth a statutory argument against the holding in \textit{Giacomini}, arguing that a plain reading of section 102 shows Congress did

\begin{itemize}
  \item \footnote{148} See \textit{In re Giacomini}, 612 F.3d at 1385.
  \item \footnote{149} 35 U.S.C. § 102(a), (e), (g).
  \item \footnote{150} Id. § 102(g).
\end{itemize}
not intend for provisional patent applications to be included. Section 102(e) states that one may be entitled to a patent unless “[t]he invention was described in . . . an application for patent, published under section 122(b).”

Because a provisional application is not published under section 122(b) and even more, section 122(b)(2) lists provisional patents as an exception to publication – section 102(e) did not intend to include provisionals to create a novelty bar against obtaining a patent. Not only did Giacomini confuse the clear rules outlined in statutes, but it contradicted the policies found in the common law.

The holding in Giacomini is in conflict with the seminal case on the issues of priority and loss of patentability. In Milburn, the court affirmed the first-to-invent doctrine in America even when the first to invent was not the first to file. However, the Milburn court ruled in this way because the petitioner had done all that he could do to make his description public. He had taken steps that would make it public as soon as the Patent Office did its work . . . . We see no reason in the words or policy of the law for allowing Whitford [the second inventor] to profit by the delay and make himself out to be the first inventor when he was not so in fact . . . .

The key distinction is that the first inventor in Milburn made his description public, whereas in Giacomini, Tran only filed a provisional application, thus Tran did nothing to make his claim public. If anything, the Tran provisional patent does more to keep the invention secret until the patent is granted.

By keeping the prior art secret in this manner, Tran effectively extended the statutory period of patent protection without disclosure to society. Tran was in essence receiving patent protection prior to actually being granted a patent. Since no one else could receive patent protection on the same subject matter – because the invention would be barred by the prior art, as was the Giacomini Group’s patent – Tran received protection prior to being granted a patent and was granted statutorily permitted protection after it eventually received its patent, essentially giving the patent double insulation it did not

152. 35 U.S.C. § 102. This same analysis could be done with section 102(e)(2) as well.
153. Id. § 122(b)(2)(A) ("An application shall not be published if that application is – (iii) a provisional application filed under section 111(b) of this title.").
155. Id. at 402.
156. Id. at 401 (emphasis added).
157. See id. at 399; In re Giacomini, 612 F.3d 1380, 1382 (Fed. Cir. 2010).
deserve. This extension of protection goes directly against the quid pro quo policy behind patent law—public disclosure traded for monopolistic protection. Also, this holding seemingly creates a first-to-file regime rather than a first-to-invent regime, which goes against both common law and statutory principles.

Besides being able to extend protection to one’s patent, the holding in Giacomini creates a perverse incentive for one to quickly file a provisional application to block any future patent from granting. One problem with this is that some early filed inventions have not been completely fleshed out but will block a fully developed invention that would bring more benefit to society. Another problem is that one such as Tran could file a provisional and never pursue the invention to fruition, yet still block one who is interested in bringing this invention public. This has real world implications with competing companies trying to secure a market over an invention.

Apart from the policy reason for objecting to the Giacomini holding, the court may have erred by misinterpreting the plain language of section 102(e) as applied to Tran’s provisional application. The Giacomini Group pointed out that section 102(e), which the court relied upon to permit the shifting of the reference date, lists only two exceptions: (1) an application for a patent published under section 122(b), and (2) a patent granted on an application filed in the United States before the invention by the applicant for patent. The court found that the Tran provisional patent fell under exception two. The court reasoned section 102(e)(2) should be interpreted this way because “applications for patent” under section 102 includes both provisional and non-provisional patent applications. But section 102 does not merely say “patent application,” it states there must be a patent granted on an application. So even if provisional applications fall under the broader term of “application,” the Tran patent was still not granted on the provisional application until after the Giacomini Group’s patent. In essence, there was no patent “granted” on the provisional application. Instead the patent was subsequently granted on the nonprovisional application that claimed priority. If this is the

158. Tran received protection for the statutory requirement from the date of his patent being granted, as well as any time dating back to his provisional application in which the prior art would block any future invention. In re Giacomini, 612 F.3d at 1385.
159. See supra note 89.
161. In re Giacomini, 612 F.3d at 1384. Since the Tran provisional was not published, it could not fall under exception one. Brief of Appellants, supra note 11, at 26.
case, then the Giacomini Group application should not have been barred under section 102(e)(2).

B. Addition of New Material to Provisional Patent Application

Another policy reason for objecting to the Giacomini ruling is that one can add new material to a nonprovisional patent granted after a provisional patent application. Generally, there is a prohibition against adding new matter to a patent by amendment. But this rule does not apply when it comes to provisional patent applications. So in essence, this creates a situation in which an inventor can file a provisional application, conceive of new material to put in the application, and then file a nonprovisional application containing the new material. After the holding in Giacomini, that inventor can receive the earlier date of the provisional patent even though it contains new material, which possibly was not conceived of (or invented) until after a second individual invented. In the meantime, an inventor who does thorough research will not see this added material. The Giacomini holding for all intents and purposes has created a situation where “new matter in the nonprovisional could be accorded an effective reference date before it was ever conceived.”

While there is enough in the plain language of section 102 and section 119 to justify a strict statutory interpretation in the holding in Giacomini, the holding does not seem to support the policies behind patent law espoused in either Title 35 or the cases leading to its codification. Mainly, the policies of nonobviousness and novelty are undermined by this decision. Looking ahead to future patent disputes, this holding will create situations where secret prior art will render patents obvious or no longer novel that otherwise would be eligible for valid patent protection. Because Tran likely was the first to invent, Giacomini’s holding affirms the American policy of awarding a patent to the first to invent, but this does not take into account the policies behind nonobviousness and novelty. The case places inventors in the untenable position of wasting their time on pursuing an invention that they think is clear of prior art references, only to find out that there are unpublished references hidden in a provisional patent application waiting to block their invention from patent protection.

Not only is the second to file, the Giacomini Group, in the difficult position of not knowing whether to pursue an invention from fear of unpublished prior art, but the first to file has a perverse incentive to quickly file and sit on

164. Brief of Appellants, supra note 11, at 12.
165. 35 U.S.C. § 132(a) (“No amendment shall introduce new matter into the disclosure of the invention.”).
167. Brief of Appellants, supra note 11, at 13. The brief goes on to say, “This is obviously silly. . . . This is absurd.” Id. at 21-22.
his rights. Even though the Giacomini Group was the first to make physical, beneficial progress on the invention, Tran, sitting on an unpublished provisional application, kept these benefits from being exposed to the public. In other words, this new rule may keep inventions relegated to the file cabinet rather than placed in the public domain. Giacomini goes against not only patent law policy but also the centuries-old property rule of granting ownership to the person who takes physical control over the thing rather than granting ownership for mere pursuit. 168

VI. CONCLUSION

The holding in Giacomini seemed to settle the question of whether a provisional patent can contain prior art to block a future patent. By holding that the Tran patent can be considered prior art and that the Tran provisional application effectively shifts the reference date of the Tran patent, the Federal Circuit has expanded the plain language of section 102. Looking forward, the holding in Giacomini may raise more questions than it answers, and by doing so, it places inventors between a rock and a hard place. This holding, while in line with the plain language of the patent statute, creates an oddity in the requirements of novelty and nonobviousness in that something can be considered prior art and render an invention obvious or no longer novel even though the inventor had no idea, and no way to know, that the prior art existed. Giacomini also seems to create a first-to-file regime rather than a first-to-invent regime, which goes against both common law and statutory principals.

This dilemma, created by the holding in Giacomini, will effectively place future inventors in the impossible position of trying to discover prior art that is unpublished and undiscoverable. Inventors looking to invest millions of dollars and thousands of hours into creating something new and useful may hesitate to do so after reading Giacomini. Instead of fostering creativity, as patent policy is supposed to do, this holding may have the effect of chilling creativity in inventors who cannot be sure whether there is prior art that will block their invention. Pursuing an invention that may only end up barred from patent protection because of prior art tucked away in another inventor’s provisional application is a scary proposition for future inventors, but Giacomini has created this reality.

168. See Pierson v. Post, 3 Cai. 175 (N.Y. Sup. Ct. 1805).