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SECRET PRIOR ART — GET YOUR PRIORITIES STRAIGHT!

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I. INTRODUCTION

The patent laws of all major industrial nations provide that patents are to be granted only for inventions that possess sufficient novelty in comparison with that which publicly came before. Classically, the concept of sufficient novelty has developed into two separate and distinct requirements, namely novelty and nonobviousness. Moreover, that which publicly came before is referred to as "prior art" or "state of the art." Prior art establishes the technical background against which both the novelty and nonobviousness of any invention are determined. Since prior are plays so fundamental a role in the operation of a patent system, it is important that both its meaning and scope be properly defined.

It would also be beneficial if prior art were treated consistently throughout the world since countries could then share search and examination results. Additionally, a harmonized definition of prior art would help eliminate disparate results with respect to patent acquisition in different countries of the world. Unfortunately, prior art is not defined consistently. In fact, in their recent efforts to harmonize their patent laws, many countries have identified inconsistencies in the definition of prior art as one of the major obstacles to complete harmonization.

This Article focuses on a particular type of prior art known as "secret" prior art, specifically unpublished patent applications. The World Intellectual Property Organization ("WIPO") Harmonization

^{1.} Under U.S. patent law, the novelty requirement is met if an invention was not "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." 35 U.S.C. § 102(a) (1988).

^{2.} An invention is obvious, under U.S. patent law, 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." 35 U.S.C. § 103 (1988). Most other countries have an analogous requirement known as "inventive-step." In this article, not obviousness and inventive-step are used interchangeably.

Treaty negotiations³ and the final report of the U.S. Advisory Commission on Patent Law Reform⁴ will also be discussed. Finally, this Article will articulate a recommendation for reforming U.S. patent law treatment of secret prior art.

II. SECRET PRIOR ART

Secret prior art is prior art that is not generally known or familiar to the public. Intuitively, one would think that only art that is known to the public would have a patent-defeating effect. Nevertheless, the law has evolved to provide secret prior art with a patent-defeating effect in certain circumstances. The most common example of secret prior art is earlier-filed unpublished patent applications which are eventually either published or granted.⁵ One notable limitation, however, is that these patent applications only have a national prior art effect.⁶

There are two major reasons for the use of secret prior art within a patent system. First, countries want to protect their citizens from multiple infringement suits or royalty payments on a single invention. Second, countries want to limit extension of the term of exclusive rights granted by a patent. The use of pending patent applications as prior art is intended to prevent multiple patents for the same or similar inventions. The doctrine of "double patenting" is also used to achieve the same objectives. Double patenting bars a subsequent patent from extending

^{3.} WIPO is the United Nations agency responsible for intellectual property matters. The treaty negotiations are detailed in Records of the Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention As Far As Patents Are Concerned (1991) (published by WIPO, on file with the Harvard Journal of Law & Technology) [hereinafter Diplomatic Conference Records].

^{4.} ADVISORY COMMISSION ON PATENT LAW REFORM, U.S. DEP'T OF COMMERCE, REPORT TO THE SECRETARY OF COMMERCE (1992) [hereinafter ADVISORY COMMISSION REPORT].

^{5.} These patent applications are given a patent-defeating effect from their filing date. Hence, this author chooses to consider the pending applications themselves as secret prior art even though they only become so after the application issues or is published. The reasoning is that the filing of the application is the initiating event, and the subsequent patenting or publishing is but a condition subsequent. Furthermore, filed applications will normally be included within the prior art. Others prefer to say that such patents or published applications are effective retroactively as of their filing date. See, e.g., Tetsu Tanabe & Harold C. Wegner, Japanese Patent Law (Part II), 58 J. PAT. OFF. SOC'Y 647, 655-56 (1976).

^{6.} For example, a patent application filed in country A would become secret prior art only in country A and not in any other country.

^{7.} See Reinhard Wieczore, Convention Applications as Patent-Defeating Prior Rights, 6 INT'L REV. INDUS. PROP. & COPYRIGHT L. 134, 137-38 (1975) (recognizing the common goals of these legal doctrines).

the term of exclusive rights by claiming essentially the same invention as an earlier patent.8

One can utilize either the whole-contents approach⁹ or the more narrow prior-claim approach¹⁰ when using secret prior art or double patenting.¹¹ Both the United States and Europe use the whole-contents approach for prior art.¹² For double patenting, however, the United States uses the prior-claim approach,¹³ while the trend in Europe is to use the whole-contents approach.¹⁴

III. EVOLUTION OF U.S. LAW ON SECRET PRIOR ART

Under the U.S. patent laws, there exist two forms of secret prior art: pending patent applications and prior inventions of others in the United States.¹⁵ The first type evolved from case law, while the second is inherent in a first-to-invent system.¹⁶ Since the focus of this article is on pending patent applications, most of the discussion below will pertain to

- See Donald S. Chisum, 3 Patents § 9.01 (1995).
- 9. The whole-contents approach looks at both the disclosure and the claims made in an earlier patent. Under the whole-contents approach, the earlier-filed and subsequently published patent application defeats a later-filed application to anything disclosed in the earlier application.
- 10. The prior-claim approach focuses exclusively on the claims made in an earlier patent. Under the prior-claim approach, an earlier-filed patented invention defeats a later-filed application to the same, or similar, claimed invention.
- 11. See Harold C. Wegner, Patent Law Simplification and the Geneva Patent Convention, 14 AIPLA Q.J. 154, 173 (1986); Wicczorek, supra note 7.
 - 12. See Wieczorek, supra note 7.
 - 13. See CHISUM, supra note 8.
 - 14. See Wieczorek, supra note 7, at 164-65.
 - 15. See 35 U.S.C. § 102(e), (g) (1988). The relevant portion of § 102 states: A person shall be entitled to a patent unless —
 - (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
 - (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it.

Id.

^{16.} A first-to-invent system awards a patent to the individual who was the first to create the invention.

U.S. case law relating to the development of this first type of secret prior art. 17

The current law concerning secret prior art derives from the Supreme Court's 1926 opinion in Alexander Milburn Co. v. Davis-Bournonville Co. 18 The Supreme Court held that pending patent applications could be used to prove that a later applicant for a patent was not the original inventor. 19 In Milburn, the defendant asserted that a previously filed patent application that claimed a different invention than the plaintiff's patent nonetheless invalidated that patent.²⁰ In accepting the defense and invalidating the patent, the Supreme Court held that an earlier-filed and subsequently granted application which disclosed but did not claim the invention claimed in a later patent application, prevents the later applicant from being the first inventor.²¹ The Court's reasoning was that processing delays within the U.S. Patent and Trademark Office ("PTO") should not affect the validity of later-filed applications.²² That is, if the PTO had immediately issued the patent on the earlier application, then the later applicant would not have been entitled to a patent because his claimed invention would have already been disclosed by the earlier patent.

In applying *Milburn*, courts have restricted the use of pending U.S. patent applications to priority determinations.²³ In contrast, pending patent applications are viewed today as part of the prior art, and are used in making novelty and nonobviousness determinations.

The language used in *Milburn* sounds like a priority of invention situation. However, after the 1952 Patent Act²⁴ the *Milburn* doctrine

^{17.} Secret prior art such as patent applications and prior inventions need not be completely secret. For example, a pending patent application might have been disclosed to others, and a prior invention may have been witnessed by the public. Indeed, prior invention cannot be concealed. Typically, however, the public has no knowledge of another's patent application or invention. Even if the public had knowledge of such events, ordinarily neither patent applications nor prior inventions are readily accessible.

^{18. 270} U.S. 390 (1926).

^{19.} Id. at 401.

^{20.} Id. at 399.

^{21.} Id. at 401.

^{22.} Id. at 400-01.

^{23.} See, e.g., United Specialties Co. v. Industrial Wire Cloth Prod. Corp., 186 F.2d 426 (6th Cir. 1951) (holding that a prior, co-pending patent application does not necessarily belong to the prior art when the issues do not involve priority of invention), Permo, Inc. v. Hudson-Ross, Inc., 179 F.2d 386 (7th Cir. 1950) (stating that co-pending patent applications which ripen into patents may not be part of the prior art in its usual sense, but these patent applications can nevertheless be used to prove that a patentee was not the original and first inventor or discoverer of the invention).

^{24.} Pub. L. No. 82-593, 66 Stat. 792 (1952) (current version at 35 U.S.C. § 1 et. seq.).

falls more precisely under § 102(e).²⁵ Nevertheless, the Court of Customs and Patent Appeals ("CCPA") has repeatedly stated that the statutory basis of unpatentability in *Milburn* was a lack of novelty under § 102(a).²⁶

To say that *Milburn* was decided on the grounds of § 102(a) novelty is to stretch the basis for the Court's decision beyond its reasonable limits. Put succinctly, the Supreme Court's underlying rationale was that the applicant was not the first inventor.²⁷ Furthermore, the patent application used to invalidate the plaintiff's patent was not public — it was secret. Thus, the crux of the case was priority, not prior art.

In Hazeltine Research, Inc. v. Brenner, 28 the Supreme Court extended the Milburn reasoning to the determination of nonobviousness (§ 102(e)/103 situation). 29 Specifically, the Hazeltine Court held that the patent application of an issued patent, which was pending in the PTO at the time a second application was filed, constitutes part of the prior art in determining whether the second invention was obvious. 30 Thus, the

^{25.} The report of the Committee on the Judiciary described § 102(e) of the bill as "another well-recognized condition imposed by a decision of the Supreme Court which was not expressed in the existing law; for the purpose of anticipating subsequent inventors, a patent disclosing the subject matter speaks from the filing date of the application disclosing the subject matter." S. Rep. No. 1979, 82d Cong., 2d Sess. (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2399.

E.g., In re Land, 368 F.2d 866, 877 (C.C.P.A. 1966) (Rich, J.); In re Hilmer, 359
 F.2d 859, 876-77 (C.C.P.A. 1966) (Rich, J.). In In re Land, Judge Rich expounded his reasoning as follows:

In a rejection today under the 1952 Patent Act, a so-called "section 102(e) rejection" is equally predicated on lack of novelty and 102(a) if the reference fully describes the invention; if it is only partially described, because of a difference, then it is based on section 103 into which must be read the prior art outlined in 102 which supplies the evidence of obviousness. In the first case, the evidence shows the invention was old and in the second that it was obvious, at the time the applicant or patentee at bar made his invention. The rejection is based on 102(a) or 103, however, 102(e) merely makes the evidence in the form of a "reference patent" available, as before 1953 the rule of the Milburn case made it available.

³⁶⁸ F.2d at 877. By similarly distinguishing priority from prior art in *In re Hilmer*, Judge Rich may have been attempting to buttress the foundation of his logic which required that § 102(e)-type prior art be distinct from priority.

^{27.} See Maurice H. Klitzman, Remarks at the Third Patent System Major Problems Conference, Franklin Pierce Law School (April 27, 1991), in 32 IDEA: J.L. & TECH. 13, 33 (1991) (stating that the *Milburn* case was really a § 102(g) case).

^{28. 382} U.S. 252 (1965).

^{29.} Id. at 255. For the remainder of this article, the use of pending patent applications as prior art for determining nonobviousness shall be referred to as the "§ 102(e)/103" situation.

^{30.} Id.

Court explicitly held that secret prior art is part of the prior art for obviousness determinations. As in *Milburn*, the Court's underlying logic was that delays in the PTO should not affect the result.³¹ Hence, after *Hazeltine* pending patent applications were no longer only evidence used in priority determinations, but full-fledged prior art.

Decisions of the CCPA, such as the one in In re Hilmer³² ("Hilmer I"), have also had a major impact on the evolution of the secret prior art doctrine. In Hilmer I, the court interpreted § 102(e), § 119, 33 and the Paris Convention³⁴ and concluded that a U.S. patent application that eventually issues is effective as prior art only as of its U.S. filing date regardless of any foreign priority filing date. 35 Hilmer I has often been criticized as being decided incorrectly 36 and impacting foreigners

Consequently, any subsequent filing in any of the other countries of the Union before the expiration of the periods referred to above shall not be invalidated by reason of any acts accomplished in the interval, in particular, another filing, the publication or exploitation of the invention, the putting on sale of copies of the design, or the use of the mark, and such acts cannot give rise to any third-party right or any right of personal possession. Rights acquired by third parties before the date of the first application that serves as the basis for the right of priority are reserved in accordance with the domestic legislation of each country of the Union.

Id. at 1632.

^{31.} Id. at 256.

^{32. 359} F.2d 859 (C.C.P.A. 1966).

^{33. 35} U.S.C. § 119 (1988).

^{34.} Convention for the Protection of Industrial Property, Mar. 20, 1883, 1 Bevans 80 (revised by Paris Convention for the Protection of Industrial Property, July 14, 1967, 21 U.S.T. 1583) [hereinafter Paris Convention]. Article 4B states:

^{35. 359} F.2d 859, 882-83 (C.C.P.A. 1966). In 1970, the CCPA decided the related issue of whether § 102(g) may be combined with § 119 to create prior art as of a foreign priority date. The CCPA held that it could not. *In re* Hilmer, 424 F.2d 1108, 1112 (C.C.P.A. 1970).

^{36.} See, e.g., Gordon R. Lindeen, In re Hilmer and the Paris Convention: An Interpretation of the Right of Foreign Priority for Patents of Invention, 18 Cal. W. INT'L L.J. 335 (1988); George R. Gansser, Violations of the Paris Convention for the Protection of Industrial Property, 11 INT'L REV. INDUS. PROP. & COPYRIGHT L. 22-23 (1980). But see HAROLD C. WEGNER, PATENT HARMONIZATION § 773 (1993); Wegner, supra note 11, at 177-79; Wieczorek, supra note 7 (finding U.S. law to comply with a narrow interpretation of Article 4B); Harold Wegner & Jochen Pagenberg, Paris Convention Priority: A Unique American Viewpoint Denying "The Same Effect" to the Foreign Filing, 5 INT'L REV. INDUS. PROP. & COPYRIGHT L. 361, 364 (1974).

disproportionately.³⁷ Nevertheless, the U.S. law is clear that pending patent applications become effective as prior art as of their U.S. filing date, not their foreign priority filing date.

In In re Bass, 38 the CCPA was presented with the difficult question of whether inventions of different entities of the same assignee could be used as prior art under § 102(g)/103. 39 Since the evidence did not prove prior invention, the court was able to make a decision on the merits without truly reaching the above question. Although the judgment was unanimous, no majority opinion was written since the court was sharply divided with respect to the correct legal reasoning. 40

Judge Rich was of the view that "what is prior art for one purpose is prior art for all purposes and in all courts and in the Patent Office." In this regard, he stated:

As a general proposition of law, and particularly considering the way in which full anticipation situations under § 102 shade into obviousness rejections under § 103 because of discernable differences, we cannot sanction an interpretation of the statute under which a prior invention is "prior art" under the former situation but not the latter.⁴²

Based on this view, Judge Rich concluded that another's prior invention is available to be used as prior art in determining obviousness as long as it had not been abandoned, suppressed, or concealed.⁴³ Furthermore, Judge Rich asserted that these prior inventions were to be considered prior art regardless of when they are made public or if a patent application was filed.⁴⁴

^{37.} See Donald S. Chisuni, Foreign Activity: Its Effect on Patentability Under United States Law, 11 INT'L REV. INDUS. PROP. & COPYRIGHT L. 26 (1980); Lindeen, supra note 36; Wegner & Pagenberg, supra note 36. Recent articles have commented that even though Hilmer I has a discriminatory effect it should not necessarily be disposed of through harmonization. See Kate H. Murashige, The Hilmer Doctrine, Self-Collision, Novelty and the Definition of Prior Art, 26 J. Marshall L. Rev. 549 (1993); R. Carl Moy, The History of the Patent Harmonization Treaty: Economic Self-Interest As an Influence, 26 J. Marshall L. Rev. 457 (1993).

^{38. 474} F.2d 1276 (C.C.P.A. 1973).

^{39.} See id. For the remainder of this article, the use of prior inventions as prior art for determining nonobviousness shall be referred to as the "§ 102(g)/103" situation.

^{40.} See id.

^{41.} Id. at 1289 (Rich, J.).

^{42.} Id. at 1285.

^{43.} Id. at 1289.

^{44.} See id. at 1286-87.

In contrast, Judge Baldwin's concurring opinion was based on his view that the 1952 Patent Act was merely meant to codify existing law on priority of invention.⁴⁵ He reasoned that prior invention under § 102(g) should not be prior art for purposes of § 103 since it was well settled prior to 1952 that "the question of priority of invention did not arise unless the parties claimed the same, or substantially the same, invention."

In *In re Clemens*,⁴⁷ the CCPA hinted that it might retreat from its extension of the secret prior art doctrine. The CCPA therein stated, albeit in dicta, that in order to impute knowledge of another's invention in a § 102(g)/103 situation to one of ordinary skill in the art, the knowledge must be known to either the public or the applicant.⁴⁸ The CCPA reasoned:

Where an applicant begins with knowledge of another's invention that will be available to the public at a later date as a result of an issued patent, treating this other invention as prior art is justified under facts such as those in Bass. No such consideration is present when the applicant does not begin with such knowledge. To the contrary, where this other invention is unknown to both the applicant and the art at the time the applicant makes his invention, treating it as 35 U.S.C. § 103 prior art would establish a standard for patentability in which an applicant's contribution would be measured against secret prior art. Such a standard would be detrimental to the innovative spirit the patent laws are intended to kindle. Inasmuch as there are no competing policy considerations to justify it, as there is in the case of § 102(e) prior art and lost counts, we decline to establish such a standard here 49

^{45.} Id. at 1291 (Baldwin, J., concurring).

^{46.} Id. at 1299.

^{47. 622} F.2d 1029 (C.C.P.A. 1980).

^{48.} Id at 1039-40. In this case, knowledge of the earlier invention was not known by Clemens or by the public. In contrast, in *In re Bass*, at least one of the co-inventors had knowledge of the prior invention. Accordingly, the dicta in *In re Clemens* echoes the concurring opinion of Judge Baldwin in *In re Bass*. See *In re* Bass, 474 F.2d 1276, 1291 (C.C.P.A. 1973) (Baldwin, J., concurring) (reasoning that prior invention should not be prior art).

^{49.} In re Clemens, 622 F.2d at 1039-40 (footnotes omitted). The court stated that the competing policy consideration which justified § 102(e) is "to ensure that the speed at which the PTO performs its functions is not a factor which determines patentability." Id. at 1040 n.22. This is the same policy justification offered in Milburn and subsequently adopted in Hazeltine.

Furthermore, in *In re Wertheim*, ⁵⁰ the CCPA explicitly limited the secret prior art doctrine to its underlying logic. The court further developed the Supreme Court's *Milburn* and *Hazeltine* rationale that "but for" the delays of the PTO a patent would have issued earlier. ⁵¹ In this case, the court held that for purposes of § 102(e), the filing date of a patent which issued from a series of applications depends on compliance with 35 U.S.C. § 120 and § 112. ⁵² Thus, a patent application which issues would normally be effective as a prior art reference for novelty and nonobviousness determinations as of its U.S. filing date.

Accordingly, a continuation application that issues would be effective as a prior art reference as of the U.S. filing date of its earliest parent application. On the other hand, unlike a continuation application, a continuation-in-part application adds new matter to the parent application. If such new matter is critical to the patentability of the claimed invention, a patent could not have issued from the parent application, and the PTO delay rationale would therefore not apply.⁵³ As the CCPA stated:

If . . . the PTO wishes to utilize against an applicant a part of that patent disclosure found in an application filed earlier than the date of the application which became the patent, it must demonstrate that the earlier-filed application contains sections 120/112 support for the invention claimed in the reference patent. For if a patent could not theoretically have issued the day the application was filed, it is not entitled to be used against another as "secret prior art," the rationale of Milburn being inapplicable, as noted above. In other words, we will extend the "secret prior art" doctrine of Milburn and Hazeltine only as far as we are required to do so by the logic of those cases. 54

However, the CCPA's apparent limitations on the use of secret prior art were not adopted by the Federal Circuit in subsequent decisions. In both Kimberly-Clark Corp. v. Johnson & Johnson⁵⁵ and E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 56 the Federal Circuit revitalized the secret prior art doctrine. Although recognizing that the

^{50. 646} F.2d 527 (C.C.P.A. 1981) (Rich, J.).

^{51.} Id. at 536.

^{52.} Id. at 537.

^{53.} Id. at 536-37.

^{54.} Id

^{55. 745} F.2d 1437 (Fed. Cir. 1984).

^{56. 849} F.2d 1430 (Fed. Cir. 1988).

use of secret prior art is not favored for public policy reasons, in *Kimberly-Clark*, the Federal Circuit held that prior non-public work of another can be used as prior art under § 102(g)/103 regardless of whether the applicant had personal knowledge of the earlier work.⁵⁷ The court acknowledged but discredited the dicta to the contrary in *In re Clemens.*⁵⁸ In *E.I. du Pont*, the Federal Circuit used reasoning similar to that in *Kimberly-Clark* to hold that § 102(g) does not contain a "known in the art" requirement apart from the requirement of no abandonment, suppression, or concealment.⁵⁹

Accordingly, in order for prior non-public work of another to qualify as secret prior art, it need only meet the requirements of § 102(g), which states: "A person shall be entitled to a patent unless before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it." Notwithstanding the fact that the former Commissioner of the PTO described this subsection as containing the rules of law governing priority of invention, 61 court decisions have pulled this subsection into the prior art context.

Although the courts in Clemens, Kimberly-Clark, and E.I. du Pont showed an aversion to secret prior art because of policy considerations, these cases involved the second type of secret prior art — prior inventions of others in the United States. In contrast, with respect to the first type of secret prior art — pending patent applications — the CCPA and the Federal Circuit have rigidly adhered to the decisions and reasoning of the Supreme Court. In particular, the CCPA and the Federal Circuit have accepted the Supreme Court's somewhat suspect policy justification that PTO delays should not substantively affect patentability.

The Federal Circuit has also embellished on some of the more detailed aspects of the secret prior art doctrine with respect to pending patent applications. For example, in Sun Studs, Inc. v. ATA Equipment Leasing, Inc., 62 the Federal Circuit clarified some of the differences

^{57.} Kimberly-Clark, 745 F.2d at 1445.

^{58.} Id. Although not central to its holding, the Clemens court stated that it would be contrary to public policy to impute knowledge of secret prior inventions to later applicants, and hinted that it would decline to do so if the issue arose in a future case. In re Clemens, 622 F.2d 1029, 1039-40 (C.C.P.A. 1980).

^{59.} E.I. du Pont, 849 F.2d at 1437.

^{60. 35} U.S.C. § 102(g) (1988).

^{61.} See Pasquale J. Federico, Commentary on the New Patent Act, 35 U.S.C.A. 1 (1954), reprinted in 75 J. PAT. & TRADEMARK OFF. SOC'Y 161, 180 (1993).

^{62. 872} F.2d 978 (Fed. Cir. 1989), overruled on other grounds by A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020 (Fed. Cir. 1992).

between § 102(e) and § 102(g). Specifically, the Federal Circuit held that under § 102(e) the entire disclosure of an earlier-filed and subsequently issued patent application is effective as a prior art reference only as of its filing date. ⁶³ In sharp contrast, § 102(g) prior art is effective as of the date of conception or actual reduction to practice. ⁶⁴

63. Id. at 983.

64. Id. One commentator has expressed concern that the CCPA might permit the "roll back" of the effective date of a § 102(e) reference to its earlier § 102(g) date. See Maurice H. Klitzman, 35 USC 102(g) As Establishing Prior Art, 58 I. PAT. OFF. SOC'Y 505, 516-17 (1976). This "roll back" idea was unsuccessfully attempted in Sun Studs.

In Sun Studs a jury found the patents valid, 872 F.2d at 981-82, and the rederal Circuit affirmed the validity finding. Id. at 984. The defendant argued on appeal that the jury instructions were faulty in that they did not require the jury to consider an earlier-filed patent as prior art. Id. at 982. The plaintiff had argued that the earlier patent was a reference only under § 102(e) and effective only as of its filing date, while the defendant argued that the reference was effective as of its conception date. Id. The plaintiff also argued that § 102(g) was not applicable because the inventions were not the same. Id. at 983. Furthermore, the plaintiff argued that even if § 102(g) were applicable, the reference was ineffective before its filing date because the plaintiff had proved prior invention. Id. The court stated:

When patents are not in interference, the effective date of a reference United States patent as prior art is its filing date in the United States, as stated in § 102(e), not the date of conception or actual reduction to practice of the invention claimed or the subject matter disclosed in the reference patent.

Both sides appear to have confused interference practice under § 102(g) with prior art status under § 102(e). The [earlier patent] reference, as the district court held, does not describe or claim the identical invention to [the plaintiff's later application]. It is not prior art under § 102(g), but under § 102(e).

Id. (citations omitted).

The court's analysis up to this point appears consistent with existing law, namely that a \S 102(e) reference is a reference patent effective as of its U.S. filing date. Strictly speaking, evidence of earlier conception of the invention described in the reference patent, while not relevant for \S 102(e) purposes, would be relevant to establish \S 102(g) prior art.

The court also addressed the evidence of prior conception:

The [district] court [also] allowed the jury to consider as prior art materials that Mouat had produced as evidence of conception; an error that favored [the defendant]. The court also stated that Mouat's conception occurred in 1966, without discussing other questions raised by [the plaintiff], such as enablement and diligence, that would be pertinent in establishing Mouat's entitlement to a date of invention under § 102(g); an error again favoring [the defendant].

Id at 984. This later part of the opinion is, however, confusing. In the initial portion of the opinion it seems that the Federal Circuit was simply trying to separate § 102(e) from § 102(g). However, the evidence of prior conception is clearly relevant to § 102(g) even when not in an interference. Alternatively, the case could be read to say that § 102(g) is only available in an interference contest. The former interpretation is more likely; the

Finally, in *In re Bartfeld*, ⁶⁵ the Federal Circuit affirmed the § 102(e)/103 rejection of a patent application using a commonly-assigned pending patent application as prior art. ⁶⁶ The applicant argued that Congress intended the second paragraph of § 103 to prohibit the use of commonly-assigned patent applications as secret prior art. ⁶⁷ Unimpressed with this argument, the Federal Circuit made it clear that the second paragraph of § 103 means what it says. ⁶⁸ That is, the paragraph operates to save the common-assignee only in § 102(f)/103 and § 102(g)/103 situations. ⁶⁹

IV. INTERNATIONAL HARMONIZATION DEVELOPMENTS

Only the United States and the Philippines follow a first-to-invent system — the rest of the world follows a first-to-file system. To In first-to-file countries, pending patent applications are the only relevant type of secret prior art. With respect to pending applications, most countries follow a whole-contents novelty-only approach.

court was just explaining that the basis of the case was § 102(e) and that any § 102(g) evidence considered by the district court was harmless.

- 65. 925 F.2d 1450 (Fed. Cir. 1991).
- 66. See id. at 1454.
- 67. See id. at 1452. It is interesting to note that, in this case, the earlier application was not known to the later applicant. A commonly-assigned application cannot be secret to the assignee, even though each of the inventive entities may be unaware of the other's work.
 - 68. The second paragraph of § 103 provides:

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

- 35 U.S.C. § 103 (1988).
 - 69. In re Bartfeld, 925 F.2d at 1452-53.
- 70. A first-to-file system awards a patent to the individual who was first to file an application. See supra note 16 for a discussion of the first-to-invent system.
- 71. Because claims in an application typically change during the examination process, the prior-claim approach is problematic when a later-filed application requests examination before an earlier-filed application. Although the claims of the earlier application are included within the state of the art, the claims are not yet fixed. In contrast, the whole-contents approach avoids this problem since it considers the overall spirit of the earlier-filed application rather than the specific claims present at the time of the later-filed application. See, e.g., Albrecht Krieger, The New German Patent Law After Its Harmonization With European Patent Law—A General Survey, 13 INT'L REV. INDUS. PROP. & COPYRIGHT L. 1, 7 (1982).

In 1984, WIPO began efforts to harmonize international patent laws. Since then, WIPO has convened numerous meetings of the Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions to discuss various harmonization topics. This Committee has had the task of drafting a treaty to harmonize international patent laws.

One specific challenge put to the Committee was to develop a uniform treatment of earlier-filed, but not yet published, patent applications. Given the many differences in patent laws throughout the world, a search for uniformity presented the Committee with the following questions:

- (A) Should pending patent applications be considered part of the state of the art?
- (B) As of what date (priority date or national filing date) should they be considered part of the state of the art?
- (C) Should the state of the art be limited solely to the claims of these applications or should it include their whole contents?
- (D) Should such applications be used only for novelty determinations or for both novelty and obviousness determinations?
- (E) Should pending patent applications of the same applicant be excluded from the state of the art?⁷³

Questions A, B, C, and D relate to the prior art effect of pending patent applications, and Question E relates to "self-collision." 74

^{72.} See generally WEGNER, supra note 36; Richard C. Wilder, An Overview of Changes to the Patent Law of the United States After the Patent Law Treaty, 26 J. MARSHALL L. REV. 497 (1993); Donald S. Chisum, Introduction, 26 J. MARSHALL L. REV. 437 (1993), Murashige, supra note 37; Moy. supra note 37; William S. Thompson, Reforming the Patent System for the 21st Century, 21 AIPLA Q.J. 171 (1993); Jochen Pagenberg, The WIPO Patent Harmonization Treaty, 19 AIPLA Q.J. 1 (1991); Edward G. Fionto, The WIPO "Basic Proposal" for Harmonization of Patent Laws Viewed from the U.S. Practitioner's Point of View, 19 AIPLA Q.J. 24 (1991); William T. Fryer, Patent Law Harmonization Treaty Is Not Far Off — What Course Should the U.S. Take?: A Review of the Current Situation and Alternatives Available, 30 IDEA: J.L. & TECH. 309 (1990).

^{73.} See Prior Art Effect of Previously Filed But Yet Unpublished Patent Applications, WIPO Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions, 3d Sess., at 4, 17, WIPO Doc. HL/CE/III/2, Supp. 3 (1986) [hereinafter Prior Art Effect Memorandum].

^{74.} Self-collision occurs when one party's application is used as prior art against his or her own later application.

After several studies on the issue, 75 the Committee of Experts formulated a proposal that ultimately became part of a draft treaty. 76 There was general agreement with respect to Questions A, B, and C. Article 202 (later renumbered as Article 13) of the draft treaty 77 addressed the prior art status of later-filed co-pending applications by establishing a whole-contents novelty-only approach. Co-pending applications would be considered prior art for novelty purposes as of their priority date, provided that the applications were subsequently published. There was, however, general disagreement with respect to Questions D and E. The two unsettled issues concerned the use of pending applications for inventive-step determinations and their use against the same applicant or assignee.

On the issue of pending applications, early versions of the draft treaty limited their use to novelty, and most countries felt that this approach struck the right balance between the interests of the applicant and the interests of other inventors. However, at the June 1990 meeting of the Committee of Experts, the U.S. delegation proposed an amendment to Article 13⁷⁹ that would allow, but not require, the use of prior co-pending applications in inventive-step determinations as well. After unfruitful debate on the issue, the Chairman revised the treaty to include the U.S. inventive-step proposal on a provisional basis before tabling the issue. The Swedish delegation revisited the issue in 1991 and recommended removing the U.S. inventive-step proposal from Article 13.82 All of the delegations, with the exception of the delegations

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^{75.} See Prior Art Effect Memorandum, supra note 73.

^{76.} See Draft Treaty on the Harmonization of Certain Provisions in Laws for the Protection of Inventions, Draft Regulations, WIPO Committee of Experts on the Harmonization of Certain Provisions in I aws for the Protection of Inventions, 5th Sess., WIPO Doc. HL/CE/V/2 (1988) [hereinafter Draft Harmonization Treaty of 1988].

^{77.} See id. at 37, 39.

^{78.} See Draft Treaty on the Harmonization of Certain Provisions is: Laws for the Protection of Inventions; Draft Regulations, WIPO Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions, 3d Sess., at 38-39, WIPO Doc. HL/CE/III/2 (1986).

^{79.} Diplomatic Conference Draft Treaty, ast. 13, in Diplomatic Conference Records, supra note 3.

^{80.} WIPO Doc. PLT/DC/6 (1990), in Diplomatic Conference Records, supra note 3; see also Wilder, supra note 72, at 525.

^{81.} See Report on the First Part of the Eighth Session, WIPO Committee of Experts on the Harmonization of Certain Provisions in Laws for the Protection of Inventions, 8th Sess., ¶ 461, WIPO Doc. HL/CE/VIII/26 (1990).

^{82.} See WIPO Doc. PLT/DC/11 (1991), in Diplomatic Conference Records, supra note 3.

from the United States and possibly Israel, ⁸³ supported the Swedish proposal. After noting that the U.S. proposal affected only two to three percent of all applications, the Chairman agreed to make the Swedish proposal the basis for further consideration. ⁸⁴

With respect to self-collision, the draft treaty initially contained a section which permitted, but did not require, avoidance of self-collision, provided that double patenting was also prohibited.⁸⁵ By 1990, due to widespread opposition, the Committee was considering a compromise approach in which the anti-self-collision provision would be mandatory only for those countries which opted to consider pending patent applications as part of the state of the art for purposes of determining inventive-step.⁸⁶

In June 1991, a proposal supported by the European nation, was submitted to the Diplomatic Conference, a group composed of delegations from various countries assembled to consider the draft treaty. The European proposal, which appears in paragraph (4)(b) of Article 13,87 would enable a contracting party to retain self-collision provided that it also elects not to apply earlier co-pending applications in inventive-step determinations. Paragraph (4)(a) creates an anti-self-collision rule.88 A number of delegations that opposed this rule stated that there would be no need for it if the second sentence of paragraph (1)(a)89 were deleted. Parring that, many of these same countries felt that retention of this sentence necessitated retention of subparagraph (4)(b). Several other countries wanted self-collision to be completely optional. Still other countries, including the United States, wanted the treaty to contain a mandatory anti-self-collision provision, such as paragraph (4)(a), but not

^{83.} See Diplomatic Conference Records, supra note 3, ¶ 965.3 to 991 (summary minutes of the Main Committee I).

^{84.} See id. ¶ 992.1.

^{85.} See Draft Harmonization Treaty of 1988, supra note 76, at art. 202(6).

^{86.} See Wilder, supra note 72, at 525-28.

^{87.} This paragraph states: "Any Contracting Party that considers the whole contents of the former application to be p. or art only for the purpose of determining the novelty of the invention shall be free not to apply subparagraph (a)." Diplomatic Conference Records, supra note 3.

^{88.} This paragraph states: "Paragraph (1) shall not apply when the applicant of, or the inventor identified in, the former application, and the applicant of, or the inventor identified in, the application under examination, is one and the same person." See Diplomotic Conference Records, supra note 3.

^{89.} This sentence states that: "Any Contracting Party may consider the whole contents of the former application to be prior art also for the purpose of determining whether the invention satisfies the requirement of inventive step (non-obviousness)." Id.

contain (4)(b). 90 The Chairman concluded that the completely optional approach could possibly reconcile these divergent views. 91

Unfortunately, the June 1991 Diplomatic Conference cast substantial doubt over whether a uniform solution could be achieved. The WIPO harmonization talks had been proceeding for several years under the assumption that the United States was agreeable to adopting a first-to-file system in exchange for concessions in other areas of the harmonization package. In March 1991, the U.S. delegation unexpectedly proposed amendments to the treaty that would allow the United States the option of retaining its first-to-invent system. The U.S. delegation indicated that congressional approval and private sector support for the first-to-file system were uncertain. Moreover, the U.S. delegation claimed that inclusion of its proposed amendments would maximize the chances that the United States would adhere to any resulting harmonization treaty. He was a support of the chances that the United States would adhere to any resulting harmonization treaty.

The U.S. delegation's proposal would maintain the basic premise that earlier-filed applications would be considered prior art from the earlier of their filing or priority date. However, the proposed amendment would enable a contracting party (namely, the United States) to eliminate the prior art effect of an earlier-filed application if the invention claimed in a later-filed application had a date of invention

^{90.} When an anti-self-collision rule is in place, a double patenting rule is also needed to prevent the issuance of two patents to the same applicant for the same invention. Hence, the U.S. delegation wanted to add an additional provision, paragraph (5), to Article 13 that would prevent more than one patent for each invention. WIPO Doc. PLT/DC/51, in Diplomatic Conference Records, supra note 3. Although many countries supported the adoption of proposed paragraph (5), the European delegations did not because they felt that one's own prior application should not be used against one's later application. See Diplomatic Conference Records, supra note 3 (summary minutes of the Main Committee I).

^{91.} See Diplomatic Conference Records, supra note 3, ¶ 1066.2 (summary minutes of the Main Committee I).

^{92.} See WIPO Doc. PLT/DC/6 (1991), in Diplomatic Conference Records, supra note 3.

^{93.} See Diplomatic Conference Records, supra note 3, ¶ 4.2, 4.4 (summary minutes of the Main Committee I).

^{94.} See WIPO Doc. PLT/DC/6 (1991), in Diplomatic Conference Records, supra note 3.

^{95.} This proposal would add the following subparagraph to Article 13 ¶ 1:

⁽c) Any Contracting Party that awards patents to the first to invent may consider that the former application shall not be considered as prior art against an invention claimed in another application where that invention is made prior to the filing date of the former application, or where the former application claims the priority of an earlier application, prior to the priority date of the former application.

prior to the filing or priority date of the earlier application. While the U.S. delegation attempted to leave itself the option of backing out of a first-to-file system, it nevertheless consistently acquiesced to the idea of abolishing the *Hilmer* rule. Most other countries strongly opposed the U.S. proposal and argued that a mandatory first-to-file system was an essential element that could not be compromised. 8

The second part of the Diplomatic Conference originally scheduled for the summer of 1993 has been postponed at the request of the United States to allow the Clinton Administration time to review the issues and formulate its policy on patent harmonization.⁹⁹

V. ADVISORY COMMISSION ON PATENT LAW REFORM

The Advisory Commission on Patent Law Reform was established in 1990 by former Secretary of Commerce Robert Mosbacher. The Advisory Commission included representatives from U.S. businesses, universities, the patent bar, and the public. In 1992, the Advisory Commission published its final report which proposed a series of recommendations that would effect fundamental changes to the U.S. patent system. ¹⁰⁰ Several of the recommendations relate to, and are contingent upon, the worldwide harmonization of patent laws.

^{96.} That is, this additional paragraph would permit the United States to retain its Rule 131 affidavit practice that enables applicants to swear behind the U.S. filing date of a patent application which has issued. See 37 C.F.R. § 1.131 (1995).

^{97.} See Thompson, supra note 72, at 184; Fiorito, supra note 72, at 41; Fryer, supra note 72, at 331. But cf. ADVISORY COMMISSION REPORT, supra note 4 (recommending retention of the Hilmer doctrine only if the first-to-invent system is maintained).

^{98.} See Diplomatic Conference Records, supra note 3, ¶ 5.1 to 46.8 (summary minutes of the Main Committee I). However, the proposals of a few groups indicated greater flexibility. For example, the International Federation of Industrial Property Attorneys ("FICPI") favored the draft treaty and believed that although the option to retain a first-to-invent system would prevent worldwide harmonization, such a treaty would still be useful provided that a country that operated under the first-to-invent option determined the date of invention for foreign and domestic inventions in the same way. The FICPI committee believed, however, that the first-to-invent option would meet with greater acceptance if used only as a transitional provision. See Fédération Internationale Des Conseils En Propriété Industrielle, FICPI Position Paper for the Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as Far as Patents Are Concerned (Patent Law Harmonization Treaty) (May 1991) (unpublished manuscript, on file with the Harvard Journal of Law & Technology).

^{99.} See Wilder, supra note 72, at 497-98.

^{5 100.} See ADVISORY COMMISSION REPORT, supra note 4.

Of particular interest to this article is Recommendation IV-A, which concerns the prior art effect of patent applications. This recommendation states:

- (i) If the U.S. retains a first-to-invent system, the "Hilmer rule" should be maintained "as is." The U.S. should only change the "Hilmer rule" in the context of a global harmonization package.
- (ii) If first-to-file is adopted as part of harmonization, U.S. patents and published U.S. applications should be applicable as prior art references for novelty as of their earliest effective filing date (foreign priority date), and for both novelty and obviousness as of their U.S. filing date (including filing date of provisional applications).
- (iii) Whether or not the U.S. adopts a first-to-file system, if publication of applications is adopted, the applicability of a prior-filed U.S. application as prior art should occur when the U.S. application either issues as a U.S. patent, or is published, whichever occurs first, whether or not the "Hilmer rule" is changed. The carliest U.S. filing date should be the effective date for prior art purposes. 101

Recall that contrary to the law in most countries, U.S. patent applications are effective as prior art as of their U.S. filing date, not as of their foreign filing date. 102 Moreover, although most foreign countries consider patent applications to be prior art only for purposes of novelty, under current U.S. law, patent applications are considered prior art for both novelty and nonobviousness.

After a thorough study on the topic, the Advisory Commission recommended changing the *Hilmer* rule only in the context of a patent law harmonization package. In particular, the Advisory Commission felt that unilaterally changing the *Hilmer* rule would disadvantage U.S. inventors because it would enable more foreign-originated U.S.

^{101.} Id. at 65.

^{102.} This practice results from the *Hilmer* decisions, which numerous authors have criticized. *See*, e.g., STEPHEN P. LADAS, PATENTS, TRADEMARKS, AND RELATED RIGHTS — NATIONAL AND INTERNATIONAL PROTECTION 498-99 (1975); Lindeen, *supra* note 36; Wegner & Pagenberg, *supra* note 36; Wieczorek, *supra* note 7.

applications to defeat domestic U.S. patent applications. ¹⁰³ The Advisory Commission also thought it best for the United States to leverage elimination of the *Hilmer* rule in order to insure a balanced harmonization package.

With respect to the use of earlier-filed patent applications, the Advisory Commission took a hybrid approach that attempted to balance the advantages and disadvantages of the various approaches. Under this approach, published U.S. patent applications would be prior art for novelty purposes as of their foreign priority date, and for obviousness purposes as of their U.S. filing date. The Advisory Commission felt that this hybrid approach would minimize the impact of eliminating the *Hilmer* rule, while still preventing a substantial number of patents from issuing which are obvious variants of each other.

VI. A RECOMMENDATION TO IMPROVE U.S. PATENT LAW

The United States should adopt a whole-contents novelty-only approach from the priority date regardless of whether or not the United States switches to a first-to-file system. The remainder of this section argues that public policy favors the adoption of a novelty-only approach, that the public policy arguments asserted against novelty-only are not well-founded, and that a novelty-only approach is more consistent with the underlying theory of U.S. patent law.

A. Public Policy Favors the Adoption of a Novelty-Only Approach

1. Novelty-and-Obviousness Approach Is Too Harsh

Adoption of a novelty-only standard would increase the fairness of U.S. patent law. There is a basic unfairness associated with secret prior art. 104 because undisclosed inventions can defeat a later application on

^{103.} ADVISORY COMMISSION REPORT, supra note 4, at 66. While it is true that changing the Hilmer rule would make foreign-originated U.S. applications effective as prior art up to one year earlier, it is not clear whether this would disproportionately disadvantage U.S. inventors as opposed to foreign inventors because about half of all U.S. patent applications are foreign originated. On the other hand, it is clear that currently the Hilmer rule does disproportionately disadvantage foreign inventors. See Karl F. Jorda, That Discriminatory U.S. Patent Lawl, 61 J. PAT. OFF. Soc'Y 95 (1979).

^{104.} See Paul W. Leuzzi, A Re-Evaluation of the Use of 35 U.S.C. 102(e), Secret Prior Art, in Obviousness Determinations, 29 IDEA: J.L. & TECH. 167 (1988) (arguing that an obviousness rejection relying on § 102(e) secret prior art is an illogical result for which the courts have never provided a reasonable justification); see also Wegner, supra note 36, § 771.

obviousness grounds even though the later applicant had no way of knowing about the earlier invention. The § 102(e)/103 rejection is particularly unfair when the co-pending applications have differing inventive entities but are controlled by a common assignee. ¹⁰⁵ In this situation, a company's own secret work is used to restrict its ability to obtain patents on related inventions. The Advisory Commission's hybrid approach does nothing to correct this unfairness.

Under current U.S. law, secret prior work or pending patent applications can be used as prior art against anyone except the identical inventive entity. Although an applicant caught in the common-assignee § 102(e)/103 situation has five potential options available, their utility is limited. First, an applicant could contest the obviousness determination. Second, an applicant could file a Rule 131 affidavit to swear behind the filing date of the reference, in order to eliminate its patent-defeating Third, an applicant could cancel matter unneeded and effect. 106 unclaimed from an application before its issuance. 107 applicant could file a continuation-in-part application and abandon both parent applications (provided the earlier-filed application had not issued). This approach eliminates the § 102(e)/103 problem by joining all the inventors under a single application. Finally, an applicant could try to alter the application such that it has the same inventors as the reference.

These options are by no means a satisfactory solution to the unfairness. Indeed, many patent practitioners do not fully understand how limited the options are. When these options are either unavailable or not properly invoked, self-collision results for the common-assignee. Moreover, the § 102(e)/103 rejection would remain harsh even in a first-to-file system. ¹⁰⁸ The adoption of a novelty-only standard would limit

^{105.} See Daniel E. Wyman, Thoughts on 102/103, 74 J. PAT. & TRADEMARK OFF. Soc'Y 440, 443-44 (1992) (contending that the second paragraph of § 103 should be amended to exclude § 102(e) in the common-assignee situation). The classic example is the situation where inventor A of one company invents X and a first patent application is filed in the United States. Shortly thereafter, inventor, The classic example is the structure of the public at large knew of A's invention, § 102(e)/103 will defeat the second application.

^{106.} A Rule 131 affidavit allows an applicant to swear that his invention was made in the United States before the filing date of the earlier application. 37 C.F.R. § 1.131 (1995). Such an affidavit is not effective if both applications claim the same invention.

^{107.} See Ex parte Stalego, 154 U.S.P.Q. (BNA) 52 (Pat. Off. Bd. App. 1706).

^{103.} This harshness encouraged Denmark to switch from novelty-and-obviousness to novelty-only between filing and publication. See Lise Østerborg, Recent Changes in Danish Patent Law — Harmonization With the International Patent Systems, 10 INT'L REV. INDUS. PROP. & COPYRIGHT L. 314 (1979).

the use of secret prior art. As a result, the § 102(e)/103 rejection would disappear, since pending patent applications would no longer be available for obviousness determinations.

2. Novelty-Only Approach Would Reduce Uncertainty

Applicants generally know very little about the details of earlier-filed applications and prior inventions. Indeed, these applications and inventions are referred to as secret prior art for this very reason. Secret prior art makes it very difficult to ascertain the state of the art at any particular point in time. Accordingly, secret prior art poses a serious obstacle to certainty. The novelty-only approach used by most countries together with a first-to-file system reduces this problem significantly. This approach eliminates the use of pending patent applications as secret prior art for nonobviousness determinations. By reducing the total volume of secret prior art, applicants are better able to ascertain the likelihood of their application issuing.

3. Novelty-Only Approach Fosters Innovation

The purpose of the patent system is to stimulate innovation. The adoption of a novelty-only approach would enable an applicant to obtain a patent which is obvious in light of an earlier pending application. As a result, two patents can issue and each patent owner can obtain funding to compete with the other. The novelty-only approach will encourage more inventors and businesses to enter the patent race because the threat of losing is reduced. 112

4. Novelty-Only Approach Facilitates Harmonization

The novelty-only recommendation would also facilitate global harmonization. With respect to secret prior art, the international delegations to the WIPO harmonization negotiations have not been able

^{109.} Many industry representatives as well as patent practitioners have complained about "submarine patents" because of the uncertainty they create. According to Chisum, a submarine patent is a patent "that hide[s] unseen beneath the PTO 'patent pending' ocean and, after an industry sets sail unaware of proprietary rights claims, surfaces with torpedoes ready to fire." Chisum, supra note 72, at 445.

^{110.} Provided, of course, that the later application is filed before the earlier application is published.

^{111.} See WEGNER, supra note 36, at 182-83.

^{112.} But see Donald S. Chisum, Prior Invention and Patentability, 63 J. PAT. OFF. Soc'Y 397, 415-16 (1981).

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to reach agreement. The United States insists on an option to use pending patent applications for both novelty and obviousness, but most other countries oppose such an option and want a mandatory novelty-only approach.¹¹³ The Advisory Commission's hybrid approach.¹¹⁴ would be strongly opposed at any future WIPO harmonization discussions.¹¹⁵ In contrast, a novelty-only approach would be readily acceptable to the other delegations.¹¹⁶

B. Public Policy Arguments Asserted Against Novelty-Only Are Not Well Founded

The policy arguments commonly asserted against a novelty-only approach are: (1) that all patents should be "patentably distinct" from each other; (2) that the public should not be subjected to multiple infringement suits; and (3) that the present U.S. system works well as it stands.

1. Patentably Indistinct Patents Commonly Issue

The notion that all patents should be nonobvious from other patents ignores reality. Although this is perhaps a laudable goal, existing law has not produced this result. Patents which are obvious with respect to other patents are frequently issued for numerous reasons. For example, a patent examiner may allow an application without considering a very similar, previously filed application, patent, or prior invention. In other cases, an application may be allowed after the applicant files a Rule 131 affidavit. In addition, a terminal disclaimer may be filed to overcome a double patenting rejection. 118 In still other cases, the *Hilmer* rule would allow patentably indistinct applications to issue. 119 Thus, the current U.S. system fails to yield the result urged by its defenders.

The proposed reform retains the formal requirement that applications be patentably distinct. The change provided by the novelty-only

^{113.} See text accompanying notes 67, 68, and 79-83.

^{114.} See ADVISORY COMMISSION REPORT, supra note 4.

^{115.} See notes 89-94 and accompanying text.

^{116.} See notes 71-77 and accompanying text.

^{117.} The patentably distinct requirement means that the claims in an application must not be obvious in light of the claims in an earlier patent. See, e.g., In re Braat, 937 F.2d 589, 592 (Fed. Cir. 1991).

^{118.} A terminal disclaimer allows any patentee or applicant to "disclaim or dedicate to the public the entire term, or any terminal part of the term, of the patent granted or to be granted." See 35 U.S.C. § 253 (1988).

^{119.} See In re Hilmer, 359 F.2d 859, 879 (C.C.P.A. 1966); In re Hilmer 424 F.2d 1108 (C.C.P.A. 1970).

recommendation is that the obviousness would no longer be measured against secret prior art. Moreover, in the context of foreign-originated applications, the effects of eliminating the *Hilmer* rule would tend to offset any increase in the number of patentably indistinct patents.

In addition, the bar on double patenting minimizes the issuance of obvious patents in the context of applications by the same inventive entity. Generally speaking, a bar on double-patenting addresses the same concerns as secret prior art, namely, avoidance of multiple infringement suits for the same or similar inventions and limitation on extension of the term of exclusive rights. ¹²⁰ In the United States, the ban on double patenting applies only if the two patents are owned by the same applicant or assignee.

2. Multiple Infringement Suits

The U.S. delegation and many U.S. practitioners appear to strongly oppose a novelty-only approach because it would lead to the issuance of multiple patents on patentably indistinct inventions thereby subjecting the public to payment of multiple royalties or multiple infringement suits on one invention. Although multiple infringement suits on one invention should be avoided, in practice they cannot be completely prevented.

Even under current U.S. law, nothing necessarily shields the public from multiple royalties or infringement suits for an invention. For example, the manufacturer or seller of a chair with four tapered legs could be subject to an infringement suit by a first patentee having a patent claiming a chair with at least three legs, by a second patentee having a patent claiming a chair with four tapered legs, and by a third patentee having a design patent covering the chair in question. Given that it is not uncommon for a single product to include features which are covered by one or more different patents, the concern over multiple infringement suits is exaggerated. Even though there is a greater probability that patentably indistinct inventions will issue, most countries still prefer a novelty-only approach. [21] Furthermore, early publication of patent applications sharply limits the window of opportunity for such patentably in astinct inventions. Accordingly, the resistance of the U.S. delegation and many U.S. practitioners is not well founded.

^{120.} See supra notes 7-14 and accompanying text.

^{121.} See supra text accompanying notes 79-82.

3. Resistance to Change Is to Be Expected

Another argument often asserted by U.S. practitioners against a novelty-only approach is founded on inertia. Like a stationary object, many U.S. practitioners resist change or motion. The existing law governing the prior art effect of pending patent applications is well established. Not surprisingly, a portion of the patent bar resists changing the established practice. Although there is usually some uncertainty with any change, the uncertainty is typically short term. Those practitioners who feel overwhelmed by such inertial forces need to reconsider the benefits associated with a novelty-only approach, namely improved fairness, predictability, and harmonization. Once these practitioners fully consider these benefits, they should realize that the short term disadvantage of uncertainty is overshadowed by the long term benefits.

C. Legal Theory Supports Novelty-Only

Existing U.S. law, which currently employs a novelty-and-obviousness approach, can be viewed so that it actually supports a novelty-only approach. This section performs that analysis by comparing and contrasting the legal concepts of priority and prior art. In essence, the argument asserts that the evolution of U.S. patent law has been detoured from its proper path and that legal consistency supports a novelty-only approach.

1. Priority Is Conceptually Distinct from Prior Art

In *In re Bass*, Judge Rich expressed strong support for the notion that what is prior art for novelty is prior art for obviousness. ¹²² In *Hazeltine*, the Supreme Court also used reasoning based on symmetry to extend the *Milburn* logic for secret prior art from the novelty situation to the obviousness situation. ¹²³

The symmetry argument is intellectually pleasing. However, with respect to the prior art effect of patent applications, symmetry is not appropriate because the conceptual underpinnings do not support it. Properly understood, a pending application gives rise to priority, but not prior art. In either a first-to-file system or a first-to-invent system, filing denotes an act of priority. Filing, however, does nothing to wrich the public knowledge. Therefore, the act of filing cannot create prior art.

^{122.} See In re Bass, 474 F.2d 1276, 1289 (C.C.P.A. 1973). Chisum has also criticized the novelty-only approach. See Chisum, supra note 112, at 418 n.57.

^{123.} Hazeltine Research, Inc. v. Brenner, 382 U.S. 252 (1965).

It is the publication of patent applications or the issuance of patents which establishes prior art. Thus, the concepts of priority and prior art are distinct. It is more consistent with this dichotomy to treat secret prior art as evidence of priority rather than as prior art. A novelty-only approach to pending patent applications thus replaces an apparent symmetry with true consistency.

2. Pending Patent Applications Establish Priority

a. First-to-Invent System

Filing a patent application operates as a constructive reduction to practice.¹²⁴ In a first-to-invent system, a constructive reduction to practice, like an actual reduction to practice, establishes priority of invention. Even so, a filed application is not available to the public.¹²⁵ Thus, it should be evident that the act of filing establishes priority, not prior art.

Furthermore, § 102(e) pending U.S. patent applications are but a subset of § 102(g). No one disputes the notion that the lineage of § 102(g) lies in priority. If § 102(g) is categorized as priority, 126 § 102(e) must also pertain to priority, not prior art. Consequently, the act of filing should not be viewed as creating prior art in a first-to-invent system.

b. First-to-File System

In a first-to-file system, filing is by definition an act of priority. To effectuate the priority right, most first-to-file countries provide patent applications with a patent-defeating effect as of their filing date. In such countries, the patent-defeating effect is usually limited to a novelty-only approach in which patent applications are usable for novelty determinations but not inventive-step determinations.¹²⁷

Although most first-to-file countries include patent applications within the state of the art, some of these countries more precisely refer

^{124.} See, e.g., In re McIntosh, 230 F.2d 615, 619 (C.C.P.A. 1956).

^{125.} See 35 U.S.C. § 122 (1988).

^{126.} See Federico, supra note 61 and accompanying text.

^{12&#}x27;). Although the priority versus prior art distinction is easier to visualize in a first-to-file system, it has still resulted in confusion. See Tanabe & Wegner, supra note 5. Tanabe and Wegner explained the differences in the context of Japanese patent law as follows: "A Japanese patent application is 'prior art' as of its first publication date, and not its filing date. A published Japanese patent application, however, has a limited patent-defeating effect under Article 29bis as of its effective filing date under the Paris Convention." Id. at 653-55.

to patent applications as establishing a senior right. 128 Whichever label is used, the underlying notion is that the act of filing is a priority mechanism. Nevertheless, most first-to-file countries carry out the priority mechanism by including patent applications within the state of the art for limited purposes.

3. Secret Prior Art Is a Misnomer

At least one commentator has consistently insisted that secret prior art is merely an attempt to undercut the first-to-invent system. ¹²⁹ At first blush, one might think that this view is rather radical, particularly since the Federal Circuit has on several occasions upheld not only the concept of secret prior art but also the term. ¹³⁰ However, upon closer examination, it becomes evident that the phrase "secret prior art" is indeed a misnomer. ¹³¹ The art denoted as secret prior art is not prior art in either a first-to-invent system or a first-to-file system — it is evidence of priority.

The mislabeling of priority as prior art is more than an erroneous label. This misnomer has confused other points of U.S. patent law, particularly Rule 131 affidavits. The confusion arises because the Rule 131 affidavit treats patent applications as prior art as of their U.S. filing date, when in fact they only establish priority. Hence, swearing behind a U.S. application's filing date avoids the reference under § 102(e) but leaves serious questions open with respect to prior invention under

^{128.} See Wegner, supra note 11; see also WORLD INTELLECTUAL PROPERTY GUIDEBOOK: FEDERAL REPUBLIC OF GERMANY, AUSTRIA AND SWITZERLAND Ger 2-42 (Dr. Bernd Rüster ed., 1991) [hereinafter GERMANY, AUSTRIA AND SWITZERLAND] ("In accordance with the first-to-apply principle, an older invention is never state of the art unless it has been published. However, an invention with an older filing or priority day is relevant as being a senior right, if published after the application. If published before the application, it constitutes prior art. Inventions filed the same day, for example, a patent application and an accompanying application for a utility model, are neither prior art nor senior right."); W.R. CORNISH, WORLD INTELLECTUAL PROPERTY GUIDEBOOK: UNITED KINGDOM 133 (1991) ("Once the earlier applicant has his specification published, it of course becomes part of the state of the art. But without special provision it would not have that character in the period between securing the priority date and publication of the specification. Yet if nothing is done, 'double patenting' may result, and that has long been thought unacceptable. . . . Instead, the material in the patent specification is now given a priority date, which is determined in the same way as the priority date of a claim."); GERMANY, AUSTRIA AND SWITZERLAND, supra, at Aus 3-15.

^{129.} See, e.g., Klitzman, supra note 27.

^{130.} See, e.g., Sun Studds, Inc. v. ATA Equip. Leasing, Inc., 872 F.2d 978, 982-83 (Fed. Cir. 1989), overruled on other grounds by A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020 (Fed. Cir. 1992); Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1446 (Fed. Cir. 1984).

^{131.} See Wegner, supra note 11, at 176.

§ 102(g).¹³² The problem is that the Rule 131 affidavit is only a half-solution because priority is not fully considered. In particular, unless the claims are substantially similar, the PTO does not consider U.S. applications for prior invention under § 102(g).¹³³ However, it is well settled that prior invention by another under § 102(g) is prior art regardless of what is claimed.¹³⁴ Accordingly, the "secret prior art" misnomer facilitates the Rule 131 affidavit practice, which undercuts the first-to-invent system, at least within the PTO.

Furthermore, it is misleading to say that pending applications retroactively become prior art as of their filing or priority date once they are either published or issued. 135 The condition that applications must eventually be published or granted in order to have any prior art effect, as required by all countries making use of secret prior art, demonstrates that it is the act of publication — not the act of filing — that is the triggering event. In essence, the laws of such countries make use of a legal fiction whereby the effective date of published applications or patents is set earlier than their actual date of publication.

Moreover, in all countries utilizing secret prior art, only national applications possess a patent-defeating effect¹³⁶ — foreign applications are ignored. This usage is consistent with priority analysis, but is inconsistent with prior art notions.

Thus, filed patent applications should not be referred to as prior art, secret or otherwise.¹³⁷ In fact, the phrase "secret prior art" is self-contradictory since what is secret is not prior art. A more accurate phrase would be "patent-defeating effect of priority."

^{132.} See Klitzman, supra note 64, at 521; Murashige, supra note 37.

^{133.} For example, this problem arose in *In re Bass*. There, despite the fact that affidavits were filed, the Board of Appeals held that those affidavits were not necessarily sufficient. "[A]ssuming the affidavits were sufficient, the reference is not necessarily removed in view of the relationship of the parties and the common ownership. There is still section § 102(g) to consider. Under this provision the prior invention of another, meeting the conditions specified in [§ 102(g)], is prior art with respect to a later invention." *In re* Bass, 474 F.2d 1276, 1281 (C.C.P.A. 1973) (quoting *Ex parte* Robbins, 156 U.S.P.Q. 707, 709 (Pat. Off. Bd. App. 1967)).

^{134.} See supra text accompanying notes 47-59.

^{135.} But see, e.g., Tanabe & Wegner, supra note 5, § 132.

^{136.} Published documents are, for the most part, deemed prior art throughout the world, regardless of where they were published. Hence, if patent applications were truly part of the prior art, one would think they would have a worldwide effect, not a localized effect. Foreign applications that are subsequently filed as national applications in accordance with a treaty are typically treated the same as national filings.

^{137.} Likewise, prior inventions in a first-to-invent system should not be referred to as secret prior art.

4. Patent Applications Should Only Bar the Same Invention

a. The Supreme Court Overextended Milburn in Hazeltine

The issue in *Hazeltine* was whether a pending patent application was prior art for obviousness. The inventions involved were different but the differences were obvious. In *Hazeltine*, Justice Black followed *Milburn* and concluded without much discussion that the fact that the case arose under § 103 and not § 102(e) was a "distinction... without significance." Any other course would "create an area where patents are awarded for unpatentable advances in the art." As in *Milburn*, the tionale, again, was that the delays of the PTO should not affect the real to because the applicant had done what he could to add his disclosure to the prior art. 141

Hazeltine can be criticized on a number of grounds. First, the Court did not consider the resulting inequities, the uncertainty, and the anti-competitive effects of its decision. Second, in contrast to what the Supreme Court stated, the applicant of the earlier patent did not do all he could to add his disclosure to the prior art. The applicant knew his disclosure would be held in secrecy, and could have published his disclosure if he wanted to make it available to the public before its issue date.

Third, the extension of the *Milburn* rationale was unjustified. The filing of a patent application is an act of priority, and such priority is preserved regardless of when the PTO examines the application. The appropriate conceptual basis for the novelty-defeating effect is priority and has nothing to do with PTO delays. Thus, the policy justification offered by the Supreme Court was inapposite.

Finally, the Court's reasoning that no patents should be issued for obvious advances in the art is not expressly codified in the U.S. patent laws. The notion of one patent for one invention is firmly entrenched in U.S. law. However, the U.S. patent laws do not require that all patents be nonobvious from one another. Indeed, the *Hilmer* rule contradicts this assertion. Terminal disclaimers and Rule 131 affidavits also

^{138.} Hazeltine Research Inc. v. Brenner, 382 U.S. 252 (1965).

^{139.} Id. at 256.

^{140.} Id.

^{141.} Id.

^{142.} See supra part ill.

^{143.} See 35 U.S.C. § 122 (1988).

^{144.} See, e.g., In re Deckler, 977 F.2d 1449 (Fed. Cir. 1992).

^{145.} See Donald S. Chisum, Foreign Activity: Its Effect on Patentability Under United States Law, 11 INT'L REV. INDUS. PROP. & COPYRIGHT L. 26, 39-40 (1980).

undermine this contention. Furthermore, Congress enacted the second paragraph of § 103 to temper the *Bass* result, thereby excluding certain joint research efforts from this assertion.¹⁴⁶

b. Priority Should Prevent Patents for the Same Invention but Not Obvious Variations

Since the act of filing establishes priority, not prior art, patent applications should be treated in accordance with priority principles. That is, as between two applicants for the same invention, the applicant with priority should receive the patent. If the two applicants claim different inventions, both should receive patents, regardless of whether one is obvious in view of the other.¹⁴⁷

Countries which follow a first-to-file system have almost uniformly decided that earlier-filed applications are able to bar subsequent applications claiming the same invention, but not obvious variations. ¹⁴⁸ These countries use a novelty-only approach to achieve an equitable balance between the interests of earlier and later applicants. ¹⁴⁹

The U.S. first-to-invent system treats earlier patent applications that eventually issue as prior art references as of their U.S. filing date. Because the United States has historically insisted that an issued patent

^{146.} See 35 U.S.C. § 103 (1988).

^{147.} This is the case with almost all first-to-file countries, but it is not accurate for the U.S. first-to-invent system. For example, if the PTO detects the overlapping subject matter, an interference will be declared and typically only the winner receives a patent. On the other hand, if the overlapping subject matter is not detected, then both typically receive patents subject to later challenge under § 102(g)/103.

^{148.} This is also in accord with Ladas' interpretation of Article 4B of the Paris Convention. See LADAS, supra note 102.

^{149.} See Østerborg, supra note 108. The Danish Patent Act of 1967 was amended in 1978 to harmonize its laws to those of the various conventions. Under the old law, Danish patent applications were considered part of the state of the art for novelty and inventive-step. The new law adopts novelty-only. Østerborg indicates that the new law is a gentler provision. Further, with respect to the old law it was said that: "Since its introduction in 1967 this provision has been heavily criticized. In particular it has been pointed out that it may reduce the applicant's possibilities of obtaining patent protection for his further development of the invention." Id. at 318.

The European Patent Office appears to agree. See Robert Bosch GmbH v. Nissan Motor Company, Ltd., Case No. T 167/84 (E.P.O. 1987), reprinted in 18 INT'L REV. INDUS. PROP. & COPYRIGHT L. 788, 789 (1987) ("In order to mitigate the harsh effects of the 'wholecontents approach', its application is confined to novelty.").

should not be an obvious variation of another issued patent, ¹⁵⁰ the U.S. law forces priority concepts into prior art doctrine for obviousness purposes to ensure the intended result. Although this technique is effective to prevent patenting of obvious variations, it is not conceptually correct to use an earlier patent application that was unavailable to the public to bar an applicant from a patent on a different, yet obvious, invention. Therefore, filed applications, when properly treated as establishing priority, should only bar the same invention. ¹⁵¹

D. Effect of Recommendation on U.S. Law

Some subsections of § 102 that apply to novelty determinations do not apply to obviousness determinations under § 103. These subsections are usually referred to as loss-of-rights provisions. As the term implies, these subsections operate to deprive a patent seeker of rights by virtue of priority, but have no effect on determinations based upon the consideration of prior art. Currently, most practitioners would classify the subsections of § 102 according to Table I.

^{150.} See, e.g., In re Deckler, 977 F.2d 1449, 1451-52 (Fed. Cir. 1992) ("[S]ections 102, 103, and 135 of 35 U.S.C. clearly contemplate — where different inventive entities are concerned — that only one patent should issue for inventions which are either identical to or not patentably distinct from each other." (quoting Aelony v. Arni, 547 F.2d 566, 570 (C.C.P.A. 1977)).

^{151.} Judge Baldwin's concurring opinion in *In re Bass* supports this notion. *See supra* note 45 and accompanying text. Judge Baldwin stated:

There has long been a distinction in the law between the defense of invalidity based on unpatentability over the prior art and the defense of invalidity based on the prior invention of another. Framed in the terminology of our present statute, that distinction is merely this: if the defense or rejection is based on prior art, the claim under consideration is not patentable if the differences between the subject matter claimed and the prior art relied on 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. On the other hand, when the defense or rejection is not based on prior invention, i.e., the prior invention made in this country by another who had not abandoned, suppressed or concealed it, the claimed invention will be patentable unless the prior invention is the same as or substantially the same as the claimed invention.

Table I: Current § 102 Categorization

Prior Art	Loss-of-Rights
§ 102(a)	
§ 102(b)	
	§ 102(c)
	§ 102(d)
§ 102(e)*	
§ 102(f)**	§ 102(f)***
§ 102(g)**	§ 102(g)***

^{*} The effective date of an application is the U.S. filing date, not the foreign priority filing date.

As shown in Table I, under existing U.S. law, pending patent applications (§ 102(e)) are considered to be prior art and are therefore available for both novelty and obviousness determinations. Prior inventions by others (§ 102(g)) are also considered to be prior art and are available for both novelty and obviousness determinations, but only in non-common-assignee situations.

The novelty-only recommendation would completely exclude use of pending patent applications in obviousness determinations, restricting their effect to use to a patent-defeating effect of priority. In accordance with the above recommendation, the subsections of § 102 would be recategorized as shown in Table II.

[&]quot;Only for non-common-assignee situations.

[&]quot;" In common-assignee situations, use is limited to novelty.

Table II: Proposed Categorization of § 102

Prior Art	Loss-of-Rights	Patent-defeating Effect of Priority
§ 102(a)		
§ 102(b)		
	§ 102(c)	
	§ 102(d)	
		§ 102(e)"
§ 102(f)		
		§ 102(g)**

^{*} The effective date of a patent application would be the foreign priority filing date.

As shown, the recommendation would clearly define § 102(e) not as prior art, but as priority, which carries a novelty-only patent-defeating effect. For consistency, since § 102(g) is also a priority section, it should be grouped with § 102(e).

VII. CONCLUSION

The patent laws of many countries include earlier-filed patent applications as part of the state of the art. However, the extent to which such applications may be used varies considerably throughout the world. For example, although some countries include only the claims of such applications in the state of the art, most countries include the whole contents. Further, most countries use such applications for purposes of evaluating novelty, but not for purposes of evaluating nonobviousness.

Presently, for earlier-filed patent applications, the United States uses a novelty-and-obviousness approach based on the U.S. filing date. However, a conceptual framework already exists within U.S. law that supports a novelty-only approach for secret prior art. First, pending patent applications are not truly prior art because their filing does not disclose their contents to the public. Second, the filing of a patent application does create a right of priority. Third, a right of priority is

[&]quot;This subsection would disappear if the United States switches to a first-to-file system.

distinct from prior art, but should carry with it a patent-defeating effect for the same invention in any country where such priority is claimed. Fourth, since the basis for the patent-defeating effect is priority, not prior art, the patent-defeating effect should be limited to novelty.

The time has come for the United States to improve its patent laws by adopting a novelty-only approach based on the foreign priority filing date. This reform would produce fairness, predictability, and harmonization that would more than offset the increased risk that obvious patents could issue. In addition, the discrimination caused by the *Hilmer* rule would end. The overall effect of such changes would be to limit what is commonly, although improperly, known as secret prior art.