

Provisional Priority Practices, Prior Art Patents, Published Applications for Patent & Related Matters Arising From The American Inventors Protection Act of 1999

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With the enactment of the American Inventors Protection Act of 1999, the Congress has dramatically modernized the U.S. patent law. It has enacted improvements that will simplify and make more certain the course of many patent prosecutions. It also affords U.S. inventors with new alternatives and options for getting and enjoying the benefits of patents.

This paper reviews the aspects of the American Inventors Protection Act of 1999 that most directly impacts patent filing and procurement. It attempts to provide useful advice for patent practitioners seeking to take advantage of the new law.

I. New Statutes and Rulemaking Affecting Provisional Application Filing, Pendency, and Conversion

The American Inventors Protection Act of 1999 (AIPA) has put to rest any lingering concerns over the vitality of the use of provisional applications as an element in the strategy for obtaining U.S. patent rights. Because use of provisional applications are the "cheapest" means of securing global priority for Paris Convention purposes, can extend the patent term by one year, avoid the requirements for "information disclosure," avoid (or at least defer) the burden of responding to any official action on the merits of patentability, allow for more streamlined filing (including the optional filing of claims), inherently have a more relaxed requirement for assessments of "inventorship," employ few formalities (no inventor's oath or declaration; only a simplified "cover sheet"), and can be cheaply and readily supplemented throughout the Convention year (*i.e.*, completely substitute for continuation-in-part practices), there would appear to be little reason – except for the need for expedited issuance or a desire for immediate publication to secure "provisional rights" – for an inventor not to use of provisional filing.

Several statutory changes have made provisional filing even more attractive. Three major statutory changes in the AIPA relating to provisional applications are –

- Pendency is extended to coincide with the Paris Convention year. Where a provisional application would otherwise become abandoned on a Saturday, Sunday, or holiday in the District of Columbia, the pendency is extended until the following business day of the U.S. Patent and Trademark Office.

- Copendency between a provisional and an nonprovisional application is no longer required in order to claim the right of priority for a provisional application in the nonprovisional application under 35 U.S.C. § 119(e).
- A provisional application can be converted to a nonprovisional application by payment of a conversion fee, supplying a claim (if not already supplied), and submitting an oath or declaration.

The latter change should totally quiet any residual voices who have questioned whether a U.S. provisional application filing qualifies under the Paris Convention as a "regular national filing" on which the right of priority can be asserted.

Final rules have been published that implement the statutory changes to provisional application filing, pendency, and conversion. These rules appear at 65 Fed. Reg. 50092 (August 16, 2000), and deal with continued examination practice as well as provisional applications. They are based on interim rules that were previously published and put into effect that appear at 65 Fed. Reg. 14865 (March 20, 2000).

The final rules provide the following practice changes:

- Rule 7(b) provides that provisional applications now accorded pendency for equivalent of a full Paris Convention year. The new rulemaking notes that this extends by one or two days the time that a conversion to a nonprovisional application can be effected, where the last day for taking action would otherwise be a non-business day in the U.S. Patent and Trademark Office.
- Rule 17 provides new fees for "continued examination" and conversion of a provisional application to a nonprovisional application are set at basic filing fee (before excess claims fees).
- Rule 53(c)(3) provides explicitly for provisional-nonprovisional conversion, including explicit caveat concerning the loss of patent term by moving the 20-years term from filing back to the original provisional filing date. The final rulemaking makes politely clear that only an idiot would take this step as a means of procuring a patent.
- Rule 53(d)(1) limits access to filing "continued prosecution applications" to pending applications filed before May 29, 2000.
- Rule 78(a)(3) limiting benefit of the filing date of a provisional application to claims in a nonprovisional application where the subject matter claimed is adequately disclosed under 35 U.S.C. § 112, first paragraph in the provisional application and where at least a common inventor is named and where the provisional application was filed in the English language or an English language translation was filed in the time required by the U.S. Patent and Trademark Office under 37 C.F.R. § 1.52(d). *In addition, an express requirement is made that the filing fee for the provisional application have been paid within the period set out under 37 C.F.R. § 1.53(g).*
- Rule 97 now requires that an information disclosure statement be made before the mailing of the first office action after the filing of a request for continued examination (new 37 C.F.R. § 1.114).

- Rule 103 on suspension of action is substantially rewritten to include specific provisions for suspensions of action in CPA's (continued prosecution applications) and CEA's (continued examination applications), in each case for up to three months but only if made with the request for the CPA or the continued examination. A petition fee (37 C.F.R. § 1.17(i) is required.
- Rule 104 is revised to account for the new disqualification from prior art based on commonly owned subject matter under one or more of 35 U.S.C. § 102(e), (f), or (g).
- Rule 113 is amended to reference the new option under 37 C.F.R. § 1.114 for making a continued prosecution request in responding to a final rejection.
- Rule 114 is added providing the new provisions for continued prosecution in any application where prosecution is "closed" (*i.e.*, under final rejection or appeal). Where a "submission" is made (which must include a response to any outstanding action) and the required petition fee (37 C.F.R. § 1.17(i)) paid, the finality of any rejection will be withdrawn and prosecution on the merits reopened.
- Rules 116 (amendments after final rejection), 198 (reopening after decision on appeal), 312 (amendments after allowance, and 313 (withdrawal from issue) are conformed to the new continued examination practice under 37 C.F.R. § 1.114.

With these new statutory provisions and the new rulemaking implementing them now completed, what does this all mean for patent practitioners? Surprisingly, new patent strategies have now emerged from these relatively obscure changes to an obscure part of U.S. patent practice.

II. *Removing Copendency for Provisional Patent Applications: New Options Under the Paris Convention.*

Section 4801 of the American Inventors Protection Act contains two new provisions that specifically impact "provisional" patent applications. The most important of these is in section 4801(b), removing the requirement in 35 U.S.C. § 119(e)(2) that a provisional and a non-provisional application must be "copending" in order for the later-filed nonprovisional application to be able to obtain the benefit of the filing date of the earlier-filed provisional application.

Under this provision, anyone filing a provisional application will have the right to intentionally and categorically abandon the provisional patent application, thereby leaving no rights outstanding in the provisional application, *i.e.*, following an intentionally, expressly abandoned provisional application, the application could not be revived and no patent could be issued on the application. While 35 U.S.C. § 111(b)(5) has been amended by section 4801(a) of the American Inventors Protection Act to permit a provisional application to be converted to a nonprovisional application upon which a patent can be granted, no provision in Title 35 permits an intentionally abandoned application of any type from being revived and issued as a patent.

The ability to intentionally abandon a provisional application for patent without leaving rights outstanding in the application permits an inventor to file a *second provisional application* disclosing the same invention and have the later-filed provisional

application serve as a basis for a claim of priority under the Paris Convention. According to Article 4.C.(4) of the Paris Convention, such an express abandonment is a categorical requisite to the ability to make a later claim to priority:

A subsequent application concerning the same subject as a previous first application within the meaning of paragraph (2), above, filed in the same country of the Union, shall be considered as the first application, of which the filing date shall be the starting point of the period of priority, if, at the time of filing the subsequent application, ***the said previous application has been withdrawn, abandoned, or refused, without having been laid open to public inspection and without leaving any rights outstanding, and if it has not yet served as a basis for claiming a right of priority.***

This rule under the Paris Convention, although nowhere embodied in U.S. patent law, is carried literally into the patent laws of Europe and Japan. For example, under Article 87.4 of the European Patent Convention, the failure to claim the earliest priority filing is normally fatal to all claims for priority:

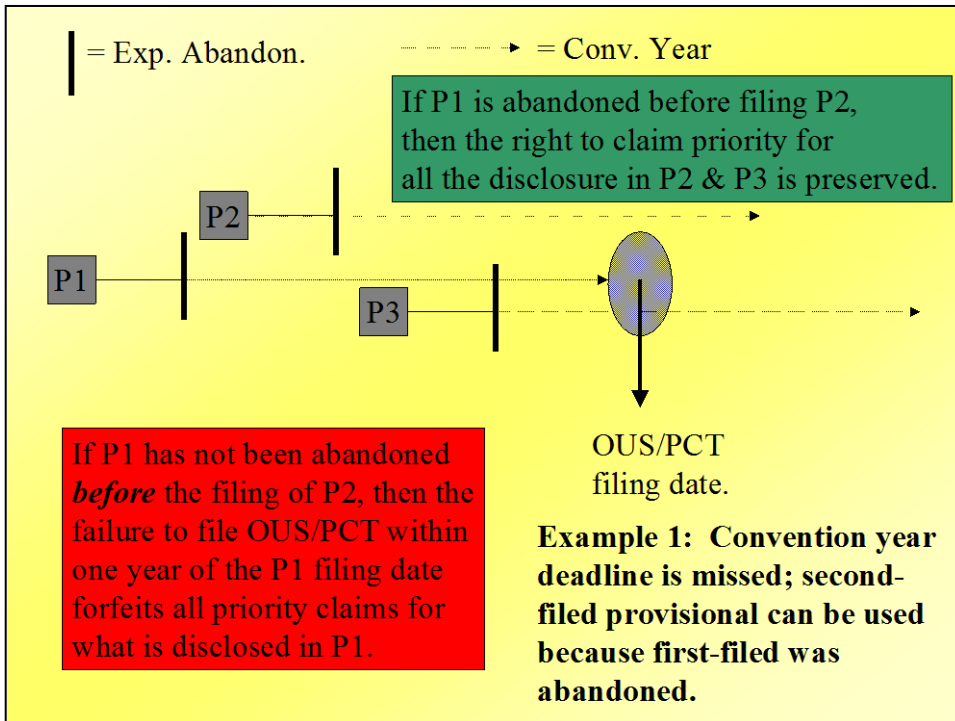
A subsequent application for the same subject-matter as a previous first application and filed in or in respect of the same State shall be considered as the first application for the purposes of determining priority, provided that, ***at the date of filing the subsequent application, the previous application has been withdrawn, abandoned or refused, without being open to public inspection and without leaving any rights outstanding,*** and has not served as a basis for claiming a right of priority. The previous application may not thereafter serve as a basis for claiming a right of priority.

This new opportunity to intentionally and expressly abandon a provisional patent application provides new flexibility in making priority claims. The practice implications are clear:

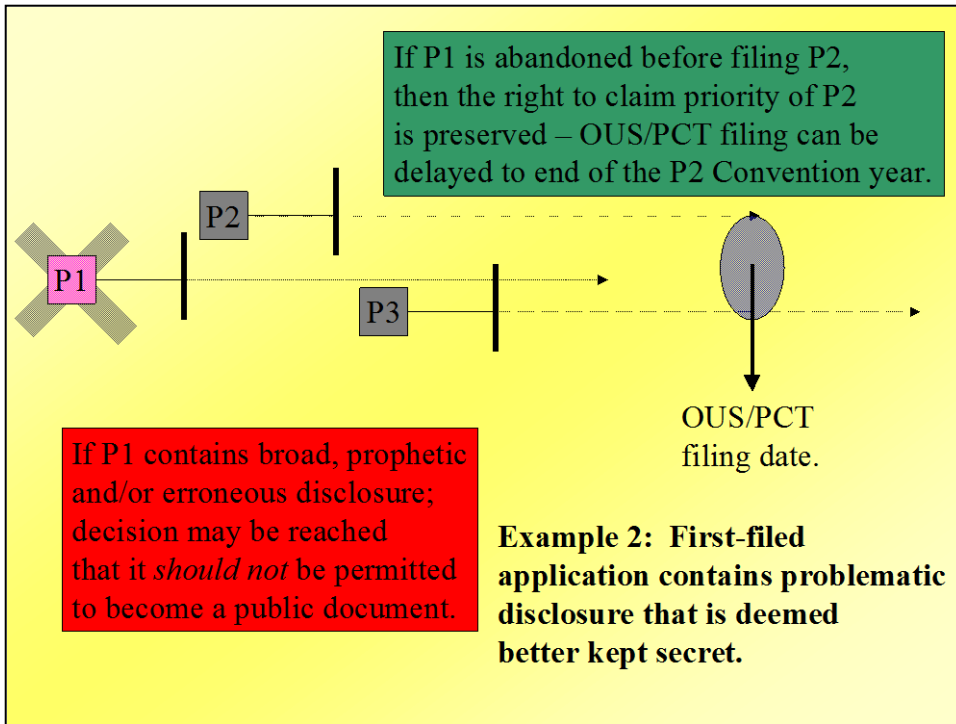
- Where a series of provisional applications are filed, ***the second in the series should not be filed until the first in the series has been expressly abandoned.*** This will assure that when the second application is filed, no rights are outstanding in the first application.
- Under a more conservative strategy, provisional applications should be expressly abandoned promptly after filing as a matter of course. This can serve to prevent an inadvertent failure to abandon a provisional application.

- Provisional applications, like nonprovisional applications provide a *benefit or priority* date for a claim only if the provisional in question provides full §112 support to the claim. This means that multiple provisional applications cannot be “aggregated” to support a claim.

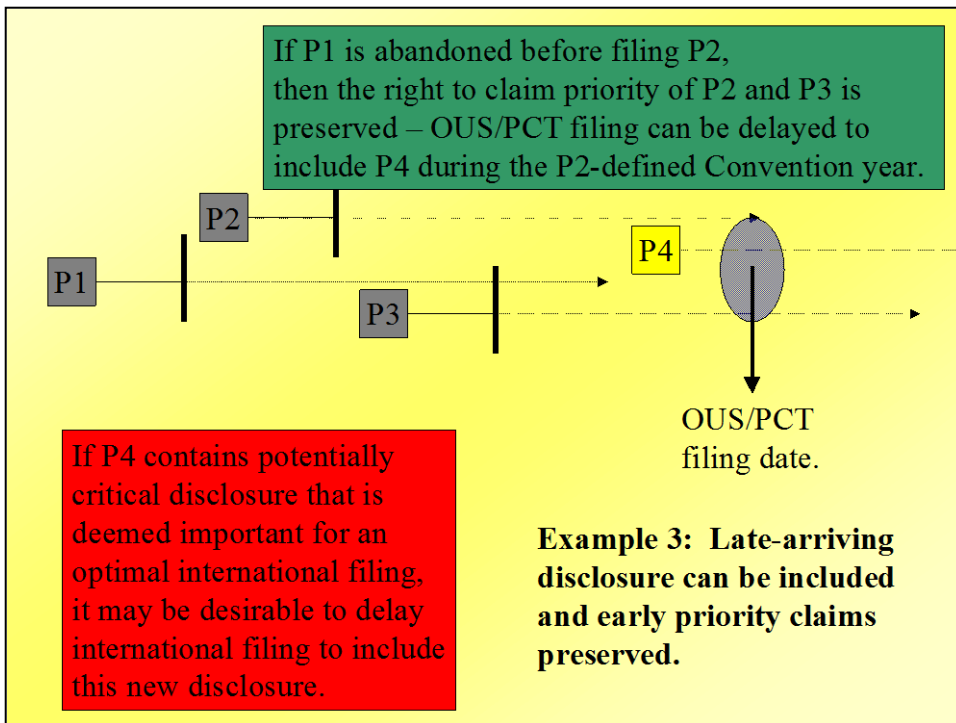
The flexibility to claim priority from a second provisional application where a series of provisional applications have been filed can be crucial. Consider the following example in which the Convention year for the first provisional application has been missed:



Another situation where a provisional application may be jettisoned is the presence in the initial provisional application of disclosure that will be problematic as a basis for later patenting. For example, if the original disclosure is found only to be non-enabling or lack utility for a substantial portion of the originally disclosed invention, prudence may dictate using only a more limited, but secure disclosure in a later-filed provisional application:



As a final example, there may be situations where late-breaking information would be unavailable during the Convention year, but available to be used within one year from the second provisional filing:



How to Abandon a "Provisional Patent Application."

The requirement to abandon an application for patent "with no rights outstanding" before a later-filed application disclosing the invention can be used as a priority application raises a threshold question as to the *form* in which an application should be "abandoned." Particularly, should the "magic words" be used – "no rights outstanding" be invoked in abandoning a priority application.

Several considerations argue that "magic words" not be used. These include:

- **Futility.** If a provisional application is abandoned with the additional statement that the "applicant expressly abandons this application and leaves no rights outstanding," nothing in U.S. patent law prevents such an application from serving as a priority application under 35 U.S.C. § 119(e) for domestic priority purposes. Further, the Paris Convention makes expressly clear that the subsequent fate of the priority application has no impact on the ability of the application to serve as a basis for priority claim. In this regard, an application upon which a patent has issued, an application expressly abandoned, and an application expressly abandoned leaving no rights outstanding must be treated equivalently.
- **Uncertainty.** Before expressly abandoning a U.S. application for patent with a notation relating to "no rights outstanding," caution is needed to assure that a court does not construe this effort as an "abandonment" of the underlying invention under 35 U.S.C. § 102(c) or an attempt to repudiate the right to rely on the application as a "constructive reduction to practice" sufficient to establish a date of invention. Since there is nothing in U.S. law directly corresponding to the language of the Paris Convention, an applicant making an additional statement on abandonment leaves the door open to potentially troublesome arguments being later advanced.

Making a more explicit disclaimer would appear equally frustrating. For example, abandoning an application with a disclaimer, "I hereby categorically abandon the right to use this application as a basis for claiming priority under the Paris Convention or domestically under 35 U.S.C. § 119(e)" would appear equally problematic. This disclaimer, even if given effect in the United States, would not necessarily preclude a later change of heart. Again, the Paris Convention, Article 4.A. imposes only the following constraints:

- (1) *Any person* who has duly filed an application for a patent, or for the registration of a utility model, or of an industrial design, or of a trademark, in one of the countries of the Union, or his successor in title, *shall enjoy*, for the purpose of filing in the other countries, a right of priority during the periods hereinafter fixed.
- (2) *Any filing* that is *equivalent to a regular national filing* under the domestic legislation of any country of the Union or under bilateral or multilateral treaties concluded between countries of the Union *shall be recognized* as giving rise to

the right of priority.

(3) By a regular national filing is meant any filing that is adequate to establish the date on which the application was filed in the country concerned, *whatever may be the subsequent fate of the application.*

Since the "right of priority" upon filing a U.S. patent application is not a "priority right" under U.S. patent law, but a "right" wholly under foreign patent laws, it is unclear how the disclaimer would be given its intended effect. For example, if I file a priority disclaimer under 35 U.S.C. § 119 with respect to a U.K. patent application with the European Commission is this legally binding in terms of U.S. patent law? If so, what provision?

Further, it is clear that the target of the Paris Convention is to prevent U.S. continuing application practice from producing an "evergreening" of the Paris Convention priority year. Foreign patent systems have long recognized that a U.S. continuing application, filed in connection with the abandonment of the parent application, does not permit the use of the continuing application as the earliest priority application – on the grounds the parent was "abandoned." Because of the copendency requirement in 35 U.S.C. § 120, the parent application was abandoned with the right to obtain a patent retained in the continuing application outstanding.

Finally, the language of the EPC suggests that it is abandonment of the right to a patent on the application, not the right to claiming priority that triggers satisfaction of the "no rights outstanding" limitation. The EPC states that the first application cannot be disregarded where it already has "*served as a basis for claiming a right of priority.*" Then, presumably even if the application was abandoned leaving "no rights outstanding," the earlier application "*may not thereafter serve as a basis for claiming a right of priority.*" Presumably, if abandoning "***without leaving any rights outstanding***" was intended to include abandonment that somehow encompassed abandonment of later priority claims, the next sentence so stating would be wholly superfluous.

III. "Paris Convention" Pendency For Provisional Patent Applications

A further set of changes was made in the law relating to provisional applications. Section 4801(b) extends the pendency of a provisional application to the last day of the Convention year – where the Convention year would otherwise end on a Saturday, Sunday or holiday. While the original purpose of this amendment was to assure "copendency" between a provisional application and a later-filed nonprovisional or international application for the full duration of the Paris Convention year – and avoid loss of U.S. patent rights – copendency is no longer needed for this purpose.

However, this provision does not serve to provide a few additional days in which to *convert* a provisional application to a nonprovisional application under the new provisions on conversion. Indeed, the new U.S. Patent and Trademark Office rulemaking

notes that the extra pendency avoids redundancy in the new legislation for exactly this reason.

IV. Conversion of Provisional Applications to Non-Provisional Applications

The final important change to provisional application practice is the new right to convert a provisional application to a non-provisional application. Obviously, an applicant cannot both *abandon* expressly a provisional application and exercise the conversion right. Therefore, the obvious question is "Why convert a provisional to a nonprovisional patent application rather than use the express abandonment route?"

Certainly, if the intention of the inventor is to ever obtain on an invention disclosed in a provisional application, the answer is, "Don't." The only real effect of doing so is that the eventual patent term of the converted provisional application will be 20 years from the original, provisional filing date. Filing a separate and subsequent nonprovisional application that will claim benefit of the provisional filing date moves the patent expiration date back to 20 years from the later, nonprovisional filing date.

Conversely, the ability to convert a nonprovisional patent application to a provisional patent application could be a viable option – at least during the first year from the effective filing date of the provisional application – to get the extra year of patent term. This, of course, results in the need to file two nonprovisional patent applications and effect the conversion of the provisional to the nonprovisional – making it an inferior strategy to simply filing the provisional application in the first instance.

However, if the intent is not to get a U.S. patent, but to establish the provisional application as *prior art* as of its provisional filing date, then the very simplest thing to do may be to convert the provisional application before the end of the Convention year. This will permit the converted provisional application to be published at 18-months from the provisional filing, and become prior art, even if the converted provisional application is then permitted to become abandoned.

V. Patent Strategies Involving Provisional Patent Application Filing

With the various changes in provisional application practice, it would appear to be completely reliable and foolproof. These applications can no longer be doubted as "regular national filings" under the Paris Convention. No one can trip on a copendency issue. No new formalities or requirements have been imposed that might diminish the options presents. Thus, the amended statutory provisions and the new provisional rules have many important implications for provisional application users. These include the following.

Job One: You Get Only What You Disclose

A prior-filed provisional application, a prior-filed nonprovisional application, and a prior-filed foreign application all have a common status under the U.S. patent law: the “benefit” of the prior filing date is limited to the invention disclosed in the prior filed application. More specifically, the benefit is limited to the invention disclosed in the prior-filed application that is in full compliance with the requirements of the first paragraph of 35 U.S.C. §112. This is not a trivial matter. Section 112 requires that a written description of the invention be present, the invention be “enabled,” and that the best mode contemplated by the inventor for the making and using of the invention not be concealed. Hence, all the disclosure is required, or none of the benefit can be accorded.

The detail of the disclosure is also well established in 35 U.S.C. §112. A person of ordinary skill in the art must be capable of making and using the invention as disclosed without resort to undue experimentation. Hence, a reasonable level of detail may be needed, particularly in areas of technology where the predictability of experimental undertakings is low. For those unsure about the ferocity of this requirement, see *Genentech v. Novo-Nordisk*, 42 U.S.P.Q.2d 1001, 108 F.3d 1361 (Fed. Cir. 1997):

It is true ... that a specification need not disclose what is well known in the art. ... However, that general, oft-repeated statement is merely a rule of supplementation, not a substitute for a basic enabling disclosure. It means that the omission of minor details does not cause a specification to fail to meet the enablement requirement. However, when there is no disclosure of any specific starting material or of any of the conditions under which a process can be carried out, undue experimentation is required; there is a failure to meet the enablement requirement that cannot be rectified by asserting that all the disclosure related to the process is within the skill of the art. It is the specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enablement.

42 U.S.P.Q.2d 1005.

Although the “written description” requirement is most apparent in inventions relating to the chemical arts, it is a requirement that applies equally to other technological areas. Where claims are initially filed with an application for patent, the original claims, all else failing the inventor, will provide the requisite description. Without the claims, however, the presence of a written description must emerge from the narrative or graphical elements of the specification proper. Hence, provisional applications will all require a well-drafted disclosure and, where appropriate, any necessary drawings.

The level of disclosure for a “complete conception of the invention” is probably the best model for the *minimum* disclosure that will be required for an effective provisional patent application. Thus, for inventors accustomed to providing well-

constructed Records of Invention or Invention Disclosures, the provisional application could conceivably be closely modeled in the initial documents received from an inventor.

Finally, the provisional patent application may not, in fact, support *every* claim made in a later application claiming priority from the provisional. This limitation obviously requires inventors to carefully review the “prior art” landscape for patent barring activities that might prevent broad claims from being pursued in a nonprovisional patent application (i.e., a public use or on sale bar taking hold during the interlude between the provisional and nonprovisional filing). It does not, however, prevent an inventor from using the provisional application filing date as a date of constructive reduction to practice of a broad interference count, if *at least one claim corresponding to that interference count* finds support in the provisional application.

In short, whatever §112 deficiencies might later emerge when the nonprovisional patent application is filed, a provisional application filing date is clearly better than none at all.

Language of the Provisional Application

Can provisional applications be filed in French? German? Russian? Japanese? The easy answer is yes, because *all U.S. patent applications* can be so filed *initially*. 35 C.F.R. §1.53(d) provides that:

An application may be filed in a language other than English. A verified English translation of the non-English-language application and the fee set forth in §1.17(k) are required to be filed with the application or within such time as may be set by the Office.

However, will the usual translation be required? The Patent and Trademark Office in its 1995 rulemaking has taken the following view:

Comment: Several comments suggested that an English translation of a foreign language provisional application should not be required unless necessary in prosecution of the 35 U.S.C. §111(a) application to establish benefit. If an English translation is required, there is no useful purpose to require the translation at any time earlier than the filing of the 35 U.S.C. §111(a) application claiming the benefit of the provisional application.

Response: Provisional applications may be filed in a language other than English as set forth in existing §1.52(d). However, an English language translation is necessary for security screening purposes. Therefore, the PTO will require the English language translation and

payment of the fee required in §1.52(d) in the provisional application. Failure to timely submit the translation in response to a PTO requirement will result in the abandonment of the provisional application. If a 35 U.S.C. §111(a) application is filed without providing the English language translation in the provisional application, the English language translation will be required to be supplied in every 35 U.S.C. 111(a) application claiming priority of the non-English language provisional application.

The Patent and Trademark Office, has persisted with the encouragement of the use of the English language in the new rules:

Section 1.78 is amended to eliminate the requirement that a nonprovisional application be "copending" with a provisional application for the nonprovisional application to claim the benefit under 35 U.S.C. 119(e) of a provisional application. Section 1.78 is also amended to require that, for a nonprovisional application to claim the benefit of a provisional application, the provisional application must be entitled to a filing date as set forth in § 1.53(c), and have paid the basic filing fee set forth in § 1.16(k) within the time period set forth in § 1.53(g), and have any required English language translation filed within the time period set under § 1.52(d).

65 Fed. Reg. 50094.

Thus, without any penalty, foreign-based inventors will have a clear and clean language choice for provisional filing – only where the U.S. Patent and Trademark Office asks for a translation will there be any distinction between an English-language and non-English provisional patent filing.

Greater Flexibility in the Meaning of “Inventor” in a Provisional Application

The statutory requirement for a provisional application with regard to inventorship is the same as for a nonprovisional application: it must be “made or authorized to be made, by the inventor.” In the promulgation of the 1995 rules for provisional applications, the Patent and Trademark Office made the following observation:

Comment: Several comments objected to the definition in §1.45(c) of joint inventors in provisional applications as being those having made a contribution to "the subject matter disclosed" in the provisional application. Various language, such as, "the subject matter which constitutes the

invention," "subject matter disclosed and regarded to be the invention," "disclosed invention," "the inventive subject matter disclosed" was suggested. Another comment requested guidance as to the determination of inventorship in a provisional application.

Response: The suggestion has not been adopted. The term "invention" is typically used to refer to subject matter which applicant is claiming in his/her application. Since claims are not required in a provisional application, it would not be appropriate to reference joint inventors as those who have made a contribution to the "invention" disclosed in the provisional application. If the "invention" has not been determined in the provisional application because no claims have been presented, then ***the name(s) of those person(s) who have made a contribution to the subject matter disclosed in the provisional application should be submitted.*** Section 1.45(c) states that "if multiple inventors are named in a provisional application, each named inventor must have made a contribution, individually or jointly, to the subject matter disclosed in the provisional application." ***All that §1.45(c) requires is that if someone is named as an inventor, that person must have made a contribution to the subject matter disclosed in the provisional application.*** When applicant has determined what the invention is by the filing of the 35 U.S.C. 111(a) application, ***that is the time when the correct inventors must be named.*** The 35 U.S.C. 111(a) application must have an ***inventor in common with the provisional application*** in order for the 35 U.S.C. 111(a) application to be entitled to claim the benefit of the provisional application under 35 U.S.C. 119(e).

This comment suggests a very liberal approach to inventorship determinations will be acceptable for provisional applications. First, the inventors in the provisional application clearly may be *under-named*. The comment states that contributing persons *should be*, not that such persons *must be*, named as inventors. Only in the nonprovisional application is filed do the *correct inventors* need to be named.

The same observation applies to the over-naming of inventors. By making a contribution to *the subject matter disclosed in the application*, whether or not part of any invention ultimately claimed, a person may be listed as an inventor. Thus, the carefully crafted comments of the Patent and Trademark Office will greatly simplify the process of naming inventors in provisional applications.

A completely safe course of action would be to name “contributors” liberally, worry about “inventors” later.

Provisional Filing: The Strategies for the Foreign Inventor

A century ago, a statutory scheme of filing "caveats," allowed a U.S. citizen to follow the filing of the caveat with a completed application for patent that was afforded the caveat date as the priority date. "Caveats" were, however, unavailable to the foreign inventor. Now that "provisional applications" are unclouded by any uncertainties over their legal effects, will they, unlike the caveats of old, be used by foreigners? If so, how?

Skirting the “Hilmer Doctrines.”

In 1966 the Court of Customs and Patent Appeals was faced with the issue of the “prior art” effect under 35 U.S.C. §102(e) of a U.S. patent issuing on an application for patent that had a foreign priority claim under 35 U.S.C. §119. Was the application to be considered to have been filed in the United States on the §119 priority date? *In re Hilmer*, 149 U.S.P.Q. 480 (C.C.P.A. 1966), concluded that foreign inventors needed to file a patent application in the United States in order for a patent issuing from that application to have the effect as prior art going back to the filing date. A second *Hilmer* appeal was decided in 1970. *In re Hilmer*, 424 F.2d 1108, 165 U.S.P.Q. 255 (C.C.P.A. 1970). It extended the *Hilmer* reach to the provisions of 35 U.S.C. §102(g). The foreign filing of an application for patent, any possible reading of 35 U.S.C. §119 notwithstanding, simply did not constitute in the *Hilmer* court’s view evidence of a prior invention *in this country*.

These so-called *Hilmer* doctrines posed a major impediment to foreign inventors. They cannot fully enjoy their patents in the United States in competitive fields. First, the §104 prohibition on invention date proofs often meant that in situations where interferences were involved, the first inventor, if a foreign-based inventor, might well lose. Second, even if the interference was not lost, the effect of winning an interference was often tempered by the fact that the interference judgment was the only patenting bar to a U.S.-based competitor seeking U.S. patents. Depending on the U.S.-based parties’ facility during the interference “motion period,” the scope of the interference judgment against a U.S. inventor, coupled with any estoppels, could be insufficient to bar the U.S.-based loser from securing significant U.S. patents.

If either of these two *Hilmer* doctrines could be reversed, or legislatively overruled, the *foreign priority application* would become prior art to U.S.-based inventors as of the foreign priority date.

Before 1995, foreign inventors could, of course, have avoided all the effects of *Hilmer* by simply filing in the United States at the *beginning* rather than the *end* of the Paris Convention year. Since the filing of a U.S. patent application is a §102(g) “constructive reduction to practice of the invention” in the United States and expressly prior art under §102(e) upon patent issuance, just repositioning the U.S. filing date would

eliminate any alleged discrimination under *Hilmer*. However, few (if any) foreign-based inventors systematically undertook *early* U.S. filing.

Filing early in the United States to secure an early §102(e)/§102(g) date is not a common occurrence because it presents formidable financial obstacles for inventors:

- The full U.S. filing fee must be paid at or near the time of filing in the United States.
- The U.S. application must meet all the formalities requirements under U.S. law. An inventorship determination must be made and the U.S.-style oath/declaration must be executed.
- The full application must be filed in the English language or, if not immediately available in English, translated promptly after filing.
- The “information disclosure” requirements apply to the application immediately upon filing. The foreign-based inventor would need to make a complete information disclosure promptly after the U.S. application is filed.
- Substantive examination is likely to begin during the Convention year. In order to maintain the pendency of the application, the inventor may be obliged to respond to one or more official actions.

At the end of the Convention year, all these expenses and efforts undertaken by the foreign inventor might well have been wasted efforts. In many situations the foreign priority application that was filed early in the Convention year will *not* be the application for patent that will best serve the inventor’s interests by the end of the Convention year. When a changed or different application must be filed, the original U.S. application will be abandoned, and the investment in the parent application lost.

Accordingly, a foreign-based inventor would need to sacrifice all the advantages under the Paris Convention in order to circumvent *Hilmer*. What utility would provisional filing be to a foreign inventor?

A provisional patent application provides a compelling opportunity for the foreign-based inventor concerned with the *Hilmer* issue. The compulsion comes from a single source: the overwhelming economics. The economic benefits cover all aspects of the provisional filing process.

- No translation of a foreign priority document is needed in order to proceed with a provisional filing. The translation can come later – 37 C.F.R. § 1.52(d) merely requires that, an "English translation of the non-English- language application, a statement that the translation is accurate, and the fee set forth in §1.17(k) are required to be filed with the application or *within such time as may be set by the Office.* "

- No elaborate formalities need to be observed. The sole formal requirement is the “cover sheet.” The cover sheet requires information that virtually any knowledgeable person could provide. No need exists, therefore to involve any person other than an inventor in the filing of the provisional application.
- No final inventorship determination is required. The application as filed may contain no claims so that any designation of inventorship is necessarily preliminary. The Patent and Trademark Office rules specifically sanctioned the over-designation and under-designation of inventorship by providing in the rules simplified procedures for adding and removing. Thus, again, no U.S. patent counsel need necessarily be consulted in order to finalize an inventorship determination.
- No page or size limit is imposed. The lack of any size limitation means that a foreign inventor can aggregate provisional applications for filing in the United States. For example, if a company files a very large number of U.S. patent applications per year (e.g., 300-400), it can aggregate these applications together for a one-a-month filing. By combining 25, 35, or more separately filed foreign priority applications into a *jumbo provisional*, an inventor can reduce the annual costs of U.S. provisional filing to about \$2000 per year—or a few dollars per foreign priority application.

Thus, a provisional patent application does not need to *replace* the foreign priority filing; it can merely be an *adjunct filing*. As an *adjunct*, it need not be filed precisely contemporaneously with the foreign priority filing, but will fulfill its §102(e) and §102(g) purposes of filed reasonably contemporaneously therewith, e.g., under the one-a-month regime outlined above. When a non-provisional U.S. (or PCT application) is then filed at the end of the Convention year, the U.S. provisional filing will also be available for citation as a §119 priority.

Thus, for the foreign inventor for whom the *Hilmer* doctrine and the lack of a §102(e) effect has heretofore been a nuisance, inconvenience, or worse, Congress has cured the scourge. For a few dollars per year (and essentially no administration inconvenience), *Hilmer* is history. File a U.S. provisional patent application; file an English language PCT designating the United States and any conceivable *Hilmer* issue is resolved.

Provisional Filing: The Options for the Domestic Inventor

Provisional filing strategies for the U.S. inventor normally come in one of three sizes: small, medium and large. Small provisional applications represent a form of minimalist patent application filing; large provisional applications are the complete analogue of the traditional nonprovisional application—either initially filed under the procedural form of a provisional or converted to a provisional after filing.

The “medium” provisional application is anything between large and small. Thus, the flexibility inherent in provisional application practice opens an abundance of new possibilities for the novice provisional filer.

Large Provisional Applications

A large provisional application is, effectively, the old-style non-provisional patent application every practicing patent attorney is familiar with: it fully discloses the invention, provides justification for non-obviousness, lays out the full scope of protection being sought, and is readable enough for a judge or jury to at least begin to probe its mysteries. In other words, it is the “complete” application that heretofore could only have been filed nonprovisionally.

The “large” application is a “provisional” application because the cover sheet used in transmitting it to the Patent and Trademark Office is the provisional patent application cover sheet and the filing fee included is the \$75/\$150 fee imposed. Otherwise, it would look exactly like the disclosure in a complete application.

Present would be the fully descriptive title, complete abstract of the disclosure, full background of the invention, complete summary, some indication of the relevant prior art (information disclosure), preferred embodiments and the claims.

The advantages for the “large provisional application” are many:

1. If all information for a complete or nonprovisional application is in hand, it may not be worth drafting two patent specifications: one shorter nonprovisional and one provisional.
2. If it becomes important after filing to get the patent quickly examined and issued, the route to doing so is more rapid if the nonprovisional application is simply a refiling of the provisional application.
3. If the development of the invention is unlikely to yield more embodiments that would broaden the effective scope of the claims, but is likely to provide a greater clarification of the “best mode,” the reworking of the provisional application is likely to require that the best mode be updated. The use of a provisional application has no impact the necessity (or lack of necessity) of updating the best mode in a provisional patent application.
4. If some concern exists that one or inventors may be unavailable at the end of the 12-month pendency of the provisional application, the oath for the application can be executed before the provisional filing and need not be re-executed if the provisional application can be simply refiled as a nonprovisional patent application at the end of the 12-month pendency. The Patent and Trademark Office has now indicated that no more “stale oaths” will exist (In the final rulemaking, Comment 62, the Office stated, “Neither the statute nor the rules require a recent date of execution to appear on the oath or declaration. The PTO practice of objecting to an oath or declaration where the time elapsed between the date of execution and the filing date of the application is more than three months is found in section 602.05 of the M.P.E.P. Therefore, the removal of the stale oath practice will be accomplished by amending the M.P.E.P.”). Hence, the nonprovisional application can be fully executed, filed provisionally with the cover sheet

substituting for the oath or declaration of the inventor, and the nonprovisional application filed at the end of the 12-month pendency.

5. If the modest difference in the filing fees would otherwise impact on the filing of the application for patent. Given the importance of obtaining an early filing date, the inventor may wish to postpone extra expense.
6. If the twenty-first year of U.S. patent term is likely to be of importance. In the pharmaceutical/biotechnology, early issuance of patents is often meaningless. Hence, the deferral of grant for one year is less important the ability to get the twenty-first year of patent term.
7. If premature examination is a possibility. If the completed application is filed nonprovisionally, it may be immediately search and examined, even prosecuted to allowance in the year following filing. Such a result, however, could come at the expense of the completeness of the examination. This incompleteness results in redundant examination efforts once the full scope of the prior art can be identified. Accordingly, provisionally filing can avoid this premature effort.
8. If a continuation-in-part application is likely to be needed before the end of the 12-month pendency/Convention priority year. Filing nonprovisionally will simply waste an entire *full* filing fee.

Hence, large provisional filing can be little more than a fees and formalities option, useful in a variety of circumstances—greater economy, deferred expiration, greater flexibility.

Small Provisional Applications.

Small provisional applications are what is needed to support the claims that will later be made, but without the “bells and whistles” of the specification needed to most effectively enforce a patent. The small application is a minimalist approach—much akin to what might be an inventor’s notebook outline of a “complete conception” for the invention.

Indeed, the notion of the “small provisional” as a disclosure document or complete conception is not far from the mark. These “small” provisional applications will have the following uses:

1. Replacement for all the “disclosure documents” that the Patent and Trademark Office accepts from inventors. The Manual of Patent Examining Procedure makes clear that “disclosure documents” have all the substantive requirements for a useful provisional patent filing, but none of the benefits.
2. Replacement of dedication of the invention to the public outside the United States by (an otherwise pre-filing) publication of a manuscript disclosing the invention. The little

provisional can literally consist of a manuscript accompanied by a cover sheet. While the publication may not be a perfect disclosure of the invention for patent purposes, if it is cited abroad as an otherwise anticipatory disclosure, it would be possible to argue that what anticipates must enable.

3. Filing prior to the disclosure to a competitor, potential partner, or prospective licensee. The ability to disclose inventions is greatly facilitated where the disclosing party has already secured a patent priority date. However, many invention will find no market and it is financially impractical for many inventors to file patent applications speculatively in hopes that a few may be successfully developed. The provisional application fills the void.

The benefit of the small provisional is that the overall cost to an independent or "small entity" inventor—all things included—should be less than \$100. This includes getting the necessary "cover page" form from the Patent and Trademark Office, preparing the specification in suitable form for filing, making copies, affixing postage, and mailing the provisional application to the Patent and Trademark Office.

It can be done without intermediaries—attorneys, agents, or invention promotion firms. It can be done *successfully*, however, only if the quality of the disclosure in the provisional application is adequate. *Will inventors succeed?*

The level of success, as discussed above, is wholly dependent on the level of *disclosure*. An inventor may fail in a brief provisional to describe sufficient nuances to enable the broadest claims that might later be sought based on the full nonprovisional patent specification. However, in several situations this is not important:

- The inventor is likely to disclose at least one embodiment that would correspond to an interference count and a latter patent claims corresponding to that count. If only this much is disclosed, the provisional filing may have a "lay your hands down" interference victory, foregoing the need to put on more expensive proofs of the actual reduction to practice.
- The embodiments of the invention most likely to be misappropriated from an inventor are again very likely to be those embodiments actually disclosed in the patent application. Thus, an inventor's task in an interference to establish derivation can be greatly simplified by the use of an early provisional patent application.
- The risks of an inadvertent bar from an invention "on sale" or "in public use" are greatly reduced where the early commercial prototypes are presented in the provisional patent application.

While the idea of a "large provisional" is complete patent professional involvement to assure a complete and final work product, the "small provisional" model generally assumes that the inventor will proceed to draft and file *pro se*. Obviously, as with any effort to proceed *pro se*, the chances that the work product will be fully effective

and successful greatly diminish. There is, of course, an obvious middle ground between the "large" and "small."

The guarantee of success may lie in the "medium provisional."

The Medium Provisional

Filing a "small provisional" has the disadvantage that the "invention" is inferred from a disclosure rather than deduced from a formal patent-style claim. Filing a "large provisional" has the disadvantages of greater cost and greater delays. A medium provisional patent application is, by definition, one that does not require an exceptional long time to prepare, does not cost what a nonprovisional would cost, but has the advantage of at least some measure of skilled practitioners overview.

Medium provisional applications would preferably include at least a broad claim and some narrative description of the invention in terms of the claim. The medium provisional could, of course, easily dispense with the "background of the invention" and omit all the information concerning related prior art. Additionally, the provisional application could have a less prophecy about what the invention might be, but a clear focus on enabling what actually is.

Medium provisional applications have many uses:

1. Any situation where a "small provisional" would be filed, but the inventor has the *time* and *resources* that would be needed to involve a patent professional.
2. Any situation where a "large provisional" would be filed, but the inventor wants (or needs) do accelerate the filing or economize on costs.
3. Whenever the inventors are filing in "mid-stream" -- during the course of development work. Rather than a series of continuation-in-part applications filed at great expense, a series of provisional applications can be filed at lesser expense.

These medium provisional applications are likely to reflect the preferred operating environment for fast-moving fields where, during the course of a Convention priority year, extensive drafting and redrafting of patent applications is needed.

In many circumstances, where a series of nonprovisional patent applications would have been filed during the Convention priority year, instead a series medium provisional applications will take their place. They will act in form like a series of continuation-in-part applications, but in substance will be merely elaborate "warm-up" acts for the main event, consolidated C-I-P filed at the end of the Convention priority year (or before the weekend of the end of the Convention priority year).

VI. Amendment to 35 U.S.C. § 103(c): The Exclusion of Commonly Assigned Patent Applications as Prior Art

Background

The Patent Law Amendments of 1984 excluded from "prior art" certain subject matter defined in 35 U.S.C. § 102(f) and 35 U.S.C. § 102(g). It did so although no judicial decision had ever determined that 35 U.S.C. § 102(f) was a source for prior art. It did so notwithstanding that manifest legal and policy reasons could be marshaled for legislating that 35 U.S.C. § 102(g) should not be "prior art," but instead reserved solely for determining which among rival inventors was not the "first to invent."

The 1984 Act presaged a future, therefore, that did not need to be. Thirteen years later, in 1997, the Federal Circuit cited the 1984 Act as a basis for concluding that, indeed, 35 U.S.C. § 102(f) was a source for prior art. *OddzOn Products Inc. v. Just Toys Inc.*, 43 U.S.P.Q.2d 1641, 122 F.3d 1396 (Fed. Cir. 1997):

... There was no clearly apparent purpose in Congress's inclusion of Section 102(f) in the [1984] amendment other than an attempt to ameliorate the problems of patenting the results of team research. However, the language appears in the statute; it was enacted by Congress. We must give effect to it.

The statutory language provides a clear statement that subject matter that qualifies as prior art under subsection (f) or (g) cannot be combined with other prior art to render a claimed invention obvious and hence unpatentable when the relevant prior art is commonly owned with the claimed invention at the time the invention was made. While the statute does not expressly state in so many words that Section 102(f) creates a type of prior art for purposes of Section 103, nonetheless that conclusion is inescapable; the language that states that Section 102(f) subject matter is not prior art under limited circumstances clearly implies that it is prior art otherwise. That is what Congress wrote into law in 1984 and that is the way we must read the statute.

43 U.S.P.Q2d. 1646.

With the 1997 decision mandating that section 102(f) was a source of "prior art" for non-obviousness purposes, the Federal Circuit left no doubt that section 102(g) had the identical posture. Indeed, Congress reacted in 1999 by amending 35 U.S.C. § 102(g) to clarify that it has both an *ex parte* component and an *inter partes* component:

A person shall be entitled to a patent unless—

...

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it.

While relatively recent Congressional and judicial actions have clarified the status of sections 102(f) and (g) as fully functioning "prior art" generators, section 102(e) has been an unequivocal source of prior art for decades. The Supreme Court settled that issue. *Alexander Milburn v. Davis-Bournonville Co.*, 270 U.S. 390 (1926). However, deliberately excluded from the 1984 Patent Law Amendments was this very subject matter the courts had long held *was prior art* – patents on prior-filed applications under 35 U.S.C. § 102(e). The Federal Circuit took explicit note of the apparent deliberateness of this exclusion in its decision *In re Bartfeld*, 17 U.S.P.Q.2d 1885, 925 F.2d 1450 (Fed. Cir. 1991), citing the legislative history of the 1984 Act:

The second paragraph of §103 is expressly limited to subject matter "developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102." (Emphasis added.) We may not disregard the unambiguous exclusion of §102(e) prior art from the statute's purview. ... Further the legislative history of Pub.L. No. 98-622 indicates that Congress intended to carefully limit the scope of the amendment to 35 U.S.C. §103. The section-by-section analysis of the amendment states that "if the subject matter qualifies as prior art under any other subsection, *e.g.*, subsection 102(a), (b) or (e) - it would *not* be disqualified as prior art under the amendment to section 103." 130 Cong.Rec. H 10525, H 10527, reprinted in 1984 U.S. Code Cong. & Admin. News 5827, 5833 (emphases added).

17 U.S.P.Q.2d 1885.

Although prior-filed U.S. patents were not statutorily excluded as a source of prior art, there were vehicles available for nonetheless avoiding prior art where the patents at issue were commonly prosecuted. The procedural mechanism for avoiding such prior art was recognized by the U.S. Patent and Trademark Office and described explicitly in the Manual of Patent Examining Procedure:

Where the inventions are made by inventors that have assigned their rights to a common assignee, the

assignee can take some *preemptive measures* to avoid having a copending application become prior art under 35 U.S.C. §102(e). The applications can be filed on the same day, or copending applications can be *merged into a single continuation-in-part application and the parent applications abandoned*.

M.P.E.P. §804, 6th Edition, 2nd Revision. (July, 1996)

Where an applicant followed this procedural gambit, the "merged application," even if restricted by U.S. Patent and Trademark Office back into separate applications, would not result in prior art. Under 35 U.S.C. § 121, third sentence, no prior-filed divisional patent can be prior art against any later-filed divisional patent:

A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application.

Hence, at least for commonly assigned patent applications, the existence of prior art based on a prior-filed U.S. patent was dependent upon the savvy of the patent counsel in identifying potential section 102(e) prior art and following the M.P.E.P.'s procedural recipe for avoiding such prior art. The M.P.E.P. combination application gambit was recognized by the Federal Circuit in the *Bartfeld* appeal:

Bartfeld also emphasizes the problems associated with the fairly limited options available to an applicant attempting to overcome a §102(e)/§103 rejection. Without the availability of terminal disclaimers, *Bartfeld* urges, corporate assignees are routinely forced to use burdensome and costly procedures such as abandoning both applications and refiling a combined application.

17 U.S.P.Q.2d 1887.

While the law on what was and was not prior art under 35 U.S.C. § 103(c) appeared well settled – as was the law and practice on the procedural options for commonly assigned applications to *avoid* certain avoidable section 102(e) prior art – Congress needed to change this well settled law with the advent to 18-month publication of pending applications for patent. The *Bartfeld* gambit would effectively disappear once 18-month publication of pending patent applications was in place. Before many of the

later-filed patent applications could be combined successfully with the earlier-filed patent applications that might generate section 102(e) prior art, the earlier applications would be published. Once published, the prior art "genie" would forever be out of the bottle and no procedural device would be available to remove the prior-filed published application from its status as section 102(e) prior art.

Fortunately, Congress acted as it needed to act to avoid the embarrassment of an "inventors protection" act needlessly destroying patentability of inventions that theretofore would have been patentable – given sufficient procedural hygiene during patent prosecution.

Statutory Exclusion

Beginning on November 29, 1999 – the "effective date" for P.L. 106-113 – the Congress has now provided a categorical exclusion of certain prior-filed applications as possible prior art. Henceforth, 35 U.S.C. § 102(e) prior art has the same status in the "non-obviousness" inquiry as prior art under subsections 102(e) and 102(f). The new amendment to 35 U.S.C. § 103(c) provides that:

Subject matter developed by another person, which qualifies as prior art only under ***one or more of*** subsection (e), (f), ***and*** (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.

P.L. 106-113, § 4807(a).

The only mitigating element in this long overdue statutory change is the "effective date" provision. Unlike the 1984 Patent Law Amendments (where the statutory change was largely retroactive), the section 102(e) provision requires a new patent application filing to trigger its effect:

(b) EFFECTIVE DATE- The amendment made by this section shall apply to any application for patent ***filed on or after the date of the enactment*** of this Act.

P.L. 106-113, § 4807(b).

By way of contrast, the more complicated, but substantially more retroactive changes in the 1984 Act provided that *all formerly §102(f)/§102(g) invalid, issued U.S. patents*, except those already the subject of legal controversies, were retroactively *validated*:

(a) Subject to subsections (b), (c), (d) and (e) of this section, the amendments made by this Act shall apply to all

United States patents granted before, on, or after the date of enactment of this Act, and to all applications for United States patents pending on or filed after the date of enactment.

(b) The amendments made by this Act shall not affect any final decision made by the court or the Patent and Trademark Office before the date of enactment of this Act with respect to a patent or application for patent, if no appeal from such decision is pending and the time for filing an appeal has expired.

...

(d) No United States patent granted before the date of enactment of this Act shall abridge or affect the right of any person or his successors in business who made, purchased, or used prior to such effective date anything protected by the patent, to continue the use of, or to sell to others to be used or sold, the specific thing so made, purchased, or used, if the patent claims were invalid or otherwise unenforceable on a ground obviated by Section 104 or 105 of this act and the person made, purchased, or used the specific thing in reasonable reliance on such invalidity or unenforceability. If a person reasonably relied on such invalidity or unenforceability, the court before which such matter is in question may provide for the continued manufacture, use, or sale of the thing made, purchased, or used as specified, or for the manufacture, use, or sale of which substantial preparation was made before the date of enactment of this Act, and it may also provide for the continued practice of any process practiced, or for the practice of which substantial preparation was made, prior to the date of enactment, to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the date of enactment.

(e) The amendments made by this Act shall not affect the right of any party in any case pending in court on the date of enactment to have their rights determined on the basis of the substantive law in effect prior to the date of enactment.

P.L. 98-622, § 107.

The "first blush" look at these two effective date provisions might suggest that the 1999 Act provided a less generous retroactivity than the 1984 Patent Law Amendments. However, unlike the 1984 changes, the 1999 changes contain *none* of the "savings

provisions" intended to assist those who might have relied upon invalidity prior to the liberation of unpatentable subject matter from the shackles of the former "prior art."

Thus, anyone with a patent that is *valid* under the new section 103(c) prior art exclusion criteria is totally free to enforce the valid patent against *any person* who infringes that patent. This suggests, therefore, that the goal of the patent solicitor under this new act is to work the patent prosecution to assure that a patent strategy falls under the new prior art exclusion umbrella of 35 U.S.C. § 103(c), even for inventions where a patent has already been granted.

The objective of issuing such a valid patent would appear to be possible using any one of several prosecution devices:

- *If no U.S. patent has yet issued, file a continuing application today.* Any application filed after November 29, 1999, is automatically under the umbrella of section 103(c). If an application is now pending, it can be simply continued to fall within the exclusion. (As a practice caveat, however, care should be exercised not to "continue" a pre-URAA (Uruguay Round Agreements Act) patent application for which the term of the patent granted on the continuing application would be meaningless or otherwise unacceptably compromised.)
- *If a patent has issued, continue an existing divisional or other existing descendent application and present at least colorably different claims.* If an invention has already been patented, but any decedent application remains pending with a disclosure of the originally patented invention, that decedent application can be continued and the "same patentable invention" patented a second time – provided the claims differ sufficiently to avoid a "same-invention double patenting" rejection. The colorably different claims to the same patentable invention will, however, be immune for the section 102(e) prior art of the parent patent. "Same invention double patenting" is strictly limited to situations of *identical claiming*:

"Same invention" means identical subject matter.
Miller v. Eagle Mfg. Co., 151 U.S. 186 (1984); *In re Ockert*, 114 U.S.P.Q. 330 (CCPA 1957); *In re Vogel*, 164 U.S.P.Q. 619 (CCPA 1970).

A reliable test for double patenting under 35 U.S.C. 101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. *In re Vogel*, 422 F.2d 438, 164 U.S.P.Q. 619 (CCPA 1970). Is there an embodiment of the invention that falls within the scope of one claim, but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting would not exist.

M.P.E.P. §804.

- *If a patent has issued and no descendent application remains pending, create a pending application via reissue.* Since a reissue application can apparently be filed to cure a "procedural defect" that would otherwise produce an invalid patent claim (See *Fontijn v. Okamoto*, 518 F.2d 610, 186 USPQ 97 (CCPA 1975)), the reissue application – being *filed* after the effective date – would appear to be an application subject to the exclusion set out in 35 U.S.C. § 103(c). If the reissue application – or perhaps even a *continuation application* filed based on the original reissue application – was deemed filed after the effective date, any commonly assigned section 102(e) prior art would be obviated.

Substantial arguments can be marshaled to support the notion that a patent granted on a reissue application for patent filed after the effective date should come within the scope of the section 103(c) exclusion. First, section 102(e) prior art arises in the first instance because of a *procedural* defect during prosecution – failure to file the "combination application" required to obviate the effect. Second, the "effective date" provision here was not intended to track the "effective date" for patent applications to be published under amended section 122 of the Inventors Protection Act. Publication provisions will take effect in November of 2000 – Congress gave the section 103(c) amendment immediate effect upon enactment. By any measure, therefore, the new law is *remedial* in character and should be given a broad construction – much as the reissue statute itself.

Practice Implications

Patent practitioners need to determine how best to assure that patents are not granted without vetting whether a new filing would avoid potential section 102(e) prior art. For aggressive prosecutors, this might mean *refiling every patent application filed before November 29, 1999 to assure that no section 103(c) exclusion is missed.* A prudent alternative course should involve making a section 102(e) prior art audit at the time of issue – much in the same way that prudent practitioners have historically done to determine whether a *Bartfeld* combination application was in order – *and refiling any patent application where a Bartfeld combination* would otherwise have been implicated. The most conservative approach would be to deal with the new section 103(c) exclusion only where the patent examiner made a section 102(e) rejection that could be obviated by refiling the application for patent. While the latter course is the most economical in the short term, it is likely to fall into the "pound foolish" category.

As with any strategy that requires refiling of a patent application, consideration must be given to the patent term consequences of forfeiting an actual filing date prior to June 8, 1995 – the effective date for the 20-year patent term measured from the earliest priority filing date. The American Inventors Protection Act has further complicated the patent extension considerations. Effective on May 20, 2000 – for applications filed after this date – an entirely new set of patent term extension provisions will come into effect. In general, these provisions will provide fewer limitations on available extensions. However, to "earn" the extension under the 1999 Act, a newly filed application will

"reset" the extension clock. When the extension clock is reset, an extension "earned" or accrued under the post-June 8, 1995 application may be forfeited.

For example, if an application filed on July 1, 1995 was on appeal from July 1, 1998 through July 1, 1990, the inventor will have earned a two-year extension of term under the law prior to the American Inventors Protection Act. However, if a continuation application is filed on December 1, 2000, *e.g.*, attempting to insulate the patent issuing on the application from any attack based on a commonly-owned, prior-filed patent, this two-year extension is lost. The new statutory provision under 35 U.S.C. § 154(b) governs the extension and the appeal in a parent application does not qualify the descendent application for an extension. The moral: saving a patent from *potential* invalidity under 35 U.S.C. § 102(e)/§103 may not be worth the *certainty* of loss of a meaningful post-grant patent term.

Implications for Collaborative Research

One bedrock principle of U.S. patent law prohibits a second U.S. patent from issuing on the same patentable invention as an earlier-issued U.S. patent – unless the two patents have, and maintain, a common legal ownership. When the 1984 Patent Law Amendments were enacted, the legislative history indicates that Congress anticipated an *expansion* of the law on double patenting to include the newly patentable inventions based on that could not have been issued but for the exclusion of "common assignee" prior art under section 102(f) and 102(g)

The Committee expects that the Patent and Trademark Office will reinstitute in the appropriate circumstances the practice of ***rejecting claims in commonly owned applications of different inventive entities on the ground of double patenting***. This will be necessary in order to prevent an organization from obtaining two or more patents with different expiration dates covering nearly identical subject matter. In accordance with the established patent law doctrines, double patenting rejections can be overcome in certain circumstances by disclaiming the terminal portion of the term of the later patent, thereby eliminating the problem of extending patent life.

130 Cong. Rec. H10925 (October 1, 1984).

The U.S. Patent and Trademark Office had – in 1967 – eliminated "obviousness-type double patenting" rejections where same-assignee prior art under section 102(f) or (g) was extant:

The term "double patenting" is properly applicable only to cases involving two or more applications and/or

patents of the same inventive entity and should not be applied to situations involving commonly owned cases of different inventive entities.

In situations involving cases filed by different inventive entities, regardless of ownership, Sections 102 and 103 of 35 U.S.C. preclude the granting of two or more patents when directed to identical inventive concepts or when one of the concepts would be obvious in view of the other. A terminal disclaimer can have no effect in this situation since the basis for refusing more than one patent is not connected with any extension of monopoly.

834 O.G. 1615 (Jan. 31, 1967).

The U.S. Patent and Trademark Office complied with this Congressional expectations by promulgating new regulations reversing its 1967 Official Gazette notice:

(c) Where two or more applications, or an application and a patent naming different inventors and owned by the same party contain conflicting claims, ***and there is no statement of record indicating that the claimed inventions were commonly owned or subject to an obligation of assignment to the same person at the time the later invention was made***, the assignee may be called upon to state whether the claimed inventions were commonly owned or subject to an obligation of assignment to the same person at the time the later invention was made, ***and if not, indicate which named inventor is the prior inventor***. In addition to making said statement, the assignee may also explain why an interference should or should not be declared.

(d) Where an application claims an invention which is not patentably distinct from an invention claimed in a commonly owned patent ***with the same or a different inventive entity***, a double patenting rejection will be made in the application. An obviousness - type double patenting rejection may be obviated by filing a terminal disclaimer in accordance with §1.321(b).

37 C..F.R. § 1.78

The implication of the foregoing transactions is clear to the extent the excluded prior art under 35 U.S.C. § 102(e) produces newly patentable subject matter, the U.S. Patent and Trademark Office's new 1984 double patenting will apply. Significantly, a common assignee must exist and be maintained throughout the term of the two patents.

Thus, a necessary price for permitting patents on otherwise subject matter was and must continue to be *permanent common ownership*.

Where, however, does this leave those who engage in collaborative research? Clearly, where *all* the relevant research is conducted in a joint venture in which a common ownership entity exists, the collaborative research can take maximal advantage of these 1984 and 1999 developments in the patent law. For others, particularly those who determine ownership using a combination of inventorship and employment relationship, these new statutory provisions are inapplicable. For these inventions, it is apparently "no win." Any further statutory expansion of section 103(c) would necessarily require a corresponding expansion of the law of "obviousness-type double patenting" for the newly patentable inventions.

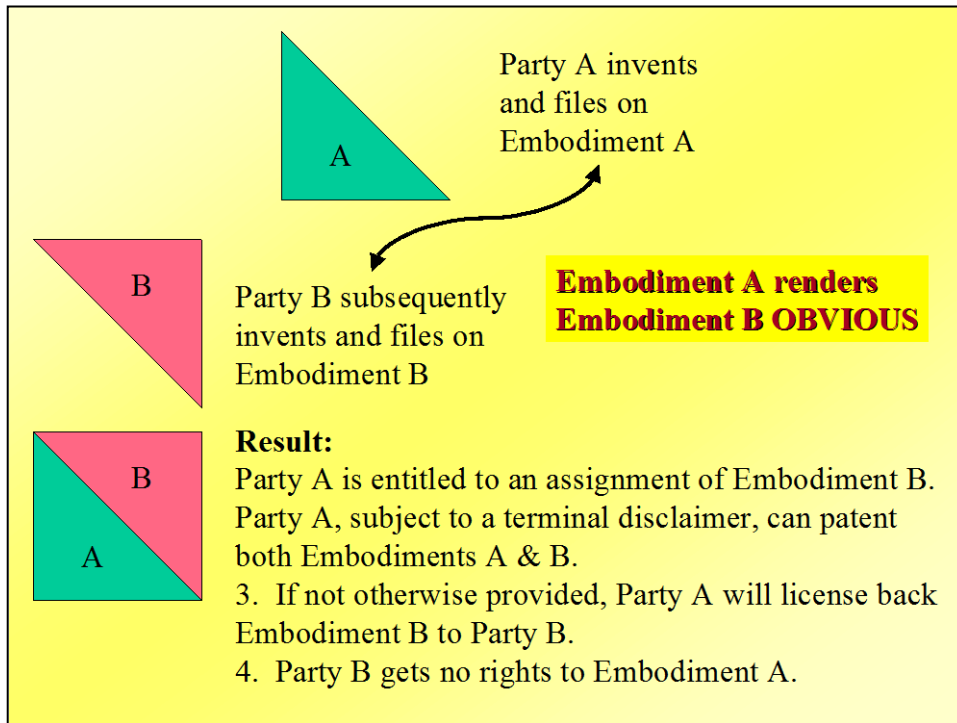
The only trigger, however, for application of the prior art "safe harbor" of 35 U.S.C. § 103(c) is an *obligation* to assign an invention. Thus, where two parties have any type of collaboration, it should be possible to assign *otherwise unpatentable* inventions to whomever owns the prior art invention. If this is done, however, the contract must further set out who has what rights to the otherwise unpatentable invention.

Such an assignment obligation might look like the following:

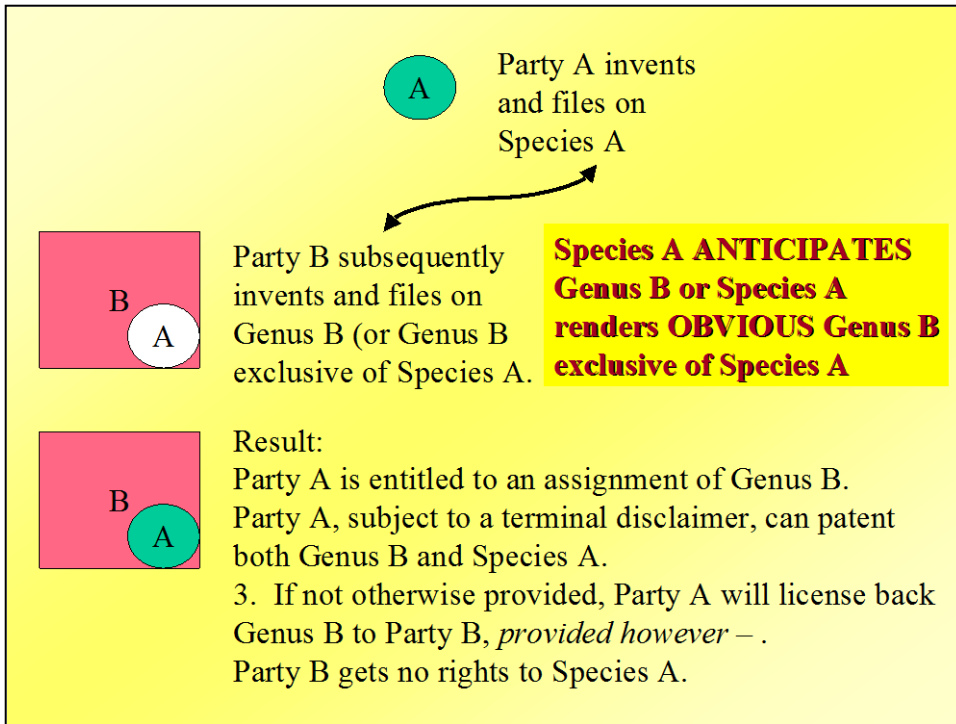
Inventions otherwise unpatentable in the United States. Any invention made by a party hereto that would be rendered unpatentable in the United States solely on account of prior art under one or more of subsections 102(e), (f), or (g) of Title 35, U.S.C., but for the absence of an obligation of assignment of said invention (or an undivided interest therein) to one or more other parties hereto, is hereby subjected to an obligation of assignment to such other parties of such interest in the invention as renders the invention patentable in the United States. Such assignment shall have force and effect only with respect to patents granted in the United States. The rights of the parties with respect to any invention subject to an obligation of assignment under this paragraph, *except for subject matter patentable to the assignee in the absence of the assignment*, shall be the same as the rights that would have applied under this Agreement had no obligation to assign under this paragraph existed. If and only if required to give force and effect to the immediately preceding sentence and, in such case, only to the extent required to give such force and effect, each assignee under this paragraph hereby grants to each of the assignors under this paragraph such licenses, if any, as are required to vest in the assignor rights to make, have made, use, sell and import

the assigned invention, except for subject matter patentable to the assignee in the absence of the assignment.

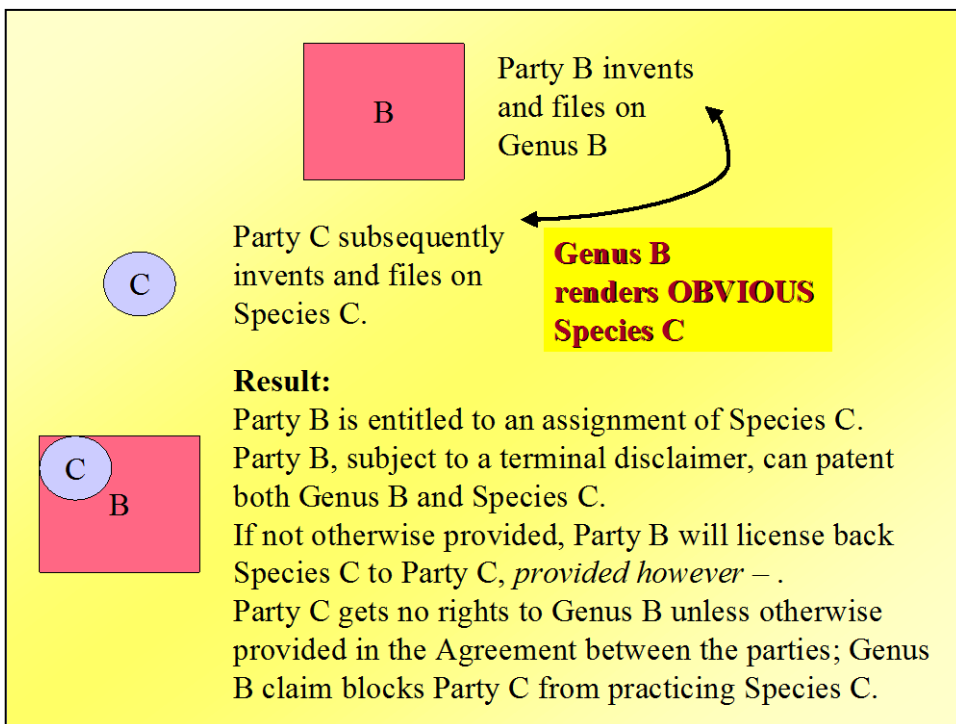
The consequences of such an assignment obligation can be seen in the simple situation where two parties have made two inventions:



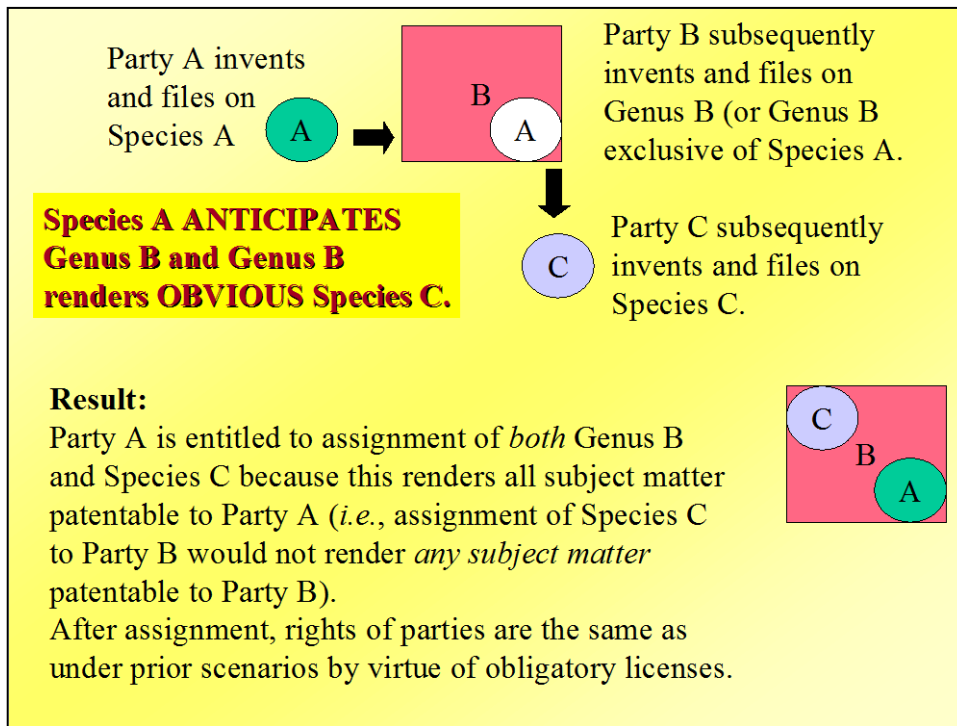
Where an initial invention relates to a species and a later invention is directed to a genus, a similar schematic can describe who gets rights to what:



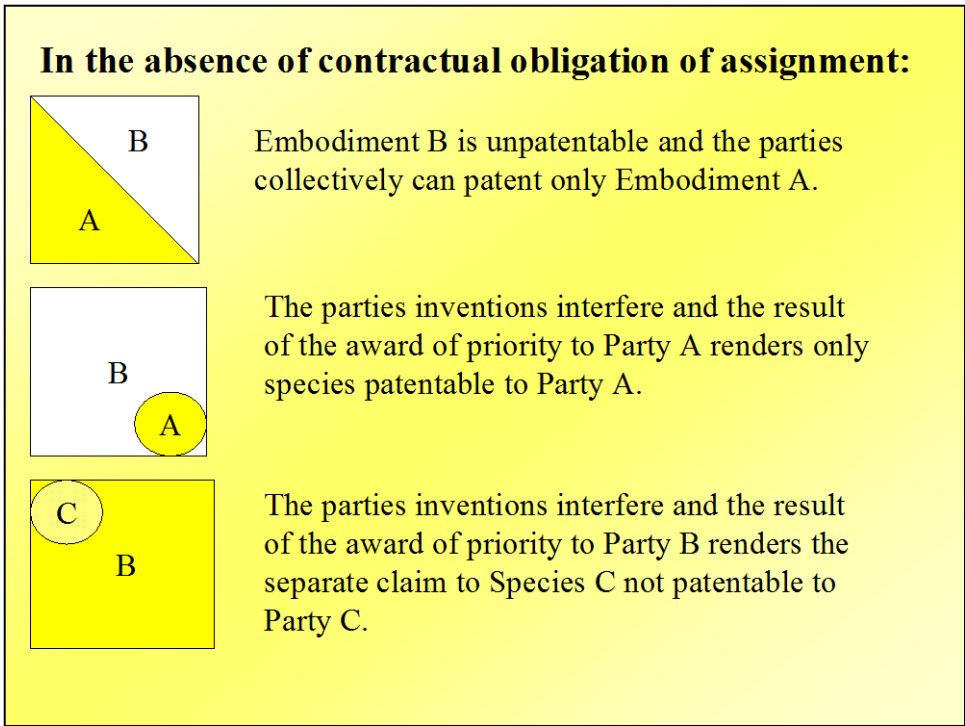
Further, where an "obvious" species faces a prior-invented genus as prior art, the ownership again can be shifted to create patentability where it would otherwise not exist:



Finally, the latter two situations can exist in a three-party contract where each party makes an invention, but the latter two would be otherwise rendered unpatentable without an assignment:



In each of these scenarios, the absence of the obligation to assign would dramatically diminish the scope of patentable subject matter. This diminution of patentability is represented graphically in the following:



VII. Expanded Section 102(e) Prior Art Based on Published Patent Applications

"National" Applications

Section 102(e) has been expanded to provide the same prior art status to published U.S. patent applications that was formerly reserved only for issued U.S. patents. This new prior art status provides a vastly more convenient way in which to produce "retroactive" prior art than that available heretofore.

Under former patent strategies, inventors seeking to use a U.S. patent application disclosure as prior art retroactively to the filing date of the application were forced to identify some patentable subject matter, however narrow, that could serve as a basis for the grant of the U.S. patent. Henceforth, the mere passage of time will assure that publication will take place and the prior art effect will be accorded.

Thus, where the principal purpose to be served is offensive prior art, not patent exclusivity, the new provisions in 35 U.S.C. § 102(e) will permit applicants to simply file a nonprovisional application and abandon the application once publication has taken place.

"International" Patent Applications

The United States reserved under the Patent Cooperation Treaty the right to treat non-U.S. origin PCT applications differently from U.S. origin PCT applications. Under

Article 64(4) of the PCT, the reservation applicable to the United States with respect to these international applications read:

Any State whose national law provides for prior art effect of its patents as from a date before publication, but does not equate for prior art purposes the priority date claimed under the Paris Convention for the Protection of Industrial Property to the actual filing date in that State, may declare that the filing *outside that State* of an international application designating that State is not equated to an actual filing in that State for prior art purposes.

The implementation of the Article 64(4) reservation by the United States has long been in violation of the Article 64(4) reservation under the PCT. The United States patent statute did not recognize, as required by the PCT, that the filing of an international application in the United States must be equated to an actual filing in the United States; nothing in the PCT or any reservation permitted the United States to deny international applications filed in the United States Receiving Office from being prior art to the same extent as a U.S. national application similarly filed in the U.S. Patent and Trademark Office. As provided in Article 11(3) of the PCT, the United States was bound by treaty not to otherwise discriminate against an international patent application *vis-à-vis* a national application with the same disclosure:

Subject to Article 64(4), any international application fulfilling the requirement listed in items (i) to (iii) of paragraph (1) [*i.e.*, (i) the applicant does not obviously lack, for reasons of residence or nationality, the right to file an international application with the receiving Office, (ii) the international application is in the prescribed language, and (iii) the international application contains at least the following elements: (a) an indication that it is intended as an international application, (b) the designation of at least one Contracting State, (c) the name of the applicant, as prescribed, (d) a part which on the face of it appears to be a description, and (e) a part which on the face of it appears to be a claim or claims].and accorded an international filing date shall have the effect of a regular national application in each designated State as of the international filing date, which date shall be considered to be the actual filing date in each designated State.

Further, for all international patent applications, the United States required entry into the PCT "National Stage" prosecution before a section 102(e) effect was accorded. This had the peculiar effect of making it simpler to simply file a U.S. national application in any circumstance where an early section 102(e) date was deemed of importance.

The American Inventors Protection Act has finally removed these anomalous aspects of the use of the Patent Cooperation Treaty. For international applications filed after November 29, 2000, a new provision of U.S. law provides that international applications designating the United States – and published in the English language – shall be equated with a U.S. published application. Thus, like a U.S. national application, there is no requirement for these international applications that a patent eventually issue on the application or that the national stage requirements prescribed by U.S. patent law be met in order for an international application to be accorded the full statutory effect of a U.S. national filing. Since all PCT applications filed with the United States Receiving Office must be submitted in the English language, the new provision with respect to PCT applications filed with the U.S. Patent and Trademark Office complies – for the first time – with the treaty obligation.

For patents that issue *based* on the filing of a PCT application, the international patent application will be completely disregarded in determining the section 102(e) date for prior art purposes. Since essentially no patent can be granted on an international application without having the international application publish under Article 21 of the PCT, the publication of the PCT application is sufficient, by itself, to account for the section 102(e) effect to be given to any PCT application maturing into a U.S. patent, whether directly or indirectly.

Effective Date Issues

The changes to the law on section 102(e) prior art are contained in section 4508. Although not completely clear, the apparent intent of Congress is that the changes with respect to section 102(e) prior art will apply only prospectively: being limited to applications filed on or after November 29, 2000 – one year after enactment. Thus, a PCT application filed on or after November 29, 2000, once published at 18 months becomes a prior art as of its international filing date if the United States was designated and the PCT application was published in the English language.

U.S. national applications filed on or after November 29, 2000, once published, become section 102(e) prior art as of their filing dates.

Finally, applicants who have pending U.S. applications on November 29, 2000 will have the option to request that the Commissioner publish pending applications for patent. When such a voluntary publication takes place, the published patent application will represent prior art as of its U.S. filing date.

Pending Technical Amendments

A technical amendment to the AIPA is now pending before Congress that would make the following technical change to 35 U.S.C. § 102(e):

(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, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States if and only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or ...

H.R. 4870, 106th Congress, Sec. 4505 (July 18, 2000).

This "technical correction" to the AIPA will be accompanied by a redrafting of 35 U.S.C. § 374 that in its amended form would appear as follows:

The publication under the treaty defined in section 351(a) of this title, of an international application designating the United States shall ~~confer the same rights and shall have the same effect under this title as an application for patent published~~ **be deemed a publication** under section 122(b), except as provided in sections 102(e) and 154(d) of this title.

These "technical amendments" are being made at the behest of the U.S. Patent and Trademark Office. A further amendment, more widely sought, was a correction to the "effective date" provision in Section 4508 of the AIPA. This technical correction appears as follows:

Except as otherwise provided in this section, sections 4502 through 4507 [all the AIPA provisions related to publication and provisional rights], and the amendments made by such sections, shall take effect on November 29, 2000, and shall apply only to applications (including international applications designating the United States) filed on or after that date. The amendments made by sections 4504 and 4505 ["provisional rights" and section 102(e) "prior art" effect] shall additionally apply to any pending application filed before November 29, 2000, if such pending application is published pursuant to a request of the applicant under such procedures as may be established by the Director. If an application is filed on or after November 29, 2000, or is published pursuant to a request from the applicant, and the application claims the

benefit of one or more prior-filed applications under section 119(e), 120, or 365(c) of title 35, United States Code, then the provisions of section 4505 [section 102(e) "prior art"] shall apply to the prior-filed application in determining the filing date in the United States of the application.

These changes should fully clarify any lingering uncertainty over the scope and effect of the new "prior art" provisions in 35 U.S.C. § 102(e). PCT applications (and U.S. patents issuing or U.S. patent applications published on PCT applications) will have a completely unified treatment. No section 102(e) prior art will exist – as of the application filing date – unless two conditions have been met. First, the United States must be designated. Second, the PCT publication must be in the English language. If these conditions are met – the publication/issued patent based on the PCT application is prior art based on the PCT filing date. If not, the filing of the PCT application is simply disregarded.

U.S. Patent and Trademark Office Implementation Guidelines

The U.S. Patent and Trademark Office has published "implementation guidelines" for the section 102(e)/103(c) changes to the patent law. These guidelines can be accessed at <http://www.uspto.gov/web/offices/com/sol/og/2000/week15/patamin.htm>. They provide the mechanism for examiners to be able to disregard prior art of commonly owned applications:

(1) Examiners are encouraged to check the assignment records, which are available on the Patent Application Locating and Monitoring (PALM) system, for the patents and applications involved in any rejection to see if there is a possible common owner or assignee with the application being examined. Since examiners should always apply potentially commonly owned or assigned prior art, the review of assignment records is only to indicate to the examiner whether making one or more appropriate back up rejections should be considered. The assignment records on PALM show the execution date of any recorded assignment. Since applicants are not required to record assignments, however, these records are not the exclusive means to determine whether there was common ownership at the time the invention was made. In addition, the Office records other papers, such as employment contracts, which are not evidence of common ownership. Therefore, the examiners should be careful to refer to the box labeled "Brief" on the bottom of the PALM screen which provides a brief description of the paper recorded as stated by the applicant. Examiners should not fail to apply a reference believed to be commonly owned at the time of

the invention based only upon the data in PALM. The assignment information in PALM, however, may give an examiner a warning that a reference may be disqualified by the applicant in the future.

(2) Applications and patents will be considered by the examiner to be owned by, or subject to an obligation of assignment to, the same person, at the time the invention was made, if:

(a) the applicant provides evidence that the application and patent files refer to assignments recorded in the PTO in accordance with 37 CFR 3.11 which convey the entire rights in the applications to the same person(s) or organization(s) at the time of the invention;

(b) copies of unrecorded assignments which convey the entire rights in the applications to the same person(s) or organization(s) at the time of the invention are filed in each of the applications and patents;

(c) an affidavit or declaration by the common owner is filed which states that there was common ownership at the time the invention was made and explains why the affiant believes there was common ownership; or

(d) other evidence is submitted which establishes common ownership of the applications and patents at the time the invention was made, e.g., a court decision determining the owner. In circumstances where the common owner is a corporation or other organization, an affidavit or declaration averring ownership may be signed by an official of the corporation or organization empowered to act on behalf of the corporation or organization.

(3) If the application file being examined does not establish that it and the reference patent(s) or application(s) are owned by, or subject to an obligation of assignment to, the same person, at the time the invention was made, the examiner will:

(a) assume the application(s) and patent(s) are not commonly owned;

(b) examine the application on all grounds other than any conflict between the reference patent(s) or application(s) arising from a possible 103 rejection based on 102(e), (f) and/or (g);

(c) consider the applicability of any references under 103 based on 102(e), (f) and/or (g), including provisional rejections under 35U.S.C. 102(e)/103; and

(d) apply the best references against the claimed invention by making rejections under 102 and 103, including any rejections under 103 based on 102(e), (f)

and/or (g), until such time that proof is submitted that the application(s) and patent(s) were commonly owned, at the time the invention was made (see (2) above). When applying any 102(e)/103 references against the claims, the examiner should anticipate that an affidavit (or other adequate proof) averring common ownership at the time the invention was made may disqualify any patent or application applied in a rejection under 103 based on 102(e). If such an affidavit (or other adequate proof) is filed in reply to the 102(e)/103 rejection and the claims are not amended, the examiner may not make the next Office action final if a new rejection is made.

(4) If the application being examined establishes that it and any reference patent or application were owned by, or subject to an obligation or assignment to, the same person, at the time the invention was made, the examiner will: (a) examine the applications as to all grounds except 102(e), (f) and (g) as they apply through 103, including provisional rejections under 35 U.S.C. 102(e)/103; (b) examine the applications for double patenting, including statutory and nonstatutory double patenting, and make a provisional rejection, if appropriate; and (c) invite the applicant to file a terminal disclaimer to overcome any provisional or actual nonstatutory double patenting rejection, if appropriate.

Practice Implications

For U.S. inventors, the practice implications of the new changes in section 102(e) are significant. For the first time ever, the filing of a PCT application designating the United States, without more, will be interchangeable with the filing of a U.S. national application. No longer will concerns over the effect under 35 U.S.C. § 102(e) be predicated upon fulfillment of national stage requirements.

For inventors outside the United States, there will be the benefit of total certainty as to the effect of using the PCT – no longer will there be a need for an early completion of U.S. national stage requirements to trigger a section 102(e) effect. Indeed, for foreign inventors for whom section 102(e) issues are present, there will be no difference whatsoever between filing a U.S. national nonprovisional patent application or filing the *same application* through the PCT. In both cases, an English language patent specification is needed.

Hence, the effect of the changes in section 102(e) should be to further encourage foreign inventors concerned over section 102(e) issues to employ the PCT. All the benefits of PCT use remain and the disadvantages of using the PCT for U.S. prosecution are neutralized by the simple expedient of an English language PCT filing.

For all inventors, domestic and foreign, a further benefit of the new prior art provisions relating to section 102(e) is that they no longer create prior art against later-filed patents of a common assignee. Thus, not only does new section 102(e) accelerate the prior art date for PCT applications, but it provides that this prior art reaches only to *others* – inventors outside the umbrella of common assignment.

VIII. Publication of Pending Applications for Patent

Summary

Publication of pending applications for patent represents the single most important reform of the U.S. patent system over the last half-century. It is perhaps rivaled only by the Congressional enactment of the "non-obviousness" standard for patentability under 35 U.S.C. § 103. The new law on publication contains a large number of new features and principles. These include:

- Publication is mandatory where the same disclosure is to be published in a non-U.S. application for patent. Where a lesser disclosure will be published, the applicant can "redact" the excess disclosure. All applications filed after November 29, 2000 will be subject to this requirement. The redaction provision of the new law provides:

If an applicant has filed applications in one or more foreign countries, directly or through a multilateral international agreement, and such foreign filed applications corresponding to an application filed in the Patent and Trademark Office or the description of the invention in such foreign filed applications is less extensive than the application or description of the invention in the application filed in the Patent and Trademark Office, ***the applicant may submit a redacted copy of the application filed in the Patent and Trademark Office eliminating any part or description of the invention in such application that is not also contained in any of the corresponding applications filed in a foreign country.*** The Director may only publish the redacted copy of the application unless the redacted copy of the application is not received within 16 months after the earliest effective filing date for which a benefit is sought under this title. ***The provisions of section 154(d) shall not apply*** to a claim if the description of the invention published in the redacted application filed under this clause with respect to the claim ***does not enable*** a person skilled in the art to make and use the subject matter of the claim.

- Publication for utility patents – applications for design patents are specifically exempted. Further, patent applications under a secrecy order are not published.
- Publication, upon grant of the patent, provides an entire new system of "provisional rights" to recover a reasonable royalty. The new provisional rights require notice of the published application, a requirement that may be construed to include notice of the acts alleged to infringe. In addition, only patent claims that have a corresponding, substantially identical published application claims will qualify for provisional rights.
- In order to assure publication, the Director of the U.S. Patent and Trademark Office will be required to establish a time limit for providing any claims for benefit of prior filed applications. This requirement may mean that benefit claims will not be accepted unless made by the later of 14 months from the date of filing of the application for which the benefit is sought or two months from the filing date of the application in which the claim for benefit is being made.
- The Director will, upon request, publish applications pending on November 29, 2000. These voluntarily published applications will be accorded the same provisional rights and have the same section 102(e) prior art effect as applications subject to the mandatory publication provisions.
- Once an application is published, the public should have access to copies of the entire prosecution history. Under regulations that must be promulgated by the Director, copies of the prosecution history would be provided to a requester for a fee. The U.S. Patent and Trademark Office appears geared to hire contractors who will perform the copying on an after-hours basis so as not to interfere with the examination process. The prior proposed rulemaking on access provided in part that:

The Office proposes to change the rules of practice to provide that, upon publication, ***access to the entire content of the application file would be permitted.*** To avoid undue interference with the examination of the application, however, the public access to the application file of a pending published application is proposed to be limited to obtaining, ***upon the payment of the fee*** set forth in § 1.19(b)(2), ***a copy of the application file produced during non-working hours by the Office*** when the application file is made available by the appropriate patent application processing organization. The Office also proposes to provide, upon the payment of the fee(s) set forth in § 1.19(b)(4), as proposed, a copy of specifically identified document(s) contained in a pending published application.

- The Director is specifically precluded from publishing a patent application where it would be "detrimental" to national security. Further, the Director has a three-year period in which to prepare a study of the effect on publication of applicants who file only in the United States.
- An amendment to 35 U.S.C. § 135(b) effectively creates a new bar to patenting for any claim first presented one-year after the publication of a claim to the same

patentable invention as the claim published. See *In re McGrew*, 43 U.S.P.Q.2d 1632 (Fed. Cir. 1997).

Practice Implications

Election Not to Publish: NOT!

Publication will not be mandatory for inventors who do *not* foreign file. Non-foreign filing inventors will be entitled to opt out of the publication at 18-months. Opting out has significant *disadvantages* for an inventor, including the following:

- Loss of provisional rights. For many inventors the *only economic advantage* of having a patent issue will be the invention was commercially used during the pre-grant period. If no provisional rights are established, the grant of the patent will be economically meaningless.
- Deferral of section 135(b) bar. Publication of a U.S. patent application will operate in exactly the same manner as issuing a U.S. patent in terms of the bar to patenting under 35 U.S.C. § 135(b). Unless claims are made to the same patentable invention as each published patent application claim within one year of the date of publication, there is no possibility of patenting that patentable invention. When publication does not take place, such an adverse patent claim can still be made and an interference may ensue solely because of the failure to perfect the early publication.
- Delay in creation of "offensive" section 102(e) prior art. Competitors may be able to issue U.S. patents that would be difficult or complicated to issue because the non-published application is not available under section 102(e) for citation as prior art.
- Risk of loss of patent rights if foreign filing has actually taken place. Under the statute, if an applicant does foreign file on the same subject matter that is disclosed in the patent application, the option to avoid publication is *unavailable* and the U.S. Patent and Trademark Office must be given notice with 45 days that the foreign filing has, in fact, taken place. The penalty is abandonment of the application. Because disclosure from an earlier-filed patent application can easily be incorporated into any number of later improvement patent applications, it is risky in the extreme to opt out of publication except in the most extreme circumstances. This difficulty is, of course, magnified where the applicant elects to "redact" subject matter from the application prior to publication.
- Risk of loss of patent rights if redaction removes enabling disclosure or redaction includes subject matter published in a foreign patent application. As noted above, the most risky maneuver imaginable under the new act may be the deliberate *redaction* of subject matter that is asserted at the time of redaction not to have been published abroad. There will be no presumption of validity for any published patent application claim in an application that has been "redacted" because the examination will have proceeded for the corresponding ("substantially identical") patent claim on the *unredacted* patent specification. Without proof of "enablement" in the redacted, published patent application, there can be no provisional rights.

Because of the very significant opportunities gained and risks avoided when an application is published, patent practitioners should exercise extreme caution in any decision to elect to avoid 18-month publication or to publish only a redacted patent specification. *Inventors need to be warned that the costs of enforcing the patent may be substantially enhanced, risks will exist that application will go abandoned, and the economic value of the patent may be destroyed if, by that time of issuance of the actual patent, the technology is no longer used commercially.*

Hence, it is *unlikely* that virtually any well-advised inventor will seek to avoid 18-month publication except where a *bona fide* trade secret manufacturing process is the subject of the application and the patent application was largely pursued for defensive purposes, *e.g.*, to provoke an interference if another party were to seek to patent the same invention. Even this limited exclusion is likely, however, to disappear for any inventions determined to be subject to the first inventor defense (prior user rights).

Pre-Publication Claiming Practices

Because the current standard for *avoiding intervening rights* where a reissue patent has been granted (or a reexamination certificate is issued) will constitute the new standard for *taking advantage of provisional rights*, published patent applications need an exquisitely complete set of claims. The new statute now codifies the existing reissue/reexamination law that to avoid intervening rights (or take advantage of provisional rights) the original claim (*i.e.*, the published application claim in the case of provisional rights) must be *substantially identical* to the subsequent claim (*i.e.*, the issued patent claim in the case of provisional rights).

In order to guarantee substantial claim identity, the inventor should claim the invention in multiple dimensions – broad and narrow, product and process, independently and dependently. This is the only strategy that is likely to optimize the prospects that an invention will be claimed substantially identical both at publication and at issuance. As to the issue of identity, the legislative history clearly places the onus on the applicant to devise appropriate application claims:

Another important limitation on the availability of provisional royalties is that the claims in the published application that are alleged to give rise to provisional rights ***must also appear in the patent in substantially identical form.*** To allow anything less than substantial identity would impose an unacceptable burden on the public. If provisional rights were available in the situation where the only valid claim infringed first appeared in the granted patent, the public would have no guidance as to the specific behavior to avoid between publication and grant. Every person or company that might be operating within the scope of the disclosure of the published application would have to conduct her own private examination to determine

whether a published application contained patentable subject matter that she should avoid. ***The burden should be on the applicant to initially draft a schedule of claims that gives adequate notice to the public of what she is seeking to patent.***

House Report, H.R. 1907.

Notice-Giving Practices

Another critical issue for those seeking reasonable royalties for violations of the new provisional rights based on published application claims is the need to provide notice of the published patent claims. The House Report contains strong language suggesting that this notice must extend to notice of the actual infringing acts:

The mere fact that the published application is included in a commercial database where it might be found is insufficient. The published applicant must give actual notice of the published application to the accused infringer and ***explain what acts are regarded as giving rise to provisional rights.***

In contrast, the new statute appears to have a more limited requirement for notice. Under the statute, notice is sufficient if the accused infringer

... had ***actual notice of the published patent application*** and, in a case in which the right arising under this paragraph is based upon an international application designating the United States that is published in a language other than English, ***had a translation of the international application into the English language.***

Good "notice" practices, therefore, might command that any notice letter to an accused infringer be as detailed as possible concerning acts that might be regarded as potentially infringing. Such conduct is, of course, premised on a suitable mechanism for policing competitors and analyzing that conduct against published application claims.

Good notice practice is critically important in the context of a satisfactory recovery of reasonable royalties. Because of the statute of limitations that applies to claims for provisional rights, a law suit can be brought on a patent that may have expired, but still qualify the former patent holder for rights to two decades of royalties. The only limitation on recovery is that the suit be brought within six years of the issue date of the patent:

TIME LIMITATION ON OBTAINING A
REASONABLE ROYALTY- The right under paragraph

(1) to obtain a reasonable royalty shall be available only in an action brought *not later than 6 years after the patent is issued*. The right under paragraph (1) to obtain a reasonable royalty shall not be affected by the duration of the period described in paragraph (1).

If a patent is filed, immediate publication is requested, and the patent takes 15 years to be issued, a suit brought after the patent expires will capture at least a reasonable royalty over the entire course of the 20-years of patent term from filing. The only "downside" is that 35 U.S.C. § 284 has been amended to expressly deny enhanced damages where the recovery is based on provisional rights.

IX. Access to Prosecution History of Published Applications for Patent.

As part of its rulemaking for the American Inventors Protection Act, the U.S. Patent and Trademark Office has undertaken to promulgate regulations that identify the basis for application for pending applications for patent. The proposed rules were published at "Changes to Implement Eighteen-Month Publication of Patent Applications," at 65 Fed. Reg. 17946 (April 5, 2000).

The current policy of the Office appears to be to provide "copies" of pending file wrappers, not physical access, and actual physical access to abandoned patent application files – once publication has taken place:

Access to the file wrapper and contents of a published application: The Office plans to permit: (1) Any member of the public to obtain (for a fee) a copy of the complete file wrapper and contents of, or a copy of a specific paper in, any published application, provided that no redacted copy was timely submitted for publication; (2) any member of the public to obtain (for a fee) an appropriately redacted copy of the file wrapper and contents of, or a copy of a specific paper in, any published application for which a redacted copy was timely submitted for publication; and (3) any member of the public to physically inspect (under the conditions that inspection of patented files is permitted) the file of any abandoned published application, provided that no redacted copy was timely submitted for publication.

Any member of the public may obtain status information concerning any published application via the Office's PAIR system. Permitting physical inspection of pending published applications, however, would interfere with the Office's ability to act on the applications within the time frames set forth in 35 U.S.C. 154(b)(1)(A) and (B). Thus, the Office must limit public access to the file

wrapper of pending published applications to obtaining a copy produced by the Office (for a fee) to avoid conferring patent term adjustment on the applicant due to actions by members of the public.

65 Fed. Reg. 17951.

Practice Implications

The 18-month publication provisions – coupled with the new access provisions – have finally removed the debilitating mystery and unseemly gamesmanship from much of the U.S. patent system. This will be particularly apparent in "due diligence" associated with the acquisition of rights under potentially patentable inventions. Because it will no longer be possible to "hide the ball" in terms of what claims are pending and what the U.S. Patent and Trademark Office is doing with prosecution, the transactional "playing field" should be much more level.

X. Vehicle of Choice for Seeking a U.S. Patent: Provisional Filing Followed by Filing Under the Patent Cooperation Treaty

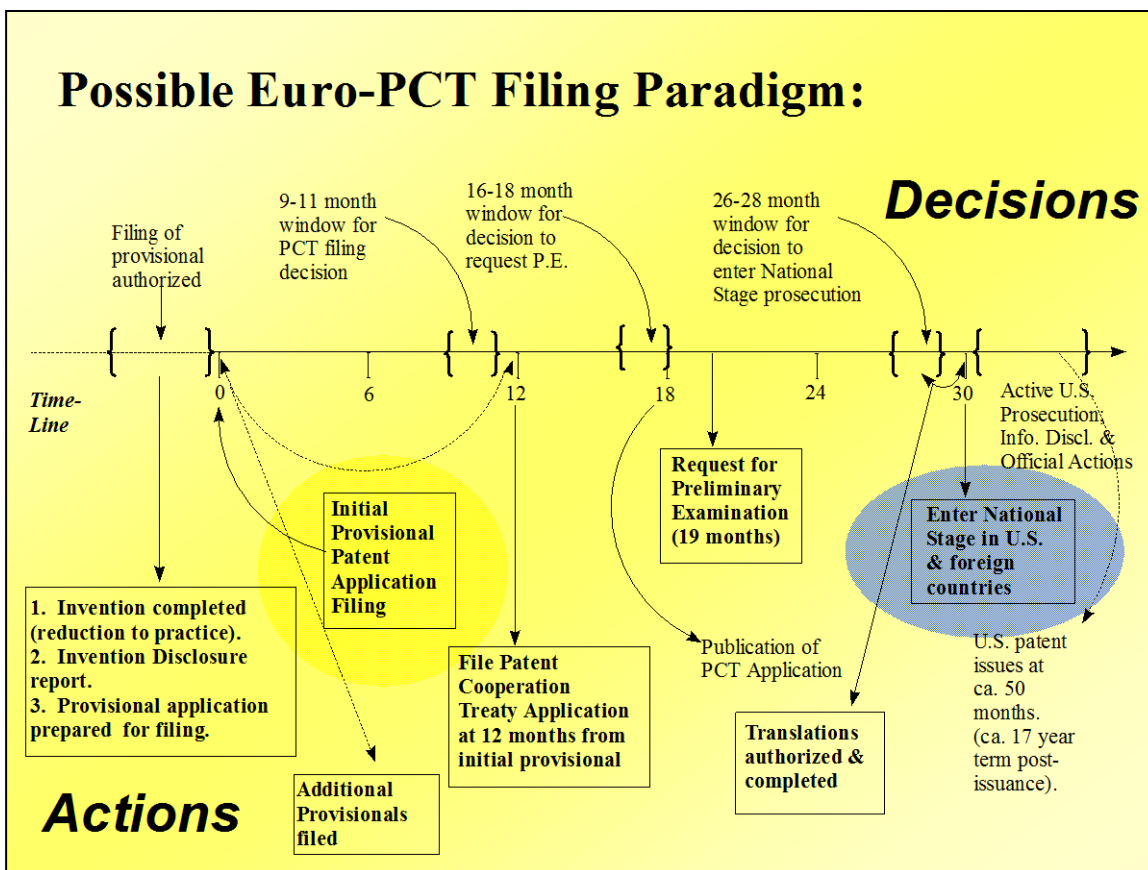
Prior to the American Inventors Protection Act, use of the PCT posed issues for both foreign and domestic inventors. The provisions of 35 U.S.C. § 102(e) relating to prior art and PCT applications did not work optimally. Early prior art dates were *denied* to PCT users – unless they essentially duplicated a national U.S. filing by perfecting an early entry into the national stage of the PCT. When these early U.S. prior art dates were sought and achieved, there would be a need downstream to combine applications if intra-company prior art under 35 U.S.C. § 102(e) were to be avoided. Both these impediments to use of the PCT have been erased in the American Inventors Protection Act.

Finally, the law on "provisional application" filing has now been perfected as well. A provisional application in the United States is now the perfect prelude to global patenting under the PCT.

What does this mean for obtaining a U.S. patent? It means that there is today a Euro-PCT patent filing paradigm that should highly advantage U.S. inventors seeking global patents. Its components can be seen in the following:

U.S. inventors can now obtain an early U.S. filing date, an early section 102(e) prior art date, and defer all substantive prosecution in the U.S. Patent and Trademark Office for a full 30 months from the initial priority filing. During this 30-month period, the international preliminary examination can take place before the European Patent Office. With aggressive prosecution efforts, a favorable examination report can be used to essentially complete European prosecution. Moreover, when U.S. prosecution is actively commenced, more complete prior art will be available and the best patentability arguments can be marshaled. With more compact prosecution, it should be possible to

avoid presenting arguments or claims that can give rise to later estoppels based on prosecution.



II. Conclusions

The American Inventors Protection Act has strengthened the U.S. patent system by making patentability determinations more certain by bringing forward in time all prior art that has heretofore appeared belatedly during prosecution or after patent issuance. At 18 months from the initial priority filing, a U.S. inventor should have a near perfect understanding of the "scope and content of the prior art" that will later guide prosecution and judicial assessments of validity.

The bane of having two U.S. patent applications collide with one another – and having the second destroy the patentability of the first – has been extracted from the U.S. patent law. So long as an *obligation* of common assignment exists or is created, the immunity within a research team or research collaboration from internal prior art should be complete.

Provisional filing now provides a completely safe and reliable means for entering the U.S. patent system. It is the best of all worlds – it creates offensive prior art when a corresponding non-provisional application is published, preserves an early constructive

date of invention, and is still cheap to file. Coupled with PCT filing, U.S. inventors now have a smooth interface from which to launch a global patenting campaign.

Having moved dramatically closer to the international norms of patent law and practice over the decade of the 1990's – 20-year patent term, 18-month publication, provisional rights, *de facto* "first to file" based on global invention dates, prior user rights, and opposition-style patent reexamination – the 21st century U.S. patent law is now perfectly positioned to harvest the fruits of the dramatic internationalization achieved thus far. Indeed, the time is now ripe to move aggressively to *de jure* harmonization. The advantages and opportunities that might be realized – especially the massive cost reductions – are compelling in the extreme.

[Overheads are embedded as an OLE object in electronic versions of this paper. Double-click on the image below to launch a PowerPoint Presentation and use "Pg Dn" to advance through the presentation.]



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Robert A. Armitage joined Eli Lilly and Company on October 1, 1999 as Vice President and General Patent Counsel, Lilly Research Laboratories. Mr. Armitage was chief intellectual property counsel for The Upjohn Company from 1983 to 1993. He has served as an adjunct professor of law at George Washington University Law School and a partner with Vinson & Elkins LLP (1993-1999).

He is currently Chair-Elect of the National Council of Intellectual Property Law Associations (NCIPLA), chair of the Fellows of the American Intellectual Property Law Association, and a member of the board of directors of both Intellectual Property Owners (IPO) and the National Inventors Hall of Fame Foundation. Mr. Armitage is a past chair of the Patent Committee of the Pharmaceutical Research & Manufacturers of America (PhRMA), the Intellectual Property Committee of the National Association of Manufacturers (NAM), and the Intellectual Property Law Section of the State Bar of Michigan. He is also a past president of the American Intellectual Property Law Association (AIPLA) and the Association of Corporate Patent Counsel (ACPC).

Mr. Armitage has lectured and written on a wide range of intellectual property subjects, including patent litigation, inequitable conduct, biotechnology patent law and practice, chemical patent law and practice, and patent interferences. He has testified before the United States Congress on a variety of IP policy matters, including biotechnology process patents, PTO governance, and international patent harmonization. Mr. Armitage has also extensively written and lectured on IP-related public policy issues.

He is a member of the Michigan, Indiana, and D.C. bars and an honors graduate of the University of Michigan Law School. Mr. Armitage received an M.S. degree in physics from the University of Michigan, where he was a Woodrow Wilson Fellow, and a B.A. degree with highest honors from Albion College.

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