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Derivation and Prior Art Problems with the New Patent Act¹

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Legislation sometimes is enacted that obviously requires either immediate revision or creative administrative and judicial interpretation. The new Leahy-Smith America Invents Act's derivation and prior art provisions fall in that category. Whether or not the move from a first-to-invent to a first-inventor-to-file system is viewed as good policy and as authorized by the Constitution,³ the particular changes made to the prior art provisions may not prevent or invalidate patents on inventions derived from others, *i.e.*, when the applicant has obtained knowledge of an invention from another, original inventor and then files for a patent on the same or a similar invention. In particular, obvious inventions made with unauthorized derived knowledge will now be patentable, given the elimination of prior art section § 102(f). Absent creative interpretations by the U.S. Patent and Trademark Office (PTO) and the courts, the new derivation proceedings will not prevent a first filer from obtaining a patent even if the first filer's invention is merely an obvious extension of information derived from another. Further, the new act adds a narrow and poorly understood category of prior art that may generate years of needless litigation to re-settle the currently well-understood boundaries of the public

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³ Some have argued that the new act is unconstitutional, in light of the meaning of "Inventors" in the Constitution, as the grant of patents is not limited to the first and original inventor, but only an inventor who files first. U.S. Const., art. I, § 8, cl. 8. These concerns may have particular merit in regard to obvious variants of derived information, which may now be patentable as discussed below. No creativity of the kind previously recognized as required for "invention" may exist in such obvious variants of derived knowledge. As Justice Douglas stated in regard to the requirement for "invention" under § 103, "every patent case involving validity presents a question which requires reference to a standard written into the Constitution. . . . It is not enough that an article is new and useful." *Great Atl. & Pac. Tea Co. v. Supermarket Equip. Co.*, 340 U.S. 147, 154-55 (1950) (Douglas, J., concurring),

domain. I discuss these problems in detail below.⁴

These problems were avoidable. Current § 102 could have been altered to effectuate a first-inventor-to-file system without otherwise changing prior art definitions in a way that will lead to derivation problems and unnecessary litigation. A group of academics had sent a letter to Congress as early as 2005 noting similar problems with predecessor legislation.⁵ I focus here on how the PTO and the courts may try to interpret the new act to avoid the derivation problems and why Congress may need to amend the new act, and why Congress should either remove the new prior art category or supply a definition that provides greater policy guidance for its application.

1. Problems with the New Derivation Proceedings and Eliminating § 102(f) Prior Art.

In general, the new act changes the existing prior art provisions by adopting a new §102(a) that: (1) eliminates existing § 102(a), which created prior art relative to the date of invention for subject matter known or used by others in the U.S. or patented or described in a printed publication anywhere; (2) converts and expands the existing § 102(b) statutory bars into pre-filing prior art, retaining the patented and printed publication category, making the public use or on-sale bars worldwide and adding a new category of prior art “otherwise available to the public”; (3) eliminates existing § 102(c) abandonment; (4) eliminates existing § 102(d) foreign filing bar, in light of the new first-to-file priority provisions; (5) converts existing § 102(e) to a first-inventor-to-file system; (6) eliminates existing § 102(f) for derived art (or other ways that an applicant did not invent the claimed subject matter); and (7) eliminates existing § 102(g)(2) prior making in the U.S. The new act also adopts exceptions in new § 102(b) to the new prior art provisions, which prevent inventor and third party disclosures from becoming new § 102(a) prior art within one year of the filing date (more narrowly than the existing § 102(b) grace periods) if the inventor (or others who obtained the information from the inventor) had earlier publicly disclosed the information, as well as prevent inventions derived from the applicant from becoming prior disclosure art within one year prior to filing or in regard to the earlier-filed applications of others.⁶ Thus, the exception of new §

⁴ I do not address many other significant changes, such as the additional changes to § 103 (beyond incorporation of the § 102 prior art changes), except to note that because new § 103 changes the date for determination of obviousness from the date of invention (which was held to include the critical date for statutory bar “prior art” in *In re Foster*, 343 F.2d 980, 987-90 (C.C.P.A. 1965)) to the effective filing date for the claim, claimed inventions are more likely to be found obvious. This is because skill in the art (even if it does not qualify as prior art under new § 102) may increase from the date of invention through the critical date up until the effective filing date.

⁵ See Daniel R. Cahoy et al., Patent Law Academics’ Positions on Patent Law Reform Issues (June 27, 2005).

⁶ See, e.g., HAROLD C. WEGNER, THE 2011 PATENT LAW: LAW AND PRACTICE, § 312 at 124 (2d ed. 2011) (discussing the “first-to-publish” approach to disclosures within the one-year period,

102(b)(2)(B) will prevent the disclosure of an earlier-filed, derived invention in a patent or application from being prior art against the applicant who originally invented it under new § 102(a)(2) (application prior art). But if the original inventor files more than one year after publication of that patent or application, the deriver's disclosure will be prior art against the originator's application under new § 102(a)(1), as new §102(b)(1)(B) will not apply.

a. Effects of Eliminating § 102(f) on Derivation.

By eliminating existing § 102(f), the new act removes the substantive prior art basis that used to prevent patents on derived inventions that are the same as or obvious in light of the derived knowledge.⁷ Because § 102(f) was treated as prior art for obviousness, it provided substantive grounds for denying or invalidating patents on obvious variants of a derived invention (*e.g.*, applications or improvements of, or additions to or modifications of, a derived invention) as well as to the derived invention itself. To prevent this effect for certain joint inventors, existing § 103(c)(1) created a special rule for inventions that were commonly owned or under assignment at the time the invention was made. In contrast, new § 102(b)(2)(B) will only *prevent* the disclosure of or application for a derived invention from being prior art in the limited circumstances noted above. The new act also replaces existing § 102(f) and existing § 103(c) with a new § 102(b)(2)(C) exception to new § 102(a)(2) application prior art, for commonly owned or assigned inventions, and in new § 102(c) provides that inventions made within the scope of joint research agreements qualify for the new § 102(b)(2)(C) exception. Finally, the new act provides two new procedures to address derived inventions: (1) an administrative "derivation proceeding" in new § 135(a), which replaces the current interference procedure that includes derivation interferences (that exist in light of § 102(f)); and (2) a derivation "civil action" in new § 291(a).

These new prior art provisions and additional procedures were intended to assure that *only* an original inventor can obtain a patent and that an original inventor will get the patent when another applicant is the first to file and derived that invention from the original inventor.⁸ The new procedures will not prevent an applicant who derived an invention from obtaining a patent on the derived invention (although the oath of new § 115(a) may prevent this) or on an obvious variant of it (and the oath will not prevent this) when the original inventor does *not* petition for a derivation

and citing Patent Reform Act Of 2011, Bill Provisions, Proceedings and Debates of the 112nd Cong., 1st Sess., 157 Cong. Rec. 1348, 1365-66 (March 8, 2011)).

⁷ See *Oddzon Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1399-1404 (Fed. Cir. 1997).

⁸ See H.R. REP. NO. 112-98, at 42 (1st Sess. 2011) ("A new administrative proceeding—called a 'derivation' proceeding—is created to ensure that the first person to file the application is actually a true inventor. This new proceeding will ensure that a person *will not be able to obtain a patent for the invention that he did not actually invent*. If a dispute arises as to which of two applicants is a true inventor (as opposed to who invented it first), it will be resolved through an administrative proceeding by the Patent Board.") (emphasis added).

proceeding or file a civil action. This is because the new act removes the substantive prior art grounds for the PTO to reject or for the courts to invalidate a patent on the derived invention or an obvious variant of it. The new derivation procedure and civil action also may be inadequate to prevent the deriving applicant from obtaining the patent on an obvious variant even when the originator *does* file a derivation petition, when the original inventor learns about the obvious variant from the deriver (and had not earlier conceived of the obvious variant). And in litigation defending against the deriver's patent on an obvious variant, an unrelated third party may be unable to challenge the deriver's patent for obviousness (although it may be able to challenge it for improper inventorship,⁹ but only if the elimination of § 102(f) has not undermined the substantive basis for such invalidation¹⁰).

It is highly unlikely that Congress, when it eliminated § 102(f), intended patents to issue to applicants who merely claim derived inventions or obvious variants of them.¹¹ This is true even if Congress had a general intent to harmonize the new first-inventor-to-file provisions with the law in other jurisdictions. Some other jurisdictions treat derived information as prior art only for novelty; as a result, many original inventors seek to publish their inventions as soon as they file applications so as to avoid competitors' efforts to discover the inventions and to seek patents on obvious variants of them.¹² Thus one could (and lawyers will) argue

⁹ I am indebted to Mark Lemley for this point.

¹⁰ As the Federal Circuit noted in *Pannu v. Iolabs, Corp.*, 155 F.3d 1344 (Fed. Cir. 1988), invalidation for failure to name all co-inventors is premised on current §102(f), although this aspect of the law predates the creation of § 102(f) in the 1952 Patent Act. *See id.* at 1448-51; *see also id.* at 1449-50 ("Thus, section 102(f) still makes the naming of the correct inventor or inventors a condition of patentability; failure to name them renders a patent invalid."). Eliminating § 102(f) may have undermined the basis for such invalidation, even when a patent holder who derived the invention in part cannot successfully establish the good faith required to permit the correction of inventorship under § 256. To the extent that an original inventor who acted in good faith seeks to correct inventorship under § 256, moreover, the deriver-in-part of a patent on an obvious variant may remain on the patent and be entitled to co-ownership of its rights. And of course, proving improper inventorship is difficult given the requirement for clear and convincing evidence, notwithstanding the permissive substantive standard that joint inventors need not themselves conceive of the final claimed invention. *See, e.g., Vanderbilt Univ. v. Icos Corp.*, 601 F.3d 1297, 1303-08 (Fed. Cir. 2010).

¹¹ Congress went out of its way to indicate its intent to preserve the legislative purposes of the Create Act in Section 3(b)(2) of the new act, when adopting new § 102(c) to replace current § 103(c). This suggests that Congress intended to preserve derivation art for obviousness generally, notwithstanding elimination of § 102(f), as current § 103(c) applies to prevent invalidation under current § 102(f) – combined with current § 103(a) – of claims of joint inventors operating under joint research agreements who derive relevant knowledge from each other.

¹² I am indebted to Paul Morgan for this point (and that foreign companies may sometimes file "surround" patents on obvious but commercially useful applications or improvements of basic inventions of their U.S. "partners"). *Cf. WEGNER, supra* note 6, at 146 (discussing *application* prior art that is used for novelty determinations only, citing Japanese Patent Law Art. 29-2 and European Patent Convention Art. 56).

that Congress did intend these results in the name of harmonization. In contrast to obvious variants, it is more likely that Congress intended for non-obvious inventions made with derived information to remain patentable. But given improper conduct in deriving inventions, the courts may nevertheless seek to impose legal or equitable restrictions on granting or enforcing such patents, so as to prevent rewarding the unauthorized derivation.¹³ Congress could make clear that patents created with unauthorized, derived information should be held invalid or unenforceable, although such a change to the law would not be a mere technical correction. And to avoid the potential problems with the new derivation proceedings (and other aspects of the law), a technical correction may be needed.

b. Interpretive Problems with the New Derivation Provisions That May Require Technical Corrections.

Section 3(h) of the Act creates new § 291(a), which provides for a civil action by “the owner of a patent” against someone who owns “another patent that claims the same invention” and has an earlier effective filing date.¹⁴ Section 3(i) of the Act creates a new § 135(a), which provides for petitions for derivation proceedings to be conducted before the (renamed) PTO Patent Trial and Appeal Board (PTAB). A petition may be filed “only within the 1-year period beginning on the date of the first publication of a claim to an invention that is the same or substantially the same as the earlier application’s claim to the invention. . . .” Thus, only a later-filing originator can petition to trigger a derivation proceeding, and can only do so within one year of the *publication* of the *later* filed claim that is “the same or substantially the same” as the earlier-filed claim of the copier.¹⁵ If the derivation proceeding is

¹³See, e.g., *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1249-50 (Fed. Cir. 1989) (ordering assignment of ownership of a patent on a derived invention); see generally Margo A. Bagley, *The New Invention Creation Activity Boundary in Patent Law*, 51 WM. & MARY L. REV. 577, 598-608 (2009) (discussing illegality, immorality, and unethical conduct in creating inventions). Under § 103(a) of the Copyright Act, copyright protection will not “extend to any part of the work” in which copyrighted material “has been used unlawfully,” which may prohibit copyright in any infringing derivative work (at least that is non-severable from the underlying work). See, e.g., *Pickett v. Prince*, 207 F.3d 402, 406-07 (7th Cir. 2000) (focusing on the right of the originating inventor to prevent creation of an unauthorized derivative work). No such provision exists in the patent law, and a non-obvious variant of a derived invention may or may not be severable from the original invention. Further, a patented non-obvious variant may not infringe the originator’s invention, but if it does it may become a blocking patent (if the original invention issues as a patent). Absent equitable restrictions on grant or enforcement of the patent on the non-obvious variant, the deriver will benefit from its improper conduct. Particularly if such a deriver extinguishes or diminishes the original inventor’s patent rights, the original inventor may wish to pursue other legal and equitable claims.

¹⁴ For clarity, I will refer to the deriving first-filer as the copier and the derived-from later-filer as the originator.

¹⁵ If the intent was to limit derivation petitions to one year after constructive knowledge of the deriver’s claims, the language should have been tied to publication of the *earlier*

triggered, under new § 135(b) the PTAB may then determine whether the copier “derived the claimed invention” from the petitioning originator and “may correct the naming of the inventor in any application or patent at issue.” As will become apparent, these provisions – in combination with the new first-inventor-to-file prior art provision, the elimination of the current § 102(f) derivation prior art provision, and the revised oath specified in new § 115(b) – may fail to create sufficient grounds to trigger a derivation civil action or proceeding, and more importantly may not prevent the copier from obtaining a patent to an obvious variant of the originator’s invention.

Let’s follow the process in the PTO first. Assume that a copier files an application containing a claim to an obvious variant of knowledge derived from the originator. Assume further that the originator only learns of the copier’s variant (and filing) from the copier’s published application, *i.e.*, that the originator had not itself conceived of (or disclosed) the obvious variant. The originator correctly perceives the copier has derived its claims *in part* from the originator. The originator seeks to file a patent application and a petition to trigger a derivation proceeding within one-year after his application can be filed and published from the date of learning of the copier’s publication. But the copier’s claim adds new matter to the originator’s invention – e.g., an additional or substituted element -- and is not the “same invention” as that of the originator. Worse yet, since the originator had not independently conceived of the copier’s claimed invention, the originator has derived knowledge of that invention from the copier and may no longer be able to file an application claiming the copier’s invention. This is because the originator may not be able to make the required oath of new § 115(b)– that the originator “believes himself to be the original inventor . . . of a claimed invention in the application.”¹⁶ New § 100(j) defines “claimed invention” to be “the subject matter

application containing the claim to the same subject matter. But publication of a claim that is “the same or substantially the same” can only occur after the *later* application is published (or an amended claim in it becomes public). Nevertheless, even if the deriver’s application issues as a patent before the later application’s claim is published and the petition is filed, the derivation proceeding *should* remain available so long as the one-year window is met. The reference to “earlier application” in new § 135(a) may not preclude the derivation proceeding from applying to a previously issued patent, just as an interference may be declared between an application and previously issued patent under existing § 135(a). Although existing §135 applies explicitly to previously issued patents and new § 135(a) does not, the later patent will have once been an “earlier application.” However, the legal argument can now be made that by removing the “patent” language that was in the existing version of § 135(a), Congress foreclosed resort to the new derivation procedure once a copier’s earlier application issues. The language of new § 135(a) should be clarified to avoid this possibility.

¹⁶ Arguably, one could read new § 115(b) to permit making this oath where *any* single claim in an application is original to the oath-maker. The language of the oath provision may need to be read that way where co-applicants are not joint inventors of all claims of the application. In that case, so long as the application also contains a claim to the originator’s invention, it could also contain a claim to the copier’s invention and the oath could then be filed by the originator. But interpreting § 115(b) in this fashion for a sole applicant would

defined by a claim in a patent or an application,” and thus removes any doubt that the originator is not the original inventor of the copier’s claim. Even if we were to dramatically extend the meaning of “invention” to include obvious variants (for which there is some historical precedent in the prior art-statutory bar context¹⁷), this new statutory definition of claimed invention appears to focus on claimed subject matter rather than on invention.¹⁸ Having derived the obvious variant from the copier, the originator may not be able to state (under penalty of perjury) that he is the “original” inventor of that “claimed” “subject matter,” even if the claimed subject matter falls broadly within the scope of the originator’s “invention.”¹⁹

In light of these potential limits on the oath and claims, let us assume that the originator files an application that contains claims only to its own, derived-from invention (and not to the copier’s “derived-plus” obvious variant). That application likely could not trigger the derivation proceeding under “the same” invention prong of § 135(a) as (without creative interpretation of the meaning of “invention” as just noted) the originator’s claim cannot be considered the “same” invention as the copier’s earlier “claimed invention.” Nevertheless, the derivation proceeding *may* permissibly be triggered if the originator’s claim is “substantially the same” as the copier’s claimed invention. The new act does not define “substantially the same,” and courts and PTO officials interpreting this provision would likely look to the same language in the existing interference provision, and how it has been interpreted in the context of derivation interference practice and the determination

permit those applicants to seek patents on claims where they know they are not inventors or joint inventors so long as they include one claim to which they are inventors. In any event, the originator should not be entitled to a patent for a claim to the copier’s invention, as the originator did not invent that subject matter. Removing § 102(f), however, may allow this result.

¹⁷ See *In re Foster*, 343 F.2d 980, 987-99 (C.C.P.A. 1965) (noting policy grounds for construing the § 102(b) statutory bars to apply beyond “complete anticipation” to claims for obvious inventions, whether based on skill in the art given printed publication disclosures or based on combination of such disclosures, and discussing pre-1952 Act terminology that such obvious claims lacked “invention”); *Dix-Seal Corp. v. New Haven Trap Rock Co.*, 236 F. Supp. 914, 918-19 (D. Conn. 1964) (“Precise identity . . . is not necessary to constitute constructive abandonment of the invention It is enough if the two devices are substantially the same . . . or if the advance from one to the other did not amount to invention . . .”). I am indebted to John Duffy for this point.

¹⁸ Construing “claimed invention” to include obvious variants notwithstanding the language of § 100(j) would significantly alter understandings of peripheral claiming as reflected in the “particularly pointing out and distinctly claiming” language of § 112, para. 2, which was not substantively revised by the new act.

¹⁹ Given elimination of current § 102(f), if deriving knowledge of the variant from the copier does not prohibit the originator from claiming the copier’s subject matter as the originator’s invention, this approach also might work the other way, with the copier being able to claim that the originator’s invention was within the scope of the copier’s invention. The copier might then obtain claims to the underlying invention, and not just to the obvious variant, as the oath would not then stand in the way (and as a derivation petition may not be filed).

of counts.²⁰ To regulate interference timing, §§ 135(b)(1)&(2) of the existing law prevent applicants from amending applications to claim “the same or substantially the same subject matter” as a claim of an issued patent or pending application within one year of grant of the patent or publication of the application, respectively. The existing PTO rules provide that “[a]n interference exists if the subject matter of a claim of one party would, *if prior art*, have anticipated *or rendered obvious* the subject matter of a claim of the opposing party *and vice versa*.”²¹ The premise of the interference is to determine who invented first and whether claims are not novel or are obvious in light of the other applicant’s claimed subject matter; in a derivation interference, the question of prior art status for obviousness is determined under § 102(f). Thus, it is possible to construe the “substantially the same” language of new § 135(a) for derivation proceedings in light of the earlier interference standards to encompass obvious variants of claimed inventions.²²

²⁰ I am indebted to Chico Gholz (and others with extensive interference practice expertise) for this point, as well as for the argument (discussed below) that the PTO might have substantive authority to reject claims to obvious derived variants under new § 135(d), and for the concern over limitation of derivation petitions to the later-filing applicant (given that derivation interferences often involve claims of copying that run both ways and given that parties that are ultimately found to be derivees often file before parties that are ultimately found to be derivers). Both Chico and Mark Lemley suggest that by preserving the relevant language of § 135, Congress should be presumed to have intended to preserve the same substantive authority, notwithstanding the changes to patentability in § 102. I believe, however, that as § 135(a) addresses the grounds for triggering the proceeding it does *not* provide separate substantive authority for the PTAB’s decisions, particularly in light of the separate language of new § 135(b) and the prior art changes in § 102. If Congress does not act to fix the provision, I hope Chico and Mark turn out to be right and that the courts uphold a broader interpretation that would authorize the PTO to trigger derivation proceedings for obvious derived variants and for the PTAB to deny patents on them. But if the courts will not uphold such authority, too much damage may be done in the interim. It would therefore be much better to avoid any such question of authority, by enacting amending or technical correction legislation now, which not only would assure that the procedures are adequate but also would clearly indicate that claims to obvious variants of derived knowledge are unpatentable even without a derivation proceeding (which would then authorize the PTO to reject them and would discourage filing of such claims and, in turn, unauthorized derivation in the first instance).

²¹ 37 CFR § 41.203(a)(emphasis added). *See In re Ogieu*, 517 F.2d 1382, 1390 (C.C.P.A. 1975) (where the subject matter of a count is either “the prior invention of another under § 102(g), or falls within another paragraph of § 102, [it] may be used as ‘prior art’ in combination with other references under § 103.”).

²² In contrast, this provision most likely would not address *non-obvious* variants that are derived without authorization. The interference rules define a “count” in 37 CFR § 41.201 to mean “the Board’s description of the interfering subject matter that sets the scope of admissible proofs on priority. Where there is more than one count, each count must describe a patentably distinct invention.” A non-obvious variant alone should not constitute interfering subject matter; it should be patentably distinct and patentable under the current act.

However, this interpretation is not assured, as the premise for construing “substantially the same” in interference practice to include obvious variants may not exist for a derivation proceeding under the new act. Eliminating § 102(f) removed the current PTO rule’s basis for treating the originator’s invention as “if prior art.” For a derivation interference, existing § 102(f) is what makes the applications “interfere,” by making the originator’s claimed subject matter prior art against a copier. It is also what makes an obvious variant obvious and unpatentable to the copier under existing law. In contrast, eliminating § 102(f) in the new act may remove the originator’s claim from being considered prior art against the copier (as with the facts assumed here), and thus the originator’s claim will not “interfere” in the same way with the copier’s claim.²³ The copier’s claim (at least under these facts) is not obvious because the originator’s subject matter is not prior art against the copier. Given elimination of § 102(f), there is no basis for treating the earlier invention as “if prior art” similarly to § 41.203(a) for interferences generally and for derivation interferences in particular.²⁴ Thus, at least in regard to derivation proceedings addressed to allegedly derived obvious variants where the originator’s invention is not treated as prior art against the copier, “substantially the same” might actually mean something narrower than “anticipated or rendered obvious” – *e.g.*, something like use of different terminology to claim essentially the same subject matter – that corresponds to issues that the derivation proceeding could substantively address.²⁵

In sum, although a historical basis exists for construing “substantially the same” to permit an originator to trigger a derivation proceeding by filing a claim to the original subject matter when the copier claims an obvious variant of it and when the

²³ The copier’s claim, however, may interfere with the originator’s claim if the copier’s claim is prior art against the originator’s, *e.g.*, if the originator files more than a year after the copier’s application publishes and becomes prior art against the originator under § 102(a)(1) (as the § 102(b)(1) exception will not apply). But in that case, the originator will not be entitled to the patent on the original invention and the PTO might reject its application without granting the derivation proceeding petition. Further, the derivation proceeding can only be triggered by the later filing originator, and an originator in this circumstance may not be able to file its application in good faith knowing of the prior art.

²⁴ Stated differently, treating the originator’s claim as if prior art to trigger the interference, or to substantively deny the patent, without having substantive grounds in § 102 to do so, might be arbitrary agency action, impermissible under 5 U.S.C. § 706(a) (2006).

²⁵ If the obvious variant is not the “same” invention and the meaning of “substantially similar” is limited, the derivation proceeding can only be triggered if the originator claims the copier’s obvious variant (under a broad interpretation of “claimed invention”). But that invention was not conceived by the originator but rather was derived from the copier, raising conceptual problems of who is the inventor even if the oath does not prohibit the originator from seeking to claim the obvious variant. If the originator seeks to file such a claim, moreover, the copier cannot trigger the derivation procedure as the language of § 135(a) makes clear that only the later filer can petition. And if the originator does not petition, both claims may issue so long as the originator filed before the copier’s publication became prior art against the originator.

originator derived knowledge of that variant from the copier, the premises of going to a first-inventor-to-file system and the elimination of § 102(f) may undermine that interpretation.²⁶ If so, and if the oath prevents the originator from claiming the obvious variant itself, no derivation proceeding can be triggered to prevent the copier's claim from issuing.²⁷

Similarly, the originator may be unable to trigger a civil action for derivation under new § 291(a) under the facts described. This is because (assuming the oath requirement precludes it or the copier's application became prior art against the originator) the originator cannot file a claim for or obtain a patent on the obvious variant, and the civil action § 291(a) requires the originator to have obtained a patent "that claims the same invention." Interpreting "claims the same invention" to apply to obvious variants of the originator's claimed invention would require much more of a stretch than interpreting § 135(a)'s "substantially similar" language to apply to obvious variants. As before, creative interpretation of "invention" is required, and that interpretation may be precluded by the new act's definition of "claimed invention" and its general approach.

Further, even if § 135(a) "substantially the same" were construed broadly to permit the derivation action to be triggered by the originator, the substantive standard in §135(b) for the new derivation proceeding also may prevent relief for the originator. The PTAB's authority in new § 135(b) appears to be limited to determining whether the copier ("the inventor named in the earlier application") "derived the claimed invention from an inventor named in petitioner's application" and to taking appropriate action in light of that determination. Although the reference to "claimed invention" here is ambiguous, it most sensibly refers to the copier's claimed invention. Again, unless "claimed invention" is construed broadly to include obvious variants, the originator cannot claim the copier's invention and cannot demonstrate that the copier derived *that* invention from the originator.²⁸ Rather, as with the civil action's trigger, the substantive requirement of the derivation proceeding is based on the copier's "claimed invention" being the same as the originator's invention, which they will not be given their differing subject matter. And if the PTAB cannot find derivation of the copier's invention, it

²⁶ In contrast, elimination of § 102(f) may not undermine the rationale for non-statutory obviousness-type double patenting rejections and restriction practices, given continuing temporal extension and split ownership concerns. But it seems incongruous to allow patents to derivers for obvious variants of claimed inventions while prohibiting such patents (absent terminal disclaimers and common ownership) to the original inventors.

²⁷ If the PTO has substantive authority to deny granting the copier's obvious variant under new § 135(a) or new § 135(d), as discussed below, then it would have a more tenable ground for construing "substantially similar" to include the obvious variant.

²⁸ As the proceeding can only be triggered by the later filer, the section appears to presume that the earlier filer is the copier, and thus it makes sense to focus on the copier's claims. This is particularly true on the facts here, as the earlier filer will not have claimed the same invention as the later-filing originator, and thus although the copier may not have derived that invention the copier also is not seeking a patent for it so no relief is needed.

presumably lacks authority under new § 135(b) “to correct the naming of the inventor in” the copier’s application.²⁹ Nor would the PTAB appear to have the authority to reject the copier’s claim as obvious in light of any derivation finding. Given the elimination of § 102(f) as prior art, there would be no substantive basis for denying the copier’s claim to the obvious variant (although it could potentially correct inventorship in that claim by adding the originator to it).

c. The Limits of Alternative Interpretations and Suggested Language for Technical Corrections.

One partial alternative to these results would be to interpret the word “derived” in §135(b) to mean “derived in part,” which would then permit correction of inventorship. But this may not prevent the claim for the obvious variant from issuing to the copier (as a joint inventor).³⁰ Another alternative would be to read new § 135(d) as providing authority to the PTAB to establish *substantive* rules of patentability that would permit findings of derivation that not only permit correcting inventorship when the claimed invention is only derived in part but also would permit the PTAB to deny patents for claims to obvious variants, notwithstanding elimination of § 102(f).³¹ New § 135(d) (“Effect of Final Decision”) provides that “[t]he final decision of the [PTAB,] if adverse to claims in an application for patent, shall constitute the final refusal by the Office on those claims.” Thus, if the PTAB were to deny the claims to the copier, that would be an “adverse” decision that became final, and the substantive grounds for denying the claims would be incorporated into that decision. But there is nothing in the language of the provision to suggest authority for such substantive bootstrapping, and the provision by its own language appears intended only to establish administrative finality, presumably to assure termination of further administrative action and thereby create final agency action that will permit a judicial appeal. Accordingly, Section 3(j) of the new act amends existing § 146 to provide for a civil action under § 141 or for an appeal to the Court of Appeals for the Federal Circuit from “a derivation proceeding” of the PTAB. It also would be highly unusual to specify the substantive standard in new § 135(b) and provide additional, unbounded authority in § 135(d) for the PTAB to create new substantive rules for derivation or denial of patents.

²⁹ As noted above, *supra* note 10, eliminating §102(f) may have removed the premises for correcting inventorship even if derivation of the claimed invention could be proved.

³⁰ Again, unless “claimed invention” is construed broadly to include obvious variants, such correction of inventorship might still require the originator to share the patent with the copier. It is unlikely that the copier, having supplied the part of the invention that was not contemplated by the originator, would *not* be considered a joint inventor of the obvious variant (*i.e.*, that the copier would be found to have supplied an insufficient contribution to the conception of that invention).

³¹ This may put originators to the difficult choice of seeking to invalidate the claim to the obvious variant, rather than to permit the copier to share in the patent right. It is unlikely that § 135(d) could be construed to permit changes to inventorship law so as to prevent the copier from obtaining rights in any patent not held invalid.

Even assuming such broad substantive authority, it is possible (although as noted above the legislative history suggests the opposite) that Congress intended for obvious variants to be patentable to derivers. If so, the PTAB would run afoul of legislative intent if it were to adopt substantive rules denying patentability and inventorship to the copier. Perhaps the best argument in favor of allowing patents for obvious variants is Section 3(q) of the new act, which indicates the sense of the Congress that the first-inventor-to-file system promotes harmonization.³² Given that some other jurisdictions may allow patents for obvious variants, the new act arguably should be construed to achieve the same result. In addition the legislative history for the derivation proceeding could be read to support granting obvious variants to a copier, given that the copier is an original inventor. Specifically, the House Report on H.R. 1249 states that:

A new administrative proceeding—called a “derivation” proceeding—is created to ensure that the first person to file the application is actually a *true inventor*. This new proceeding will ensure that a person will not be able to obtain a patent for the invention that he *did not actually invent*. If a dispute arises as to which of two applicants is a true inventor (as opposed to who invented it first), it will be resolved through an administrative proceeding by the Patent Board.³³

It is unlikely, however, either that this language reflects legislative understanding of the significance of eliminating existing § 102(f) or that Congress actually intended by its discussion of “true inventors” what its legislative language actually accomplishes, *i.e.*, restriction of the derivation procedures to prevent their use against a copier who files an obvious variant of a derived invention. Certainly if that was not its intent, Congress should fix the language now. If Congress adopts technical corrections to the existing legislation, it should include the derivation and prior art provisions in that legislation. To do so would be relatively simple.

First, Congress needs to restore § 102(f). Given that restoral, the PTO would (as with current derivation interferences) be fully justified in triggering derivation proceedings for obvious variants of an originator’s claimed invention (as “substantially the same” as the originator’s claim). Restored § 102(f) would also provide the PTAB with substantive grounds for denying claims to the copier (as obvious in light of derived § 102(f) prior art).³⁴ Second, Congress needs to amend

³²See H.R. REP. NO. 112-98, at 74 (1st Sess. 2011). *See also id.* at 42 (“This new system provides patent applicants in the United States the efficiency benefits of the first-to-file systems used in the rest of the world by moving the U.S. system much closer to a first-to-file system and making the filing date that which is most relevant in determining whether an application is patentable.”).

³³*Id.* at 42 (emphasis added).

³⁴To address derivation by a later filer (where the PTO has failed to apply an earlier filer’s application as prior art against the later-filing deriver), the earlier filer also should be able to

the derivation civil action in § 291(a) to eliminate the requirement for a patent “that claims the same invention,” given that the § 115(a) oath may bar the originator from seeking to claim the obvious variant after learning of it from the copier.³⁵ Instead, § 291(a) should be amended to state that

Any person may have relief by civil action against the owner of a patent where a claim of that patent is alleged by the person seeking relief to be derived in whole or in part. For any claim found to be derived in whole or in part, the Court may correct the named inventor, may find the claim invalid, or may deny relief, as appropriate under the circumstances by applying substantive patentability standards to the claim.

This change should permit correction of inventorship when the originator actually invented the claimed subject matter at issue (without deriving it from the copier), should invalidate the claim where it is not patentable to the copier in light of the derivation and is not patentable to the originator in light of the prior art created by the copier, and should permit the copier to retain the claim where it is a non-obvious variant of the derived invention.³⁶ Given the public interest in invalidating wrongly issued patents, moreover, this derivation action would not be limited to the originator.

Finally, Congress could (but need not) more fully address the inequity of unauthorized derivation by making clear that a copier is not entitled to patent even

trigger a derivation proceeding. To do so, new section § 135(b) could be revised to delete the word “earlier” and add “or patent” after “in the petitioner’s application,” and new § 135(a) could be revised to state in relevant part “[a]n applicant for patent or an owner of a patent may file a petition to institute a derivation proceeding in the Office. The petition shall set forth with particularity the basis for finding that an inventor named in an application or an issued patent derived the claimed invention from an inventor named in the petitioner’s application or patent and, without authorization, the application or patent claiming such invention was filed, but no petition may be filed by an owner of an issued patent seeking a derivation proceeding against an issued patent. Any such petition may be filed only within the 1-year period beginning on the date of the first publication in an application or issued patent of a claim to an invention that is the same or substantially the same as the claim of the petitioner’s application or patent. . . .”

³⁵ Even if the oath permitted the originator to file an application containing a claim to the same invention, the originator would not receive a patent on it given the copier’s prior art. Thus, no further change to the oath requirement is needed, unless Congress also wishes to prevent an unauthorized copier from depriving an originator of the ability to claim obvious variants of the originator’s invention that the originator derives from a copier (and then the copier’s patent would also have to be disqualified as prior art under new § 102(a)(2)).

³⁶ If Congress wishes to prevent unauthorized derived art from becoming prior art against the originator (where the originator has not disclosed the invention so as to trigger a new § 102(b) exception to new § 102(a) prior art, or to prevent the copier’s obvious variant from becoming § 102(f) art against the originator), more extensive changes are needed.

a non-obvious variant of unauthorized derived knowledge. To do so, Congress could simply remove the “deny relief” language in the proposed revision of § 291(a) and substitute for “may find the claim invalid, or may deny relief,” after “named inventor,”: “or may find the claim invalid, even for a non-obvious variant of a claim that is derived in part without authorization.”³⁷ Similar language could be added to new § 135(a).

2. Expansion of Existing § 102(b) to Create “Otherwise Available” Prior Art Will Generate Needless Litigation.

As with the removal of the § 102(f) prior art provision, the addition of the new § 102(a)(1) prior art category may cause more trouble than it is worth. Specifically, new § 102(a)(1) adds to the known statutory bar categories of prior art of existing § 102(b) a new category, “otherwise available to the public.” Existing § 102(b) provides that “the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country.” New § 102(a)(1) provides that “the claimed invention was patented, described in a printed publication, or in public use, on-sale, or otherwise available to the public” As a matter of language, use of the first “or” suggests that the three categories that follow are linked, and are alternatives to the earlier two categories. The use of the second “or” with “otherwise” suggests that “public use” and “on-sale” categories (or all four preceding categories) are linked by the concept “available to the public.” And, most significantly, there is no way to read the second “or” and “otherwise” except as creating a “catchall” category of “available to the public” that “public use,” “on-sale” “patented,” and “described in a printed publication” do not capture.

The new statutory category language appears to be both unnecessary for and ill-suited to merely restricting the meaning of “public use” or “on-sale.” Even if that were its intent, the use of “or” and “otherwise” would suggest that Congress intended either: (1) to *limit* those two categories of activities to events that are publicly accessible (given their broader earlier interpretation); or (2) to *declare* that any activities in those two categories are necessarily publicly accessible (based on their earlier interpretation). At least the second of these options is highly unlikely to have been the intent of Congress, but even the first is problematic. As the House Report indicates, the “the phrase ‘available to the public’ is added to clarify the *broad* scope of relevant public art, as well as to emphasize that it *must be* publicly

³⁷ It should be clear that once an application is published, using the knowledge of that application to develop non-obvious inventions is not “without authorization.” Further, using the claimed invention itself after the application is published but before the grant of an originator’s patent should not be viewed as “without authorization,” even if provisional rights under § 154(d) may retrospectively attach to such conduct. In contrast, using the claimed invention to develop non-obvious inventions after the grant to the originator may run afoul of the current limits to the experimental use exception. Congress may wish to revisit that exception. See generally Henrik Holzapfel & Joshua D. Sarnoff, *A Cross-Atlantic Dialog on Experimental Use and Research Tools*, 48 IDEA 122, 133-48 (2008).

accessible.”³⁸ Clarifying its past breadth would demonstrate that the categories of prior art *need not be* publicly accessible, as the “public use” and “on-sale” categories have been interpreted under existing § 102(b) to include secret commercialization and sales of inventions that are *not* accessible to the general public.³⁹ But whatever the intent in regard to the existing categories of “public use” or “on-sale,” the new statutory language must be viewed as creating a new category of prior art – “otherwise available.”

The “otherwise available to the public” language derives from House bills in earlier Congresses. In those bills, the “on-sale” and “in public use” categories had been eliminated in favor of a broad catchall category “otherwise publicly known,” which again suggested that the first two categories (patented or described in a printed publication) also had to be publicly known. “Otherwise publicly known” was defined as information that is “reasonably and effectively accessible,” *i.e.*, information to which a person having ordinary skill in the relevant art is “able to gain access” “without resort to undue efforts” (which would have created a new concept and a new policy for interpretation), and of which such a person is “able to comprehend the content” (another new concept and new policy), also “without resort to undue efforts.”⁴⁰ This legislative language (including the definition) would have precluded most “secret prior art,” as pre-filing prior art was restricted to third-party sales or uses of the invention and as the earlier bills provided a one-year grace period for the inventor’s own acts. After significant off-the-record legislative negotiations, the existing “on-sale” and “public use” statutory categories were restored, and the “otherwise publicly known” language was converted to the “otherwise available to the public” language. Questions remain as to whether Congress, by restoring the existing language of § 102(b) and adopting this new language, intended to include or to exclude so-called “secret prior art” in the on-sale or public use categories, *i.e.*, whether they include sales or uses that were not available to the public because the contracts were private and inaccessible or the uses were kept as trade secrets or otherwise restricted from public view, even if they provided applicants with commercial benefits (and particularly if the uses provided only third parties with commercial benefits). But whatever the legislative intent in regard to secret prior art, there is no policy evident that would define what “otherwise available” means in other contexts.

³⁸ H.R. REP. NO. 112-98, at 43 (1st Sess. 2011) (emphasis added). As Hal Wegner has noted, patents, commercial public uses, and sales under existing § 102(b) may have been secret from the public. *See WEGNER, supra* note 6, at 108, 117.

³⁹ *See, e.g., WEGNER, supra* note 6, at 90-108 (discussing scope of the “on-sale” and “public use” categories and citing, inter alia, *Pennock v. Dialog*, 27 U.S. (2 Pet.) 1 (1829), and *Metallizing Eng’g. Co. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516 (2d Cir. 1946)).

⁴⁰ *See* H.R. 2795, 109th Cong., § 3(b) (2005) (proposed §§ 102(a)(1) and 102(b)(3)(A)&(B)); Daniel R. Cahoy, et al., *Patent Law Academics’ Positions on Patent Law Reform Issues* 4 (June 27, 2005) (discussing the proposed changes and the statutory definition of “publicly known”).

Given the broad interpretation that has been given to “printed publication,” moreover, the new category of “otherwise available to the public” seems wholly unnecessary, unless it is based on either different *policies* or on a different *scope of application* than is reflected in the “printed publication” case law. The statutory language of “printed publication” was recodified without any clear intent to change it, and should retain its broad scope of application. The courts have interpreted that category expansively to address publicly available information, even when the information has not been “printed” or formally “published.” As the Federal Circuit stated in *In re Klopfenstein*, which addressed a printed slide presentation, cases construing “described in a printed publication” have found “the key inquiry [to be] whether or not a reference has been made “publicly *accessible*.”⁴¹ But this is almost identical to the policy criteria that is supposed to distinguish the new category (“otherwise available to the public”), as well as (perhaps) the “public use” and “on-sale” categories).

No other policy criteria are specified to provide guidance or limits to the new category that would help to specify its separate content, and separate content is needed to avoid that language becoming mere surplussage. As a result, “[i]t is difficult to imagine how an invention [widely disseminated in tangible form] would be ‘otherwise available to the public’ when it would *not* also be a ‘printed publication’ within the meaning of case law.”⁴² Perhaps the only meaningful addition that this new category of “otherwise available” may cover is orally transmitted information (to a sufficient number of people to qualify as public) that (perhaps) is not subsequently (within some relevant timeframe) reduced to a tangible medium of expression.⁴³

The boundaries of this new category of prior art will have to be resolved, and the existence of the category will invite needless litigation if Congress did not in fact intend to create it. But even if it did so intend, needless litigation will ensue to settle its boundaries. The new act thus will encourage unnecessary and (for patent challengers) often unsuccessful litigation to establish what are highly likely to be very limited expansions of the public domain. It is doubtful that the marginal social benefits to be obtained from this incremental expansion – even if it were intended by Congress – warrants the social cost of the litigation that is likely to ensue. Further, until the courts establish the limits of this new category (however they decide the effects on “on-sale” and “public use”), the uncertainty over the scope of the provision may chill permissible and beneficial sharing of information (to avoid making it “otherwise available”).

If Congress did intend such an expansion of prior art, it can and should revise the language of this section to reduce the litigation and uncertainty, by articulating a

⁴¹ *In re Klopfenstein*, 380 F.3d 1345, 1348 (Fed. Cir. 2004) (emphasis added).

⁴² WEGNER, *supra* note 6, at 90 (citing, *inter alia*, *SRI Int’l, Inc. v. Intenet Sec. Systems, Inc.*, 511 F.3d 1186 (Fed. Cir. 2008), and *Klopfenstein*).

⁴³ I am indebted to John Duffy for this point.

clearer policy or scope of application that differs from that for a “printed publication” and the other new § 102(a)(1) categories. If Congress did not intend to create the new category of prior art, it need only eliminate the additional language “, otherwise available to the public”. Finally, if Congress intended the “otherwise available” language only to eliminate secret prior art for the “on-sale” or “in public use” categories, in general or only for third parties, it can simply say so. Lack of legislative compromise (much less inadequate legislative drafting) is a poor excuse for generating confusion and needless litigation, particularly as it is unlikely that any such clarifying changes (had they been in the original act) would have led to a different legislative outcome.

3. Conclusion

There is still plenty of time for Congress to pass technical correction legislation before the effective date of these new provisions. Congress can readily remedy these – and other – problems in the new patent act. Doing so will avoid the substantial and unnecessary social costs of administrative and judicial interpretative action, lawyering time, and decisions that must ultimately be reversed that will otherwise result from such inadequate attention to the legislative language. Let us hope Congress acts soon to do so. But if it does not, let us hope the PTO and the courts adopt and uphold sensible interpretations that prevent copiers from obtaining claims to obvious variants, that permit derivation actions to proceed so as to provide originators with joint inventor rights in claimed obvious variants, and to specify the policies and scope of application of new “otherwise available” prior art.