The Effect of the Leahy-Smith America Invents Act on Collaborative Research

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ABSTRACT

Requirement under subsection 102(f) of Title 35 of the United States Code that a person "himself invent the subject matter sought to be patented" has been removed by the Leahy-Smith American Invents Act (AIA) of 2011. At least one commentator proposes amending the new Act to add back this provision in order to prevent unauthorized copiers from patenting obvious variants of non-public inventions derived from an original inventor. However, judicial precedent prior to OddzOn Prods., Inc. v. Just Toys, Inc. generally does not sanction obviousness considerations under subsection 102(f). If a provision equivalent to subsection 102(f) is incorporated into the AIA that *does* block obvious variants of derived subject matter, then the Act should also be amended to provide that subject matter that qualifies only under that provision should not be prior art to a claimed invention if, by the effective date of the claimed invention, it is owned by the same person, subject to a common obligation of assignment, or subject to a joint research agreement.

INTRODUCTION

The Leahy-Smith America Invents Act of 2011¹ represents the most substantial change to American patent law since the Patent Act of 1952,² and possibly since the reinstatement of substantive patent exam-

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¹ Leahy-Smith America Invents Act, H.R. REP. No. 112-98 (1st Sess. 2011) [hereinafter AIA].

² Patent Act of 1952, ch. 950 §1, 66 Stat. 798 (July 19, 1952).

ination under the Patent Act of 1836.3 Among the most significant changes is the restructuring of conditions for patentability under 35 U.S.C. § 102 and, in particular, elimination of subsection 102(f), which states that a person is entitled to a patent unless "he did not himself invent the subject matter sought to be Also gone is subsection patented." 102(g)(2), barring a person from obtaining a patent where, "before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it." In effect, while there is still the positive requirement under section 101 that patents be obtained by "[w]hoever invents or discovers a new and useful process, machine, manufacture, composition of matter, or any new and useful improvement thereof," the "conditions and requirements" to which section 101 is subject under Title 35 of the United States Code now provide protection to inventors who are the first to file or publicly disclose their inventions, even if they were not the first to invent.

The criteria for non-obviousness under section 103 also have been changed to eliminate exclusion of "prior art" that qualifies only under "one or more of subsections (e), (f), and (g) of section 102 of this title ..." if the prior art and the claimed

subject matter are commonly owned or subject to an obligation of assignment to the same person at the time the invention was made.⁴ Therefore, anything that qualifies as "prior art" under new section 102 can prohibit a person from obtaining a patent under new section 103 if "the claimed invention as a whole would have been obvious ... to a person having ordinary skill in the art to which the claimed invention pertains." Like the previous Act, the conditions of section 103 specifically state that "patentability shall not be negated by the manner in which the invention is made."⁵

The new Act also replaces a statutory provision for a contest between patent applications, or between a patent application and a patent based on priority of inventorship, known as an "interference proceeding," under section 135 of the Patent Act of 1952 with a "derivation proceeding." Under new section 135 of the AIA, a petition to institute a derivation proceeding is proper when "an inventor named in an earlier application derived the claimed invention named in the petitioner's application and, without authorization, [files] the earlier application claiming" an invention that is "the same or substantially the same" as that claimed by the petitioner.⁶ However, as Joshua Sarnoff recently pointed out, there is no standard in the AIA for "the

³ Patent Act of 1836, ch. 357, 5 Stat. 117 (July 4, 1836) (repealed 1870).

⁴ AIA, 35 U.S.C. § 103 states:

^{§103} Conditions for patentability; non-obvious subject matter

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

⁵ The word "negatived" in section 103 of the previous Act has been replaced by the word "negated," although the legislative history of the AIA states that no substantive change was intended by the substitution. H.R. REP. No. 112-98, at 43, n. 21 (1st Sess. 2011).

⁶ AIA, 35 U.S.C. § 135.

same or substantially the same,"⁷ and because subsection 102(f) has been removed, it is possible that original inventors of technology may not be able to stop copiers from patenting obvious variants of inventions communicated from original inventors to them.⁸ Prof. Sarnoff proposes amending the new Act to add back subsection 102(f) in order to bar patent protection of unauthorized copies of non-public inventions and their obvious variants.⁹

Under current law, establishing that a derived variant is "obvious" under section 103 requires that the subject matter under subsection 102(f) be eligible as "prior art." However, prior to *OddzOn Prods., Inc. v. Just Toys, Inc.,* 10 there is very little judicial precedent for considering subject matter under subsection 102(f) of the Patent Act of 1952 to be prior art. Rather, as discussed below, courts generally, and the Supreme Court in particular, had held that subject matter under subsection 102(f) was *not* considered to be prior art for obviousness purposes. 11 It was only exclusion of subject matter under subsection 102(f) from con-

sideration as evidence of obviousness under section 103 when commonly owned or subject to common assignment, pursuant to the Patent Act of 1984, that prompted the Federal Circuit in *OddzOn* to hold that such subject matter was to be considered prior art when not so excluded. Removal of subsection 102(f) from exclusion under section 103, therefore, means that, without more, amendment of the new Act to introduce a provision equivalent to subsection 102(f) will not ensure a statutory basis for blocking obvious variants of copied inventions.¹² Further, if the AIA is amended to include an equivalent to subsection 102(f), and even if subject matter under a newly minted 102(f) is to be considered prior art for obviousness purposes, then there must be further amendment to exclude subject matter that qualifies only under that subsection from consideration as prior art where the subject matter and a claimed invention are commonly owned, subject to an obligation of assignment to the same person, or subject to a joint research agreement.

⁷ The United States Patent and Trademark Office recently has proposed rule § 42.405 that repeats this standard when comparing the claimed inventions of the petitioner (originator) and the respondent (deriver):

^{§42.405} Content of petition

⁽a) Grounds for standing. The petition must:

⁽²⁾ Show that the petitioner has at least one claim that is:

 ⁽i) The same or substantially the same as the respondent's claimed invention;

⁽ii) Not patentably distinct from the invention disclosed to the respondent.

Fed. Reg. 77:28, page 7040, February 10, 2012. (Emphasis added.)

⁸ Joshua D. Sarnoff, Derivation and Prior Art Problems with the New Patent Act, 2011 Patently-O Patent Law Review 12.

⁹ Id. at 23 ("First, Congress needs to restore § 102(f).... Restored § 102(f) would also provide the PTAB [Patent Trial and Appeal Board] with substantive grounds for denying claims to the copier (as obvious in light of derived § 102(f) prior art).")

^{10 122} F.3d 1396 (Fed. Cir. 1997).

¹¹ See infra text at note 36.

¹² Although, as pointed out by Prof. Sarnoff, the Court of Customs and Patent Appeals in *In re Foster*, 343 F.2d 980 (C.C.P.A. 1965) provides some historical precedent for "extending the meaning of 'invention' to include obvious variants" under section 102 on policy grounds. Sarnoff at 18.

1. A Short History of Statutory Provision for Collaborative Research

Exclusions under section 103 of the Patent Act of 1952 of commonly-owned prior art under subsections 102(f) and (g) were enacted under the "Patent Law Amendments Act of 1984," which was intended to "encourage communication among members of research teams, and patenting, and consequently public dissemination, of the results of 'team research,'" and to recognize "the realities of modern day industrial research and development." Subsection 102(e) was added to the exclusions under section 103 by the American Inventors Protection Act of 1999. 16

The Cooperative Research and Technology Enhancement Act of 2004 (2004 CREATE Act) extended the scope of protection provided by the 1984 and 1999 Acts by including inter-institutional collaborations under the phrase, "owned by the same person or subject to an obligation of assignment to the same person." ¹⁷ Pursuant to the 2004 CREATE Act, under 35 U.S.C. § 103(c)(2):

- [A] claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if
- (A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;
- (B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
- (C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.¹⁸

The AIA deletes reference under new section 103 to subsections (e), (f) and (g) of prior section 102. Much of the language regarding common ownership consequent to the 2004 CREATE Act has been preserved under new subsections 102(b)(2)(C) and 102(c).¹⁹ However, because subsec-

¹³ Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 104(a), 98 Stat. 3384 (1984) [hereinafter 1984 Act].

¹⁴ Section-by-Section Analysis of H.R. 6286, Patent Law Amendments Act of 1984, 130 Cong. Rec. 28069, 28071 (Oct. 1, 1984), reprinted in 1984 U.S.C.C.A.N. 5827, 5833.

¹⁵ Innovation and Patent Law Reform: Hearings Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary, 98th Cong., 2d Sess., 61 (1984) [hereinafter 1984 House Hearings] (Statement of Harry F. Manbeck, Jr.).

¹⁶ American Inventors Protection Act of 1999, Public. L. No. 106-113, 113 Stat. 1537-44 (1999) [hereinafter AIPA].

¹⁷ Cooperative Research and Technology Enhancement Act of 2004, Pub. L. No. 108-453, §2, 118 Stat. 3596 (2004) [hereinafter 2004 CREATE Act].

¹⁸ Id.

¹⁹ AIA, 35 U.S.C. § 102 (b)(2)(C) states:

^{§ 102} Conditions for patentability; novelty

⁽b) Exceptions.-

⁽²⁾ Disclosures appearing in applications and patents. – A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if –

tions 102(f) and (g) have been eliminated, provision for common ownership only extends to patents and published patent applications that would otherwise be prior art under new subsection 102(a)(2),²⁰ which has its closest parallel to provisions for patents and published patent applications under current 35 U.S.C. § 102(e).²¹

2. Case Law Motivating Legislative Intervention in Collaborative Research

In 1973, the Court of Customs and Patent Appeals in *In re Bass*,²² in a case of first impression,²³ held that:

[W]e rule against appellants and hold that the use of the prior inven-

tion of another who had not abandoned, suppressed, or concealed it, under the circumstances of this case which include the disclosure of such invention in an issued patent, is available as "prior art" within the meaning of that term in § 103 by virtue of § 102(g).²⁴

No exception was made by the court for the fact that the events considered under subsection 102(g) were all conducted by members of a common research and development program.²⁵ In addition to subsection 102(g), subsections 102(a), (b) and (e), were also stated by the court to be "prior art subsections," and, therefore, relevant to obviousness considerations

Footnote 19 continued from previous page

AIA, 35 U.S.C. § 102(c) states:

- (c) Common Ownership Under Joint Research Agreements. Subject matter disclosed and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person in applying the provisions of subsection (b)(2)(C) if –
- (1) the subject matter disclosed was developed and the claimed invention was made by, or on behalf of, 1 or more parties to a joint research agreement that was in effect on or before the effective filing date of the claimed invention;
 - (2) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
- (3) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.
- 20 AIA, 35 U.S.C. § 102(a)(2) states:
 - § 102. Conditions for patentability; novelty
 - (a) Novelty; Prior Art A person shall be entitled to a patent unless -
- (2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.
 - 21 35 U.S.C. § 102(e) currently states:
 - § 102. Conditions for patentability; novelty and loss of right to patent
 - A person shall be entitled to a patent unless -
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the Untied 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 only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language. ...
 - 22 59 CCPA 1342 (CCPA 1973).
- 23 Id. at 1350 ("However, it is the first time we have considered combining § 102(g) and § 103 in the context of an ex parte rejection entirely divorced from award of priority in an interference which established the prior inventorship relied on in rejecting.").
 - 24 Id. at 1355 (eniphasis added).
- 25 Id. at 1350 ("[A]pplicants [Bass, Jenkins, and Horvat] were working together on a common project, as evidenced by the facts in the Rule 131 affidavit....")

⁽C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.

under 35 U.S.C. § 103, while subsections 102(c), (d) and (f) were explicitly held to have no relevance to obviousness under 35 U.S.C § 103:

Of course, (c), (d), and (f) have no relation to § 103 and no relevance to what is "prior art" under § 103. Only the remaining portions of § 102 deal with "prior art." Three of them, (a), (e), and (g), deal with events prior to applicant's invention date and the other, (b) with events more than one year prior to the U.S. application date. These are the "prior art" subsections.²⁶

Subsection 102(f) was understood by the CCPA in *Bass* to relate only to derivation in that it "deals with originality," whereby "one who 'did not himself invent the subject matter' (i.e., he did not originate it) has no right to a patent on it." 28

The "circumstances of this case" of Bass, according to a later decision by the CCPA in *In re Clemens*, ²⁹ included "clear and conclusive evidence of priority" ³⁰ and knowledge of that fact by one of the inventors of the prior invention:

In *Bass*, it was clear that at least one of the three *Bass* co-inventors had knowledge of the prior invention before the making of the Bass inven-

tion. (The sole inventor of the prior invention was a co-inventor of the Bass invention.)³¹

In *Clemens*, however, there was "no such evidence in the record concerning the order in which the inventions in question were made," and there was "no evidence of record that any of the applicants had knowledge of [non-co-inventor] Barretts' invention prior to the making of their own invention." The court in *Clemens* refused to extend the logic of *Bass*, where a holding of obviousness under section 103 was made, by imputing an "applicant's own knowledge of another's prior invention," when such "knowledge has not been shown to be known to either the public or the applicants." As stated by the court:

Where an applicant begins with knowledge of another's invention that will be available to the public at a later date as a result of an issued patent, treating this other invention as prior art is justified under facts such as those in *Bass*. No such consideration is present when the applicant does not begin with such knowledge. To the contrary, where this other invention is unknown to both the applicant and the art at the time the applicant makes his invention, treating it as 35 *U.S.C.* § 103

²⁶ Id. at 1360.

²⁷ Id.

²⁸ Id.

^{29 622} F.2d 1029 (CCPA 1980).

³⁰ Id. at 1038.

³¹ Id. at 1039.

³² Id. at 1038.

³³ Id. at 1039.

³⁴ Id.

prior art would establish a standard for patentability in which an applicant's contribution would be measured against secret prior art. Such a standard would be detrimental to the innovative spirit the patent laws are intended to kindle.³⁵

From well before the time of Bass and Clemens, and until much later, subsection 102(f) generally was understood to be limited to derivation, as "shown by a prior, complete conception of the claimed subject matter and communication of the complete conception to the party charged with derivation," wherein the "[c]ommunication of a complete conception must be sufficient to enable one of ordinary skill in the art to construct and successfully operate the invention."36 As late as 1997, the Federal Circuit, in Gambro Lundia v. Baxter Healthcare,37 invoked the Supreme Court decision of Agawan Co. v. Jordan,38 stating that the "Court required a showing that the communication 'enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part to construct and put the improvement in successful operation.'"39 The Federal Circuit in Gambro

chastised the lower court's reliance on another case, *New England Braiding Company* v. A.W. Chesterton⁴⁰:

Citing New England Braiding v. A.W. Chesterton, the district court concluded that Baxter did not need to prove communication of the entire conception, but rather only so much of the invention "as would have made it obvious to one of ordinary skill in the art." Based on this reasoning, the district court applied the obviousness standard in 35 U.S.C. § 103 (1994) to determine that the named inventors received enough information to make the invention obvious to one skilled in the dialysis art. This reasoning, however, misconstrues the dictum in New Engand introduces Braiding incorrectly an obviousness analysis into the test for derivation.41

Nevertheless, in response⁴² to *Bass* and *Clemens*, both subsections 102(f) and (g) were excluded from consideration as prior art under section § 103 in the 1984 Act, provided that the subject matter under subsec-

³⁵ Id. at 1039-40.

³⁶ Hedgewick v. Akers, 497 F.2d 905,908 (CCPA 1974), citing MacMillan v. Moffett, 432 F.2d 1237 (CCPA 1970), DeGroff v. Roth, 56 CCPA 1331 (CCPA 1969), Egnot v. Looker, 387 F.2d 680 (CCPA 1967) and Agawan v. Jordan, 74 U.S. (7 Wall:) 583 (1869).

^{37 110} F.3d 1573, (Fed. Cir. 1997).

^{38 74} U.S. (7 Wall.) 583 (1868).

³⁹ Gambro at 1577, quoting Agawan, 74 U.S. 583, at 602-603.

^{40 970} F.2d 878 (Fed. Cir. 1992).

⁴¹ *Gambro* at 1577 (citations omitted). The Federal Circuit in *New England Braiding* did, in fact, say: "To invalidate a patent for derivation of invention, a party must demonstrate that the named inventor in the patent acquired knowledge of the claimed invention from another, or at least so much of the claimed invention as would have made it obvious to one of ordinary skill in the art." 970 F.2d at 883. However, according to the court in *Gambro*, "[t]his dictum did not in fact incorporate a determination of obviousness into a *Section 102(f)* analysis. Indeed, this court in *New England Braiding* did not apply such a test." *Gambro* at 1578.

⁴² See Section-by Section Analysis, supra note 6. As stated in the legislative history of the 1984 Act:

However, under In re Bass and In re Clemens an earlier invention which is not public may be treated under section 102(g), and possibly under 102(f), as prior art with respect to a later invention made by another employee of the same organization.

^{...}The bill by disqualifying such background information from prior art, will encourage communication among members of research teams, and patenting, and consequently public dissemination, of the results of "team research."

tions 102(f) and (g) and of the claimed invention "were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person."⁴³

In 1997, the Federal Circuit, in *OddzOn Products, Inc. v. Just Toys Inc.*,⁴⁴ decided a few months after *Gambro*, held that, despite language in *Bass* that subsections 102(c), (d) and (f) have "no relation to § 103 and no relevancy to what is 'prior art' under § 103,"⁴⁵ the language of section 103 mandates that subsection 102(f) "creates a type of prior art for purposes of § 103" outside of the "limited circumstances" prescribed:

While the statute [§ 103] does not expressly state in so many words that § 102(f) creates a type of prior art for purposes of § 103, nonetheless that conclusion is inescapable; the language that states that § 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. 46

The court further stated that such a result was "not illogical" because, while the "obvious invention, A', may not be unpatentable to the inventor of A, and may not be unpatentable to a third party who did not receive the disclosure of A, ... it is unpatentable to the party who did receive the disclosure."47 For the court in OddzOn, public disclosure constituted the dividing line between, on one hand, events under section 102 that constitute "prior art," including subsections 102(a), (b) and "prior invention of another that was not abandoned, suppressed, or concealed (102(g) prior art),"48 and, on the other hand, events under those subsections, namely 102(c), (d) and (f), that do not relate to public disclosure.49 According to the court, "[e]ven the 'secret prior art' of § 102(e) is ultimately public in the form of an issued patent before it obtains prior art status."50 Therefore, there was "a basis for an opposite conclusion [to their finding that events under subsection 102(f) are 'prior art'], principally based on the fact that § 102(f) does not refer to public activity, as do the other provisions that clearly define prior art,"51 and the court expressed concern about their holding.⁵² But, for the Federal Circuit in *OddzOn*, the decision

⁴³ Pub. L. No. 98-622, Sec. 104(a).

^{44 122} F.3d 1396 (Fed. Cir. 1997).

⁴⁵ Id. at 1402, quoting In re Bass, 474 F.2d at 1360.

⁴⁶ Id. at 1403.

⁴⁷ Id. at 1403.

⁴⁸ Id. at 1402.

⁴⁹ *Id.* at 1402 ("There is substantial logic to that conclusion. After all, the other prior art provisions all relate to subject matter that is, or eventually becomes, public.").

⁵⁰ Id.

⁵¹ Id. at 1403.

⁵² Id. As stated by the court:

It is sometimes more important that a close question be settled one way or another than which way it is settled. We settle the issue here (subject of course to any later intervention by Congress or review by the Supreme Court), and do so in a manner that best comports with the voice of Congress. Thus, while there is a basis for an opposite conclusion, principally based on the fact that $\S 102(f)$ does not refer to public activity as do the other provisions that clearly define prior art, nonetheless we cannot escape the import of the 1984 amendment.

was the one "that best comports with the voice of Congress." 53

3. Legislative History of the 2004 CREATE Act

a. The Original Proposal and Congressional Hearing

The 2004 CREATE Act, as finally enacted, differed significantly from the bill that was originally submitted in the House of Representatives on June 9, 2003.54 In the first bill, subsection 102(f) was to be amended to state that a person shall be entitled to a patent unless he did not himself invent the subject matter sought to be patented, "except that subject matter under this subsection shall not be considered prior art or as evidence of obviousness under section 103 of this title."55 Subsection 103(c) was to be amended to remove reference to subsection 102(f) and to move the date by which ownership must be established from the date the invention was made to the earliest filing date of the patent application:

(c) Subject matter developed by another person, which qualifies as prior art only under one or both of subsections (e) 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 of the earliest filing date for which benefit is sought under this title, owned by the same person or subject to an

obligation of assignment to the same person.⁵⁶

A hearing before the Subcommittee on Courts, the Internet and Intellectual Property of the Committee on the Judiciary in the House of Representatives regarding the first proposed statutory amendments under the CREATE Act was conducted on June 10, 2003.⁵⁷ During the hearing, several concerns were raised about the language of the proposed amendments under the proposed Act. Among them was a view that the additional protections afforded by the proposed language went beyond the issues raised by the Federal Circuit in OddzOn, which arose "only where (a) there is no obligation for common ownership or assignment before the invention was made, (b) one party in a research team conveys information that, when combined with other prior art, would render the invention obvious, and (c) the party conveying that information is not part of the inventive entity named in the application."58

One suggested revision of the proposed bill was to keep subsection 102(f) as an exception under subsection 103(c), but to change the amendment to subsection 102(f) to state that "[a] person shall be entitled to a patent unless ... he did not himself invent the subject matter sought to be patented, except that subject matter communicated from a co-inventor shall not be considered prior art under this subsection." This suggestion was intended to

⁵³ Id.

⁵⁴ H.R. 2391, 108th Cong. (1st Sess. 2003).

⁵⁵ Id. at 2.

⁵⁶ Id. (emphasis added).

⁵⁷ Cooperative Research and Technology Enhancement (CREATE) Act of 2003: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the Comm. on the Judiciary on H.R. 2391, 108th Cong., 1st Sess., 33 (2003) [hereinafter 2003 CREATE Act Hearing].

⁵⁸ Id. at 41 (Statement of Jeffrey P. Kushan, Sidley, Austin, Brown and Wood, Washington, D.C.).

⁵⁹ Id. at 20 (Statement of Eric Steffe, Stern, Kessler, Goldstein and Fox, Washington, D.C.).

address two issues. Anticipating Prof. Sarnoff's basis for reintroducing subsection 102(f), the first issue was "a concern that the proposed bill [without the suggested revision] inadvertently protects a party who misappropriates the invention of another party, makes minor modifications, and files a patent application, because unpatentability for obviousness based on 102(f) prior [art] would no longer be available."60 The second issue to be addressed by the suggested revision to the proposed bill would be to prevent claimed subject matter in a later, jointly developed broad invention by multiple ownership entities from being found unpatentable under subsection 102(f) in view of a nonpublic narrow embodiment communicated by one of those entities:

While, hopefully a court would consider the entire collaboration as an act of invention, and would refuse to find the [later] generic formula unpatentable over the earlier communication of compound X for public policy reasons, CREATE arguably leaves this an open question.⁶¹

Therefore, while the original proposed bill would have removed reference to subsection 102(f) from subsection 103(c) and, therefore, eliminated the basis for the reading of the statute by the Federal Circuit that made subsection 102(f) a prior art consideration, the suggested revision of the proposed bill would have narrowed

the amendments under the Act to exclude the possibility that a third party would be able to file a patent application on an obvious variant unless that third party were a co-inventor.

The amendments to subsection 102(f) under the proposed statute were also thought potentially to create a secondary problem in that, by being the only paragraph under section 102 that states that it excludes considerations of obviousness, the "negative implication is that all other paragraphs do apply for non-obvious determinations," such as "§ 102(c) and (d), where [sic] the Federal Circuit has said in dicta do not apply to non-obviousness."62 Concerns relating to amendment of section 102 as a way to avoid issues of obviousness under section 103 raised by the Federal Circuit in *OddzOn* were more broadly echoed in the testimony of one of the witnesses at the hearing, Dr. John Soderstrom:

My reaction, having been on both sides of litigation, both defending and prosecuting patents, is that I think the difficulty that I see that the Act needs to deal with are the 103(c) issues, not 102. I think the problem I see is that when you start playing around with the language of 102, there are lots of other issues that arise that have unintended consequences that I fear we will be right back here trying to correct a year from now.⁶³

⁶⁰ Id.

⁶¹ Id.

⁶² *Id.* at 46. The word "exclusively" was proposed to be inserted under subsection 102(f) to prevent any interpretation of the proposed amendment to subsection 102(f) that would bar obviousness rejections where § 102(f) was not the only section under which a reference might be considered in an obviousness determination. *Id.*

⁶³ *Id.* at 50. (Statement of John Soderstrom, Ph.D., Managing Director, Office of Cooperative Research, Yale University, New Haven, CT, on behalf of the Association of University Technology Managers).

Speaking even more generally, Mr. Jeffrey P. Kushan, another witness, reflected on the realities of communications between individuals working in a "modern environment" and the inevitability of discovery in litigation:

I think the change that has been proposed wouldn't capture the full scope of the scenario that we are trying to protect because it would still have a strong encouragement to people who want to kill the patent that comes out of the inventive community by looking to somebody who doesn't qualify as an inventor and say, well, you told him something, blah, blah, blah. That goes in and can come into the litigation environment.⁶⁴

Dual situations were summarized by Mr. Berman, a representative from California on the Committee on the Judiciary. Mr. Berman stated that "the threat now is that some initial, some comments in an initial collaborative effort will be used either by that person or by someone else to defeat a patent achieved as a result of this interinstitutional collaboration," but "if we fix that problem, the problem then becomes that somebody participating in this collaboration will now be able to sustain a patent which is just a minor variation of the original idea as discussed in the collaboration."

Moreover, as stated by Mr. Thomas, the intended effect of the CREATE Act was to "overturn the 1997 holding of the U.S.

Court of Appeals for the Federal Circuit in OddzOn Products, Inc. v. Just Toys, Inc., which ruled that derived prior art may serve as evidence of obviousness."67 The Federal Circuit, however, as discussed above, also was concerned with the distinction between disclosed and undisclosed information as a dividing line between what should and should not be considered "prior art."68 The testimony of the witnesses reflected a further concern that even confidential communications could be considered derived prior art that might defeat a patent as being obvious under section 103. For example, as stated by Mr. Kushan in his oral testimony before the subcommittee:

It is looking at it from the perspective of litigation involving a patent once you have successfully developed an invention, when there are lots of motivations to go back 15 years before the invention was *made* and the patent was granted, talk to everybody who talked to the first researcher and find out if somehow they had information that they shared with the person who actually got the patent. This creates an unsustainable risk to patent validity that we think we should remove.⁶⁹

Presumably, such communications were the type of subject matter that could be considered prior art under subsection 102(f) and, thus, be eligible as evidence of obviousness under section 103.

⁶⁴ Id. (Statement of Jeffrey P. Kushan).

⁶⁵ Id. at 53. (Statement of Howard L. Berman, Representative from California)

⁶⁶ Id.

⁶⁷ Id. at 47 (Statement of John R. Thomas).

⁶⁸ See text at notes 48 and 49, supra.

⁶⁹ Id. at 35 (Statement of Jeffrey P. Kushan) (emphasis added).

b. The Revised Proposal

On February 24, 2004, a substantially revised version of the CREATE Act was reported that eliminated any amendment of subsection 102(f) and reinstituted subsection 102(f) under the exclusions of subsection 103(c).70 The new version of the bill also reinstituted in section 103 the requirement that prior art under the excluded subsections of section 102 and the claimed invention be, "at the time that the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person,"71 but broadened the interpretation of the phrase, "owned by the same person or subject to an obligation of assignment to the same person," in section 103 by including activities subject to a "joint research agreement":

- (2) For purposes of this subsection, subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if
 - (A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was *made*;

- (B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
- (C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.⁷²

"Joint research agreement," in turn, was specified by proposed subsection 103(c)(3) of the revised Act to mean "a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention."

The revisions to the proposed CREATE Act resolved many of the issues raised during the hearings of the year before. For example, by not having amended subsection 102(f), any concerns regarding consequent implications with respect to the remainder of section 102 as prior art were eliminated. However, by doing so the subcommittee was forced to include subsection 102(f) in section 103, (which had prompted the Federal Circuit in OddzOn to label events under subsection 102(f) as "prior art") and to broaden the meaning of being "owned by the same person or subject to an obligation of assignment to the same person" in order to exempt certain inter-institutional collaborations.

⁷⁰ H.R. REP. No. 108-425, at 2 (2d Sess. 2004).

⁷¹ *Id.* (emphasis added). Interestingly, the AIA requires that the date of a joint research agreement be before the *filing date* of the invention. However, this opens the possibility for an inventor to buy up the rights to third party unpublished patent applications before they qualify as prior art under new 35 U.S.C. § 102(a)(2) by executing a joint research agreement under 35 U.S.C. § 102(c)(2) before his own patent application has been filed, but retroactively covering activities that led to the claimed invention. 35 U.S.C. § 102(c)(2) should be read to avoid this result. (Thanks to Prof. Sarnoff for his assistance on this point.)

⁷² Id. (emphasis added).

⁷³ Id.

The proposed revisions of the CREATE Act responded to the issues raised by the Federal Circuit in *OddzOn* more narrowly and without the risks of providing unintentional fodder for litigation, on one hand, or overexpansive protections on the other, as articulated during the hearings conducted with respect to the first proposal under the CREATE Act. The CREATE Act as ultimately passed was essentially identical to the rewritten bill reported on February 24, 2004.

4. Changes Made by the American Invents Act that Affect Collaboration

a. The Effect on "Derivation."

Changes by the AIA to what had been components of the 2004 CREATE Act, the Patent Law Amendments Act of 1984 and the American Inventors Protection Act of 1999, appear to have been made as part of the overall conversion from a "first-inventor" to a "first-inventor-to-file-or-publicly-disclose" system. However, removal of reference to subsection 102(f) from section 103 of the new Act reopens the question of the meaning of "derivation."

As discussed above, derivation generally had no relation to determinations of obviousness from the time of the Supreme Court's decision in *Agawan* through the Federal Circuit's decision in *Gambro*.⁷⁴ If

the logic of the Federal Circuit in OddzOn is to be maintained in the new Act, whereby "language that states that § 102(f) subject matter is not prior art under limited circumstances clearly implies that it is prior art otherwise," 75 then removal of reference to subsection 102(f) from the new statute should remove the basis for the conclusion that subject matter otherwise under subsection 102(f) would be prior art at all. Simply introducing an equivalent to subsection 102(f), without more, will not be a basis for linking derivation with obviousness as the Federal Circuit did in OddzOn. Further, those portions of the 2004 CRE-ATE Act preserved in the AIA were originally written into the 2004 CREATE Act, as discussed above, to exclude events under subsection 102(f) as prior art that the Federal Circuit reluctantly held to be prior art in OddzOn. Therefore, contrary to a recent statement made by Prof. Sarnoff in his proposal to amend the AIA,76 preservation of portions of the 2004 CREATE Act in new subsection 102(c) does not suggest that Congress "intended to preserve derivation art for obviousness generally...."77

It may be that obviousness will be a consideration in derivation proceedings under new section 135 as a carry-over from standards for conducting interference proceedings⁷⁸ and, certainly, preservation of the phrase "substantially the same" in new section 135 leaves room for that interpreta-

⁷⁴ See supra text at note 39, supra. See also Gambro at 1577 ("This reasoning, however, misconstrues the dictum in New England Braiding and introduces incorrectly an obviousness analysis into the test for derivation.").

⁷⁵ See supra text at note 46.

⁷⁶ Joshua D. Sarnoff, Derivation and Prior Art Problems with the New Patent Act, 2011 Patentably-O Patent Law Journal 12, at n. 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.

⁷⁷ Id.

tion.⁷⁹ However, new section 291, entitled "Derived Patents," which is directed to civil action between owners of patents contesting derivation, includes no such language.80 Further, there is nothing in the legislative history or in the new Act that explicitly requires an obviousness determination in any derivation proceeding. The fact that courts may rely on judicial precedent to exclude obviousness from derivation proceedings further supports Prof. Sarnoff's recommendation to restore subsection 102(f) 81 and adopt a proposed revision by Prof. Sarnoff of new subsection 291(a).82 However, both sections 135 and 291 should be amended to explicitly bar obvious variants of an earlier-derived invention unless they are commonly owned, as prescribed by the statute.

b. The Effect on Collaboration

Under the Patent Act of 1984, subject matter under subsections 102(f) and (g) were excluded from consideration as evidence of statutory obviousness under section 103 when the subject matter and a claimed invention were commonly owned or subject to an obligation of assignment to the same person in order to "encourage communication among members of research

teams." The Patent Act of 1999 expanded the protection of the Patent Act of 1984 by also excluding patents and published patent applications under 102(e) from section 103 when the subject matter disclosed and claimed is commonly owned or subject to a common obligation to assign to the same person. The 2004 CREATE Act embraced inter-institutional "joint research agreements" within the meaning of "common ownership or obligation to assign." Under the new Act, only patents or published patent applications under subsection 102(a)(2) can (like prior subsection 102(e)) be excluded as prior art if the subject matter disclosed and claimed is commonly owned or subject to a common obligation to assign to the same person.

If subject matter under any new subsection 102(f) is eligible for consideration as evidence of obviousness of claimed subject matter under section 103, then the AIA should also be amended to exclude such subject matter when it and the claimed subject matter are "owned by the same person or subject to an obligation of assignment to the same person," including subject matter "commonly owned" under a "joint research agreement," as "common ownership" and "joint research agree-

⁷⁸ Sarnoff at n. 20. Professor Sarnoff states:

If Congress does not act to fix the provision, I hope Chico [Gholz] and Mark [Lemley] turn out to be right and that the courts uphold a broader interpretation that would authorize the PTO [United States Patent and Trademark Office] to trigger derivation proceedings for obvious variants and for the PTAB [Patent Trial and Appeal Board] to deny patents on them.

⁷⁹ Under previous "§ 135. Interferences," subsection (b)(1) states: "A claim which is the same as, or for the same or substantially the same subject matter as, a claim of an issued patent may not be made in any application unless such a claim is made prior to one year from the date on which the patent was granted." (Emphasis added.) Under new "§ 135. Derivation proceedings," subsection "(a) Institution of Proceeding" states: "... Any such petition [to institute a derivation proceeding] may be filed only within the 1-year period beginning on the date of the first publication of the claim to an invention that is the same or substantially the same as the earlier application's claim to the invention" (emphasis added).

⁸⁰ New "§ 291. Derived Patents" states: "The owner of a patent may have relief by civil action against the owner of another patent that claims the same invention...." (emphasis added).

⁸¹ Sarnoff at 23. ("First, Congress needs to restore § 102(f).")

⁸² Prof. Sarnoff's proposed subsection 291(a) is as follows:

Any person may have relief by civil action against the owner of a patent where a claim of that patent is alleged by that 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.

ment" are defined under subsections 102(c) and 100(h),⁸³ respectively, of the AIA. Failure to do so may engender arguments challenging validity like those proffered in *Bass, Clemens* and *OddzOn* and cause a chilling effect on intra-institutional and inter-institutional collaborations.

CONCLUSION

It is important that avenues carefully closed by the Acts of 1984, 1999 and 2004 not be reopened. The new Act greatly streamlines patent prosecution and provides many safeguards to ensure higher quality patent protection. Prof. Sarnoff's proposal to amend the new Act to incorporate an equivalent to subsection 102(f) rightfully intends to bar patent protection of obvious variants and thereby foreclose the opportunity for unscrupulous copiers to leverage the AIA to their advantage. However, if such an amendment is made, it should be realized that subject matter under subsection 102(f) was only considered "prior art" by the Federal Circuit in OddzOn by virtue of language limiting its use under section 103. The fact that section 103 under the AIA does not exclude any "prior art" may, therefore, remove the utility of a new subsection 102(f) if judicial precedent prohibiting consideration of subject matter under subsection 102(f) as evidence of obviousness in derivation proceedings is followed by the courts. Therefore, any such amendment of the AIA to include a requirement that the inventor "himself invent the subject matter to be patented," should also explicitly state that subject matter that qualifies as prior art under such new subsection be subject to consideration for obviousness purposes. Further, if obviousness is part of a derivation analysis based on a new subsection 102(f), then care must be taken not to allow third parties to use any subject matter that qualifies as prior art exclusively under that subsection to invalidate claims when that "prior art" and the claimed subject matter are owned by the same person, subject to an obligation of assignment to the same person, or subject to a joint research agreement.

⁸³ AIA, 35 U.S.C. § 100(h) ("The term 'joint research agreement' means a written contract, grant, or cooperative agreement entered into by 2 or more persons or entities for the performance of experimental, developmental, or research work in the filed of the claimed invention.").