# INVENTORSHIP, DOUBLE PATENTING, AND THE AMERICA INVENTS ACT

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### **ABSTRACT**

The Leahy-Smith America Invents Act of 2011 (AIA) defines an "inventor" as "the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention." Prior art that consists of a "disclosure... made by the inventor or joint inventor" or "subject matter [that] had, before such disclosure, been publicly disclosed by the inventor or a joint inventor," when disclosure is "made 1 year or less before the effective filing date of a claimed invention," is excepted from the novelty requirement. However, there is nothing in the AIA or its legislative history that specifies whether the "disclosure" by the inventor or joint inventor must be the work of the inventive entity of the invention claimed, or need only be the work of an individual member or subgroup of that inventive entity. Guidelines developed by the United States Patent and Trademark Office (USPTO) do not clarify this issue. Early commentary on the AIA suggests that the work "disclosed" need not be that of the entire inventive entity. Such an interpretation, if confirmed by the courts, would be a radical and unnecessary departure from judicial precedent and would fundamentally change the effect of prior work by individuals on claimed joint inventions to which they contributed. The judicially created doctrine of obviousness-type double patenting, which limits inventors to a single patent for each invention considered patentably indistinct in view of another, would also be implicated, as would a recently proposed statutory alternative.

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#### I. INTRODUCTION

The America Invents Act (AIA)<sup>1</sup> radically changed several fundamental concepts of patent law as they existed under the Patent Act of 1952. It also provided definitions for several terms that, historically, had no statutory basis. Failure to properly understand the roots of these definitions, where they exist, may have profound implications on the concept of inventorship. Specifically, the term "inventor" is defined under § 100(f) of United States Code, Title 35, to mean "the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention."2 The terms "joint inventor" and "coinventor" are defined for the first time under 35 U.S.C. § 100(g) to mean "any 1 of the individuals who invented or discovered the subject matter of a joint invention." A "claimed invention" is defined under 35 U.S.C. § 100(j) to mean "the subject matter defined by a claim in a patent or an application for a patent." But it is not clear from the AIA or its legislative history whether the independent work of a joint inventor is "severable" from the collective invention or discovery to which that joint inventor contributed. In other words, is the prior work of an individual legally distinct from that of a joint inventive entity of which that individual is a member? It is also unclear whether the AIA was intended to be different in this respect from its predecessor, the Patent Act of 1952,<sup>5</sup> or whether jurisprudence of inventorship or joint inventorship is affected by the new law.

For example, § 102 of the Patent Act of 1952<sup>6</sup> was replaced under the AIA.<sup>7</sup> In providing the conditions for novelty, § 102 of the AIA provides for what generally qualifies as "prior art" in subsection (a)<sup>8</sup> and exceptions to those general qualifications under subsection (b).<sup>9</sup> Among the

<sup>1.</sup> Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified at 35 U.S.C.) [hereinafter AIA]. In many sources, "AIA 35 U.S.C." is used to refer to the now-codified updated provisions, while "Pre-AIA 35 U.S.C." is used to refer to the provisions in place prior to the AIA amendments.

<sup>2.</sup> *Id.* sec. 3(a), § 100(f).

<sup>3.</sup> *Id.* sec. 3(a), § 100(g).

<sup>4.</sup> *Id.* sec. 3(a), § 100(j).

<sup>5.</sup> Patent Act of 1952, ch. 950, 66 Stat. 792 (1952) [hereinafter Patent Act of 1952].

<sup>6.</sup> *Id.* sec. 3(b), § 102.

<sup>7.</sup> AIA, *supra* note 1, sec. 3(b), § 102.

<sup>8.</sup> *Id.* sec. 3(b), § 102(a).

<sup>9.</sup> Id. sec. 3(b), § 102(b).

exceptions under subsection (b) are disclosures made one year or less before the effective filing date of a claimed invention where any such disclosure was made "by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor." A similar exception is provided for subject matter where "the subject matter disclosed had, before such public disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor." Exceptions are also provided for disclosures appearing in applications and patents one year or less before the effective filing date of an applicant's claimed invention. 12

"Grace periods" play an important role under the AIA because disclosure of components that are the work of the same inventive entity as the claimed combination can be excepted from prior art under the AIA, as they were under the provisions of the Patent Act of 1952.<sup>13</sup> What is not clear from the provisions of the new Act is whether exceptions from the general scope of prior art embrace only disclosures made by a joint inventor of the joint work or, instead, embrace any disclosure of the work of the joint inventor, even if that work was done independently of the joint invention. For example, assume A independently conceived a novel ceramic material, and inventors A and B, working together jointly conceive a door handle of A's novel ceramic material. Would the exceptions to prior art under the AIA extend to inventor A's prior disclosure (within the one-year grace period preceding the effective filing date of a joint patent application) of the novel ceramic material alone? Or rather, would only inventor A's prior public disclosure of the joint invention, namely the door handle made of the novel ceramic material (again within the one-year grace period preceding the effective filing date of the joint patent application) be excepted from consideration as prior art under the AIA?

The "Examination Guidelines For Implementing the First Inventor to File Provisions of the Leahy-Smith American Invents Act" (the "Guidelines"),<sup>14</sup> promulgated by the United States Patent and Trademark Office (USPTO, or the "Patent Office"), do not parse inventorship of so-

<sup>10.</sup> *Id.* sec. 3(b), § 102(b)(1)(A).

<sup>11.</sup> *Id.* sec. 3(b), § 102(b)(1)(B).

<sup>12.</sup> Id. sec. 3(b), § 102(b)(2)(A)–(B).

<sup>13.</sup> Patent Act of 1952, 35 U.S.C. § 102.

<sup>14.</sup> USPTO Examination Guidelines for Implementing the First Inventor to File Provisions of the Leahy-Smith America Invents Act, 78 Fed. Reg. 31, 11059 (2013) [hereinafter Guidelines] (to be codified at 37 C.F.R. pt. 1).

called "grace period" disclosures so long as they were by either an "inventor or joint inventor" of the subject application. The Guidelines state:

Specifically, Office personnel will not apply a disclosure as prior art under AIA 35 U.S.C. § 102(a)(1) if the disclosure: (1) Was made one year or less before the effective filing date of the claimed invention; (2) names the inventor or joint inventor as an author or inventor; and (3) does not name additional persons or authors on a printed publication or inventors on a patent. This means that in circumstances where an application names additional persons as inventors relative to the persons named as authors in the publication (e.g. the application names as inventors A, B, and C, and the publication names as authors A and B), and the publication is one year or less before the effective filing date, it is apparent that the disclosure is a grace period inventor disclosure, and the publication would not be treated as prior art under AIA 35 U.S.C. § 102(a)(1).<sup>15</sup>

Therefore, regardless of whether it is some subgroup of an inventive entity that is responsible for a disclosure made within the statutory grace period of AIA 35 U.S.C. § 102(b)(1), that disclosure will not be treated as prior art under AIA 35 U.S.C. § 102(a)(1). In other words, disclosure by the subgroup of inventors is not "severable" (i.e., legally distinct) from that of the inventive entity of the patent application as a whole as "prior art" under AIA 35 U.S.C. §102(a) and (b). The salient question, however, is whether the *subject matter* of the disclosure, as opposed to the *act of disclosing*, must be the product of the inventorship entity as a whole, or need only be the work of the subgroup responsible for the disclosure.

Lack of severability of a coinventor's own work from a joint invention to which he has contributed has implications beyond the scope of disqualification of his own prior public disclosure as prior art. For example, under pre-AIA law, the Court of Appeals for the Federal Circuit ("Federal Circuit") held in *In re Hubbell* that an earlier-filed patent application having, in this case, a pair of coinventors in common with a later-filed, but first-to-issue, patent was subject to rejection under the doctrine of obviousness-type double patenting rejection (i.e., rejection of claims for lack of patentable distinction, such as by being obvious over the claims of an issued patent). The Federal Circuit affirmed the rejection of the patent despite the non-identical inventorship entities of the claimed subject matter in the first-filed application and the later-filed (but first-to-

<sup>15.</sup> *Id.* at 11076 (emphasis added). Similar provisions exist for exceptions to AIA in 35 U.S.C. § 102(a)(2), 35 U.S.C. § 102(b)(2).

<sup>16.</sup> In re Hubbell, 709 F.3d 1140, 1147 (Fed. Cir. 2013).

issue) patent, and despite a lack of co-ownership of the first-filed patent application and the issued patent (such as by being subject to a qualifying joint research agreement).<sup>17</sup> The court affirmed the decision by the Board of Patent Appeals and Interferences (BPAI or "Board") to maintain the rejection by the Patent Office for obviousness-type double patenting by taking judicial notice of a provision of the Manual of Patent Examining Procedure (MPEP) of the Patent Office that the existence of a common inventor in an issued patent and a pending application was sufficient basis for an obviousness-type double patenting rejection.<sup>18</sup> Further, the court approved of the Board's underlying rationale of asserting obviousness-type double patenting rejections where there is a "concern over potential harassment of infringement by multiple assignees asserting essentially the same patented invention." Of particular significance was that, because there was no common ownership, the obviousness-type double patenting rejection of the earlier-filed application could not be overcome by filing a terminal disclaimer. Normally, a terminal disclaimer would overcome a double patenting rejection by disclaiming the "terminal" portion of a patent extending beyond the expiration date of another patent.<sup>20</sup>

Judge Newman, in dissent, stated, "double patenting does not apply when the application and patent are of separate ownership and have separate inventive entities."<sup>21</sup> Instead, according to Judge Newman, where there is no common inventorship entity or common ownership, such as by

<sup>17.</sup> *Id*.

<sup>18.</sup> Id. at 1146.

<sup>19.</sup> *Id.* at 1144 (reciting MANUAL OF PATENT EXAMINING PROCEDURE § 804(I)(A) (8th ed. Rev. 7, Sept. 2008) [hereinafter MPEP], which states, "double patenting may exist between an issued patent and an application filed by the same inventive entity, or by a *different inventive entity having a common inventor*, and/or by a common assignee/owner" (emphasis added)).

<sup>20.</sup> Terminal disclaimers for "double-patenting" are discussed in greater detail *infra* Section III.B, but generally provide that the portion of the term of a patent extending beyond the expiration date of another patent has been dedicated to the public, and that both patents will expire upon division of ownership between them. For a general discussion of the history of statutory disclaimers predating modern "terminal disclaimers" filed in response to obviousness-type double patenting rejections, see, for example, PASQUALE J. FREDERICO, STATUTORY DISCLAIMER IN PATENT LAWS (Paul Perlman, 1935). FREDERICO mentions "double patenting," but only with reference to disclaimer in an issued patent *of claims* to the "same invention" claimed in an earlier patent. *Id.* at 28. Statutory provision for disclaimer *of the remaining term* of a patent was first provided for in 35 U.S.C. § 253 of the Patent Act of 1952, and stated, "any patentee or applicant may disclaim or dedicate to the public the entire term, or any terminal part of the term, of the patent granted or to be granted." This provision still exists in the AIA. *See* 35 U.S.C. § 253(b).

<sup>21.</sup> *Hubbell*, 709 F.3d at 1150–51 (Fed. Cir. 2001) (Newman, J., dissenting).

virtue of a qualifying joint research agreement, disputes should be resolved "on the merits of the invention, or through the interference [for priority of invention] or derivation [of the source of an invention] procedures, or other standard protocol as may apply in the particular situation."<sup>22</sup>

Nothing in the AIA changes the availability of obviousness-type double patenting rejections. As a result such rejections can still be asserted against earlier-filed patent applications in view of later-filed but earlier-toissue patents on the basis of the existence of a common coinventor, despite there being no common ownership between the patent and the patent application. The lack of severability of an inventor's own work from that of a joint invention, by embracing the work of a common coinventor within the same umbrella as that of the work of "joint inventors," greatly expands the scope of "prior art" that can be excluded as "exceptions" under the AIA, just as the existence of a common inventor among inventive entities greatly increases the scope of obviousness-type double patenting. Such an interpretation of the effect of an inventor's own work under the AIA would be an unnecessary departure from judicial precedent. Recognition, on the other hand, that the independent work of an inventor is distinct from that of a joint inventive entity would be consistent with judicial precedent and would also be consistent with a proposed statutory provision limiting obviousness-type double patenting rejections to patents and patent applications that "name the same individual or individuals."23

Part II of this Article describes how the concept of "prior art" in patent law is affected by changes made under the AIA, including the possible effect of statutory definitions of "inventor" and "joint inventors" in the absence of historical context. Part III traces the evolution of "obviousness-type double-patenting" as a judicial doctrine and the notion of "terminal disclaimer" in the context of inventorship. Part IV addresses problems raised by common inventors among distinct inventive entities and how courts and, ultimately, Congress responded to the associated issue of common ownership among distinct inventive entities. Finally, Part V advocates for extending the logic of severability of inventorship as it evolved prior to the AIA, and compares and contrasts that approach with inventorship under the judicially created doctrine of obviousness-type double patenting. Part V discusses recent developments in obviousness-type double patenting and a proposed codification of this doctrine under the Innovation Act, which was introduced in the 114th Congress.

<sup>22.</sup> Id. at 1151 (Newman, J., dissenting).

<sup>23.</sup> Innovation Act, H.R. 9, 114th Cong. (2015) [hereinafter Innovation Act].

### II. THE MEANING OF "PRIOR ART"

The meaning of the terms "inventor," "joint inventor," and "coinventor," despite the definitions provided under 35 U.S.C. § 100 of the AIA, must be read in the context of 35 U.S.C. § 102, the so-called "novelty" portion of the Act, which prescribes the conditions for novelty in relation to "prior art." Exceptions to patentability are provided under § 102 in terms of "disclosure" by an *inventor* or *joint inventor*. The meanings of the terms, "inventor" and "joint inventor," as they relate to an "inventive entity," therefore, are critical to an understanding of the AIA. Section II.A discusses the relevant portions of the AIA, as well as the legislative history and early commentary directed to the meaning of "prior art" and excepted "disclosure." Section II.B reviews the development of the "inventive entity" as a judicial construct prior to implementation of the new Act.

### A. DISCLOSURE BY A "JOINT INVENTOR" UNDER THE AMERICA INVENTS ACT (AIA)

The term "prior art" existed under the Patent Act of 1952 only under the "obviousness" portion of the statute, 35 U.S.C. § 103, and only with reference to § 102, which made no mention of this term. Under the AIA, "prior art" is defined under 35 U.S.C. § 102(a) in terms of disqualification from entitlement to patentability. Exceptions are provided under the remaining paragraphs of § 102, based in part on inventorship and timing of disclosures. The structure of § 102 under the AIA is discussed in Section II.A.1, which is followed in Section II.A.2 by an analysis of the legislative history and principal early commentary on statutory inventorship.

## 1. Exclusions from Novelty Under the AIA by the United States Patent and Trademark Office

Under the AIA, 35 U.S.C. § 102 expresses novelty as distinction over "prior art." There are four subsections of § 102: subsection (a) broadly defines novelty and "prior art," subsection (b) provides exceptions to the prior art identified in subsection (a), subsection (c) qualifies joint research agreements under the common ownership provision of subsection (b), and subsection (d) delineates what patents and published patent applications are effective as "prior art" under subsection (a).<sup>24</sup>

Reflecting the parallel section of the statute under the Patent Act of 1952, conditions for patentability under AIA § 102(a) are stated in the negative:

- §102. Conditions for patentability; novelty
- (a) Novelty; Prior Art.—A person shall be entitled to a patent unless—
  - (1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention; or
  - (2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under § 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.<sup>25</sup>

Exceptions to "prior art" under subsection (a)(1) are described under § 102(b)(1) as "disclosures made 1 year or less before the effective filing date of a claimed invention," so long as,

- (A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or
- (B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.<sup>26</sup>

Similarly, exceptions to descriptions of the claimed invention in issued patents or published patent applications under AIA § 102(a)(2) are set forth under subsection (b)(2), which states that:

A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

- (A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;
- (B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been

<sup>25.</sup> *Id.* sec. 3(b), § 102(a).

<sup>26.</sup> Id. sec. 3(b), § 102(b)(1).

publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor . . . . <sup>27</sup>

Subsection (b)(2) also excepts prior art where: "(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." Therefore, all exceptions to prior art under AIA § 102 include disclosures made by the "inventor or a joint inventor," and subject matter disclosed that, prior to public disclosure of that subject matter, had been publicly disclosed by "the inventor or a joint inventor."

A fundamental question immediately arises from an internal discrepancy of § 102 in that the negative conditions of patentability specified in § 102(a) refer to the *claimed invention*, <sup>29</sup> while exceptions under § 102(b) are stated in terms of disclosure by the inventor or joint inventor.<sup>30</sup> The term "claimed invention" is defined at § 100(j) as: "the subject matter defined by a claim in a patent or an application for patent."31 The term "inventor" is defined at § 100(f) as "the individual, or if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention,"32 while a "joint inventor" is defined as "any 1 of the individuals who invented or discovered the *subject matter of a joint* invention."33 The phrases "subject matter of the invention" and "subject matter of a joint invention" link the "claimed invention" of § 102(a) to the terms "inventor" and "joint inventor" of § 102(b), thereby partially resolving the discrepancy. However, there is no requirement that the term "disclosure" of § 102(b) must be coterminous with "the subject matter" of the "claimed invention" of § 102(a). One question, then, is whether the "disclosure" of § 102(b) can be a sub-combination of the elements constituting the "claimed invention" of § 102(a). The Guidelines promulgated by the Patent Office do not answer this question.<sup>34</sup>

According to the Guidelines, because the AIA provides no definition, the Patent Office is "treating the term 'disclosure' as a generic expression

<sup>27.</sup> Id.

<sup>28.</sup> *Id.* sec. 3(b), § 102(b)(2)(C).

<sup>29.</sup> Id. sec. 3(b), § 102(a).

<sup>30.</sup> *Id.* sec. 3(b), § 102(b).

<sup>31.</sup> *Id.* sec. 3(a), § 100(j) (emphasis added).

<sup>32.</sup> *Id.* sec. 3(a), § 100(f) (emphasis added).

<sup>33.</sup> *Id.* sec. 3(a), § 100(g) (emphasis added).

<sup>34.</sup> See generally Guidelines, supra note 13.

intended to encompass the documents and activities enumerated in AIA 35 U.S.C. § 102(a)."35 The "exception" under 35 U.S.C. § 102(b)(1)(A), referenced by the Patent Office as the "grace period inventor or inventororiginated disclosure exception," includes disclosures made: "(1) One year or less before the effective filing date of the claimed invention; and (2) by the inventor or a joint inventor, or by another who obtained the subject matter directly or indirectly from the inventor or joint inventor."36 Where the disclosure names some subset of the inventors of the patent application as authors, the Guidelines state that the Patent Office will presume that the "disclosure is a grace period inventor disclosure, and the publication would not be treated as prior art under AIA 35 U.S.C. § 102(a)(1)."37 On the other hand, where the situation is reversed, i.e., the application names as inventors a subset of the authors listed in the publication, the Guidelines state that "it would not be readily apparent from the publication that it is by the inventor or a joint inventor and the publication would be treated as prior art under AIA 35 U.S.C. § 102(a)(1)."38 The Guidelines do not state in either case, however, whether the "disclosure" need be of the "claimed invention" of the patent application, or only some component of it. In other words, would a "disclosure" of invention X by inventor A less than one year before a claim by A of invention XY be an exception to prior art under 35 U.S.C. AIA § 102(b)(1)(A), as it would be under 35 U.S.C. § 102(b) of the Patent Act of 1952? More importantly, the Guidelines do not state whether the "disclosure" must be the work of the inventive entity of the claimed invention, or need only be the independent work of a coinventor of that inventive entity. Interpreted literally, the disclosure could be the work of either the joint inventive entity or the independent work of a member of that joint inventive entity. For example, would "disclosure" by A of X within one year of a claim by A and B to joint invention XY be an exception to prior art under 35 U.S.C. § 102(b)(1)(A)?

A parallel exception exists for disclosure of subject matter that occurs after the subject matter has been publicly disclosed by the inventor under AIA 35 U.S.C. §102(b)(1)(B), namely, where "the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter

<sup>35.</sup> Id. at 11075.

<sup>36.</sup> Id. at 11075-11076.

<sup>37.</sup> Id. at 11076.

<sup>38.</sup> *Id*.

disclosed directly or indirectly from the inventor or a joint inventor."<sup>39</sup> The exception is referred to by the Guidelines as the "inventor or inventor-originated prior public disclosure exception."<sup>40</sup> Here, the explanation by the Guidelines is more explicit. Where the subject matter disclosed had previously been publicly disclosed by the inventor or a joint inventor, only those elements previously disclosed by the inventor or joint inventor are disqualified. Other elements of intervening disclosure that are part of the claimed invention are not excepted and continue as prior art. As stated by the Guidelines:

For example, [if] the inventor or a joint inventor had publicly disclosed elements A, B, and C, and a subsequent intervening grace period disclosure discloses elements A, B, C, and D, then only element D of the intervening grace period disclosure is available as prior art under AIA 35 U.S.C. 102(a)(1).<sup>41</sup>

In assessing the relevance of the prior disclosure by the inventor or a joint inventor to intervening disclosure, the Guidelines clearly state that no comparison is to be made between the subject matter of the claimed invention and either the subject matter disclosed by the inventor or a joint inventor or the intervening disclosure:

A determination of whether the exception in AIA 35 U.S.C. 102(b)(1)(B) is applicable to subject matter in an intervening grace period disclosure does not involve a comparison of the subject matter of the claimed invention to either the subject matter disclosed by the inventor or a joint inventor, or to the subject matter of the subsequent intervening grace period disclosure.<sup>42</sup>

The relevance of an intervening grace period disclosure must be measured only by comparison of that intervening disclosure to the prior disclosure by the inventor or a joint inventor.

The Guidelines, therefore, do not state whether prior disclosure by the inventor or a joint inventor must be of the claimed invention as a whole or need only be of elements or some sub-combination of elements of the claimed invention in order to be excepted from consideration as prior art

<sup>39.</sup> Guidelines, supra note 13, at 11076.

 $<sup>\</sup>cdot 0$ . Id.

<sup>41.</sup> *Id.* at 11077 (An "intervening grace period disclosure of a genus is not available as prior art," while, conversely, an "intervening grace period disclosure of the species would be available as prior art," as would be an intervening grace period disclosure of "alternative species not also disclosed by the inventor or joint inventor.").

<sup>42.</sup> *Id*.

under AIA 35 U.S.C. § 102(b)(1)(A) or (B). Nor is there any discrimination under the Guidelines between prior disclosure that represents the work of the inventive entity (i.e., all joint inventors collectively) of the claimed invention and prior disclosure that represents the work of only a joint inventor of the claimed invention under § 102(b)(1)(A) or (B). The same issues apply to disclosures appearing in previously filed patent applications and patents as exceptions to prior art under AIA 35 U.S.C. § 102(b)(2)(A) and (B).

## 2. Legislative History and Principal Early Commentary on Inventorship Under the AIA

The legislative history of the AIA does not shed light on whether the contribution of a coinventor is severable from that of a joint inventorship entity of which he or she is a part. According to Joe Matal, who served as a Judiciary Committee Counsel to Senator Jon Kyl, and as Minority General Counsel of the Judiciary Committee while the American Invents Act was proceeding through Congress, the definitions of "inventor," "joint inventor," and "claimed invention" were introduced in an early version of the patent reform legislation that ultimately became part of the AIA and remained part of every bill introduced thereafter.<sup>43</sup> Matal reports that the "only commentary on any of these definitions that appears in the legislative history" is found in a section-by-section analysis of the 2007 House Committee Report and states:

The term "inventor" refers to a single individual who has, working alone, invented or discovered an invention. In cases where two or more individuals are responsible for inventing or discovering an invention, the term inventor applies to all individuals collectively.

The term "joint-inventor" is applied to any one of the individuals who have invented or discovered an invention together. Such a term is necessary since the term inventor is used to refer to either a single inventor or, collectively, to all the joint inventors of an invention made or discovered by more than one person.

• • •

<sup>43.</sup> Joe Matal, A Guide to the Legislative History of the America Invents Act: Part I of II, 21 FED. CIR. B.J. 435, 447 (2012).

The term "claimed invention" is any invention defined by a claim in a particular patent or patent application, as required by § 112(b) as amended by this Act.<sup>44</sup>

As can be seen, none of the above commentary clarifies whether the disclosure of an "inventor" or "joint inventor" under the exceptions to prior art of AIA 35 U.S.C. § 102(b)(1) or (2) is of the subject matter of the claimed invention or some sub-combination of the elements of the claimed invention. The commentary also does not indicate whether the "disclosure" of a "joint inventor" is the joint work of the inventive entity, or whether the disclosure could be the work of the joint inventor alone. Similarly, the legislative history of the AIA, as represented by Matal, does not clarify whether a "disclosure" within the exceptions of § 102 (b)(1) and (2) made by the "inventor" or "joint inventor" must be commensurate in scope with the "claimed invention" described in § 102(a), and if such disclosure is not commensurate in scope with the "claimed invention," whether the disclosure must be the work of the inventive entity, or need only be the work of a "joint inventor" alone.

Robert Armitage, who was one of the principal architects of the AIA, states that a qualifying "disclosure" under subsection 102(b) need only be the work of a "joint inventor," and not necessarily the work of the inventive entity of the joint invention.<sup>45</sup> In particular, in explaining the subparagraph (A) exceptions to prior art of § 102(b)(1)(A) and (2)(A), Armitage states:

Both subparagraph (A) provisions reach the identical result of disqualifying a disclosure of the inventor's own work as prior art. Using functionally identical language, both provisions exempt from prior art subject matter disclosed, if obtained directly or indirectly from the inventor or a joint inventor. However, the actual structure of the two subparagraphs differs.<sup>46</sup>

After explaining that the difference between the two subparagraph (A) provisions is that § 102(a)(1), and therefore § 102(b)(1)(A), differs from § 102(a)(2), and therefore § 102(b)(2)(A), in that "§ 102(a)(1) applies broadly to public disclosures by *any person*," while "§ 102(a)(2) is specifically limited to patent filings *naming another inventor*," Armitage continues:

<sup>44.</sup> *Id.* at 448 (quoting H.R. Rep. No. 110-314, at 56 (2007)).

<sup>45.</sup> See Robert A. Armitage, Understanding the American Invents Act and its Implications for Patenting, 40 AIPLA Q.J. 1 (2012).

<sup>46.</sup> *Id.* at 71.

<sup>47.</sup> *Id.* at 71–72 (emphases in original).

Therefore, although containing wording differences, the two subparagraph (A) exceptions contain no substantive differences from one another in the sense that a disclosure reflecting *the work* of the inventor (or a joint inventor), rather than an independent creator of the *subject matter disclosed*, made during the one-year "grace period" prior to the effective filing date of the inventor's claimed invention, is excepted from prior art.<sup>48</sup>

As an explanation of his meaning of the word "work," Armitage states in a footnote:

To be most precise, the "work" of the inventor or the work of inventing or creating is a reference to the intellectual work—the intellectual contribution or origin of the subject matter in question. Thus, the term "obtained... directly or indirectly from the inventor" means that the inventor must be the intellectual originator of the subject matter. This is further apparent from the quotation to follow from the *Facius* appeal. *See In re Facius*, 408 F.2d 1396, 1407 (C.C.P.A. 1969).<sup>49</sup>

The quotation from *In re Facius* referenced by Armitage is repeated below. In particular, Armitage substitutes the word "appellant" in the original language with the phrase, "the named inventor of the claimed invention":

The real question is whether, in addition to establishing derivation of the relevant disclosure from himself, [the named inventor of the claimed invention] has also clearly established the fact that he invented the relevant subject matter disclosed in the [prior art] patent. If he merely brought the prior art to the attention of the patentee, then the disclosure in the [prior art] patent is available against [the claimed invention] even though [the named inventor] was, in a fashion, responsible for that particular disclosure (i.e., it was his "contribution" to the disclosure since he "communicated" the subject matter to the patentee). If on the other hand, [the named inventor actually] invented the subject matter upon [which] [sic] the relevant disclosure in the [prior art] patent was based, then the [prior art] patent may not be used as a reference against him notwithstanding the [prior art] patent's silence as to the patentee's source of that subject matter.<sup>50</sup>

<sup>48.</sup> Id. at 72 (emphasis added).

<sup>49.</sup> Id. at 72 n.279.

<sup>50.</sup> *Id.* at 73 (emphasis added, alterations in original) (quoting *In re* Facius, 408 F.2d 1396, 1402–03 (C.C.P.A. 1969)). The word "appellant" from the opinion was substituted in all instances except one, with "the named inventor of the claimed invention" or "the

The bracketed language fundamentally changes the potential meaning of the passage because, by substituting the word, "appellant," with the phrase, "the named inventor," Armitage is equating the "named inventor" with the inventorship entity of the appellant when, in fact, they may be different.

Moreover, Armitage states that the requirement under AIA 35 U.S.C. § 102(b) that disclosure need only represent the work of a joint inventor in the case of a joint invention, is "no more and no less than a new codification of the pre-AIA grace period."<sup>51</sup> As stated by Mr. Armitage:

Wherever the inventor's (or a joint inventor's) work is disclosed—either by the inventor or joint inventors themselves, or by someone who derived the same from them—the exception applies. Under subparagraph (A), therefore, nothing changes from the existing law, particularly as understood by the USPTO and as applied by the courts.<sup>52</sup>

This statement presumes that the work of a joint inventor is inseparable from the work of the inventive entity of which he is a part; the disclosure of the independent work of a joint inventor is tantamount to disclosure of the joint invention to which he contributed, thereby qualifying disclosure of the joint inventor's own independent work as an exception to "prior art" of a joint claimed invention under AIA 35 U.S.C. § 102(b)(1)(A). Armitage thus relies on *Facius* to support judicial precedent for codification under the AIA that "grace period" disclosure of the independent work of a joint inventor cannot be considered separately from disclosed work of the joint inventive entity of which the joint inventor is a member.

In re Facius<sup>53</sup> was a decision by the Court of Customs of Patent Appeals (CCPA) under the Patent Act of 1952. The court held that the disclosed work of an inventor "may not be used as a reference against him notwithstanding the [prior art] patent's silence as to the patentee's source of that subject matter."<sup>54</sup> The presumption in this quotation by Armitage from Facius is that the inventive entity and the originator of the work disclosed in the reference are the same. Armitage confuses this issue by substituting the term "appellant" from the original language of the case

named inventor." In one instance he instead used the phrase "the named inventor actually." The phrase "prior art" was added by Armitage.

<sup>51.</sup> *Id.* at 72 ("Given this understanding, the subparagraph (A) provisions provide no more and no less than a new codification of the pre-AIA grace period.").

<sup>52</sup> Id

<sup>53.</sup> In re Facius, 408 F.2d 1396 (C.C.P.A. 1969).

<sup>54.</sup> Armitage, *supra* note 45, at 73. (quoting *Facius*, 408 F.2d at 1407 and adding the language "prior art").

with the phrase, "[the named inventor *actually*],"<sup>55</sup> thereby leaving open the possibility that, in the case of a joint invention, the disclosed independent work of a joint inventor would be disqualified as a reference against the claimed invention of a joint inventive entity of which the "joint inventor" was a part when, as will be discussed, the case law at the time of *Facius* was to the contrary.

The court in *Facius*, in fact, did not address the severability of disclosure of the work of a joint inventor from that of a joint inventive entity. Rather, in dicta, the court stated that one's own work cannot be used as a reference against him, which is true only to the extent that the inventive entity responsible for the work disclosed is the same as that of the claimed invention. The appellant in *Facius* actually lost his bid to remove his own prior disclosure as prior art because, as stated by the court, "Appellant has not established inventorship... since he did not claim the relevant subject matter in the patent [reference] but rather only claimed an improvement thereon." In other words, the appellant failed to remove the patent reference as "prior art" because he did not establish that the disclosed but unclaimed subject matter of the referenced patent was his own work. As we shall see, other case law contemporary with *Facius*, such as *In re Land*, supported the notion that a joint inventor's own disclosure could be prior art to jointly invented subject matter.

Armitage is not alone in understanding that disclosure representing the independent work of a joint inventor qualifies as an exception to prior art under AIA § 102(b) of a claimed invention by a joint inventive entity of which he is a part. For example, Lewis et al.<sup>59</sup> state that, in the situation where "A and B are listed as the authors or inventors of the reference, and A and C are named as inventors on the rejected application," then, "[p]resumably, if inventorship was done properly... any disclosure from

<sup>55.</sup> The original language of the opinion read: "If on the other hand, *appellant invented* the subject matter upon which the relevant disclosure in the patent was based, then the patent may *not* be used as a reference against him notwithstanding the patent's silence as to the patentee's source of that subject matter." *Facius*, 408 F.2d at 1407 (emphasis removed).

<sup>56.</sup> Id.

<sup>57.</sup> *Id.* ("However, failure to claim the invention disclosed in the reference is not fatal to a showing of inventorship; that fact [of inventorship] may be established by any evidence of record." (emphasis removed)).

<sup>58.</sup> See In re Land, 368 F.2d 866 (C.C.P.A. 1966).

<sup>59.</sup> Nathan T. Lewis et al., Considerations for Handling Closely Related Subject Matter in Patent Portfolios in Light of Therasense and the America Invents Act of 2011, 53 IDEA 63 (2013).

<sup>60.</sup> Id. at 93.

A and B that is relevant to the claims of A and C's application would be based on A's contribution to the publication."<sup>61</sup> The presumption is that, "so long as [the publication by A and B] is within one year of the filing date, it would ostensibly fall under the exception of § 102(b)(1)(A) because a joint inventor A made the disclosure,"<sup>62</sup> and therefore, the prior disclosure by joint inventor A would be tantamount to disclosure by the joint inventive entity of A and C. In the case of "the reference being a patent or patent application that was published after the filing date of A and C's application, but filed before it," Lewis et al. assert that an exception would be provided under § 102(b)(2)(C) if the application were "owned or under obligation of assignment to the same client at the time of filing."<sup>63</sup>

Lewis et al. do not mention that, following the line of reasoning applied by them to § 102(b)(1)(A), an exception would also be found under § 102(b)(2)(A) because any description by a joint inventor of his own work would be excluded from consideration as prior art to a laterfiled application naming an inventorship entity of which he was a member under 35 U.S.C. § 102(a)(2). Moreover, their reasoning stands in contrast to their description of the treatment of disclosures in prior-published publications and prior-filed patent applications under the Patent Act of 1952. For example, they acknowledge that the Court of Customs and Patent Appeals in the 1966 case of *In re Land* had explicitly rejected claims under 35 U.S.C § 102(e) and § 103 in view of prior disclosure in earlierfiled patent applications by members of the inventive entity of the patent application because, as stated by Lewis et al., "[t]here was no evidence that the parts of the references relied on in the rejection were disclosures of anything the inventors did jointly."64 Lewis et al. then state that the new law under the "AIA greatly simplifies the [pre-AIA] § 102(e)-type situations for clients that have similar subject matter," because "[t]he identity of the inventors in this situation no longer matters."65 These representations of the law, before and after enactment of the AIA, if true, do not indicate a "simplification," but rather a fundamental shift in patent law, contrary to Mr. Armitage's statement that "the subparagraph (A)

<sup>61.</sup> Id. at 94.

<sup>62.</sup> *Id.* at 93–94.

<sup>63.</sup> Id. at 94.

<sup>64.</sup> *Id.* at 88 (quoting *In re* Land, 368 F.2d 866, 881).

<sup>65.</sup> Id. at 95 (emphasis added).

provisions provide no more and no less than a new codification of the pre-AIA grace period."66

The scenario provided by Lewis et al., wherein a reference authored solely by A is removed by ascertaining that the relevant teaching is the work of either A or B of the joint inventorship entity, is qualified by Lewis et al. by their reference to others, such as Nelson R. Capes and Rebecca D. Hess,<sup>67</sup> who "have concluded that the MPEP does not address this situation."68 However, even Capes and Hess, after acknowledging that the MPEP does not address the situation where "two inventors separately apply for United States patents and, before their patents issue, later *jointly* apply for a patent on an invention that is anticipated or made obvious by one or both of the earlier-filed patent applications,"69 then go on to overlook the central issue. Instead of beginning with the broader question of what is required to remove a reference authored by another that discloses subject matter later claimed by the joint inventive entity, Capes and Hess address the more specific question of whether "co-applicants [may] introduce affidavit evidence to show that one or both reference patents are really the work of one of the co-applicants[.]"70

By posing the narrower question, Capes and Hess presuppose that the work (disclosure) of an individual is not severable from the inventorship entity of which he is a member. In other words, it is assumed in the more focused inquiry that the independent work of an individual cannot be relied upon as a reference against joint work to which he has contributed. This assumption is commonly lumped under the adage that an "applicant's own work cannot be used against him unless there is a time bar under 35 U.S.C. § 102(b)."<sup>71</sup> The idea is that, as stated by Capes and Hess, "it is impossible for an inventor to disclose something *before* he invents it!"<sup>72</sup> However, in order to understand the implications of disclosing an inventor's own work relative to a later-filed patent application claiming that work, or an obvious variant of it, it is necessary to assess the historical

<sup>66.</sup> Armitage, supra note 45, at 72.

<sup>67.</sup> Nelson R. Ćapes & Rebecca D. Hess, Different Inventive Entities Under 35 U.S.C. § 102(e) and Affidavit Practice Under 37 C.F.R. § 1.132, 81 J. PAT. & TRADEMARK OFF. SOCY 33 (1999).

<sup>68.</sup> Lewis, supra note 59, at 86 (citing Capes & Hess, supra note 67).

<sup>69.</sup> Capes & Hess, *supra* note 67, at 35.

<sup>70.</sup> Id. at 37 (emphasis added).

<sup>71.</sup> See MPEP, supra note 19, § 2136.05 (citing In re DeBaun, 687 F.2d 459 (C.C.P.A. 1982)).

<sup>72.</sup> Capes & Hess, *supra* note 67, at 34 (emphasis in original).

development of inventorship and how it has been applied in recent case law.

#### B. THE "INVENTIVE ENTITY" PRIOR TO THE AIA

Issues of priority typically have required identity of the "inventorship," rather than mere overlap of membership among inventive entities. For example, in *In re Mann*<sup>73</sup> the Court of Customs and Patent Appeals (CCPA) held that Koppelman and Mann, as inventors, had conceded priority of invention to a later-filed patent application by Koppelman and Cooper, to which Koppelman and Mann had acquired the rights by electing to take out a patent upon the later-filed application of Koppelman and Cooper. The court said: "[t]here cannot be two first inventors of the same invention, and, if Koppelman and Cooper were the first inventors, it is obvious that Mann and Koppelman could not be the first inventors."<sup>74</sup> Even though Koppelman was a coinventor on both the earlier-filed patent application and the later-filed patent, the potential for using Koppelman's own work as a means for rebutting the presumed "concession of priority of invention in Koppelman and Cooper [of] the same invention disclosed in the two applications" was never raised.<sup>75</sup>

The "two first inventors" at issue were two inventive entities, namely Koppelman and Mann, as the inventive entity of the first-filed patent application, and Koppelman and Cooper as the inventive entity of the second-filed patent application that became the issued patent. Further, this was not an instance where the claims of the first-filed application and the later-filed, but issued, patent were identical. Rather, the court stated that, "in so far as appellants' claims differ from the construction specifically shown by Koppelman and Cooper, there is no invention involved because the modification is of such a character as is within the scope of the Koppelman and Cooper disclosure." The paradoxical result was that the claimed invention of the earlier-filed application by Koppelman and Mann would be patentable only if it were patentably distinct in view of the disclosure of the later-filed application by Koppelman and Cooper, based on a concession of invention to a distinct

<sup>73. 47</sup> F.2d 370 (C.C.P.A. 1931).

<sup>74.</sup> *Id.* at 371.

<sup>75.</sup> *Id*.

<sup>76.</sup> Id.

<sup>77.</sup> Id. at 372.

<sup>78.</sup> See id. ("This brings us to a consideration of the question of whether the claims here in issue read upon the disclosure in the Koppelman and Cooper patent, as held by the Patent Office tribunals.").

inventive entity, despite naming a common joint inventor. The later-filed application by Koppelman and Cooper could not be removed as a reference against the earlier-filed application by Koppelman and Mann based on the argument that relevant disclosure was really the work of the invention of the common inventor, or because "it is impossible for an inventor to disclose something *before* he invents it," as recited by Capes and Hess.<sup>79</sup>

A converse but consistent result was obtained in *In re Calvert*, <sup>80</sup> where the CCPA reversed the Board of Appeals of the United States Patent Office, finding "distinguishable" and eligible for patent protection the subject matter of an earlier-filed patent application that was more narrowly claimed in a later-filed, but first-to-issue, patent by the same sole inventor. <sup>81</sup> Where there was no distinction in the inventive entity, the fact of prior invention was irrelevant, and the appealed claims were "patentably distinguishable" from the claimed subject matter of the reference patent, regardless of which patent application issued first. <sup>82</sup> Therefore, while in *Mann* the court insisted on priority of invention when the inventive entities were distinct, in *Calvert* the court overlooked priority of invention when the inventive entity (a sole inventor) was identical, and insisted only that claim scope be patentably distinguishable. In both cases, identity of inventorship, not overlap, was key to resolving patentability.

- 79. Capes & Hess, supra note 67, at 34.
- 80. 97 F.2d 638, 640 (C.C.P.A. 1938).
- 81. Id. The court stated:

We think it is clear from what has been said that the appealed claims are distinguishable from Claims 6 and 8, as well as the other claims of appellant's patent, in that they cover the broad generic invention which comprises a "rubber hydrochloride," not resistant to photochemical disintegration, "having thermoplastic seals," rather than appellant's improved composition defined in Claims 6 and 8 of his patent, which is resistant to photochemical disintegration.

Id.

#### 82. Id. The court stated:

In view of the fact that, as we understand its decision, the board rejected each of the appealed claims solely upon the theory that claims 6 and 8 of appellant's patent were *not* limited to a composition containing a "photochemical inhibitor," and as we are of opinion that those claims are so limited, we must hold that the appealed claims differ in subject matter and scope from claims 6 and 8 of appellant's patent and are patentably distinguishable therefrom, and that the board erred in rejecting them on the ground of double patenting.

Identity of inventorship was also determinative in *In re Middleton*, 83 where the CCPA held that a patent (the Middleton Patent) disclosing zinc titanate and naming a sole inventor was not prior art against the claims of a later-filed continuation-in-part (CIP) application claiming zinc titanate and naming that inventor and another inventor (the Middleton and Reynolds application). The court clearly stated that the basis for disqualifying the earlier patent as a proper reference was a consequence of establishing that the disclosure in the Middleton Patent, supporting the claimed zinc titanate of the later-filed Middleton and Reynolds CIP application, was the joint invention of the applicants of the CIP:

We think appellants have demonstrated by their affidavits that they, rather than Middleton alone, are the inventors of zinc titanate disclosed in the Middleton patent. There seems to be no dispute that upon discovery of the fact of joint inventorship of the subject matter now claimed in the summer of 1952, the linking application was filed on September 25, 1952. In any event, we think the affidavits of Middleton and Reynolds clearly established that zinc titanate was their joint invention and not that of Middleton alone.<sup>84</sup>

Presumptive in this analysis is that the Middleton patent would have been a proper reference against the Middleton and Reynolds application had the zinc titanate disclosed in the Middleton Patent been the work of Middleton alone.

A similar result was obtained in *In re Blout*,<sup>85</sup> where the CCPA relied on *Middleton* to reverse a decision by the Board and disqualify as prior art an earlier-filed patent application naming only one of two joint inventors of a later-filed continuation-in-part application. The court in *Blout*, however, made two important misstatements that were later retracted in another case by the same court. The first was a conclusion that in *Middleton*, the court held that "Middleton was not regarded as 'another' with respect to Middleton and Reynolds. Hence 35 U.S.C. § 102(a) and (e) were not applicable." Instead, as discussed above, the court in *Middleton* stated that the earlier-filed Middleton patent was not a proper reference because "[w]e think appellants have demonstrated by their affidavits that they [Middleton and Reynolds], rather than Middleton alone, are the inventors of zinc titanate disclosed in the Middleton

<sup>83. 319</sup> F.2d 552 (C.C.P.A. 1963).

<sup>84.</sup> Id. at 560.

<sup>85. 333</sup> F.2d 928 (C.C.P.A. 1964).

<sup>86.</sup> *Id.* at 931, n.3.

patent."<sup>87</sup> The second misstatement came in the conclusion by the court in *Blout* that a prior application naming Rogers as the sole inventor was not properly referenced against a later-filed application naming Blout and Rogers, since "Rogers is not 'another' to Blout and Rogers."<sup>88</sup> This reasoning is contrary to that of the court in *Middleton*, and is not adhered to in later cases, most prominently *In re Land*,<sup>89</sup> discussed below. Moreover, it was unnecessary for the court in *Blout* to find that "Rogers is not 'another' to Blout and Rogers," because in *Blout*, the relevant disclosure in the earlier-filed Rogers patent application was established to be the work of Blout and Rogers, the inventive entity of the later-filed application. As stated by the court in *Blout*:

Rogers discloses, but does not claim, the invention of Blout and Rogers, appealed herein.

. . . .

... The affidavits constitute sworn statements of the facts, clearly attributing the invention of dye developers [claimed in the Rogers patent] to Rogers and the invention of insulated dye developers [claimed in later-filed application to Blout and Rogers] to Blout and Rogers.<sup>90</sup>

The patent application at issue in *In re Land* was an appeal from the Patent Office Board of Appeals affirming the rejection of claimed subject matter jointly invented by Land and Rogers over several patent references, among which included two patents naming Rogers as the sole inventor (Rogers '668 and Rogers '606), and one naming Land as the sole inventor. The patent application at issue did not claim priority to any of the earlier patents to Rogers or Land. However, they were all commonly assigned to Polaroid Corporation. With respect to the prior art patents naming Land and Rogers as sole inventors, the court and the Board assumed that the earlier patents constituted "prior art on the ground Land and Rogers, individually, were 'another' with respect to the same persons

<sup>87.</sup> See Middleton, 319 F.2d at 560.

<sup>88.</sup> *In re* Blout, 333 F.2d at 931 ("Since Blout and Rogers are claiming the improvement they made, as distinguished from the generic invention claimed by Rogers, and since Rogers is not 'another' to Blout and Rogers, we conclude that the Rogers patent is not properly a reference against Blout and Rogers.").

<sup>89.</sup> See În re Land, 368 F.2d 866.

<sup>90.</sup> Blout, 333 F.2d at 930.

<sup>91.</sup> Land, 368 F.2d at 868.

as joint applicants." The court stated the legal relationship among "different legal entities" that share individual members:

The question here is not merely whether A or B, individually, is or is not "another" to A & B jointly on a theory of "different legal entities." Of course they are different "entities" in the sense that an invention made jointly by A&B cannot be the sole invention of A or B and vice versa, and certain legal consequences flow from such fact, such as who must apply for patent. But it is an inescapable fact, too, that when A applies for a patent jointly with B he still has in his head all the information he had as individual inventor A, the same being true of B. If as individuals they apply for patents on individual inventions during a period when they are working together on their joint inventions, they also have in their several heads full knowledge of what they have done jointly. When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the invention of A&B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another."93

In other words, according to the court in *Land*, when A and B each make individual contributions, those individual contributions may or may not represent inventions in their own right. Those individual contributions are, regardless, severable from the joint invention of which they are parts. Nevertheless, A, B and A/B represent distinct legal entities. As distinct legal entities, therefore, disclosure of their individual work constitutes prior art against any claims to their joint invention in a later-filed patent application if that disclosure otherwise meets the requirements of 35 U.S.C. § 102. Disclosure by a member of a joint inventive entity, on the other hand, will *not* constitute prior art, absent a statutory bar, if the disclosure is of the joint invention.

In a footnote, the court expressly withdrew its earlier position in *Blout* that the contribution of the sole inventor was not severable from subject matter claimed by a joint entity of which he was a member and, therefore, not "another" under the statute:

On reconsidering our opinion in Blout and Rogers, wherein it was remarked that: "Rogers is not 'another' to Blout and Rogers," we now think that remark to have been unfortunate. The true basis of our decision "that the Rogers patent is not

<sup>92.</sup> Id. at 876.

<sup>93.</sup> Id. at 879.

properly a reference against Blout and Rogers" was that the evidence before us showed that the alleged anticipatory disclosure in the Rogers patent was a description of the Blout and Rogers joint invention, not the invention of another. In that sense only Rogers was not "another," but as a patentee, of course, he was. However the disclosure relied on was not his invention, ... but the applicants' own invention which, as against them, could not possibly be prior art. 94

The court ultimately held that the prior patents naming Land and Rogers as sole inventors were, indeed, prior art to a later-filed patent application naming Land and Rogers as joint inventors:

[O]ur considered opinion is that Land and Rogers '606, on the facts of this case, should be regarded as prior art. It is certainly in accord with the weight of authority to regard Land and Rogers individually as separate legal entities from Land and Rogers as joint inventors, as they would be regarded relative to each other if a Land application were rejected on a Rogers copending patent.<sup>95</sup>

Of particular significance is the implication that disclosure in either the Land or Blout patents would be disqualified as prior art if it could be established that that disclosure was, in fact, work that they had contributed as a joint inventive entity of the later-filed patent application, absent qualification of such statements as prior art under another portion of § 102.96 Specifically, the court stated: "There is no indication that the portions of the references relied on disclose anything they did jointly. Neither is there any showing that what they did jointly was done before the filing of the reference[d] patent applications." All of this means, of course, that there are two avenues for removing disclosures that would otherwise constitute prior art. The first would be to establish that the earlier disclosure is the work of the *inventive entity* of the later-claimed invention of the later-filed patent application. The second mechanism would be to show invention by the *inventive entity* of the later-claimed

<sup>94.</sup> *Id.* at 879 n.10 (emphasis added).

<sup>95.</sup> Id. at 881.

<sup>96.</sup> Such as pre-AIA 35 U.S.C. § 102(b), which stated: A person shall be entitled to a patent unless—

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States . . . .

<sup>97.</sup> Land, 368 F.2d at 881.

invention prior to description of that invention in the cited reference relied upon by the examiner.

Two companion cases, In re Mathews98 and In re Facius, discussed above, illustrate that if a disclosure in an earlier publication or prior-filed and published patent application is to be disqualified as prior art, it is important to establish that prior disclosure as the work of the later inventive entity. In Mathews, the court held that an affidavit by an earlier applicant that he was not the inventor of the claimed subject matter of the later-filed application, but rather derived it from the later applicant, was sufficient to establish that the earlier disclosure in the first-filed application was, in fact, the invention of the later applicant. 99 In re Facius, decided the same day as Mathews, differed in that the later applicant (Facius, the appellant) was not able to establish that he invented the relevant subject matter disclosed in the earlier-filed patent application. 100 The opinions in both cases recited and distinguished Land. 101 The court in Facius further distinguished the facts in that case from Blout and Mathews by stating that, "in both cases, the patents fully disclosed the claimed inventions,"102 and that it had been established in both cases by affidavits that "the patentees had derived their knowledge of the relevant subject matter from appellants."103

Far from refuting *Land*, the court in *Facius* pointed out inconsistencies between the holdings in *Blout* and *Land* by dismissing as dicta statements in *Blout* that would render the opinions in those two cases inconsistent:

The Land-and-Rogers joint invention undoubtedly had come after their individual inventions relied upon as prior art. The issue was solely a question of law concerning inventive entities, namely, whether Land and Rogers as individual inventors were each "another" with respect to Land-and-Rogers as joint

<sup>98.</sup> In re Mathews, 408 F.2d 1393 (C.C.P.A. 1969).

<sup>99.</sup> *Id.* at 1396 ("Dewey's affidavit and Mathew's oath accompanying his application are sufficient, we feel, to prove that the relevant disclosure in Dewey was a disclosure of Mathew's invention." (emphasis omitted)).

<sup>100.</sup> *In re* Facius, 408 F.2d 1396, 1402. The prior art reference, U.S. Patent No. 3,146,609, by Engalitcheff, disclosed a heat exchange apparatus to which Facius contributed a water distribution box. The later application by Facius claimed a combination of the water distribution box (or "chamber") and a reservoir which, according to the Examiner, was taught by another reference, Dargavel. Facius was trying to remove the Engalitcheff reference because the relevant teaching in Engalitcheff, the water distribution box, was Facius's own contribution.

<sup>101.</sup> See Mathews, 408 F.2d at 1396; Facius, 408 F.2d at 1405.

<sup>102.</sup> Facius, 408 F.2d at 1405.

<sup>103.</sup> Id.

inventors. The confusion therein had arisen as a result of an "unfortunate" remark in *In re Blout*..., and the portion of the Land "opinion" to which appellant alludes, is essentially an explanation of the "true basis" of the Blout "decision." Thus, *Land* is certainly not controlling and is so factually distinguished as to be inapposite to the present case other than for its enriching legal analysis.<sup>104</sup>

The appellant (Facius, the later filer) had unsuccessfully attempted to rely on Land to demonstrate that disclosure in the prior-filed application could not be used against him because it was his own "contribution" to that earlier-filed disclosure. It was "inapposite" because the issue in Land, as in Blout, was not who made the "contribution" to the earlier-filed disclosure, but, rather, whether the contribution was, in fact, the work of the later applicant. As discussed above, the court in both Blout and Land held that, in order for such disclosure (or contribution) to be disqualified as prior art, it had to be the work of the inventive entity of the later-filed application.

A contrary decision was rendered by the United States Court of Appeals for the Fifth Circuit in *Shields v. Halliburton Company*, <sup>106</sup> where the court held that prior employment of a method by a single inventor, Bassett, did not constitute prior art against the claimed improvement of a joint invention, by Bassett and Olesen, in a subsequently-filed patent application. <sup>107</sup> The court distinguished earlier decisions, including *Land*, by stating that those cases dealt with a "scenario... where the initial individual inventor *seeks a patent for his own work* and then subsequently applies for a second patent *with a collaborator*." <sup>108</sup> The court also distinguished the facts from earlier decisions, where "earlier work was done by a stranger to the joint inventorship." <sup>109</sup> In either case, the court clearly considered the individual's activity to be inseparable from the joint inventorship entity of which that individual is a member, at least in those instances where the individual does not seek a patent "for his own work." <sup>110</sup>

<sup>104.</sup> Id. (citations omitted).

<sup>105.</sup> Id. at 100.

<sup>106.</sup> Shields v. Halliburton Co., 667 F.2d 1232 (5th Cir. 1982).

<sup>107.</sup> *Id.* at 1237 ("The only question we answer is whether, under these facts, Bassett is 'another' to Bassett and Olson. We hold he is not, and affirm the district court's conclusion that the patent is valid.").

<sup>108.</sup> Id. at 1236 (emphasis added).

<sup>109.</sup> Id. at 1237.

<sup>110.</sup> *Id.* at 1236.

Edward C. Walterscheid, in a 1982 article published shortly after *Shields* was decided,<sup>111</sup> sharply criticized the decision by the Fifth Circuit in *Shields* as being "defective" and "simply based on false premises."<sup>112</sup> In particular, Walterscheid criticized the court's reasoning as to the nature of "joint invention," where the Fifth Circuit stated:

[I]f the "first" inventor's initial work for which no patent was sought constitutes an earlier invention as to any subsequent efforts with a collaborator, no valid joint invention would be possible. Theoretically every joint invention would have to be the result of simultaneous inspiration by the collaborators. <sup>113</sup>

Walterscheid stated that these were "false premises," because "[i]t assumes that there can be no such thing as a collaborative effort which is *patentably distinct* over the prior invention of one of the collaborators." Even without such distinctness, a "first" inventor's work must include not just "conception but also a reduction to practice of the earlier invention," and "even if reduced to practice the prior invention must be shown not to have been abandoned, suppressed, or concealed." At any rate, according to Walterscheid, the view expressed by the Fifth Circuit presupposing that "filing a patent application has a special connotation in determining whether prior art invention has occurred" was without support in either the patent statute or case law. 115

Beyond Walterscheid's criticisms regarding patentable distinction and the significance of patent filing, however, lies an underlying problem of *lack of severability* of a joint inventor's contribution that is implied in another passage from *Shields* quoted by Walterscheid in his article:

The cases involving an inventor who first seeks a patent, and then seeks a subsequent joint patent are distinguishable for a fundamental reason. Under the statutes governing patentability, novelty is a condition for patentability. 35 U.S.C. § 102. Had Bassett sought a patent for his work on the McDermott platform [the first reduction to practice of air pressure grouting] he must have claimed that the process he had developed was an invention. Had Bassett then collaborated with Olsen, and sought a patent

<sup>111.</sup> Edward C. Walterscheid, *The Ever Evolving Meaning of Prior Art (Part 3)*, 64 J. PAT. & TRADEMARK OFF. SOC'Y 11 (1982).

<sup>112.</sup> *Id.* at 646–47 ("While it is at least directed to the pertinent section of the patent statute, i.e., Section 102, unfortunately the Fifth Circuit's legal reasoning [in *Shields*] appears to be fully as defective as that of the Sixth Circuit in *General Motors*.").

<sup>113.</sup> Shields v. Halliburton Co., 667 F.2d 1232, 1235.

<sup>114.</sup> Walterscheid, *supra* note 111, at 647 (emphasis added).

<sup>115.</sup> *Id*.

for their joint product they would have been declaring that their work constituted an invention. In such a situation each process would have been the first of its kind. Accordingly, the validity of Bassett and Olsen's patent application would have to be established against Bassett's earlier one. However, as here, where Bassett does some work, seeks no patent, collaborates with Olsen, and subsequently they together seek a patent, the joint application declares that their work submitted as a whole is a single invention—the first of its kind. Because they declare their work to be a single, and first invention, as between the joint inventors there is no earlier invention or prior art against which the joint invention need be established. Thus, the validity of a joint patent issued to two inventors who work in succession is consistent with the normal analytical framework of the patent laws.<sup>116</sup>

This passage from the Fifth Circuit's opinion separates an individual's work from that of a joint inventorship entity of which he is a part only by his having "claimed that the process he had developed was an invention" in a patent application. According to the Fifth Circuit's reasoning, by the failure of the sole inventor to file such a patent application, an opportunity was created for the joint inventorship entity to declare "their work to be a single, and first invention, as between the joint inventors," and, therefore, "there is no earlier invention or prior art against which the joint invention may be established." For the Fifth Circuit, then, actively "declaring" one's earlier *sole* work to be a distinct invention by claiming it in a patent application constituted the criterion by which that work was to be adjudged "prior art" to a later *joint* invention under "the normal analytical framework of the patent laws." In the event that such a "prior art" relationship were established under *Shields*, then the work of a later joint inventorship entity would have to be patentably distinct.

This analysis dismisses the relevance of an inventor's earlier work as prior art of another in its own right, and bases the status of that activity as "prior art" solely on *declaration* of that work as an invention by claiming it. According to the logic of the court in *Shields*, then, the issue of "prior art"

<sup>116.</sup> *Id.* at 646 (quoting *Shields*, 667 F.2d at 1236) (emphasis added).

<sup>117.</sup> Shields, 667 F.2d at 1236.

<sup>118.</sup> *Id.* at 1235 ("The trial judge correctly noted the factual distinction between the case at bar in which the 'first' inventor, Bassett, never sought a patent himself, and the cases cited by defendants where the first inventor filed for, or received a patent for his own work, and subsequently filed jointly with a collaborator for newer developments.").

<sup>119.</sup> Id. at 1236.

<sup>120.</sup> Id.

was solely a consequence of the presence of multiple claimed, or *declared*, inventions among joint inventors, in which case, patentable distinction would be required if inventorship differed among the declared inventions. In other words, the Fifth Circuit was assuming that the work of a joint inventor was not *severable* from a claimed invention of an inventive entity of which that inventor was a part where the earlier work was not separately claimed by that joint inventor as an invention.<sup>121</sup>

Unfortunately for the Fifth Circuit, there was no statutory basis or case law supporting a requirement for a patentable distinction solely on the basis that an earlier invention was *claimed*. In earlier cases, such as *Land*, which were recited by the court in *Shields* as failing to disqualify earlier work by a member of a joint inventorship entity, there was no language hinging disqualification on whether the earlier work had been claimed. Rather, the question was whether *disclosure* in an earlier application was the work of the *joint inventive entity* of the subject matter *claimed* in the later-filed patent application.

In another pair of companion cases, In re Katz, 122 and In re DeBaun, 123 the CCPA held that a declaration filed by an inventor in a later-filed patent application was sufficient to remove an earlier-published article (in the case of Katz) 124 or an earlier-issued patent (in the case of DeBaun) 125 as prior art against the later-filed patent application. The court in Katz specifically held that "authorship of an article by itself does not raise a presumption of inventorship with respect to the subject matter disclosed in the article." 126 Consequently, it was unnecessary for other authors of an article to disclaim the relevant portions of that article in order to support the position of the inventor that "he is, in fact, the sole inventor of the subject matter described in the article and claimed" in the patent application. 127 Both cases, of course, presume that unclaimed subject matter of a distinct but overlapping inventive entity may, indeed, be prior art.

<sup>121.</sup> Id.

<sup>122.</sup> In re Katz, 687 F.2d 450 (C.C.P.A. 1982).

<sup>123.</sup> In re DeBaun, 687 F.2d 459 (C.C.P.A. 1982).

<sup>124.</sup> Katz, 687 F.2d at 455–56.

<sup>125.</sup> DeBaun, 687 F.2d at 462.

<sup>126.</sup> *Katz*, 687 F.2d at 455 (qualified in the subsequent case of *Ex Parte Kroger*, 219 U.S.P.Q. 370 (B.P.A.I. 1982), where the Board required further evidence beyond the patent applicant's declaration when the co-author has refused to disclaim the relevant subject matter) (emphasis omitted).

<sup>127.</sup> *Id*.

### III. DOUBLE PATENTING AND THE SEVERABILITY OF THE WORK OF INDIVIDUAL INVENTORS

Severability of inventorship in patent law has also played a significant role in barring an inventor from obtaining more than a single patent for each invention. Prohibition against so-called "double patenting" is manifested in statutory rejections under 35 U.S.C. § 101 of claims identical in scope to those of issued patents, also known as "same invention-type double patenting," and in judicially-based rejections of claims that are not patentably distinct over issued patent claims of different scope, known as "obviousness-type double patenting." Section III.A, below, traces development of judicial constraints on double-patenting as they relate to inventors and inventive entities to which they belong. Section III.B will then explore the genesis of disclaimers intended to overcome such constraints, and how adoption in the 1952 Patent Act of provisions enabling disclaimer of terminal portions of whole patents was applied to resolve early obviousness-type double patenting issues among commonly owned patents having distinct inventive entities.

### A. EVOLUTION OF A DOCTRINE

Further early evidence of the significance of severability of the work of individual inventors from the work of an inventive entity of which they are a part can be found in the evolving nature of obviousness-type double patenting. Prior to enactment of the Patent Act of 1952, very little is said about double patenting, wherein a patentee, whether intentionally or not, extends his monopoly by obtaining two patents for what is deemed a single invention. In an early case, *Odiorne v. Amesbury Nail Factory*, Justice Story held, in a case where "plaintiffs obtained a patent in September, 1810, substantially for the same invention, and improvements, which are contained in the patent, on which they now sue," that "the inventor can have but a single patent for his invention; and that the first he obtains, while it remains un-repealed, is an estoppel to any future patent for the same invention founded upon the general patent act." 128

In 1893, the Supreme Court held in *Underwood v. Gerber* that a patentee was not entitled to avail himself of a second patent claiming subject matter identically disclosed, but not claimed, in a patent claiming other subject matter. According to the Court, the subject matter having been disclosed but not claimed, it was thereby disclaimed to the public

<sup>128. 18</sup> F. Cas. 578, 579 (C.C.D. Mass. 1819).

<sup>129.</sup> Underwood v. Gerber, 149 U.S. 224 (1893).

despite the filing of the second patent on the same day as the patent reference and issuance the same day as the patent reference.<sup>130</sup>

In Miller v. Eagle Manufacturing Company, the Supreme Court held that a patent applicant was not allowed to claim in a later-filed patent application an invention that more broadly embraces the invention claimed in an earlier-filed patent. Relying on the then "settled" principle that the "patentee of such prior device would be entitled to all of its uses, whether described or not, 132 the Court found that a "single element or function of a patented invention cannot be made the subject of a separate and subsequent patent. 133 The Court clearly laid out the basis for lack of severability of component parts of a claimed invention, and the link between that lack of severability and the general prohibition against obtaining more than one patent for a single invention:

The result of the foregoing and other authorities is that no patent can issue for an invention actually covered by a former patent, especially to the same patentee, although the terms of the claims may differ; that the second patent, although containing a broader claim, more generical in its character than the specific claims contained in the prior patent, is also void . . . .

...[I]t must distinctly appear that the invention covered by the later patent was a separate invention, distinctly different and independent from that covered by the first patent; in other words it must be something substantially different from that comprehended in the first patent. It must consist in something more than a mere distinction of the breadth or scope of the claims of each patent. 134

Id.

<sup>130.</sup> Id. at 231.

<sup>131.</sup> Miller v. Eagle Mfg., 151 U.S. 186 (1894).

<sup>132.</sup> *Id.* at 201. The two patents were both directed to an apparatus that shared a common component. As stated by the Court, "the first patent, issued in 1879, covered both the lifting and depressing actions or operations, while the second patent [issued as a divisional patent in 1881] covered only the lifting effect. The spring device which was designed to accomplish these effects, or operations, is the same in both patents." *Id.* at 196.

<sup>133.</sup> Id. at 201. The Court stated:

<sup>[</sup>I]t is difficult to understand upon what principle the patentee can be allowed to withdraw from the operation of such prior patent, one of its distinct elements, and make it the subject of a second distinct patent.... [A] patentee cannot so split up his invention for the purpose of securing additional results, or of extending, or of prolonging the life of any or all of its elemental parts.

For a while, patentable distinction between claims of different patent applications (or lack of it) continued to trump inventorship and common ownership, even following enactment of the 1952 Patent Act. For example, in In re Siu, 135 the CCPA affirmed a decision by the board rejecting claims in a patent application over the claims of a patent issued from an earlier-filed, but commonly-assigned co-pending patent application filed by a different inventor, Ladisch. Siu's claimed invention was directed to a more specific use of the general method claimed by Ladisch. 136 The Board held and the CCPA agreed that "[t]he essential issue here is one of whether or not the claims [of Siu] represent a distinct and patentable invention [over Ladisch]" because, "the pertinent statutes do not, in our opinion, warrant the allowance of more than one patent for a single invention independently of the question of extension of monopoly."137 The court further noted that it "could not have been the legislative intent to permit indiscriminate issuance of numerous patents directed to mere colorable variations of the same idea."138 Significantly, the court invoked *Underwood* to deny Siu's patent, <sup>139</sup> despite the disclaimer of any remaining term of the appealed application extending beyond that of the issued patent. According to the CCPA, nothing in the statute or its legislative history suggests abandonment of the settled rule of *Underwood* v. Gerber, forbidding more than one patent for what is obviously only one invention, whether or not the grants expire on the same day."141

Shortly thereafter, in *In re Ockert*, <sup>142</sup> the CCPA held that claims could be rejected under 35 U.S.C. § 101<sup>143</sup> even though the claims of the several

<sup>135.</sup> In re Siu, 222 F.2d 267 (C.C.P.A. 1955).

<sup>136.</sup> *Id.* at 268 ("The difference between the two groups of claims is that appellant's claims are directed toward the specific use of the method with molten glass, while those of the patent to Ladisch are directed toward the method generically, and toward its use with resinous materials specifically.").

<sup>137.</sup> Id. at 269.

<sup>138.</sup> Id. at 270 n.2.

<sup>139.</sup> Id. at 269.

<sup>140.</sup> Appellant Siu had taken advantage of 35 U.S.C. § 253, which stated, in part, "In like manner, any patentee or applicant may disclaim or dedicate to the public the entire term, or any terminal part of which the term, of the patent granted or to be granted." Siu, 222 F.2d at 269; 35 U.S.C. § 253 (1952). Although disclosure of subject matter had been provided for under previous statutes (for example, R.S. Sec. 4917 and 4922 of U.S.C. Title 35 and R.S. Sec. 973 of U.S.C. Title 28), 35 U.S.C. § 253 of the 1952 Patent Act provided for the first time that a terminal part of the term of a patent could be disclaimed or dedicated to the public.

<sup>141.</sup> Siu, 222 F.2d at 270 n. 2 (citation omitted).

<sup>142.</sup> *In re* Ockert, 245 F.2d 467 (C.C.P.A. 1957).

<sup>143. 35</sup> U.S.C. § 101 reads now, as it did then:

applications involved and the patent were not "cross-readable." As stated by the court:

35 U.S.C. § 101, like its predecessor R.S. 4886, provides that an inventor may obtain a patent for his invention. There is no statutory provision for the granting of a plurality of patents on a single invention, and this court has repeatedly held that if two patents are to be granted there must be two inventions. . . .

Appellant also alleges that the claims of his applications are not cross-readable, and that accordingly the allowance of the appealed claims would not result in an extension of monopoly. Such cross-reading, however, is not indispensable to a holding of double patenting. . . . If only one inventive concept is present, two patents cannot probably be granted, regardless of the scope or relationship of the claims, or of the order in which the applications were filed or the claims presented.<sup>144</sup>

The CCPA in *In re Zickendraht*,<sup>145</sup> as in *Siu*, affirmed a board decision holding that, between an issued patent and a pending patent application, only a single inventive concept was claimed and, therefore, the patent application should be rejected for double patenting.<sup>146</sup> In *Zickendraht*, the applicants (i.e., the same inventive entity) filed two patent applications on the same day, directed to subject matter that was mutually exclusive.<sup>147</sup> The court held that the "sole issue is whether the instant claim defines a patentably distinct invention over that claimed in applicants' patent,"<sup>148</sup> and, because the court found that it did not, the board's decision was affirmed.<sup>149</sup>

Judge Rich, in his concurrence, distinguished between patents claiming the same invention, where the proper basis for rejection would be 35 U.S.C. § 101, and patented inventions, though not "prior art," that render a claimed invention obvious, in which case a "double patenting"

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

<sup>144.</sup> Ockert, 245 F.2d at 469.

<sup>145.</sup> In re Zickendraht, 319 F.2d 225 (C.C.P.A. 1963).

<sup>146.</sup> See id. at 228 ("[I]t appears to us, as it did to the examiner and the board, that there is but one patentable invention here to which both the patented and appealed claims are directed.").

<sup>147.</sup> *Id.* at 227 ("In the instant case the only difference is that in the patent claims there is a substituent on one of the benzene rings while in the application there is not.").

<sup>148.</sup> Id.

<sup>149.</sup> Id. at 229.

rejection might be avoided by filing a terminal disclaimer under 35 U.S.C. § 253."<sup>150</sup> In contrast to *Siu*, the issue of a terminal disclaimer was not properly raised in *Zickendraht* and, therefore, was not considered by the court. Judge Rich distinguished the facts in *Siu* by asserting that the "*Siu*... was a common assignee type of 'double patenting' case... [wherein] two different applicants were claiming the same invention..."<sup>151</sup> *Zickendraht*, however, was a case where "an applicant takes out a patent on one of two or more copending applications on closely related inventions,"<sup>152</sup> and, according to a "firmly established rule," the applicant "shall not be allowed claims in the other applications except on subject matter which is patently different from the subject matter claimed in his patent."<sup>153</sup> In this latter type of case, in Judge Rich's view, a terminal disclaimer under 35 U.S.C. § 253 would overcome this non-statutory rejection had such a disclaimer been filed, which it was not.<sup>154</sup>

The court in *In re Robeson*<sup>155</sup> reiterated previous justifications for non-statutory "double patenting" rejections beyond extension of monopoly, such as "harassment by multiple assignees, inconvenience to the Patent Office, and the possibility that one might avoid the effect of file wrapper estoppel by filing a second application." The court also distinguished between *Siu*'s "mere colorable variations of the same idea," which it considered to be "directed to the identical invention," and *Robeson*'s "obvious variation of the invention... [that] is more than a 'mere colorable variation' thereof." According to the court, "[w]here the claims

<sup>150.</sup> Id. at 231 n.4.

<sup>151.</sup> *Id.* at 232 (Rich, J., concurring.). According to Judge Rich, the only difference between the claimed processes in *Siu* was "the naming of the material to which the process was applied—glass in the appealed claim and inorganic material in the patent." *Id.* It would seem, however, in reading *Siu*, that the court in that case employed a broader conception of "same invention," to include obvious variants, namely "colorable variations of the same idea." *In re* Siu, 222 F.2d 267, 270 n.2.

<sup>152.</sup> Zickendraht, 319 F.2d at 231 (Rich, J., concurring).

<sup>153.</sup> Id.

<sup>154.</sup> Id. As stated by Judge Rich:

But since the patented invention is not prior art, the basis for denial is not a statutory basis; rather it is a case-law development. Where, as here, there are two distinct inventions, each separately patentable in the absence of a patent on the other, it seems to me that a "double patenting" rejection might be avoided by the filing of a terminal disclaimer under 35 U.S.C. § 253, which was not done in this case.

*Id.* at 231 n.4.

<sup>155.</sup> *In re* Robeson, 331 F.2d 610 (C.C.P.A. 1964).

<sup>156.</sup> Id. at 615.

<sup>157.</sup> Id.

of a second application are substantially the same as those of the first patent, they are barred under 35 U.S.C. § 101."<sup>158</sup> Seeing "more than a 'mere colorable variation" of the claimed subject matter of the issued patent relied upon by the examiner to make the double patenting rejection, and concluding that "the only real objection to granting appellants' application is an extension of the monopoly[,]" the court reversed the rejection in view of the terminal disclaimer filed under 35 U.S.C. § 253.<sup>159</sup> Similarly, in *In re Kaye*, the court held, in a case where the claimed invention was held to be obvious over the claimed subject of the applicant's own prior patent, a terminal disclaimer "disclaiming that portion of the term of any patent issued on the present application which would extend beyond the term of the Kaye patent" was sufficient to overcome an obviousness-type double patenting rejection.<sup>160</sup>

In *In re Griswold*, the CCPA held, in two separate appeals from the Patent Office Board of Appeals, that obviousness-type double patenting rejections of claimed inventions over later-filed but first-to-issue patents could not be overcome by terminal disclaimers when the claimed inventions were the same:<sup>161</sup>

Under the circumstances, we find no differences in substance between the invention defined in appealed claims 23 and 40 and the invention defined in the patent claims.... We are of the opinion that there is nothing defined in the appealed claims that is not as broadly defined in the patent claims. The inventions defined by the respective claims are, in our view, the same.

Appellants have filed terminal disclaimers in their applications but do not argue that they should be given effect if we find the inventions claimed in the respective applications and patents to be the same. Under the circumstances and in view of our finding, we give the disclaimers no effect.<sup>162</sup>

Of more significance was the court's observation of an "imaginative solution" provided by the common assignee, Johnson & Johnson, of disclaiming

the terminal part of any patent granted on the above identified application, which would extend beyond the expiration date of said patent . . . and hereby covenants that any patent so granted

<sup>158.</sup> Id. at 614.

<sup>159.</sup> Id. at 615.

<sup>160.</sup> In re Kaye, 332 F.2d 816, 819 (C.C.P.A. 1964).

<sup>161.</sup> *In re* Griswold, 365 F.2d 834 (C.C.P.A. 1966).

<sup>162.</sup> Id. at 840 (emphasis added) (footnote omitted).

on the above identified application, together with any right to recover for its violation shall be *enforceable only for and during such period that the legal title to said patent and to such right to recover shall be the same respectively* as the legal title to United States Patent 3,081,514 and to any corresponding right to recover for its violation, this covenant to run with any patent granted on the above identified application and to be binding upon the grantee, its successors, or assigns.<sup>163</sup>

The court considered this novel type of terminal disclaimer, or "non-alienation agreement" as it would later be referred, which disclaimed the portion of a patent term extending beyond that of another patent and linked enforceability of that patent or common ownership with that other patent, to be "ingenious."<sup>164</sup>

In another case, In re Schneller, the CCPA held that claims in a voluntary divisional application could be rejected over claims of its issued parent patent for obviousness-type double patenting, even when the subject matter may be patentably distinct, if embodiments within the scope of the claims of the issued patent could be embraced within the scope of the claims of the voluntary divisional application. <sup>165</sup> For example, if the issued patent claimed the combination of ABCX, and the voluntary divisional application claimed the combination of ABCY, an obviousnesstype double patenting rejection would be appropriate where embodiment ABCXY would be embraced by the claims of the issued patent and the voluntary divisional application. The alternative, as stated by the court, would be the "grant of another patent [to the same patentee] effectively extending the time during which he may exclude others from practicing an invention which is disclosed and claimed in his issued patent."167 The remedy would be to file a terminal disclaimer to thereby "effectively prevent this result."168 The court distinguished In re Heinle, 169 where an embodiment of a single element was held to be patentably distinct from a previously patented combination employing a generic embodiment of that element, because the "patent claim would not have been extended by the application claims directed to the element[,]" thus obviating the need for a

<sup>163.</sup> Id. at 840 n.5 (emphasis added).

<sup>164.</sup> *Id.* ("The terminal disclaimers which have been filed are ingenious.").

<sup>165.</sup> In re Schneller, 397 F.2d 350 (C.C.P.A. 1968).

<sup>166.</sup> *Id.* at 355. The appellants employed this example.

<sup>167.</sup> Id. at 354.

<sup>168.</sup> Id.

<sup>169.</sup> *In re* Heinle, 342 F.2d 1001 (C.C.P.A. 1965).

terminal disclaimer.<sup>170</sup> The court also distinguished *In re Sutherland*<sup>171</sup> on the basis that the patent and the application in *Sutherland* were by two different people.<sup>172</sup> In such a case, according to the court, two separate applications would be necessary, despite the disclosure of the claimed subject matter in the specification of the issued patent. The court explained that, while the inventions of the patent and the patent application in *Sutherland* "could be and were employed in the same process of agglomerating synthetic rubber latex," there was "no domination by one inventor's claims of the other's invention."

In an infringement action, SAB Industri AB v. The Bendix Corporation, 174 the District Court for the Eastern District of Virginia found the defendant's assertion, that "joint invention means that all claims in the invention must have the same 'inventive entity,' i.e., that the joint inventors must have combined their efforts as to each claim in the patent," to lack support by any statute or rule of the Patent Office.<sup>175</sup> Instead, the court assumed "for the purpose of this decision and because there is some evidence that it is in accordance with customary practice in the Patent Office, that the defendants' position is correct,"176 and proceeded to hold that a decision by the inventors to file a joint application as a means to avoid prohibited "double patenting" was justifiable.<sup>177</sup> According to the court, "the 'error,' if any, is too technical and immaterial, as well as innocent, to warrant invalidating an otherwise valid patent."178 The court sanctioned simultaneous expiration of an exclusive right to inventions set forth among different claims by distinct inventive entities at least where, as here, there was common ownership.

In *In re Van Ornum*,<sup>179</sup> the CCPA recited the development of obviousness-type double patenting and, in particular, revision of 37 C.F.R.

<sup>170.</sup> Schneller, 397 F.2d at 355 (apparently contradicting the holding of the Supreme Court in Miller v. Eagle Mfg., 151 U.S. 186 (1894)).

<sup>171.</sup> In re Sutherland, 347 F.2d 1009 (C.C.P.A. 1965).

<sup>172.</sup> Schneller, 397 F.2d at 355.

<sup>173.</sup> *Id.* (quoting *Sutherland*, 347 F.2d at 1013).

<sup>174.</sup> SAB Industri AB v. The Bendix Corp., 199 U.S.P.Q. 95 (E.D. Va. 1978).

<sup>175.</sup> Id. at 104.

<sup>176.</sup> Id.

<sup>177.</sup> *Id.* ("These [depositions] convince the Court that the method chosen (of a joint application), even though done with an awareness of the proper attribution of inventorship, was done in a *bona fide* affort [sic] to avoid what was regarded by the patent expert, on whom the inventors justifiably relied, as the supreme evil of 'double patenting.").

<sup>178.</sup> *Id.* at 105.

<sup>179. 686</sup> F.2d 937 (C.C.P.A. 1982).

§ 1.321(b), whereby patent applications rejected on the non-statutory basis of obviousness-type double patenting could be overcome by filing a terminal disclaimer containing the "non-alienation agreement" noted in Griswold.<sup>180</sup> The appellants argued that, because the inventorship entity was identical between the issued patent and appealed application, a terminal disclaimer should overcome the rejection regardless of common ownership.<sup>181</sup> According to the appellants, limiting terminal disclaimers under 37 C.F.R. § 1.321(b) to applications that are commonly owned and for which there is an agreement to maintain common ownership exceeded the Patent Office's rulemaking authority by being "substantive and not procedural."182 The court disagreed with the appellants. The court observed that the 1952 Patent Act183 "provided a possible remedy in the terminal disclaimer" 184 provision of 35 U.S.C. § 253, so that obviousnesstype double patenting rejections could be overcome in the greater interest of being "able to bring such improvement inventions within the protection of the patent system, [and] at the same time giving an incentive for their disclosure."185 The court noted that the "provision is merely permissive and it was left to the courts to work out its application on a case-by-case basis."186

For the court in *Van Ornum*, a terminal disclaimer was "tantamount for all practical purposes to having all the claims in one patent," and carried with it the underlying assumption of common ownership. To hold otherwise, according to the court, would be in contravention to prior case law, such as *Pope v. Gormully*, in which the Supreme Court held it impermissible to assign separate patent claims of the same patent to different parties. Therefore, the CCPA in *Van Ornum*, found that a "non-alienation" provision in a terminal disclaimer, as a requirement by the Patent Office under 37 C.F.R. § 1.321(b), was consistent with the

<sup>180.</sup> *Id.* at 944–45; see also In re Griswold, 365 F.2d 834, 840 n.5.

<sup>181.</sup> Van Ornum, 686 F.2d at 938-39.

<sup>182.</sup> Id. at 945.

<sup>183.</sup> Patent Act of 1952, ch. 950, 66 Stat. 792.

<sup>184.</sup> Van Ornum, 686 F.2d at 948 (referencing Patent Act of 1952, ch. 950, 66 Stat. 792).

<sup>185.</sup> Id.

<sup>186.</sup> Id.

<sup>187.</sup> Id. (quoting In re Braithwaite, 379 F.2d 594, 601 (C.C.P.A. 1967)).

<sup>188.</sup> *Id.* ("Obviously, that thought contemplates common ownership of the two patents, which remains common throughout the life of the patents.").

<sup>189.</sup> Pope v. Gormully, 144 U.S. 248 (1892).

<sup>190.</sup> Van Ornum, 686 F.2d at 948.

1952 Patent Act and was not a substantive rule beyond the authority of the Commissioner of Patents and Trademarks.<sup>191</sup>

In In re Kaplan, the Federal Circuit reversed a decision by the Board of Patent Appeals and Interferences. 192 The court rejected appealed claims in an application filed by Kaplan and another inventor, Walker, over the disclosure of that claimed invention in an earlier-filed patent application by Kaplan alone that had since issued as a patent. Both the patent application and the issued patent were assigned to Union Carbide Corporation.<sup>193</sup> Kaplan and Walker's joint invention was included in the specification of Kaplan's earlier-filed patent application because, at the time he filed the patent application, Kaplan was aware of the improvement invented by himself and Walker. Therefore, according to 35 U.S.C. § 112, first paragraph, 194 he was required to provide an enabling description of the best mode of practicing the invention that he alone had invented and claimed in the first-filed application. 195 The single claim of Kaplan and Walker's later-filed application was rejected by the Board for obviousnesstype double patenting. 196 The court reversed the double patenting rejection because the board confused "domination" of Kaplan's issued claims over the narrow improvement claimed in the application on appeal with "double patenting," and because the board relied upon Kaplan's patent specification "as though it was prior art, which it is not, to support the obviousness aspect of the rejection."197 The Kaplan patent could not be relied upon as prior art because, as stated by the Federal Circuit, "[d]eclarations under 37 C.F.R. § 1.131 [were] filed by appellants and by Kaplan explaining who invented what and when."198 The Federal Circuit, in reversing the Board, stated, "there is no proper evidence to show that

<sup>191.</sup> *Id.* Identity of inventorship, then, was a necessary but insufficient condition at the time of *Van Ornum* to render claimed subject matter of different patents tantamount to inclusion in a single patent.

<sup>192.</sup> In re Kaplan, 789 F.2d 1574 (Fed. Cir. 1986).

<sup>193.</sup> The decision by the court was made on the basis of the law as it was understood at the time, requiring identity of inventorship of all claims in a patent application.

<sup>194.</sup> Pre-AIA 35 U.S.C. § 112, first paragraph, stated: The specification shall contain a written descript

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

<sup>195.</sup> Kaplan, 789 F.2d at 1575-76.

<sup>196.</sup> *Id.* at 1576.

<sup>197.</sup> Id. at 1577.

<sup>198.</sup> Id. at 1576.

the claim is for a mere obvious variation of what is claimed in the Kaplan patent relied upon to support the rejection."<sup>199</sup> Presumably, then, had here been such evidence, the obviousness-type double patenting rejection by the Board would have stood.

The Federal Circuit in *Kaplan*, moreover, continued to acknowledge the significance of *In re Land*:

It is worth remembering an axiomatic statement on the same page of the *Land and Rogers* case, which is also applicable here:

When the joint and sole inventions are related, as they are here, inventor A commonly discloses the invention of A & B in the course of describing his sole invention and when he so describes the invention of A & B he is not disclosing "prior art" to the A & B invention, even if he has legal status as "another." [the reference to "another" is to that word as used in 35 U.S.C. § 102(e) and (g).]<sup>200</sup>

This comment was made in the context of recognizing that "[i]t is a given, of course, that a sole inventor and joint inventors including the sole inventor are separate 'legal entities,' a legal proposition from which certain legal consequences flow."<sup>201</sup> In other words, while inventors may make separate contributions to a single invention, prior disclosure of the work of one member of an inventive entity constitutes prior art to the joint invention, while disclosure by that member of the work of the inventive entity of which he is a part may not.

### B. PROBLEMS RESOLVED BY THE ADVENT OF TERMINAL DISCLAIMERS

"Terminal disclaimer," as a statutory provision, was first established under the Patent Act of 1952. Although there is no discussion in the legislative history of the impetus behind the second paragraph of 35 U.S.C. § 253,<sup>202</sup> it became the primary means for preventing extension of

<sup>199.</sup> Id. at 1581.

<sup>200.</sup> *Id.* at 1576 (emphasis added, bracketed text in original) (quoting *In re* Land, 368 F.2d 866, 879).

<sup>201.</sup> Id. at 1575.

<sup>202.</sup> See P. Federico, Commentary on the New Patent Act, 75 J. PAT. & TRADEMARK OFF. SOC'Y 161, 210 (1993). Federico states:

The second paragraph of Section 253 is new and provides that "in like manner" a patentee may disclaim, or dedicate to the public, the entire term or any terminal part of the term, of a patent, and such action may be taken by the applicant before the patent is granted.... No specific reason for this provision appears in the printed record, but its

the monopoly of claimed subject matter over later-filed, but earlier-to-issue patents.<sup>203</sup> Under the 1994 Uruguay Round Agreements Act,<sup>204</sup> however, all patent applications filed expire automatically twenty years from the earliest priority date claimed.<sup>205</sup> Extension of monopoly alone, therefore, no longer provided the major justification for filing terminal disclaimers in the vast majority of pending patent applications. Instead, non-alienation of overlapping claims where no statutory basis for rejection existed became the primary motivation.

Further, while common inventorship provided the original basis for double patenting rejections, common assignees ultimately were able to step into the shoes of inventors to overcome rejections based on overlapping claims of distinct inventive entities. As stated, for example, by the court in *In re Bowers*:<sup>206</sup>

It is true that in both *Robeson*...and *Kaye*,...the double patenting rejections which we found to be obviated by the terminal disclaimer were predicated in each case on the same inventorship. However, we find this to be a distinction without legal significance in the present context.<sup>207</sup>

The court held, "we are of the opinion, therefore, that the common assignee of the appealed application and the involved patents is entitled to proceed under 35 U.S.C. § 253."<sup>208</sup> Also, as discussed above, the court in *Van Ornum* applied the dicta of *Griswold* and subsequent amendment of the rules by the Patent Office to explicitly rule that, pursuant to 37 C.F.R. § 1.321(b), a second patent would be enforceable only in the event of a terminal disclaimer mandating continued common ownership.

proponents contemplated that it might be effective in some instances, in combatting a defense of double patenting, to permit the patentee to cut back the term of a later issued patent so as to expire at the same time as the earlier issued patent and thus eliminate any charge of extension of monopoly.

- 203. See, e.g., supra notes 135-91.
- 204. Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (Dec. 8, 1994).
- 205. Disregarding patent term adjustment (PTA) under the Patent Term Guarantee Act of 1999, Pub. L. No. F106-113, Div. B, § 1000(a)(9) [Title IV, Subtitle D (§§ 4401 to 4405) of S. 1948], Nov. 29, 1999, 113 Stat. 1536, 1501A-557.
  - 206. In re Bowers, 359 F.2d 886 (C.C.P.A. 1966).
- 207. *Id.* at 889. The court in *In re Kaye*, 332 F.2d 816, 819 (C.C.P.A. 1964), discussed *supra* in text accompanying note 160, decided that filing of a terminal disclaimer is adequate to obviate the extension of patent monopoly threatened by two patents claiming "two inventions [that] are not patentably distinct."
  - 208. Bowers, 359 F.2d at 889.

The policy of preventing extension of an exclusive right over an invention and of avoiding harassment by the multiple assignees hinged on a common date of expiration and common ownership throughout the period of enforceability of the patents. This policy would be maintained by these two requirements regardless of identity or overlap between the inventorship entities, so long as the later-filed patent application was not otherwise statutorily barred by the first-filed patent application, such as for lack of bare novelty or obviousness under § 102 or § 103, respectively.

Other problems resolved by terminal disclaimers included situations where various inventive entities collaborated on different, but related, inventions and where obvious improvements were made the subject of later, so-called continuation-in-part applications. Marans commented on this issue shortly after the enactment of the 1952 Patent Act:

[W]hen a number of persons contribute to the making of an invention, it is sometimes necessary to file separate applications with the same disclosure and apportion the claims between the different persons to the best of the ability of the claim draftsman, taking into consideration the facts in the case. Continuation in part applications, improving on the parent applications, also make for double patenting situations which may not be avoidable.<sup>209</sup>

Assuming the "customary practice" recited by the court in SAB, that "joint invention means all claims in the invention must have the same 'inventive entity," Marans was correct that, if the inventive entity differed among claimed inventions, separate applications would have to be filed so that the inventive entity among the claims of each application would be the same. Multiple inventive entities could, nevertheless, avoid having various applications constitute prior art to each other by filing them on the same day. However, in accordance with the policy of preventing extension of monopoly, such as when several applications owned by a common assignee claim inventions that are obvious variants of each other, the courts could reject patent applications over issued patents, even where the issued patent did not constitute statutory art (such as by having a common filing date). Again, the lack of identical inventive entities between the patent and the parent application was immaterial so long as common ownership was established and maintained. A terminal disclaimer would serve the purpose of preventing extension of monopoly

<sup>209.</sup> H. Marans, Disclaimer of a Terminal Part of the Patent Term and Double Patenting, 36 J. PAT. OFF. SOC'Y 207, 212 (1954).

<sup>210.</sup> SAB Industri AB v. Bendix Corp., 199 U.S.P.Q. 95, 104 (E.D. Va. 1978).

over the claimed invention, but only the non-alienation clause in the terminal disclaimer would eliminate the policy of avoiding harassment by multiple assignees for infringement of claims directed to that invention.

## IV. AMENDMENTS TO THE PATENT ACT OF 1952 TO ACCOMMODATE OVERLAP OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

The 1984 Patent Act recognized these realities by explicitly acknowledging that multiple inventorship and ownership entities could, indeed, exist among claims in a single patent, and by enabling patentability of claimed obvious variants in certain instances when they were commonly owned at the time the later invention was made. Sections A and B of this Part will discuss the progression from problems associated with overlapping inventive entities to those of common ownership. Section C will analyze the legislative response that was the 1984 Patent Act. Section D will then address how the Patent Office and the Federal Circuit responded to the 1984 Patent Act.

### A. THE PROBLEM OF A COMMON INVENTOR AMONG DISTINCT INVENTIVE ENTITIES

The issue of multiple inventive entities claiming obvious variants of a single invention also presented an obverse problem in that 35 U.S.C. § 102(g) required a determination of priority among the work of distinct inventive entities, regardless of whether the claimed subject matter of any resulting applications were commonly owned or when they were filed, and irrespective of any overlap in membership of those distinct inventive entities.<sup>211</sup> The issue was first highlighted by the CCPA in 1973, in *In re Bass*,<sup>212</sup> where the court stated:

§ 102 Conditions for patentability; novelty and loss of right to patent A person shall be entitled to a patent unless—

<sup>211. 35</sup> U.S.C. § 102(g) stated, at that time:

<sup>• • •</sup> 

<sup>(</sup>g)(2) before such person's invention thereof, the invention was made in this country by another who had not abandoned, suppressed or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

<sup>212.</sup> In re Bass, 474 F.2d 1276 (C.C.P.A. 1973).

[T]he use of the prior invention 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).<sup>213</sup>

The "circumstances," as relayed by the CCPA in a later case, *In re Clemens*,<sup>214</sup> included evidence of priority of the earlier invention, and knowledge of that priority by one of the inventors of the later invention:

In *Bass*, it was clear that at least one of the three *Bass* coinventors had knowledge of the prior invention before the making of the Bass invention. (The sole inventor of the prior invention was a co-inventor of the Bass invention.)<sup>215</sup>

In *Clemens*, the court distinguished *Bass* on the basis that the applicants in *Clemens* had no knowledge of the prior invention of the other applicants (there was no common inventor), and that there was no evidence that the prior invention had been made public at the time the later inventors filed their patent application.<sup>216</sup> Therefore, the prohibition of 35 U.S.C. § 102(g) for the court in *Bass* and *Clemens* was premised on knowledge by the later inventive entity of the prior invention by another.<sup>217</sup>

The court in *OddzOn Products*, *Inc. v. Just Toys Inc.*<sup>218</sup> in 1997 summarized the logic of *Bass* and *Clemens* on the basis of disclosure."<sup>219</sup> The court made clear that an obvious variant may be patentable by virtue of the presence of a common inventive entity, and may be patentable to a third-party who was unaware of the prior invention, but would not be patentable to a third-party who was in receipt of disclosure of that prior

<sup>213.</sup> *Id.* at 1355 (emphasis added).

<sup>214.</sup> In re Clemens, 622 F.2d 1029 (C.C.P.A. 1980).

<sup>215.</sup> Id. at 1039.

<sup>216.</sup> Id.

<sup>217.</sup> Id. at 1038. Specifically, the court stated:

The circumstances of the *Bass* case included clear and conclusive evidence of priority. In this connection, statements made in the affidavits filed and accepted under Rule 131 and statements made by attorneys for Bass during prosecution established that the prior invention had been reduced to practice before the earliest alleged conception date for the Bass appellants' invention. In the case at bar, however, there is no such evidence in the record concerning the order in which the inventions in question were made.

*Id.* (citations omitted).

<sup>218.</sup> OddzOn Products, Inc. v. Just Toys Inc., 122 F.3d 1396 (Fed. Cir. 1997).

<sup>219.</sup> Id. at 1403.

invention at the time of the later invention.<sup>220</sup> An example of such an ineligible third party would be a distinct inventive entity where there was a common inventor, as in *Bass*, and even where there was no common inventor, as in *Clemens*, so long as the inventive entity was in receipt of disclosure of the prior invention. The presence of a common inventor among distinct inventive entities was not, in and of itself, a basis for concluding that earlier inventions constituted prior art under § 102(g), other than instances where that presence might constitute knowledge of the prior invention by the later inventive entity that included the common inventor.

### B. THE PROBLEM OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

The presence of a common inventor, moreover, was never the basis for disqualifying what would otherwise constitute prior art under 35 U.S.C. § 102. For example, as discussed above, the CCPA in *Land* stated that, when A discloses the invention of A & B in the course of describing his own invention, he is not disclosing "prior art" to the A & B invention. Nevertheless, A has the legal status as "another." As a consequence, disclosure by A of his own invention is prior art to a joint invention to which he contributed as a joint inventor, and that qualification as "prior art" is not negated by his status as a common inventor among distinct inventive entities. In other words, statutory "prior art" cannot be removed by virtue of the presence of a common inventor among two distinct inventive entities. This is consistent with *Bass, Clemens*, and *OddzOn* in that, in all of these instances, the critical element was knowledge by the later inventive entity of the prior invention.

Obviousness-type double patenting decisions also followed the reasoning of the CCPA in *Land*. For example, as discussed above, the Federal Circuit, in reversing a double patenting rejection in *Kaplan*, explicitly called out the "axiomatic statement" of *Land*, acknowledging A's legal status as "another" relative to A & B.<sup>222</sup> The court in *Kaplan* held that prior disclosure in the patent specification naming Kaplan as the sole inventor did not constitute prior art to a later application because the portion of the specification relied upon by the Examiner was the *joint* 

<sup>220.</sup> *Id.* ("[While the] obvious invention A' may not be unpatentable to the inventor 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.").

<sup>221.</sup> See supra text accompanying notes 96–97.

<sup>222.</sup> See supra text accompanying note 201.

*invention* of Kaplan and Walker, who were the coinventors of the patent application on appeal.<sup>223</sup> While Kaplan's own invention would be prior art to the later-claimed joint invention of Kaplan and Walker, disclosure of the joint invention in Kaplan's specification would not.

Following decisions by the CCPA in Robeson, Kaye, Bowers, and Griswold, among others, and the ensuing confusion regarding the appropriateness of terminal disclaimers to overcome rejections during patent prosecution, the Patent Office early in 1967 issued a Notice restating its practice of limiting applicability of the term "double patenting'... to cases involving two or more applications and/or patents of the same inventive entity .... "224 The Patent Office clearly excluded instances, such as Bowers, where more than a single inventive entity was involved. The Patent Office went so far as to define a "single entity" by stating that "[s]ole and joint inventors cannot constitute a single entity, nor do two or more sets of joint inventors constitute a single entity if any individual is included in either set who is not also included in the other."225 Relying on Robeson and Kaye, the Patent Office limited application of terminal disclaimers to applications and/or patents where the subject matter of the competing claims do not overlap, even though the subject matter of those claims may be obvious in view of each other.<sup>226</sup> "Overlap" was defined as the possibility for infringement of multiple claims by the "same process, machine, manufacture or composition of matter."227

The Patent Office further stated that terminal disclaimers could not be relied upon to overcome double patenting rejections of claims of applications over claims of patents or other applications having different

<sup>223.</sup> *In re* Kaplan, 789 F.2d 1574, 1575 ("The reason why the process using the solvent *mixture* of the appealed claim was not *claimed* in the Kaplan patent, although it is *disclosed* in the patent specification; is that Kaplan alone was not the inventor of that process; it was the *joint* invention of Kaplan and Walker and therefore the application on appeal was filed.").

<sup>224.</sup> Edward J. Brenner, Commissioner of Patents, *Double Patenting*, 834 OFFICIAL GAZ. PAT. OFF. 1615 (Jan. 31, 1967) (publishing a notice of the Commissioner dated Jan. 9, 1967).

<sup>225.</sup> Id.

<sup>226.</sup> *Id.* ("If two or more cases are filed by a single inventive entity, and if the expiration dates of the patents, granted or to be granted, are the same, either because of a common issue date or by reason of the filing of one or more terminal disclaimers, two or more patents may properly be granted, if the claims do not overlap, even though the subject matter to which the claims of one case are directed may be obvious in view of the subject matter claimed in the other case.").

<sup>227.</sup> *Id.* ("Claims overlap within the meaning of this statement if it is possible for them to be infringed by the same process, machine, manufacture, or composition of matter. Cross reading is not necessary to constitute such an overlap.").

inventive entities, even in instances of common ownership.<sup>228</sup> Instead, in instances where cases are filed by different inventive entities, "regardless of ownership," rejections by the Patent Office would be based on statutory provisions of novelty and nonobviousness under § 102 and § 103, in which case terminal disclaimers would have "no effect in this situation since the basis for refusing more than one patent is not connected with any extension of monopoly."<sup>229</sup> Where conflicting claims by different inventive entities of different applications were commonly owned, the Patent Office indicated that it would call upon the assignee to state which entity was the prior inventor and to limit the claims of the other application accordingly, under threat of an interference if the assignee did not comply.<sup>230</sup> Issuance of a patent would estop a common assignee from asserting that a distinct inventive entity of another patent application with competing claims constituted the true inventorship entity.<sup>231</sup>

A little more than one year later, the Patent Office modified the Notice of January 31, 1967 to state that "when a single inventive entity is involved a terminal disclaimer will be accepted to avoid a double patenting rejection even if the claims overlap," but only for claims that "could not have been allowed in the other application or patent." Presumably the Patent Office was referring to claims that would not be properly supportable by the specification of the patent or application that included the claims relied upon by the examiner. The other major qualification was that the terminal disclaimer must provide that "the patent shall expire immediately if it ceases to be commonly owned with the other application or patent." This second qualification, regarding alienation, may have derived from *Griswold* where, even though the terminal disclaimer was not considered adequate, the court stated that the proffered language mandating common ownership for the life of the patent was an

<sup>228.</sup> *Id.* ("In situations involving cases filed by different inventive entities, regardless of ownership, Sections 102 and 103 of 35 U.S.C. preclude the granting of two or more patents when directed to identical inventive concepts or when one of the concepts would be obvious in view of the other.").

<sup>229.</sup> Id. at 1616.

<sup>230.</sup> *Id.* 

<sup>231.</sup> *Id.* ("[T]he assignee, by taking out the patent at a time when the application was not claiming the patented invention, is estopped to contend that the patentee is not the prior inventor.").

<sup>232.</sup> Edward J. Brenner, Commissioner of Patents, *Modification of Notice of January* 31, 1967, 848 OFFICIAL GAZ. PAT. OFF. 1 (March 5, 1968) (publishing a notice of the Commissioner dated Feb. 14, 1968).

<sup>233.</sup> Id.

<sup>234.</sup> Id.

"imaginative solution to one of the more theoretical objections to double patenting, split ownership of two patents and potential harassment." <sup>235</sup>

In March of 1969, the Patent Office again announced its policy with respect to double patenting in a superseding notice that effectively removed the rule that claims rejected in one application and that overlap another application or patent would not have been allowed in that other application or patent.<sup>236</sup> Specifically, the notice stated that "[c]laims that differ from each other (aside from minor differences in language, punctuation, etc.)," whether or not the differences are obvious, "are not considered to be drawn to the same invention."<sup>237</sup> This notice clarified the distinction between "same invention" and different inventions that are obvious variants of each other.<sup>238</sup> The Patent Office, however, maintained the requirement that double patenting did not apply in cases where there were different inventive entities: "Claims should be rejected on double patenting only in cases involving two or more applications and/or patents of the same inventive entity and not in situations involving commonly owned cases of different inventive entities."<sup>239</sup>

In 1971, the Patent Office amended 37 C.F.R. § 1.321 to require that terminal disclaimers filed to overcome a double patenting rejection include a provision "that any patent granted on that application shall be enforceable only for and during such period that said patent is commonly owned with the application or patent which formed the basis for rejection."<sup>240</sup> The policy stated by the Patent Office was clarification of existing practice intended to avoid interference proceedings and to "prevent harassment of an alleged infringer by multiple parties due to subsequent different ownership of multiple patents granted as the result of filing a terminal disclaimer to overcome a double patenting rejection."<sup>241</sup>

The Patent Office also amended rule 37 C.F.R. § 1.78, to specifically provide for elimination of conflicting claims under common ownership among two or more applications or between an application and a patent

<sup>235.</sup> In re Griswold, 365 F.2d 834, 840 n.5; see also supra note 163.

<sup>236.</sup> Edward J. Brenner, Commissioner of Patents, *Double Patenting and Terminal Disclaimer*, 860 OFFICIAL GAZ. PAT. OFF. 661 (March 18, 1969) ("The notices of January 9, 1967 and February 14, 1968, relating to this subject are hereby superseded except with reference to the practice described involving different inventive entities.").

<sup>237.</sup> *Id.* 

<sup>238.</sup> Id.

<sup>239.</sup> Id.

<sup>240. 36</sup> Fed. Reg. 75, 7312 (April 17, 1971).

<sup>241. 35</sup> Fed. Reg. 253, 20012 (December 31, 1970).

having different inventors.<sup>242</sup> Also, under the rule change, "the assignee may be called upon to state which named inventor is the prior inventor," and to "explain why an interference should [not] be declared or that no conflict exists in fact."<sup>243</sup>

These rule changes by the Patent Office, however, did not change the requirement of a common inventive entity when making a double patenting rejection. This, despite an explicit call in 1967 by the court in *Bowers* for the possibility of overcoming a double patenting rejection in instances of common ownership and different inventive entities on the basis that, in the case of common ownership, "same inventorship" was a "distinction without legal significance." Nevertheless, neither in the *Bowers* decision (or in any other court decisions relating to double patenting), nor in policies promulgated by the Patent Office, was there ever any suggestion that a double patenting rejection would be appropriate on the sole basis that different inventive entities shared a common inventor, regardless of whether conflicting claims were commonly owned.

### C. LEGISLATIVE RESPONSE TO THE PROBLEMS OF DISTINCT INVENTIVE ENTITIES AND COMMON OWNERSHIP

In 1984, 35 U.S.C. § 103 was amended to provide an exception where the subject matter relied upon to make the determination of obviousness fell under § 102(f) or § 102(g), and the subject matter relied upon in the reference and in the patent application filed was commonly owned at the time the claimed invention was made.<sup>245</sup> The purpose of excluding consideration of § 102(f) and (g) when assessing obviousness was to change a "complex body of case law which discourages communication among members of research teams working in corporations, universities or other organizations."<sup>246</sup>

Later, in 1999 the exception was expanded to embrace subject matter under § 102(e),<sup>247</sup> and in 2004 the Cooperative Research and Technology Enhancement Act of 2004 (CREATE) broadened the exception even

<sup>242. 36</sup> Fed. Reg. 75, 7312 (April 17, 1971).

<sup>243.</sup> Id.

<sup>244.</sup> In re Bowers, 359 F.2d 886, 889; see also supra text accompanying note 207.

<sup>245.</sup> Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 103, 98 Stat. 3384 [hereinafter 1984 Patent Act].

<sup>246. 127</sup> CONG. REC. 10522, 10525–29 (Oct. 1, 1984) (Section-by-Section Analysis of H.R. 6286, Patent Law Amendments Act of 1984); *see also* Remarks of Robert W. Kastenmeier, 129 CONG. REC. 5777 (daily ed. Nov. 18, 1983).

<sup>247.</sup> American Inventors Protection Act of 1999, Pub. L. No. 106-113, § 4807, 113 Stat. 1501A-591.

further to include subject matter covered by a joint research agreement between assignees "that was in effect on or before the date the" later "claimed invention was made." In no case, however, was there a requirement under the exceptions to statutory obviousness of § 103 that a common inventor exist between the inventive entity responsible for the prior work under § 102(e), (f), or (g), and the inventive entity of the claimed invention. Therefore, exceptions to *statutory nonobviousness* have never been based on the presence of a common inventor among distinct inventive entities.

Revisions to 35 U.S.C. § 116 were also made under the 1984 Patent Act, which explicitly allow inventors to apply for a patent jointly even though, *inter alia*, "each did not make a contribution to the subject matter of every claim of the patent."<sup>249</sup> A third and equally significant change under the same Act was to permit a patent application to claim priority to an earlier-filed patent application so long as both applications named at least one inventor in common. This amendment to 35 U.S.C. § 120, showing deletions in strikethrough and additions in underline, reads as follows:

#### § 120 Benefit of earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, by the same inventor which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it

<sup>248.</sup> Cooperative Research and Technology Enhancement Act of 2004, Pub. L. No. 108-453, § 2(2)(A) (enacted Dec. 10, 2004).

<sup>249. 35</sup> U.S.C. § 116, amended by the Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 105, 98 Stat. 3385. Specifically, amendments were only made to the first paragraph of 35 U.S.C. § 116, and appear as follows, showing deletions in strikethrough and additions in underline:

When an invention is made by two or more persons jointly, they shall apply for patent jointly and each sign the application and make the required oath, except as provided in this title. Inventors may apply for a patent jointly even through (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contributions or (3) each did not make a contribution to the subject matter of every claim of the patent.

contains or is amended to contain a specific reference to the earlier filed application.<sup>250</sup>

Rep. Kastenmeier, chairman of the House of Judiciary Committee in the Section-by-Section Analysis of the legislative history of the 1984 Patent Act, stated that the amendment to § 116 of Title 35 "should also be of benefit to universities and corporations which rely on team research." The legislative history also stated that these amendments raised the prospect of inquiry by the Patent Office or courts into invention dates of the subject matter of various claims "when necessary." However, the amendments to § 120 would "permit greater latitude in filing 'divisional' applications," presumably by enabling priority claims to copending prior-filed applications "by an inventor or inventors named in the previously filed application." Nevertheless, there is no explanation in the legislative history of the 1984 Patent Act as to why amended § 120 required the presence of a common inventor in patent applications when claiming priority to an earlier-filed application. There is no such requirement in the exclusions from prior art under the obviousness

Section 105 of the bill [amending 35 U.S.C. § 116] provides that the two or more inventors may obtain a patent jointly even though each inventor has not contributed to each and every claim found in the patent application. This technical amendment should also be of benefit to universities and corporations which rely on team research.

Id.

<sup>250. 35</sup> U.S.C. § 120, *amended by* the Patent Law Amendment Act of 1984, Pub. L. No. 98-622, Title I, § 104(b), 98 Stat. 3385.

<sup>251. 130</sup> CONG. REC. 10525–29 (Oct. 1, 1984) (statement of Rep. Kastenmeier) (Section-by-Section Analysis of H.R. 6286, Patent Law Amendments Act of 1984). Rep. Kastenmeier stated:

<sup>252.</sup> *Id.* ("When necessary, the Patent and Trademark Office or a court may inquire of the patent applicant or owner concerning the inventors and the invention dates for the subject matter of the various claims."). As an aside, while examination is on a claim-by-claim basis under the AIA, as it was prior to its enactment, it is important to note that entitlement to patent protection is now based on the "effective filing date," under AIA 35 U.S.C. § 102(a)(1) and (a)(2), as opposed to the date of invention under pre-AIA 35 U.S.C. § 102(f) and (g). Further, the possibility for split ownership among claims also exists in patent applications subject to the AIA as well as patent applications subject to the patent law as it existed prior to enactment of the AIA. Therefore, the possibility still exists, although based on effective filing date rather than the date of invention, that claims with a single applicant may be "prior art" relative to each other. *See*, *e.g.*, MPEP § 2152.01 (9th ed. Mar. 2014).

<sup>253. 130</sup> CONG. REC. H10525–29 (Oct. 1, 1984) at H10528 ("Subsection (b) of section 105 amends section 120 of the patent law to provide that an application can obtain the benefit of the filing date of an earlier application when not all inventors named in a joint application are the same as named in the earlier application. This permits greater latitude in filing 'divisional' applications.").

requirement of § 103 for subject matter under § 102(f) and (g) when the subject matter is commonly owned at the time of the later invention. A requirement of a common inventor in a patent application claiming priority to an earlier-filed but co-pending application should not be necessary, other than to ensure some kind of collaboration linking the inventive entities of the respective patent applications, as in the spirit of the "team research" referenced by Rep. Kastenmeier.<sup>254</sup>

This reasoning is consistent with that of the courts in Bass and Clemens, 255 where the CCPA denied patentability under "circumstances" that included knowledge by the second inventive entity of a commonly owned prior invention by one of the members of that same inventive entity, and refusal by the court in Clemens to extend that logic to circumstances where there is no evidence of such knowledge by the later inventive entity. It was the inability of the courts to overlook the differences in these circumstances that was the impetus behind the 1984 Patent Act. Common ownership at the time of the second invention was the umbrella that would bring the different circumstances in Bass and Clemens to consistent conclusions. Moreover, the amended § 116 provisions opened the possibility that the subject matter of different claims in an application could be used as prior art against each other when not commonly owned, even when a common inventor among different inventive entities was present.<sup>256</sup> Therefore, any interpretation of the amendments to § 103, § 116 and § 120, relating to the presence of a common inventor among distinct inventive entities under § 116 must be limited to common ownership under § 103 and collaboration among joint

<sup>254.</sup> A requirement of collaboration among "joint inventors" under 35 U.S.C. § 116 was confirmed by the Federal Circuit in *Kimberly-Clark Corp. v. Proctor & Gamble Dist. Co., Inc.*, 973 F.2d 911 (Fed. Cir. 1992) ("For persons to be joint inventors under Section 116, there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting.").

<sup>255.</sup> See supra notes 212–17 and accompanying text.

<sup>256.</sup> See 35 U.S.C. § 116, amended by the Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 105, 98 Stat. 3385. As more fully stated in 130 CONG. REC. 10525–29 (Oct. 1, 1984):

Subsection (a) of section 105 [amending the first paragraph of 35 U.S.C. § 116] increases the likelihood that different claims of a patent may have different dates of invention, even though the patent covers only one independent and distinct invention within the meaning of 35 U.S.C. § 121. When necessary, the Patent and Trademark Office or a court may inquire of the patent applicant or owner concerning the inventors and the invention dates for the subject matter of the various claims.

inventors when making claims to priority among the patents or applications under § 120.

#### D. IMPLEMENTATION OF THE PATENT ACT OF 1984

The 1984 Patent Act presented challenges of interpretation and implementation to the Patent Office and the Federal Circuit. For example, the Act did not specify whether double patenting rejections could be applied among patents or patent applications having distinct inventive entities, or whether common ownership was required to make double patenting rejections where there was only overlap among inventive entities of conflicting patents or patent applications. Sections 1 and 2 below will explain how the Patent Office and the Federal Circuit addressed statutory changes affecting overlapping inventorship, common ownership and the judicial doctrine of obviousness-type double patenting.

#### 1. Rules and Guidelines by the Patent Office

Prior to the 1984 Patent Act, the term "double patenting," pursuant to the Commissioner's Notice published on January 31, 1967, only applied to "two or more applications and/or patents having the same inventive entity and should not be applied to situations involving commonly owned cases of different inventive entities."257 The Notice was also clear that "[s]ole and joint inventors cannot constitute a single entity, nor do two or more sets of joint inventors constitute a single entity if any individual is included in either set who is not also included in the other."<sup>258</sup> On December 11, 1984, the Patent Office withdrew the Commissioner's Notice of January 9, 1967 "to the extent that it does not authorize a double patenting rejection where different inventive entities are present."259 On January 5, 1988, following enactment of the 1984 Patent Act, the Official Gazette republished the initial January 8, 1985 guidelines ("Initial Guidelines" or "1985 Initial Guidelines"), 260 stating that it was "reinstituting, in appropriate circumstances, the practice of rejecting claims in commonly owned applications of different inventive entities on the ground of double patenting."261 The Initial Guidelines specified "significant features

<sup>257.</sup> Edward J. Brenner, Commissioner of Patents, *Double Patenting*, 834 OFFICIAL GAZ. PAT. OFF. 1615 (Jan. 31, 1967); *see also supra* notes 224–39 and accompanying text. 258. *Id*.

<sup>259. 1050</sup> OFFICIAL GAZ. U.S. PAT. & TRADEMARK OFF. 317 (Jan. 8, 1985) [hereinafter 1985 Initial Guidelines].

<sup>260. 1086</sup> OFFICIAL GAZ. U.S. PAT. & TRADEMARK OFF. 254 (Jan. 5, 1988) [hereinafter Guidelines Republished].

<sup>261.</sup> Id. at 255.

resulting from" amendments to each of § 103, § 116 and § 120 under the 1984 Patent Act.<sup>262</sup> For example, with respect to amendments to both § 103 and § 120, the Initial Guidelines provided that double patenting rejections could be made regardless of whether the patent applications or patents were commonly owned so long as they had a common inventor, and that terminal disclaimers could not be employed to overcome such a rejection in the absence of common ownership. Specifically, with respect to the "significant features resulting from this amendment to § 103," the Patent Office stated:

- (14) Double patenting rejections may now be made in different applications based on commonly owned patents of different inventive entities and double patenting rejections of the obviousness-type can be overcome by terminal disclaimers.
- (15) A double patenting rejection may also be made in a later filed application where the application/patent on which the rejection is based and the later filed application are not commonly owned as long as one of the inventors is common between the later filed application and the application/patent; such a rejection cannot be overcome by terminal disclaimer in view of the lack of common ownership.<sup>263</sup>

#### With respect to § 120, the Initial Guidelines stated that:

- (4) Double patenting rejections may be applicable, whether or not the applications and patents are commonly owned as long as the applications/patent(s) have at least one inventor in common.
- (5) If the applications and patents are commonly owned, the rejection of the applications on the grounds of double patenting can be overcome by an appropriate terminal disclaimer as long as the identical invention is not being claimed. See *In re Robeson*, 141 USPQ 485 (CCPA 1964), and *In re Kaye*, 141 USPQ 829 (CCPA 1964).
- (6) If the applications and patents are not commonly owned, the double patenting rejection is entered in the later filed application and cannot be overcome by a terminal disclaimer

<sup>262. 1985</sup> Initial Guidelines, *supra* note 259, at 316–19; Guidelines Republished, *supra* note 260, at 246–49.

<sup>263. 1985</sup> Initial Guidelines, *supra* note 259, at 317; Guidelines Republished, *supra* note 260, at 246.

since the ownership of the subject matter being claimed belongs to someone other than the owner of the later application.<sup>264</sup>

However, none of the examples in the Initial Guidelines addressed double patenting rejections where the only basis for the rejection was an assessment of obviousness in the presence of overlapping but distinct inventorship in the absence of common ownership or a claim to priority under § 120. Rather, the only examples provided were based on double patenting rejections of common ownership.<sup>265</sup> This, despite the Initial Guidelines' explicit provision for double patenting rejections based solely on an assessment of obviousness over claims of an issued patent or patent application having a common inventor, and in the absence of any showing of common ownership. The point is that there is no apparent reason for rejecting claims on the basis of obviousness-type double patenting solely because of the presence of a common inventor with a patent or patent application, unless a claim to priority has been made under § 120. Even then, such a rejection should only occur where there is identity of inventorship between the rejected claims and those *claims* of the reference patent or application relied upon to make the rejection. There is no reason to assume that the existence of a common inventor with a patent or another patent application is somehow equivalent to identity of inventorship for double patenting purposes.

#### 2. The Federal Circuit Takes Note

Interestingly, over twenty years later, in *In re Fallaux*, the Federal Circuit noted that the Manual of Patent Examining Procedure allows an obviousness-type double patenting rejection where the only link between a patent and a patent application is a common inventor.<sup>266</sup> But the court was clear that its opinion in this case should not be read as an endorsement of the Patent Office's stance:

Neither party raised or argued the question of whether a patent may be used as a reference for an obviousness-type double patenting rejection where the patent shares only a common inventor with the application, rather than an identical inventive entity or a common assignee. The *Manual of Patent Examination Procedure (MPEP)*, allows such rejection. See § 804 ¶ I.A (8th ed., rev. 7, 2008) ("Double patenting may exist between an issued patent and an application filed by the same inventive

<sup>264. 1985</sup> Initial Guidelines, *supra* note 259, at 319; Guidelines Republished, *supra* note 260, at 248.

<sup>265.</sup> Guidelines Republished, *supra* note 260, at 249.

<sup>266. 564</sup> F.3d 1313, 1315 n.1 (Fed. Cir. 2009).

entity, or by a different inventive entity having a common inventor, and/or by a common assignee/owner."). This opinion should not be read to decide or endorse the PTO's view on this issue.<sup>267</sup>

Nevertheless, in *In re Hubbell*, such a situation recently occurred. <sup>268</sup> In that case, patent application number 10/650,509, entitled "Enzyme-Mediated Modification of Fibrin for Tissue Engineering" ("the '509 application"), was rejected for obviousness-type double patenting over a later filed patent application that issued as U.S. Patent No. 7,601,685 ("the '685 patent"). <sup>269</sup> The '509 application and the '685 patent named distinct inventive entities that shared two common inventors: Jeffrey Hubbell and Jason Schense. <sup>270</sup> The '509 application, on appeal before the Federal Circuit, and the '685 patent were never commonly owned. There was no relation between the '685 patent and the '509 application under § 120. The '685 patent could not act as prior art to the '509 application because the '509 application claimed priority to an earlier-filed patent application that preceded any priority claim by the '685 patent. <sup>271</sup>

The Board of Patent Appeals and Interferences confirmed the Examiner's rejection on the basis that the genus claim in the '509 application was "anticipated" by claims of the issued patent and rejected the appellants' argument that obviousness-type double patenting required common ownership.<sup>272</sup> In support of its decision, the Board recited the portion of the Manual of Patent Examining Procedure at § 804(I)(A) reflecting the initial guidelines first promulgated in 1985.<sup>273</sup> The relevant portion of the MPEP recited by the Board, as quoted in *Hubbell*, states that "[d]ouble patenting may exist between an issued patent and an application filed by the same inventive entity, or by a *different inventive entity having a common inventor*, and/or by a common assignee/owner."<sup>274</sup> The Board also recited "concern over potential harassment of an infringer by multiple assignees asserting essentially the same patented invention," as expressed in earlier decisions by the CCPA and the Federal Circuit.<sup>275</sup> The

<sup>267.</sup> Id.

<sup>268. 709</sup> F.3d 1140 (Fed. Cir. 2013).

<sup>269.</sup> Id. at 1142.

<sup>270.</sup> Id. at 1143.

<sup>271.</sup> *Id*.

<sup>272.</sup> Id. at 1144.

<sup>273.</sup> Id.

<sup>274.</sup> *Id.* (emphasis added by the court in *Hubbell*) (quoting MPEP, *supra* note 19, § 804(I)(A)).

<sup>275.</sup> Id. at 1145.

appellants conceded "anticipation," despite the '685 patent's later priority date than that of the appealed application,<sup>276</sup> and relied exclusively on the argument that obviousness-type double patenting requires common ownership, which, as stated above, never existed between the '509 application and the '685 patent.<sup>277</sup>

The Federal Circuit affirmed the Board's decision, taking judicial notice of the statement in the MPEP that only a common inventor among different entities is required to establish an obviousness-type double patenting rejection.<sup>278</sup> The Federal Circuit also invoked a policy of avoiding "multiple assignee harassment."<sup>279</sup>

Judge Newman, in her dissent recalled the 1984 Patent Act where:

The legislative record explained that when the ownership is the same, whether or not the inventorship is different, rejection on the ground of double patenting can be overcome "by disclaiming the terminal portion of the later patent, thereby eliminating the problem of extending patent life." The panel majority misapplies § 103(c)(1), for the statute is directed to situations of common ownership, it does not provide that when there is not common ownership there can be no patent.<sup>280</sup>

<sup>276.</sup> *Id.* ("On appeal, Hubbell does not dispute that Claim 1 of the '685 patent anticipates representative Claim 18 of the '509 application.").

<sup>277.</sup> *Id.* ("Instead, Hubbell argues that obviousness-type double patenting should not apply where, as here, an application and a conflicting patent share common inventors but do not have *identical* inventive entities, were never commonly owned, and are not subject to a joint research agreement." (emphasis in original)).

<sup>278.</sup> *Id.* at 1146. As stated by the Federal Circuit:

First, as noted, the MPEP provides that obviousness-type double patenting may exist between an issued patent and an application filed by "the same inventive entity, or by a different inventive entity having a common inventor, and/or by a common assignee/owner." MPEP §804(I)(A) (emphasis added). Although the MPEP is not binding on this court, we can take judicial notice of this provision to the extent it does not conflict with statutory text.

Id. (citations omitted) (emphasis in original).

<sup>279.</sup> *Id.* at 1147–48 ("Because it is undisputed that an infringer of the '685 Patent would also infringe the '509 application, the multiple assignee harassment justification adopted in *Van Ornum* and reaffirmed in *Fallaux* applies here, despite the lack of common ownership."). The court made no mention of how "multiple assignee harassment" is always possible with any issued patent because the claimed subject matter of any issued patent may be dominated by any number of other, earlier-filed patents generically embracing a later-patented improvement, and since any patented invention may be followed by a subsequently-patented improvement.

<sup>280.</sup> Id. at 1153 (Newman J., dissenting) (quoting the 1984 Patent Act).

Judge Newman is correct that § 103(c)(1) is directed to situations of common ownership. She also stated that, "[i]f there indeed is obviousness-type double patenting, then a terminal disclaimer is necessarily available." However, the Guidelines for implementing the amendments to § 103 under the 1984 Patent Act clearly state that any

double patenting rejection *may also* be made in a later filed application where the application/patent on which the rejection is based and the later filed application are not commonly owned as long as one of the inventors is common between the later filed application and the application/patent; such a rejection cannot be overcome by terminal disclaimer in view of the lack of common ownership.<sup>282</sup>

The distinction between the facts of *Hubbell* and the provision under the Guidelines to implement § 103(c)(1) is that the Guidelines state that the double patenting rejection may be made in a "*later* filed application" when not commonly owned.<sup>283</sup> The Guidelines do not, however, generally restrict obviousness-type double patenting to common ownership, and do not provide for curing of obviousness-type double patenting in all cases by filing a terminal disclaimer.

Moreover, the larger question is not whether obviousness-type double patenting is applicable in instances of multiple inventive entities and an absence of common ownership, but rather whether it is appropriate in the absence of common ownership to reject claims of one patent application over those of a patent (or another application) for obviousness-type double patenting where there is no claim of priority under 35 U.S.C. § 120 to connect them. Without language in the Guidelines permitting such double patenting rejections where there is a common inventor, there would be no justification for double patenting rejections made by the examiner, approved by the Board and affirmed by the Federal Circuit in Hubbell. Yet, the language in the Guidelines that provides for double patenting where the *only* basis for making a double patenting rejection is an overlap of inventive entities stems from the amendment to § 120 permitting a priority claim to a co-pending application to another where the inventive entities are distinct but share at least one inventor in common. Under the facts of *Hubbell* there is no such claim to priority under § 120, and the Guidelines do not exemplify a situation where there is a mere overlap of inventorship and a lack of common ownership to

<sup>281.</sup> *Id* 

<sup>282. 1985</sup> Initial Guidelines, *supra* note 259, at 319 (emphasis added).

<sup>283.</sup> *Id.* 

thereby confirm or deny a requirement of such a claim to priority in making an obviousness-type double patenting rejection where there is only overlap of inventorship.

In *Hubbell*, the issued patent could not constitute statutory prior art relative to the claimed subject matter of the '508 application, since the '508 application had an earlier priority date. From this point of view, and if the overlap of inventorship were to be ignored as a threshold for double patenting, Judge Newman's conclusion would be correct. Namely, that a proper solution to the situation would be, as stated by Judge Newman, "on the merits of the invention, or through the interference or derivation procedures, or other standard protocols as may apply in the particular situation," and not for "double patenting." In other words, the failure of the Patent Office to properly recognize statutory prior art before allowing a patent application to issue should not inure to the detriment of the first patent applicant to obtain a filing date nor, for that matter, to the benefit of the patentee who obtained a patent erroneously.

### V. IMPLICATIONS FOR OBVIOUSNESS-TYPE DOUBLE PATENTING

Any change in the severability of inventive contributions by inventors to joint inventions under the AIA will likely conflict with, or at least affect obviousness-type double patenting, at least as this judicially based doctrine is currently understood. Moreover, it is likely to compound issues raised by recent cases addressing obviousness-type double patenting under the twenty-year limit to patent term under the URAA. An alternative was proposed under the Innovation Act, both introduced under both the 113th Congress and the 114th Congress, <sup>285</sup> which would have based qualification for obviousness-type double patenting not on relative issue dates or expiration dates, but on relative filing dates among competing subject matters claimed in respective patents and patent applications. Section A of this Part will extend the logic of severability to the AIA and obviousnesstype double patenting. Section B will discuss recent developments in obviousness-type double patenting in view of overlapping but distinct inventive entities, or common ownership, and Section C will interpret the proposed codification of obviousness-type double patenting from the historical viewpoint of severability and common ownership.

<sup>284.</sup> In re Hubbell, 709 F.3d 1140, 1151 (Newman, J., dissenting).

<sup>285.</sup> Innovation Act, H.R. 9, 114th Cong. (2015).

### A. EXTENDING THE LOGIC OF SEVERABILITY TO THE AIA AND OBVIOUSNESS-TYPE DOUBLE PATENTING

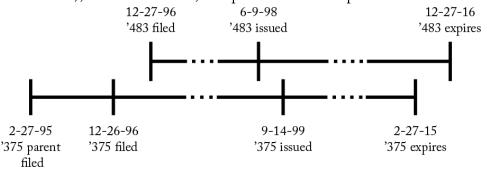
Permitting obviousness-type double patenting rejections among distinct inventive entities on the sole basis of a common inventor would seem to, superficially, suggest that the contributions of an inventor are not severable from the invention of an inventive entity to which he belongs. However, as we have seen, even the Guidelines provided by the Patent Office to implement the amendments to § 103, § 116 and § 120 of the 1984 Patent Act make clear that the work of multiple inventive entities could be used against each other in the absence of common ownership, regardless of any overlap between them. Contrary to the sometimesasserted premise that an inventor's own work cannot be used against him, jurisprudence in this country has, in fact, consistently recognized a distinction between the work of an individual and the work of a collective inventive entity of which he is a part. Therefore, despite statements in the Guidelines to the contrary, obviousness-type double patenting should not be based on the existence of a common overlapping inventor among distinct inventive entities in the absence of common ownership.

Nothing in the AIA contradicts the long-time judicially recognized severability of the work of an individual from that of an inventive entity of which he is a part. Therefore, the only conclusion that should be drawn from the language of AIA 35 U.S.C. § 102(b)(1) and § 102(b)(2) is that an exception under the AIA to prior art must be the work of the inventor, where the claimed subject matter is the work of the inventor alone, or the work of the joint inventive entity where the claimed subject matter is the work of that joint inventive entity.

Similarly, obviousness-type double patenting is still judicially based, and there is no discussion in the AIA or its legislative history of how this change in language is to affect the law of double patenting. Whatever the law regarding a sufficient basis for double patenting with nothing more than naming of a common inventor, it holds as well under the AIA only as well as it did prior to it. Regardless, § 120 is at the root of the provision enabling a common inventor to be the basis for an obviousness-type double patenting rejection, and because the phrase under § 120 of the AIA specifying "an inventor or joint inventor," is the same as that provided in § 102(b), it should be treated the same way. Therefore, just as double patenting based solely on overlap of inventorship should be considered improper prior to the AIA, so should double patenting be considered based on the same overlap under the AIA.

# B. RECENT DEVELOPMENTS IN OBVIOUSNESS-TYPE DOUBLE PATENTING IN VIEW OF OVERLAPPING INVENTIVE ENTITIES AND COMMON OWNERSHIP

Recently, the Federal Circuit, in *Gilead Sciences, Inc. v. Natco Pharma Ltd.*, held that a later-issued patent which is nevertheless the first to expire could be used to invalidate a previously issued patent having a later expiration date, despite the invalidating patent having the same inventors and ownership.<sup>286</sup> The order of filing and issue of the prior art patent, U.S. 5,952,375 (the '375 Patent), and the patent at issue, U.S. 5,763,483 (the '483 Patent), are shown below, as represented in the opinion:<sup>287</sup>



The court rejected the plaintiff's argument and the District Court's holding that "a later-issued but earlier-expiring patent' cannot 'serve as a double-patenting reference against an earlier-issued but later-expiring patent." As stated by the Federal Circuit, although "looking to patent issue dates had previously served as a reliable stand-in for the date that really mattered—patent expiration," where patents are subject to the twenty year term prescribed by the URAA "it is the comparison of . . . patent expiration dates that should control, not merely the issuance dates." To base the availability of double patenting on the issue date would, according to the Federal Circuit, enable inventors to "routinely orchestrate patent term extensions by (1) filing serial applications on obvious modifications of an invention, (2) claiming priority to different applications in each, and then (3) arranging for the application claiming the latest filing date to issue first,"<sup>290</sup> thereby barring double patenting

<sup>286. 753</sup> F.3d 1208, 1210 (Fed. Cir. 2014).

<sup>287.</sup> Id. at 1210.

<sup>288.</sup> *Id.* (quoting Gilead Scis., Inc. v. Natco Pharma Ltd., 2012 U.S. Dist. LEXIS 180717 (D.N.J., Dec. 21, 2012)).

<sup>289.</sup> Id. at 1556.

<sup>290.</sup> Id. at 1556-57.

rejections over any but the patent application that is the last to expire and effectively extending the monopoly of patent protection over the invention. According to the court, if the District Court's holding stood, intentional delay would transform the term of the later-filed patent application from an improper extension of monopoly into an enforceable term that could not be attacked for double patenting because the first-filed patent application issued as a patent only after issuance of the patent based on the later-filed application.

In his dissent Chief Judge Rader cautioned against the Federal Circuit's "new rule," stating that "a primary motivation behind the doctrine—preventing the effective extension of patent term—is largely no longer applicable," and that all other policy concerns, such as preventing multiple infringement suits by different assignees, do not justify "an extension of double patenting." In the case before the court, Judge Rader explained that the "policy concern regarding subsequent extensions of patent term" was not at issue because the subsequently issued patent on which double patenting was based "did *not* extend the term of the earlier-issuing '483 Patent," and harassment by multiple assignees was not an issue because the '375 Patent was subject to a terminal disclaimer. As stated by Judge Rader, "if the '375 patent never issued, Gilead would certainly be entitled to the '483 patent's 2016 expiration date."

Judge Rader is correct that the '375 Patent, as the first-filed but later patent to issue, did not extend the term of the earlier-issued '483 Patent, since both patents would normally expire twenty years after their respective filing dates. Judge Rader is also correct that the '375 Patent, being subject to a terminal disclaimer over the '483 Patent, avoided the risk of harassment by multiple assignees. However, Judge Rader's reference to Gilead's entitlement to the full term of the '483 Patent had the '375 Patent never issued touches upon a much more fundamental concern not at issue in *Gilead*. If the same patents (or patent and application) lacked a *common inventor or common ownership*, no obviousness-type double patenting issue could arise against either patent, <sup>297</sup> entitling the owners of the respective patents to their full twenty

<sup>291.</sup> *Id.* at 1559 (Rader, J., dissenting).

<sup>292.</sup> Id.

<sup>293.</sup> Id. In this case, a terminal disclaimer had been filed in the '375 Patent.

<sup>294.</sup> Id. (Rader, J., dissenting).

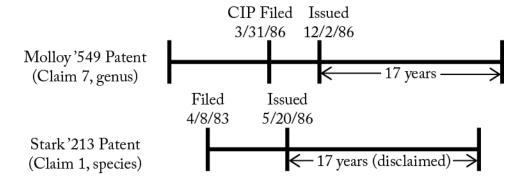
<sup>295.</sup> Id.

<sup>296.</sup> Id.

<sup>297.</sup> The '483 Patent was filed last and, therefore, would not constitute statutory "prior art" against the '375 Patent.

year terms (assuming the claimed subject matter of the later-filed application was patentably distinct over the teachings of the earlier).

In this respect, the result reflects the reasoning of Eli Lilly & Co. v. Barr Laboratory, decided by the Federal Circuit in 2001.<sup>298</sup> There, species claim 1 of U.S. 4,590,213 to Stark (the Stark '213 Patent), filed several years after a commonly-owned, but otherwise unrelated patent, U.S. 4,626,549 to Molloy (the Molloy '549 Patent),<sup>299</sup> was relied upon to invalidate genus claim 7 of the earlier-filed Molloy '549 Patent for obviousness-type double patenting.<sup>300</sup> In Lilly, however, filing of a terminal disclaimer in the Stark '213 Patent was not an option.<sup>301</sup> According to the court, "a patent owner cannot avoid double patenting by disclaiming an earlier patent."302 Further, because the entire term of the earlier-issuing Stark '213 Patent had been disclaimed by Lilly, the court would not allow Lilly to terminally disclaim the period of the Molloy '549 Patent extending beyond when the Stark '213 Patent would have expired had it not been disclaimed.303 The sequence of events of the two patents, issued as the Stark '213 Patent and the Molloy '549 Patent, both owned by Lilly, is represented below:



The Federal Circuit held that the claimed subject matter of the Molloy '549 Patent (genus claim 7) was not patentably distinct relative to the

<sup>298. 251</sup> F.3d 955 (Fed. Cir. 2001).

<sup>299.</sup> *Id.* at 958–59. The Molloy '549 Patent was a continuation-in-part application (CIP) with Serial No. 06/846,448, filed on March 31, 1986, claiming priority to Serial No. 05/432,379, filed on Jan. 10, 1974. The Stark '213 Patent was based on Serial No. 06/483,087, filed April 8, 1983.

<sup>300.</sup> Id.

<sup>301.</sup> Id. at 967, n.5.

<sup>302.</sup> Id.

<sup>303.</sup> Id.

claimed subject matter of the Stark '213 Patent (species claim 1).<sup>304</sup> Therefore the claim at issue in the Molloy '549 Patent (genus claim 7) was invalid.<sup>305</sup>

Beyond the obviousness of claimed subject matter over that of another patent not considered statutory prior art was the irony that, as in *Gilead*, had the patents *not* had a common inventor or been *commonly owned*,<sup>306</sup> the subject matter of the both patents might well have each been patentable in their own right. Specifically, the claimed subject matter of the Molloy '549 Patent was found to be not patentably distinct because the Molloy '549 patent claim at issue, claim 7, had a genus relationship to the species of the Stark '213 Patent claim 1.<sup>307</sup> As stated by the court: "A patentable distinction does not lie when a later claim is anticipated by an earlier one. That is, a later claim that fails to provide novel invention over an earlier claim is not patentably distinct from the earlier claim."<sup>308</sup>

Consistent with the majority's reasoning in *Gilead*, the fact that the subject matter of claim 1 of the Stark '213 Patent might be patentably distinct as a novel, non-obvious species of the genus of claim 7 of the

304. *Id.* at 971. The court stated:

The only other difference between claim 1 of the '213 Patent and claim 7 of the '549 Patent is that the former is directed to humans while the latter is directed to animals. Humans are a species of the animal genus. Our case law firmly establishes that a later genus claim limitation is anticipated by, and therefore not patentably distinct from, an earlier species claim.

Id.

305. *Id.* at 972 ("[W]e hold that... claim 7 is invalid for obviousness-type double patenting in view of claim 1 of the '213 Patent....").

306. There was no overlap of inventorship.

307. *Id.* at 969. As stated by the court:

Therefore, the only difference between claim 1 of the '213 Patent and claim 7 of the '549 Patent is that the former addresses a method of treating anxiety in humans with fluoxetine hydrochloride while the latter claims a method of using fluoxetine hydrochloride to block serotonin uptake in animals.

. . .

... Therefore, the limitation of claim 7 of the '549 Patent directed to blocking serotonin uptake by use of fluoxetine hydrochloride is an inherent characteristic of the administration of fluoxetine hydrochloride for any purpose, including the treatment of anxiety.

• • • •

... Humans are a species of the animal genus. Our case law firmly establishes that a later genus claim limitation is anticipated by, and therefore not patentably distinct from, an earlier species claim.

Id. at 969-971.

308. Id. at 970.

Molloy '549 patent, under a "two-way"<sup>309</sup> obviousness-type double patenting rejection, was immaterial because the PTO was not "solely responsible for the delay in causing the second-filed application to issue prior to the first."<sup>310</sup>

As noted by Robert Armitage in a white paper accompanying a United States House of Representatives hearing regarding proposed legislation under the AIA to codify obviousness-type double patenting,<sup>311</sup> following Lilly, "double patenting would now infect two patents even if the two patented inventions were patentably distinct because the non-obviousness test operated, i.e., one of the two patented inventions was prior art to the other."<sup>312</sup> In particular, the court in Lilly held that a "two way" test for obviousness, normally applied in situations where the later-filed application issues first, would not apply unless the PTO was solely responsible for the delay in causing the second-filed application to issue prior to the first. This holding potentially invalidates patents for obviousness-type double patenting that might well have been considered separately patentable if they were separately assigned and had distinct (and non-overlapping) inventive entities.

In essence, the holding by the court in *Lilly* raised the prospect of requiring every pair of commonly owned patents to be analyzed for possible double patenting despite the order of invention.<sup>313</sup> The holding has this result because, according to Armitage, the "ancient constraint on double patenting as applied to a later-issuing basic invention after an

<sup>309.</sup> A "two-way" obviousness analysis only applies to double patenting rejections where the claims of the reference patent were filed later than the pending Patent Office claims. It is also necessary that "the applicant could not have filed the claims in a single application *and* there is administrative delay." Under a two-way analysis, subject matter of the affected claims of the patent and the patent application must each be obvious over the other in order to maintain the obvious-type double patenting rejection. *See* MPEP § 804 II.B.1(b) (9th ed., Mar. 2014).

<sup>310.</sup> *Id.* at 968 n.7 (quoting *In re* Berg, 140 F.3d 1428, 1437). The court stated: The two-way test is only appropriate in the unusual circumstance where, *inter alia*, the United States Patent and Trademark Office ("PTO") is "*solely* responsible for the delay in causing the second-filed application to issue prior to the first."

Id.

<sup>311.</sup> Everything You Ever Wanted to Know About Double Patenting... But Never Realized That You Needed to Ask (From the Makers of Prozac), The "Innovation Act": Hearing Before the H. Comm. on the Judiciary, 113th Cong. 170, 202 (Oct. 29, 2013) [hereinafter Armitage II] (statement of Robert A. Armitage, Former General Counsel, Eli Lilly & Co.).

<sup>312.</sup> Id. at 196.

<sup>313.</sup> Id. at 196-97.

earlier-issuing improvement patent has now morphed into a question of whether a two-way test can be invoked,"<sup>314</sup> and that a "two-way" test will, following *Lilly*, *only* be applied where the PTO has *sole* responsibility for delay that results in later issuance of a patent based on an earlier-filed patent application.<sup>315</sup>

A significant difference between Lilly and Gilead with respect to obviousness-type double patenting is that the patent applications in *Lilly* were filed prior to enactment of the twenty year term prescribed by the URAA. Nevertheless, both claim 7 of the Molloy '549 Patent in *Lilly* and the claims of the '375 Patent in Gilead (had the '375 Patent been at issue in Gilead), shared the same problem, wherein a patent application is subject to invalidation by a later-filed application for obviousness-type double patenting because of common ownership or because of overlapping inventorship. As discussed above, the '483 Patent of Gilead faced the additional threat of invalidation by later issuance of claims because the later-issued patent would also be the first patent to expire, again, only because the patents shared an inventor, or were commonly owned. However, while the validity of the '375 patent was not at issue in *Gilead*, earlier issuance of the later-filed '475 patent rendered the '375 patent susceptible to obviousness-type double patenting as well.<sup>316</sup> Therefore, both Lilly and Gilead force patent owners to consider double patenting in all pairs of commonly-owned patents, or patents sharing a common inventor, regardless of the sequence of invention (if pre-AIA), filing (if post-AIA), issuance (both pre- and post-AIA), or expiration (post-URAA).

In her dissent from a refusal by the Federal Circuit to reconsider *Lilly* (en banc), Judge Newman stated that claim 7 of the '549 Patent should not have been held invalid for double patenting because the rejection was based on the issued claim of a patent application filed *after* the filing date

<sup>314.</sup> Id. at 197.

<sup>315.</sup> See Armitage II, supra note 311; see also MPEP § 804 II.B.1(b) (9th ed., Mar. 2014), which states, in part:

If the patent is the later filed application, the question of whether the time wise extension of the right to exclude granted by a patent is justified or unjustified must be addressed. A two-way test is to be applied only when the applicant could not have filed the claims in a single application *and* there is administrative delay.

<sup>(</sup>Emphasis added).

<sup>316.</sup> See Gilead, 753 F.3d at 1215 ("[I]t is the comparison of . . . patent expiration dates that should control, not merely the issuance dates.") (emphasis added).

associated with the '549 Patent.<sup>317</sup> In such a case, according to Judge Newman, double patenting would only apply where the application could have included all of the involved claims of both patents in the same application.<sup>318</sup> If all of the claims could have been prosecuted in a single application, a one-way test of patentable distinction of the claims of the later-issued patent over those of the earlier-issued patent would apply. If not, then the claimed invention of each patent application would have to be patentably indistinct over the other in order to maintain the obviousness-type double patenting rejection of the claims of the patent that was last to issue.<sup>319</sup>

Mr. Armitage made a similar statement in his white paper:

The facts of *Berg* might have led the U.S. Patent and Trademark Office and the Federal Circuit to immediately and decisively apply the rule in *Schneller* that states voluntarily divided inventions must be independent and distinct to escape double patenting, unless the "safe harbor" of *Vogel* applies—the laterissuing patent will not claim any obvious variation of any claim in the earlier-issuing patent. The *Schneller*-like character of this appeal could not have been clearer. Had it done so, and nothing more, the *Berg* appeal would have been as unremarkable as *Schneller* itself.<sup>520</sup>

More significantly for our purposes, and as also pointed out by Mr. Armitage, the court in *Berg* made an "appallingly inaccurate characterization of the origin and scope of the ['two-way'] test"<sup>321</sup> by stating:

<sup>317.</sup> Eli Lilly & Co. v. Barr Lab., 251 F.3d 955, 974 (Newman, J., dissenting) ("The 1974 invention cannot be invalidated based on what was filed and claimed in the 1983 application . . . .").

<sup>318.</sup> Id. at 975 (Newman, J., dissenting) (citing In re Berg, 140 F.3d 1428 (Fed. Cir. 1998)). Judge Newman stated:

The Federal Circuit then held that Berg was not entitled to the benefits of the two-way test because he could have included all of the claims in a single application. Neither the facts of Berg nor the law as developed therein applies to the patents here under consideration.

Id.

<sup>319.</sup> *Id.* (Newman, J., dissenting).

<sup>320.</sup> Armitage II, *supra* note 311, at 193 (citing *In re* Schneller, 397 F.2d 350 (C.C.P.A. 1967), *In re* Vogel, 422 F.2d 438 (C.C.P.A. 1969), and *In re* Berg, 140 F.3d 1428 (Fed. Cir. 1998)). The "safe harbor" of *Vogel* was that "no double patenting can exist where non-obviousness for the later issuing patent has been established given that the claims of the earlier-issuing patent were treated as the equivalent of prior art." *Id.* at 179.

<sup>321.</sup> Id.

Since *Braat*, many patent applicants facing an obviousness-type double patenting rejection under the one-way test have argued that they actually are entitled to the two-way test. The two-way test, however, is a narrow exception to the general rule of the one-way test. Indeed, the primary basis for the *Braat* decision—different inventive entities—was removed by the Patent Law Amendments Act of 1984 (the "1984 Act"). Nevertheless, the notion survives that in certain unusual circumstances, the applicant should receive the benefit of the two-way test. The questions then is: when?<sup>322</sup>

In fact, according to Mr. Armitage, *Braat* was a "perversion" of earlier jurisprudence addressing double patenting in that the "two-way" test established by *Braat* caused the validity of a patent having an earlier effective filing date to hinge upon the patentable distinction over the claimed subject matter of a later-filed, but first-to-issue patent.<sup>323</sup> While the court in *Braat* did limit the "two-way" test to instances where later-issuance of the first-filed patent was not attributable to the patent applicant,<sup>324</sup> to draw from *Berg* the conclusion that "two-way" distinctness was *only* appropriate where the PTO was *solely* responsible for delay in the issuance of claims in the first filed patent application, as done by the court in *Lilly* was, according to Mr. Armitage, improper:

In other words the "rate of prosecution" issue would now [after *Lilly*] *preclude* application of a "two-way test" in all but the most narrow of circumstances. The entire line of cases from *Ohio Brass* onwards that looked to the relative dates of invention to invoke what the *Braat* court called the "two-way test" would now be ignored.<sup>325</sup>

The court in *Gilead* adopted the reasoning of the court in *Lilly* that embraced obviousness-type double patenting rejections of inventions

<sup>322.</sup> *Id.* (quoting *Berg*, 140 F.3d at 1432 (citing *In re Braat*, 937 F.2d 589 (Fed. Cir. 1991)).

<sup>323.</sup> Id. at 189. Armitage stated:

Thus, the "two-way" test perverts the prior law of *Ohio Brass, Stanley, Borah* and other decisions that focus on the unfairness of calling a second-issued patent "double patenting" when the patent is for an original or basic discovery that was later the subject of an improvement, but the improvement earlier patented. Testing the improvement for "non-obviousness" should not be necessary to decide whether the basic patent is "double patenting."

Id

<sup>324.</sup> Id. at 190.

<sup>325.</sup> *Id.* at 196 (citing Thomson-Houston Electric Co. v. Ohio Brass Co., 80 F. 712 (6th Cir. 1897)).

which, but for overlapping inventorship or common ownership, may have been separately patentable, and applied that reasoning to patents limited to a twenty year term by the URAA.<sup>326</sup> By focusing on the expiration date rather than the issue date, the court in Gilead accounted for the underlying principle of preventing extension of patent monopoly, but left in place the "perversion" in Braat of potentially calling into question the validity of patents on the basis of earlier-issued patents claiming subject matter developed well after the effective filing date of the patents at issue, and without even the option for applying a "two-way" test for patentable distinction unless the PTO were solely responsible for the delay. Similar to the result in Lilly, all pairs of commonly owned patents, as well as patents having common inventorship or a common inventor, must be tested for double patenting. This testing is required regardless of their respective filing dates, issue dates, or the claimed subject matter of the respective patent claims being the consequence of the work of distinct inventive entities.327

C. PROPOSED CODIFICATION OF OBVIOUSNESS-TYPE DOUBLE PATENTING UNDER THE AIA AND ITS INTERPRETATION FROM THE HISTORICAL VIEWPOINT OF SEVERABILITY AND COMMON OWNERSHIP

Congress has proposed legislation that would codify obvious-type double patenting under 35 U.S.C. § 106.<sup>328</sup> Although removed from subsequent versions of the proposed Act, § 106 is worth addressing because it would have had several benefits. For example, under proposed § 106, obviousness-type double patenting involving patents subject to the AIA would be limited to rejection of claims of a "second patent" over "first patent" claims having an earlier "effective filing date," as defined by the AIA. The "first patent" must "name the same individual or individuals as the inventor"<sup>329</sup> as the "second patent," or the first patent must qualify as "prior art" under § 102(a)(2) "if an exception under section 102(b)(2) were

<sup>326.</sup> Gilead, 753 F.3d at 1215 ("In the URAA, Congress clearly limited the one period of exclusivity an inventor can obtain for each of his inventions to twenty years from the filing date of the earliest application to which inventor claims priority—with some limited exceptions.").

<sup>327.</sup> *Id.* at 1558 ("Permitting any earlier expiring patent to serve as a double patenting reference for a patent subject to the URAA guarantees a stable benchmark that preserves the public's right to use the invention (and its obvious variants) that are claimed in a patent when that patent expires.").

<sup>328.</sup> Innovation Act, H.R. 9, 114th Cong. (as introduced, Feb. 5 2015).

<sup>329.</sup> *Id*.

deemed to be inapplicable."<sup>330</sup> Also, the owner of the second patent must not have disclaimed the right to enforce the second patent "independently from, and beyond the statutory term of, the first patent."<sup>331</sup> In essence, as stated in a report<sup>332</sup> by the House Committee on the Judiciary introducing the Innovation Act, proposed § 106 would restore and codify the following three "fundamental principles" of double patenting:

- 1. Prohibition of double patenting of an "inventor's patents if the same patents could have validly issued to separate inventors";
- 2. The inventors' "right to rely on the order of invention (i.e., pre-AIA priority), rather than the order of issuance, to determine if the later-issued patent should be subject to a double patenting limit"; and
- 3. Limiting "double patenting" to "cases involving two or more applications and/or patents of the *same inventive entity*," as stated in a notice dated January 9, 1967, and published in the

330. *Id.* 

331. *Id.* The relevant portions of proposed section 106 would read as follows: § 106. Prior art in cases of double patenting

A claimed invention of a patent issued under section 151 (referred to as the "first patent") that is not prior art to a claimed invention of another patent (referred to as the "second patent") shall be considered prior art to the claimed invention of the second patent for the purpose of determining the nonobviousness of the claimed invention of the second patent under section 103 if—

- (1) the claimed invention of the first patent was effectively filed under section 102(d) on or before the effective filing date of the claimed invention of the second patent;
- (2) either—
  - (A) the first patent and second patent name the same individual or individuals as the inventor; or
  - (B) the claimed invention of the first patent would constitute prior art to the claimed invention of the second patent under section 102(a)(2) if an exception under section 102(b)(2) were deemed to be inapplicable and the claimed invention of the first patent was, or were deemed to be, effectively filed under section 102(d) before the effective filing date of the claimed invention of the second patent; and
- (3) the patentee of the second patent has not disclaimed the rights to enforce the second patent independently from, and beyond the statutory term of, the first patent.
- 332. H.R. REP. NO. 113-279 (2013) (Innovation Act Report together with Dissenting Views and Additional View).

January 31, 1967 edition of the Official Gazette of the United States Patent Office.<sup>333</sup>

By limiting obviousness-type double patenting to rejections over patent claims having the same or an earlier-effective filing date and naming "the same inventor" or "the same individual or individuals as the inventor," the problem of invalidating later-issued patents in view of patent claims having later-effective filing dates, such as occurred in *Lilly*, would be overcome. Also, patent claims would not be subject to invalidation under proposed § 106 simply by virtue of common ownership, since the affected claims of the second patent would be able to avoid double patenting if patentably distinct, or a terminal disclaimer would be available if the claims of the second patent were not patentably distinct. Patentable distinction would not depend upon the order of issuance, so that there would be no need to call on a test for "two-way" distinctness.

The advantages of the proposed statute are, moreover, all possible because, as asserted in the House Report, § 106 would exclude double patenting rejections where rejection based on statutory "prior art" over the same patent would be available.<sup>334</sup> The criteria for statutory obviousnesstype double patenting under proposed § 106 would hinge upon the alternatives of: (1) qualifying under § 106(2)(A) as "prior art" because of identical inventive entities, consistent with double patenting as it existed prior to the 1984 Act, or (2) qualifying under § 106(2)(B) as § 102(a)(2) prior art if the exceptions under § 102(b)(2) were "deemed to be inapplicable." The two alternatives lead to an anomaly if the exception under § 102(b)(2) is not also based on the work of an identical "inventive entity." Specifically, if qualification as "prior art" under § 106(2)(B) was contingent upon inapplicability under § 102(b)(2) pursuant to disclosure of "subject matter" that is the work of an "individual or joint inventor" rather than the work of the inventive entity of the claimed subject matter at issue then, effectively, § 106 would be supporting two standards for the term "inventor." The first standard, under § 106(2)(A), would be the "inventor" as an identical "inventorship entity" consistent with the Notice in the 1967 Patent Office Gazette. The second standard of "inventor," incorporated under § 106(2)(B) by referencing § 102(b)(2), would disqualify otherwise statutory "prior art" on the basis of overlap in inventorship entities, where an individual's earlier published work could not be relied upon to reject claimed subject matter naming an inventive

<sup>333.</sup> Id. at 36 (emphasis added).

<sup>334.</sup> Id. at 67.

entity of which he was a member. The two meanings of "inventor" (or "inventorship entity") would, therefore, also give two distinct meanings to "prior art." Under § 106(2)(A), "prior art" would depend upon "an identical inventive entity," while, under § 106(2)(B), which incorporates § 102(a)(2), "prior art" would depend upon the existence of a common named inventor, thereby broadening the art available for double patenting purposes beyond patents that have an identical inventive entity or are commonly owned. This incongruity is inconsistent with the stated goal of proposed § 106 of restoring double patenting to the threshold that existed prior to codification by the 1984 Patent Act of the possibility of multiple inventorship entities within a single patent.

Such a discrepancy within proposed § 106 is also unnecessary. If the exception to "prior art" under § 102(b)(2)(A) and (B) were limited to disclosures of subject matter "obtained directly or indirectly from the inventor or a joint inventor" that were the work of the *inventorship entity* named in the patent application at issue, rather than merely the work of the *inventor* or *joint inventor* alone, then the subparagraphs of proposed § 106 would be consistent with each other. Proposed § 106 and enacted § 102 of the AIA also would be consistent with the meaning of the term "inventorship entity" that has existed throughout the course of United States patent law.

#### VI. CONCLUSION

The independent work of individuals has always been considered severable from that of inventive entities of which they are a part. While the AIA defines for the first time in a United States patent statute the meaning of several well-worn terms, such as "inventor," "joint inventor" and "prior art," nothing in the Act or its legislative history mandates that disclosures of the work of an individual "inventor" be disqualified from consideration as "prior art" to an invention claimed by "joint inventors" of which the individual is one. Failure to recognize a distinction between disclosure by a joint inventor of the individual's own work and disclosure of the work of the joint inventive entity when qualifying exceptions to "prior art" under the AIA would broaden the practical significance of membership in a joint inventive entity far beyond its historical limits. Distinguishing the work of individuals from contributions they make as joint inventors, on the other hand, is not only consistent with the historical precedent, it is consistent with the literal language of the new Act and with proposed legislation that would simplify the much-confused judicial doctrine of obviousness-type double patenting.