

How (Not) to Discourage the Unscrupulous Copyist

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ABSTRACT

This article explores how the U.S. and Japanese courts implement the doctrine of equivalence when determining patent infringement. The doctrine of equivalence is a balance of, on one hand, the public's interest to know the metes and bounds of the patent; and on the other hand, the private interest of the patentee to be granted a sufficient scope for the granted patent. After comparing and contrasting the implementation of the doctrine in Japan and the U.S., I propose a new method that places the burden on the patent practitioner, *before* infringement proceedings begin, to determine the proper scope of the patent.

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I. INTRODUCTION

The textual authority for U.S. patent law is derived from Congress's power "[t]o promote the progress of science and [the] useful arts, . . ."¹ To further this, Congress codified a standard requiring a patentee "to particularly point out and distinctly claim[] the subject matter which the applicant regards as his invention."² In other words, Congress requires the patentee to set forth the metes and bounds of the claimed invention. This has the valuable effect of placing the public on notice of the contents of the patent. This requirement has, however, turned out to be difficult to apply because language is an imprecise vehicle to describe technical concepts.³ To remedy this the U.S. courts—and

¹ U.S. CONST. art. I, § 8.

² 35 U.S.C. § 112 (2006).

³ See Ray D. Weston, *A Comparative Analysis of the Doctrine of Equivalents: Can European Approaches Solve an American Dilemma*, 39 IDEA 35, 40 (1998).

judicial systems around the world—have developed a so-called doctrine of equivalents (“the doctrine”) allowing a patentee to expand, or limit, the patent’s scope.

In general, if literal infringement cannot be proven then the patentee may prove infringement under the doctrine.⁴ The doctrine balances two competing interests. On one hand, the patent system should grant the patentee adequate protection in exchange for public disclosure. On the other hand, the patent system must provide the public with fair notice of the invention.⁵ The doctrine was created to protect the patentee from the “unscrupulous copyist”⁶ who, in an effort to use the public disclosure to his advantage, merely makes an unimportant and insubstantial change to the claimed invention.

The main question is: how much protection should the government grant the patentee to defend the “unscrupulous copyist”? This article discusses how the courts of the United States and Japan attempt to deal with the public and private interest in this context, highlighting the similarities and the differences. To conclude, a proposal of the doctrine is set forth to adequately serve the interest of both the patentee and the general public.

II. THE UNITED STATES AND THE DOCTRINE OF EQUIVALENTS

The United States recognized the need to protect the patentee from the “unscrupulous copyist” in 1854. In the U.S. the doctrine has remained a judicially created doctrine.⁷ The initial stage of the doctrine provided for broad protection of equivalents for the patentee, but has since been limited by judicial mechanisms to limit the scope of the claimed invention.

The case noted by many to have created the doctrine is *Winans v. Denmead*.⁸ In *Winans*, the plaintiff obtained a patent claiming the making of the body of a car “in the form of a frustum of a cone . . . whereby the force exerted by the weight of the load presses equally in all directions. . . .”⁹ After visiting plaintiff’s shops and measuring the

⁴ *Graver Tank & Mfg. Co. v. Linde Air Prod. Co.*, 339 U.S. 605, 612 (1950).

⁵ *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991).

⁶ *Graver Tank*, 339 U.S. at 607.

⁷ WIPO, in the Substantive Patent Law Treaty, has attempted to codify the doctrine of equivalents, requiring the interpretation of claim scope to take “due account . . . of elements . . . equivalent to the elements expressed in the claim[.]” WIPO, Draft Substantive Patent Law Treaty, Art. 11(b), Document SCP/10/2 (Sept. 30, 2003), available at www.wipo.int/edocs/mdocs/scp/en/scp_10/scp_10_2.pdf.

⁸ 56 U.S. 330 (1853).

⁹ *Id.* at 331.

dimensions of the body, the defendant created the same body of a car in an octagonal shape—not a cone shape.¹⁰ The plaintiff argued that the defendant merely changed the form of the body, accomplishing substantially the same result, upon substantially the same principal through the same mode of operation.¹¹ After dismissing literal infringement, the Supreme Court held that it was a question for the jury to decide whether defendant’s cars had been constructed “substantially on the same principle and in the same mode of operation, [to] accomplish the same result.”¹² The Court noted patent protection would be at stake if the public was free to vary the patent’s form or proportions, unless a specific form or proportion is disclaimed.¹³

Winans was on one hand a catalyst for the expansion of patent rights for the patentee; while, on the other hand, it introduced an amount of unpredictability to the scope of the patent. Because of this broad, unpredictable doctrine the courts slowly began to limit the doctrine’s applicability. To this effect the courts have focused on three limitations: “prior art” limitation, “dedication to the public domain” limitation and the “prosecution history estoppel” limitation.

For the “prior art” limitation the patentee must prove that if his claim were written to encompass the allegedly infringing product (i.e., the alleged equivalent feature) the Examiner would have still allowed it.¹⁴ This is a direct implication of the codified U.S. patent law that requires the invention to be novel.¹⁵ Thus, if the patentee fails to prove that he would have been able to obtain a patent with the alleged equivalent feature, the infringement action fails.

The “dedication to the public domain” limitation bars a patentee from asserting as an equivalent a feature that was disclosed in the specification of the patent, but not within the claims. For instance, in *Johnson & Johnston Associates v. R.E. Serv. Co.*¹⁶ the patentee claimed an aluminum substrate while disclosing both a steel substrate and an

¹⁰ *Id.* at 332.

¹¹ *Id.* at 334.

¹² *Id.* at 346 (J. Campbell, dissenting).

¹³ *Winans v. Denmead*, 56 U.S. 330, 343 (1853). This is an early mention of prosecution history estoppel. *See Festo Corp. v. Shokeyu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002).

¹⁴ *Wilson Sporting Goods Co. v. David Geoffrey & Ass.*, 904 F.2d 677, 685 (Fed. Cir. 1990)

¹⁵ 35 U.S.C. § 102 (2006); 35 U.S.C. § 103.

¹⁶ 285 F.3d 1046 (Fed. Cir. 2002).

aluminum substrate.¹⁷ The patentee attempted to broaden his literal claim language to encompass the steel substrate.¹⁸ The Federal Circuit, however, rejected this argument by stating that if a patentee fails to claim a feature mentioned in the specification, then that specific feature is dedicated to the public and the claim cannot be broadened to encompass that feature.¹⁹ This has substantially limited the doctrine and forces patent practitioners to encompass all features of the specification they plan to protect.

The previous limitations are important, but the most controversial is the “prosecution history estoppel” limitation. This applies a rebuttable presumption that surrenders to the public the technology involved in recorded arguments made to the USPTO—including, but not limited to, amendments under 35 U.S.C. § 112, amendments for prior art purposes, and the record of an Examiner interview—during the prosecution of the patent.²⁰ For example, if the Examiner rejects a claim under 35 U.S.C. § 112 for defects in description, and the claim is amended to include a pair of one-way sealable rings with a “magnetizable” outer sleeve, the presumption will apply.²¹ Once this presumption applies, the Court has placed the burden on the patentee to rebut the presumption²² by proving either: 1) the alleged equivalent was “unforeseeable at the time of amendment”; 2) the amendment “bore no more than a tangential relation to the equivalent in question”; or 3) “some other reason” why the equivalent was not included.²³ As a result, prosecution history estoppel has severely limited the broadening of the literal scope of the claims. In fact, according to a recent study, before *Festo* the patentee won 27.6% of equivalents cases, and after *Festo* the patentee has only won 22.2%.²⁴

The modern day doctrine was set forth by the Court in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*²⁵ Here, the plaintiff obtained a patent for an ultrafiltration

¹⁷ *Id.* at 1050.

¹⁸ *Id.*

¹⁹ *Id.* at 1056.

²⁰ Matthew Eggerding, *Dependent Patent Claims and Prosecution History Estoppel: Weakening the Doctrine of Equivalents*, 50 St. Louis U. L.J. 257, 265 (Fall 2005).

²¹ *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 737 (2002).

²² *Id.* at 737-38.

²³ *Id.* at 740-41.

²⁴ John R Allison & Mark A. Lemley, *The (Unnoticed) Demise of the Doctrine of Equivalents*, 59 STAN L. REV. 955, 980 (2007).

²⁵ 520 U.S. 17 (1997).

purification process.²⁶ During prosecution the patentee added “at a pH from approximately 6.0 to 9.0” to distinguish over prior art that disclosed the process at a pH “above 9.”²⁷ Importantly, a reason for the lower pH limit of 6.0 was not provided in the amendment or the patent’s specification.²⁸ The plaintiff asserted that the defendant had infringed this patent through use of a similar process at a pH level of 5.0.²⁹

The Court first set forth the general rule: “if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.”³⁰ The Court emphasized that the important inquiry is whether the accused product contains “elements identical or equivalent to each claimed element of the patented invention.”³¹ Moreover, the Court stated the known interchangeability of substitutes, at the time of infringement, is a factor to determine whether the accused device was the same.³² Further, the Court stated that this objective inquiry—determined on an element-by-element basis, not the invention as a whole—is a question for the jury to decide.³³ After analyzing these concepts the Court remanded the case to determine if the patentee had a valid reason for the lower pH level of 6.0.³⁴

Due to the complexities and the inherent subjectivity in this objective standard, the doctrine has been a highly litigated subject. In sum, the doctrine is conducted through the function-way-result test, as an objective inquiry determined by the jury on an element-by-element basis after the “prior art” limitation, “dedication to the public domain” limitation, and “prosecution history estoppel” limitation have been considered. This article will now analyze how Japan balances the same competing interests.

III. JAPAN AND THE DOCTRINE OF EQUIVALENTS

²⁶ *Id.* at 22.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.* at 23.

³⁰ *Id.* at 35 (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608 (1950)). This is otherwise known as the function-way-result test. The Court, however, did note that the “insubstantial differences” test might be better suited for other cases. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 (1997).

³¹ *Id.* at 40.

³² *Id.* at 37.

³³ *Id.* at 38.

³⁴ *Id.* at 40. Remember, this case was decided before *Festo* so the Federal Circuit did not have any specific guidelines to determine if there was a valid reason for the lower limit.

Japanese courts also allow a patentee to protect a patent beyond the literal scope of the claims. In Japan a patentee is required by law to submit a “scope of claims” portion in the patent application that “shall state a claim or claims and state for each claim all matters necessary to specify the invention for which the applicant requests the grant of a patent.”³⁵ Additionally, similar to U.S. patent law the technical scope of the patent is limited to the scope of the claims in light of the description in the specification.³⁶ This provides the underlying basis for the Japanese courts in balancing the interests of the patentee and the public when implementing the doctrine.

The Japanese courts view the doctrine as an instance where the law “gives more weight to substance than to formality in order to avoid unfair results.”³⁷ This view, however, does not drastically change the use of the doctrine in Japan in relation to the U.S..

In the famous *Ball Spline* case, the Supreme Court of Japan set forth the general guidelines for the doctrine. Here, the Court found elements C, D, and E of the patent literally infringed by the accused product.³⁸ The Court also found the remaining elements A and B “within the technical scope of the invention” and the interchangeability known to one of ordinary skill in the art before the application was filed.³⁹ As a result, the Supreme Court overruled the Tokyo High Court’s holding of infringement under the doctrine because elements A and B were known in the prior art.⁴⁰

The Court established five elements that must be met to successfully assert the doctrine. The five elements are: 1) the elements the accused infringer interchanged must not be an “essential” part of the patent; 2) the objective of the patent can still be obtained if the elements at issue are replaced and that the accused product must result in identical functions and effects of the patent; 3) a person skilled in the art, at the time of infringement, would have conceived of the interchange of elements between the accused

³⁵ Japanese Patent Act, Art. 36(2) and (5).

³⁶ *Id.* at Art. 70(1).

³⁷ Toshiko Takenaka, *The Doctrine of Equivalents after the Supreme Court “Ball Spline” Decision*, Vol. 5, Iss. 4 CASRIP (Winter/Spring 1999) (citing *SS Seiyaku v. Zensei Yakuhim K.K.*, Judgment of Osaka District Court (Sept. 17, 1998)). That being said, Japan has consistently given the public’s interest more weight when having to make the distinction. Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

³⁸ *Tsubakimoto Seiko v. THK K.K.*, 1630 *Hanrei Jiho* 32 (Sup. Ct. 1998).

³⁹ *Id.*

⁴⁰ *Id.*

product and the claimed invention; 4) the accused product is novel and could not have been conceived by one of ordinary skill in the art at the time of the patented invention; and 5) the scope of the patent was not intentionally limited to exclude the accused product.⁴¹ This essential-nonessential test remains to be the foundation of the doctrine in Japan.

When comparing these five elements to the U.S. doctrine, there are many similarities with small technical differences. All the elements, except possibly the first, have strong—almost exact—substantive resemblances to the doctrine in the U.S..

For example, the second element has been called the “capability of replacement” test.⁴² This element requires the patentee to prove the accused product results in *identical* functions and effects of the patent.⁴³ Therefore, by comparison, this element strongly resembles the function-way-result test of the U.S. doctrine by focusing on the function, result and effect of the equivalent.⁴⁴ The Japanese test, however, is textually stricter making it more difficult for the patentee to apply the doctrine. In particular the Japanese doctrine states the word “identical” as opposed to “substantially the same” in the U.S.

The third element of the Japanese doctrine has been called the “obviousness” or “readiness of replacement” test.⁴⁵ Here, the patentee must prove that a person skilled in the art would have readily conceived of the small differences between the accused product and the claimed invention at the time of the alleged infringement. This element strongly resembles the “known interchangeability” standard mentioned in *Graver* and later specified in *Warner-Jenkinson*.⁴⁶ In particular, both the U.S. “known interchangeability” test and the Japanese “obvious” standard force the patentee to prove that the accused product’s variations of the claimed invention were foreseeable at the time of infringement.⁴⁷ However, this seems to be given less weight in the U.S..

⁴¹ *Id.*

⁴² Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

⁴³ *Id.* (emphasis added).

⁴⁴ See *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950) (holding that the accused product is an equivalent “if it performs substantially the same function in substantially the same way to obtain the same result”).

⁴⁵ Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

⁴⁶ See *supra* text accompanying note 32.

⁴⁷ Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

Next, the fourth element is known in Japan as “the defense of the free state of the art.”⁴⁸ This element requires the *accused* to prove the accused product did exist in the prior art at the time of application. This element relies on the premise that if the feature was in the prior art, then the patentee would have failed to obtain a patent on that feature. Therefore, on its face this element is the same as the “prior art limitation” set forth in *Wilson Sports*.⁴⁹ However, this element is different in Japan because the burden of proof for the “prior art” limitation is on the accused⁵⁰—not the patentee, as in the U.S.

The Fifth element seems to be similar to patent prosecution history estoppel in the U.S.. Here, the *accused* must prove the patentee “intentionally” disclaimed the alleged equivalent feature from the patent’s scope.⁵¹ Prosecution history estoppel is applied differently in Japan, however. First of all, in Japan the burden is placed on the *accused* to prove the patentee intentionally disclaimed the feature;⁵² whereas, in the U.S. the burden rests on the patentee to prove the amendment did not disclaim the alleged equivalent.⁵³ Second, the word “intentionally” implies a narrower scope to prosecution history estoppel when compared to the U.S..⁵⁴ The courts have applied the “dedication to the public domain” limitation here as in U.S.. Additionally, the Japanese courts have applied prosecution history estoppel regarding each argument or amendment made of record with the JPO.⁵⁵ The *Spline* court ruling on this issue did not seem to allow the patentee to rebut his dedication to the public. In effect, the prosecution history estoppel in Japan seems to create a non-rebuttable presumption of surrender to the public.

And finally, the first element—or “non-essential-elements” test—requires the patentee to prove the accused product did not replace an “essential” portion of the claimed invention.⁵⁶ In other words, the accused product can replace only non-essential

⁴⁸ *Id.*

⁴⁹ See *supra* text accompanying notes 14-15.

⁵⁰ See *K.K. Kouken v. K.K. Tatsumi Ryouki*, Hanrei Jiho No. 1657, 122 (Tokyo D.C. 1999).

⁵¹ Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

⁵² See *SS Seiyaku v. Zensei Yakuhin K.K.*, Judgment of Osaka District Court, Sept. 17, 1998 (Unreported as of 3/16/1999).

⁵³ See *supra* notes 21-22 and accompanying text.

⁵⁴ For instance, U.S. courts apply prosecution history estoppel as a limitation when a narrowing amendment is made with no reason as to why the limitation was made. *Honeywell Int’l, Inc., v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1139 (Fed. Cir. 2004).

⁵⁵ Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

⁵⁶ Toshiko Takenaka, *The Doctrine of Equivalents after the Supreme Court “Ball Spline” Decision*, CASRIP Vol. 5, Iss. 4 (Winter/Spring 1999).

elements to have the potential of infringing the patent. By comparison, this test vaguely resembles the element-by-element test set forth in *Warner-Jenkinson* because both tests require the court to look at each element independent of each other.⁵⁷

The “non-essential elements” test requires the court—unlike the U.S.—to determine if the element is “essential.” In effect, the court’s analysis usually turns on whether the element is essential. Here, Japanese courts have interpreted “essential” inconsistently. For example, the Tokyo District Court has defined an essential element as “being the technical features which give a basis for solving the problem unique to the patented invention.”⁵⁸ Other courts have focused on the specification, prior art, and the prosecution history to identify the features the patentee believes are distinguishable from the prior art, and thus essential.⁵⁹ Therefore, this test is in contrast with the U.S. test of infringement that makes essential “each and every” element of the claimed invention.⁶⁰

Thus, I have highlighted a few minor differences of how the U.S. and Japanese courts implement the doctrine. The two countries also differ on how they procedurally analyze these cases. The Japanese courts start with the equivalence analysis (i.e., elements 1-3) and if the patentee satisfies these elements, then the court proceeds to allow the accused to prove the limiting aspects of the doctrine (i.e., elements 4-5).⁶¹ Whereas the U.S. courts initially focus on the limitations of the doctrine such as prosecution history estoppel, or the dedication to the public; then, based on the findings and interpretation of the claims, determine whether or not the doctrine is satisfied.⁶²

The U.S. and Japan do implement the doctrine differently. In the end, Japan has fewer cases filed under the doctrine and also has fewer successful cases when the

⁵⁷ *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 38 (1997).

⁵⁸ See *Shinwa Seisakusho v. Furuta Denki*, Judgment of Toyko Dis. C. (March 23, 2000).

⁵⁹ Toshiko Takenaka, *The Doctrine of Equivalents in Japan*, Vol. 6 CASRIP (2000).

⁶⁰ See *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007) (citing 35 U.S.C. § 271(a)).

⁶¹ Jinseok Park, *Interpretation of Patent Claims in the EPO, USPTO and JPO – in the Context of the Doctrine of Equivalents and Functional Claims*, E.I.P.R. 2005, 27(7), 237, 243-44 (stating that Japanese courts rarely get to the prosecution history estoppel issue because they fail to get past the essential-elements test of element 1).

⁶² See, e.g., *Voda v. Cordis Corp.*, 536 F.3d 1311 (Fed. Cir. 2008) (emphasizing the need to examine the prosecution history estoppel and claim constructions issues before making a determination as to the doctrine of equivalents).

doctrine is invoked.⁶³ The question remains, however, whether the U.S. or Japan have the doctrine right, or whether it can be better?

IV. CONCLUSION

The correct doctrine, as I propose, should reward the patentee who has claimed his invention, and prosecuted it, with precision, brevity and accuracy in the language used. In order to fully understand this, one must take a step back and understand that a patentee is granted a monopoly by a government on a specific technology in exchange for disclosing that specific technology to the public. Therefore, a fraud on the patent system—and therefore the public—occurs when the patentee is able to expand his invention past the metes and bounds of the claimed language.

As a ground rule it is important to note that the “scope of a patented invention shall be determined on the basis of the patent claim(s).”⁶⁴ I will assume, as most countries have, that an equivalent feature is one that is able to realize substantially the same function, to achieve substantially the same result through substantially the same means as the claimed feature.⁶⁵ Unlike the Japanese courts, I believe the inquiry into whether an element is “essential” is an unnecessary and a costly inquiry for the court to determine. Because the patent is defined by the claims, “each and every” element⁶⁶ is a part of the invention providing no need to distinguish between their importance.

Next, unlike Japan, the patent claim language should be construed first. If this fails to happen there is no floor to base the alleged equivalent on; in other words, without an interpretation of the claim language, we cannot determine if a feature is an equivalent. Here, the burden should be placed on the patentee to prove that the a) patentee did not dedicate the alleged equivalent to the public; b) prior art at the time of invention did not contain the alleged equivalent; and c) equivalent was not obvious to a person of skill in the art at the time of invention. If the patentee fails to prove any of the above, the claim

⁶³ Jinseok Park, *Interpretation of Patent Claims in the EPO, USPTO and JPO – In the Context of the Doctrine of Equivalents and Functional Claims*, E.I.P.R. 27(7), 237, 248 (2005).

⁶⁴ Japanese Patent Act, Art. 70(1). This is also the case in the U.S., and generally every country with a patent system.

⁶⁵ This has, for the most part, been the standard rule in China, the U.K., the U.S., Germany, Japan, Korea and Russia, when attempting, either through the common law or by statute, to define an equivalent feature. See generally AIPPI, Resolution Question Q175, *The Role of Equivalents and Prosecution History in Defining the Scope of Patent Protection* (Oct. 27, 2003).

⁶⁶ See *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007).

should be limited to that extent; as a result, the likelihood of the doctrine applying is unlikely.

Next, the court should determine if the alleged equivalence was disclaimed during prosecution. Prosecution history estoppel should apply to all claim amendments—not arguments—made by the applicant.⁶⁷ This will provide the added benefit of requiring the patent examiner to force the applicant to manifest his arguments into claim amendments. Importantly, this results in precise claim drafting, furthering the rule that the *claim* defines the scope of the invention (not the arguments).⁶⁸ There should be a non-rebuttable presumption with respect to each specific feature that the applicant chose to disclaim through amendment; unless, however, the applicant unambiguously states an intention, and a reason, why the amendment is not material to patentability purposes. This prosecution history estoppel will create a consistent, bright-line test to allow the public to determine, before undertaking the alleged infringing act, the scope of the patent.

This prosecution history estoppel provides the right balance of both the patentee's and the public's interest in the patent. With this, all of the arguments are made before the cost of litigation is undertaken. In the current prosecution history estoppel, the line drawn is arbitrary and relies on arguments after the actual act; whereas with this, either the non-rebuttable presumption applies, or the disclaimer language is argued against. For instance, if the patentee makes an amendment of, “at a pH from approximately 6.0 to 9.0,” stating the upper limit of 9.0 is made to overcome the prior art, but is silent with respect to the lower level, then prosecution history estoppel applies to both limits. However, if the patentee had unambiguously stated the lower level amendment is not for substantive prior art purposes, and the prior art demonstrated this, then the patentee will not be estopped from arguing an expansion of the lower level.

Some may argue this will only give an incentive for the applicant to argue that every amendment is not for substantive prior art purposes. This is, however, why in the U.S. “[e]ach individual associated with the filing and prosecution . . . has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the

⁶⁷ In the U.S., prosecution history estoppel applies to, among other unnecessarily broad things, comments made to the examiner to the extent they are recorded. *See Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 979 (Fed. Cir. 1999).

⁶⁸ *See supra* note 64 and accompanying text.

Office all information . . . material to patentability.”⁶⁹ Thus, this clause or its equivalent in other countries will theoretically prevent the applicant from defrauding the patent system.

In the end, if implemented by the practitioner correctly, this may broaden the scope of the patent’s ability to be enforced through the doctrine, while at the same providing a more concrete notice to the public of the scope.

The claim scope should be fairly certain after the above-mentioned limitations have been resolved. The court should subsequently look to the doctrine to determine, on an element-by-element basis, whether the alleged equivalent “performs substantially the same function in substantially the same way to obtain the same result” as the patentee’s device.⁷⁰ This is a fairly straightforward, albeit subjective, process and I would continue to allow the courts to determine this question.

The question still remains: what is the proper balance of interests? My proposal provides a consistent bright-line test to be applied, and places the burden on patent practitioners to fulfill their “duty of candor and good faith” when dealing with the patent office. This will provide the public with better certainty when determining the scope of the claims.

⁶⁹ 15 C.F.R. § 1.56 (2006). Japan has a similar provision to prevent applicants from defrauding the patent system, where “[a]ny person who has obtained a patent, . . . by means of fraudulent act shall be liable to *imprisonment* with labor not exceeding three years. . . .” Japanese Patent Act, Art. 197 (emphasis added).

⁷⁰ *Graver Tank & Mfg. Co. v. Linde Air Prod. Co.*, 339 US 605, 608 (1950).