IEEE-USA urges Congress amend the U.S. Patent Code definitions of “prior art” and “grace period” in 35 U.S.C. §102, as amended in the 2011 America Invents Act (AIA). Rather than reduce ambiguity and foster innovative companies’ needs, those AIA term definitions greatly increased uncertainty regarding these issues. Additionally, IEEE-USA urges courts to interpret the existing statutory grace period provisions to meet innovative companies’ needs.

The AIA rewrote 35 U.S.C. §102 to redefine “prior art” (as publications, public uses, or offers for sale (by others), which can bar patentability for an inventor) It redefines the “grace period” as a limited time exemption from “prior art” arising after the inventor’s disclosure, or from actions by the inventor herself. Section 102 should strike a delicate balance between the various patent system policy goals. These goals include:

- Favoring earlier filing and disclosure, and discouraging secret technologies hoarding
- Favoring the public’s rights to use technology that has passed into the public domain; and a reliance on relatively simple public “signals” that technology is freely available for use
- Favoring inventors’ needs for time to communicate with investors (private or governmental); and complete invention research and development, testing and test-marketing, rather than requiring inventors to file an incomplete patent application. Patent legal deadlines should reflect the actual innovation process, and permit business needs to drive filing--not legal technicalities.
- Favoring collaborative projects, so that multiple entities can engage in research, development or testing, without the collaboration itself barring the collaborators from securing patent rights

However, an examination of the AIA amendments to 35 U.S.C. §102 reveals serious ambiguities. IEEE-USA urges Congress to adopt amendments to clarify the language of §102 of the U.S. Patent Code, and that courts interpret ambiguities towards favoring new and disruptive innovation, by securing an unambiguous, full, one-year grace period. Several examples of such needed amendments or interpretations are as follows:
Interpretation of AIA terms in §102(a)(1). IEEE-USA urges that the terms “public use” and “on sale” in the AIA’s §102(a)(1) retain the meanings they had before March 16, 2013.1

1. The phrase "or otherwise available to the public," which has no prior history in U.S. patent law, should either be amended by Congress, or interpreted by the courts to be a disjunctive, additional, “catch all” --not a conjunctive that engraves a previously unknown “available to the public” requirement onto the well-established terms of “public use” and “on sale.”

2. A disjunctive interpretation preserves consistency with an important feature of pre-AIA law: an “on sale” or “public use” event should bar a patent, even if that use is “non-disclosing,” as it has been since at least the 1952 Act.

3. The conjunctive interpretation, suggesting the “available to the public” requirement is engrafted onto the terms “public use” and “on sale,” would be a disruptive change relative to pre-2011 law, and tips the balance too far in favor of market incumbents, at the expense of innovators.

No Abrogation of Metalizing Engineering. IEEE-USA urges that courts should interpret the AIA’s §102 as not abrogating Metalizing Engineering Co. v. Kenyon Bearing & Auto Parts, 153 F.2d 516 (2d Cir. 1946). Metalizing Engineering established a doctrine that requires inventors to promptly file patent applications, once they have begun to make commercial use of their inventions. Even if the use is secret, the doctrine bars an inventor from seeking a patent more than one year after its first commercial use. Abrogating Metalizing Engineering would encourage companies to hoard secrets, by keeping open the option to patent, even after years of secret commercial use. This prohibition unbalances the system—in favor of market incumbents who can “evergreen” their old secret technology—and against new innovators and the public. IEEE-USA supports further clarification of the “commercial use” definition, so activities such as “experimental use”, and “confidential but multiparty innovation” do not bar patenting by the innovators, themselves.

Actions of inventor that trigger the grace period. The word “disclosure” in the AIA’s §102(b) grace period should encompass public use, on sale, printed publication, or any other action or event that the §102(a) patenting bar provisions would embrace. .

1. Limiting “disclosures” to only “printed publications,” or issued patents, makes the grace period unavailable to the vast majority of startup companies not able to adequately seek

1 A non-enabling disclosure in a “printed publication” should continue to not be “prior art,” under § 102, just as it was not under the 1952 Act (with non-enabling art still available, under § 103, “for all that it teaches”).
capital; or develop, experiment with, or vet their inventions entirely in secret--or in-house. A broad scope for the term “disclosure” enhances startups’ abilities to accomplish the important steps required for filing complete patent applications.

2. Even for universities, a printed, publications-only amendment to, or interpretation of, §102(b) only adequately addresses the ambiguity problem, if they just publish papers. Research institutions that generate working inventions, or seek to spin-out companies, are harmed.

3. A narrow interpretation of the existing law tips the balance too far in favor of large commercial enterprises that can afford to do all of their R&D and testing in secret, or within in-house facilities. It also unfairly denies patents for small businesses or startups that disclose their inventions to outside investors; or in bidding projects to potential customers, including to the government, under the Small Business Innovation Research (SBIR) program.

**Scope of embodiments covered by grace period.** Courts should interpret, or Congress should amend, §102(b) to provide a grace period that preserves patentability for a broader scope of subject matter than the exact subject matter the inventor discloses, to include variants. An interpretation that limits grace period protection to the exact subject matter an inventor discloses puts the inventor at a greatly heightened risk for losing patent protection of meaningful scope. An interpretation that gives a broader subject matter scope to the grace period allows both a pioneering inventor, and a refined inventor, to obtain a patent--with the dominant patent going to the earlier inventor. Under a narrow scope interpretation of the grace period (the position currently adopted by the U.S. Patent & Trademark Office (USPTO)), both are barred from obtaining a commercially-meaningful patent.

**Experimental use.** The "experimental use" exception under *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126 (1878) should not be considered AIA abrogated.

**Burden of proof to show derivation.** The AIA introduced derivation proceedings into U.S. patent law, as a procedure for determining whether an inventor named in an application derived his claimed invention from another inventor named in a later-filed application; and whether the earlier application was filed without the other inventor’s authorization. Regarding derivation as a reason for removal of “prior art” of another under AIA §102(b), the AIA is ambiguous as to meeting the burden of proof. It provides the USPTO with no statutory basis for discovery (i.e., subpoena authority), by which such derivation could be shown in third parties. Once an inventor has demonstrated possession of the invention on a date prior to the effective date of an item of potential prior art, AIA §102(b) should be interpreted, or amended, to authorize the USPTO to compel discovery at the inventor’s request to show evidence of derivation.
Strong grace period. The weakened AIA grace period has made it far more difficult for innovators to start new companies and bring disruptive technology to market. IEEE-USA believes the ramifications of the grace period in use since 2013, to be one explanatory factor for why startup formation rates are one of the lowest rates in the last three decades. IEEE-USA urges that Congress reinstate the statutory definition of prior art and the grace period as it was in 35 U.S.C. §102(a)-(f) prior to March 15, 2013.

This statement was developed by the IEEE-USA Intellectual Property Policy Committee, and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA advances the public good, and promotes the careers and public policy interests of the more than 200,000 engineering, computing and allied professionals who are U.S. members of IEEE. The positions taken by IEEE-USA do not necessarily reflect the views of IEEE, or its other organizational units.

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2 U.S. Department of Commerce, Census Bureau’s Business Dynamics Statistics, Establishment Characteristics Data Tables, Economy Wide, Economy Wide Data, 1977-2014, www.census.gov/ces/dataproducts/bds/data_estab.html, showing that firm growth rate has fallen from a rate that generally ranged from 1 to 4% in 1978-2007, to below 1% since the AIA was implemented; Ryan A. Decker, et al., “Where Has All The Skewness Gone? The Decline In High-Growth (Young) Firms In The U.S, NBER Working Paper No. 21776 (December 2015), http://www.nber.org/papers/w21776.

3 As we did in 2011, IEEE-USA now takes no position on the first-to-file vs. first-to-invent priority rule, for resolving conflicts between two near-simultaneous inventors, pre-AIA § 102(g).