

Case Nos. 2016-2388, 2017-1020

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

ARIOSIA DIAGNOSTICS, INC.,

Appellant,

v.

ILLUMINA, INC.,

Appellee,

ANDREI IANCU, Director,
U.S. Patent and Trademark Office,

Intervenor.

Appeals from the United States Patent and Trademark Office, Patent Trial and
Appeal Board in No. IPR2014-01093

**BRIEF OF AMICI CURIAE THE ELECTRONIC FRONTIER
FOUNDATION AND THE R STREET INSTITUTE IN SUPPORT OF
PETITION FOR REHEARING EN BANC**

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February 23, 2018

CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rules 29(a) and 47.4, counsel for *Amici Curiae* certifies that:

1. The full names of the *amici* represented by me are:

Electronic Frontier Foundation; R Street Institute.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is: **N/A**

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the *amici curiae* represented by me are: **None.**

4. The name of all law firms and the partners or associates that appeared for the party or *amici* now represented by me in the trial court or are expected to appear in this Court (and who have not or will not enter an appearance in this case) are: **Daniel K. Nazer, Electronic Frontier Foundation, San Francisco, California; Charles Duan, R Street Institute, Washington D.C.**

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal: **None.**

February 23, 2018

/s/ Daniel K Nazer
Daniel K. Nazer
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INTEREST OF *AMICI CURIAE*

Amicus curiae the Electronic Frontier Foundation (“EFF”) is a non-profit civil liberties organization that has worked for more than 25 years to protect consumer interests, innovation, and free expression in the digital world. EFF and its more than 44,000 dues-paying members have a strong interest in helping the courts and policy-makers strike the appropriate balance between intellectual property and the public interest.

Amicus curiae the R Street Institute is a non-profit, non-partisan public-policy research organization. R Street’s mission is to engage in policy research and educational outreach that promotes free markets, as well as limited yet effective government, including properly calibrated legal and regulatory frameworks that support Internet economic growth and individual liberty. R Street’s particular focus on Internet law and policy is one of offering research and analysis that show the advantages of a more market-oriented society and of more effective, more efficient laws and regulations that protect freedom of expression and privacy.¹

¹ Pursuant to Rule 29(c) of the Federal Rules of Appellate Procedure, *amici* certify that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. Furthermore, no person or entity, other than *amici*, their members, or their counsel, made a monetary contribution that was intended to fund the preparation or submission of this brief.

INTRODUCTION

The decision of the Board, summarily affirmed by a panel of this Court, held that a second-comer may patent an invention that another previously disclosed in a provisional application duly filed and statutorily rendered open to the public. This decision is contrary to both statutory construction and public policy, and en banc rehearing should be granted to reverse it.

Statutory construction does not support the Board's reasoning. The Patent Act and case law interpreting it distinguish *inventions* from *claimed inventions*, construing the former concept much more broadly than the latter. The erroneous rule applied in this case arises from a conflation of those terms and concepts.

That error cuts against the core policy behind the patent grant. Patents are granted to encourage disclosure of new inventions. Granting a patent on an invention already disclosed to the public works the opposite effect, closing off knowledge that was previously free to use. Furthermore, the applied rule would render the criteria for patentability unstable over time, detracting from a predictable patent system.

The Court should take this case en banc, hold that inventions previously disclosed in publicly-available provisional applications are prior art, even if not claimed, and overrule precedents to the contrary.

ARGUMENT

I. Statutory Construction of § 119(e)(1) Supports a Holding that Any Invention in a Published Provisional Patent Application Is Prior Art as of the Filing Date of the Provisional Application, Regardless of Whether It Is Later Claimed

Inventions disclosed in a provisional application are prior art under § 102(e)(1)² so long as there is a published application that claims priority to the provisional, which under § 119(e)(1) requires only that the application be “for an invention disclosed” in the provisional. The Board held that the Fan Reference did not qualify under § 102(e)(1) because the subsequently published application was for a different “claimed invention.” But throughout the Patent Act, the concept of “invention” is not coextensive with “claimed invention.” It is incorrect to limit § 119(e)(1)’s effect to only claimed inventions.

A. An “invention” and that which is later specifically claimed are distinct concepts in patent law

The distinction between an “invention” generally and what is later claimed in a patent can be found throughout the Patent Act and case law, in a variety of contexts.

“The primary meaning of the word ‘invention’ in the Patent Act unquestionably refers to the inventor’s conception rather than to a physical

² Unless otherwise noted, all statutory references are to Title 35 and to the version in effect prior to the passage of the America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

embodiment of that idea.” *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 60 (1998). Generally, once an inventor decides to seek patent protection for an invention, it is a patent specification that describes and discloses invention. *See* 35 U.S.C. § 112, ¶ 1. Claims, as required by § 112, ¶ 2, are a technical requirement that act to distinctly point out what the inventor “regards as his invention” for which he seeks a patent. *Cf.* 35 U.S.C. § 101 (describing “inventions patentable” without particular reference to claims). But “[t]he claims are directed to the invention that is described in the specification[,] they do not have meaning removed from the context from which they arose.” *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001).

The Patent Act and courts regularly refer to “inventions” as disclosed in specifications or other documents, acts, or public uses separately and distinctly from any claims or claimed invention. *See, e.g., Pfaff*, 525 U.S. at 62 n.10 (noting that in *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390, 401-02 (1926), the Court “held a patent invalid because the *invention* had previously been disclosed in a prior patent application, although that application did not *claim the invention*” (emphasis added)).

For example, § 121 allows the Patent Office to require an applicant to make an election claiming only one invention where an application contains two or more claimed inventions. The statute refers to applications where “two or more

independent and distinct inventions *are claimed*” (emphasis added), indicating that “inventions” disclosed in a specification can be both claimed and unclaimed. Unsurprisingly then, in *LG Electronics, Inc. v. Bizcom Electronics, Inc.*, this Court observed that a single written description in described multiple inventions, and resulted in two patents with distinctly different *claimed* inventions. See 453 F.3d 1364, 1378 (Fed. Cir. 2006), *rev’d on other grounds sub nom. Quanta Computer Inc. v. LG Electronics, Inc.*, 553 U.S. 617 (2008).

How patent applicants swear behind prior art in order to show when they conceived of an “invention” is another example of how an “invention” exists outside of the concept of claims. See 35 U.S.C. § 102(a). In *Burroughs Wellcome Co. v. Barr Laboratories, Inc.*, the Court noted that “the test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention.” 40 F.3d 1223, 1228 (Fed. Cir. 1994). The Court clarified that a draft British patent application was not itself conception: “The draft simply corroborates the claim that they had formulated a definite and permanent idea of the inventions by the time it was prepared.” *Id.* at 1230. In so stating, the Court implicitly recognized that “inventions” exist without claims.

Other sections of the Patent Act similarly confirm that an “invention” is not solely a thing which is later claimed in a patent or patent application. See, e.g., 35

U.S.C. § 104 (placing restrictions on establishing a “date of invention” by referring to “knowledge or use thereof” in certain foreign countries); 35 U.S.C. § 105 (referring to inventions “made, used or sold in outer space”). Case law has also implicitly recognized the distinction. *See, e.g., In re LeGrice*, 301 F.2d 929, 939 (C.C.P.A. 1962) (noting that prior art publications, outside of patents, can be anticipatory based on “the description of the invention in the printed publication”). The use of the term “invention,” on its own, does not necessarily mean “claimed invention.”

B. Section 119(e)(1) grants priority based on “inventions,” not claims

Section 119(e)(1) uses the term “invention,” and there is no indication it actually means “claims” or “claimed invention” in spite of the express language.

The statute states that:

An application for patent filed under section 111(a) or section 363 of this title for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in a provisional application filed under section 111(b) of this title, by an inventor or inventors named in the provisional application, shall have the same effect, as to such invention, as though filed on the date of the provisional application filed under section 111(b) of this title, if the application for patent filed under section 111(a) or section 363 of this title is filed not later than 12 months after the date on which the provisional application was filed and if it contains or is amended to contain a specific reference to the provisional application.

Nothing in § 119(e)(1) requires an analysis of a later-claimed invention. The substantive requirement included in § 119(e)(1) is that, in order to be treated “as

though filed on the date of the provisional application . . .”, “an invention” (not “the claimed invention” or even “the invention”) must be disclosed “in the manner provided by § 112, ¶ 1” 35 U.S.C. § 119(e)(1).³

The statute does not reference § 112, ¶ 2, the paragraph that requires claims. Importantly, provisional applications often contain an invention, even where there is no “claims” or “claimed invention.” *See* 35 U.S.C. § 111(b)(2) (provisional applications not required to include claims). Congress could have referenced § 112, ¶ 2 in § 119(e)(1), or required provisional applications to contain claims, if claims were required to define the relevant invention that would be accorded priority. It did not.

The closest the statute comes to requiring a “claimed invention” is perhaps in its oblique reference to an “application . . . for an invention disclosed . . . in a provisional application” But the “invention” referred to within the text of § 119(e)(1) is “an invention” disclosed in a provisional application, rather than the claimed invention of the non-provisional application, as one member of this Court

³ Like any other printed publication, a provisional application should be presumed to contain adequate disclosure, for prior art purposes, even of “unclaimed disclosures.” *In re Antor Media Corp.*, 689 F.3d 1282, 1287-88 (Fed. Cir. 2012) (citing *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1355 (Fed. Cir. 2003)); *see also Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562 (Fed. Cir. 1991). The contrary holding in *Dynamic Drinkware, LLC v. National Graphics, Inc.* is yet another reason to grant en banc rehearing. *See* 800 F.3d 1375, 1378 (Fed. Cir. 2015).

has already recognized. *See Endo Pharmaceuticals Inc. v. Actavis, Inc.*, 746 F.3d 1371, 1382 (Fed. Cir. 2014) (Dyk, J., dissenting-in-part) (“Under 35 U.S.C. § 119(e)(1), a patent that claims priority to a provisional application must ‘have the same effect, as to such invention [the provisional invention]’”).

Recent modifications to the Patent Act confirm that “invention” and “claimed invention” are two distinct concepts. Section 100 continues to define “invention” as merely an “invention or discovery,” whereas “claimed invention” is now separately defined as “the subject matter defined by a claim in a patent or an application for patent.” § 100(a), (j) (post-AIA). When Congress added a definition for “claimed invention” and modified § 102 as a result, Congress did *not* modify the text of § 119(e)(1) to refer to the “claimed invention,” further indicating Congress intends § 119(e)(1) to refer to the broader term “invention.”

Contrary to the rule of *Dynamic Drinkware* and *Amgen*,⁴ whatever invention is disclosed in a provisional application, regardless of whether it later becomes a claimed invention, has “the same effect, as to such invention, as though filed on the date of the provisional application[.]” Stated differently, the statute simply makes a provisional application subsequently made public through a published application an invalidating disclosure treated like any other prior art publication as of the date of the provisional application, *even if not claimed*.

⁴ *Amgen, Inc. v. Sanofi, Aventisub LLC*, 872 F.3d 1367 (Fed. Cir. 2017).

II. Public Policy Supports Recognizing Any Invention in a Published Provisional Patent Application as Prior Art as of the Filing Date of the Provisional Application, Regardless of Whether It Is Later Claimed

Public policy supports a reading that finds any disclosed invention in a published provisional application to be prior art to a later-filed patent application. Patents are intended, in part, to provide the public with knowledge that may otherwise be kept secret—they are “an inducement, to bring forth new knowledge.” *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 9 (1966); *see also United States v. Line Material Co.*, 333 U.S. 287, 339 (1948); *Kendall v. Winsor*, 62 U.S. 322, 327-28 (1858).

But where that knowledge is already in the public domain, that incentive is irrelevant; the concern then is that a patent on a known invention would act “to remove existent knowledge from the public domain, or to restrict free access to materials already available.” *Graham*, 381 U.S. at 6. Thus: “Only inventions and discoveries which furthered human knowledge, and were new and useful, justified the special inducement of a limited private monopoly.” *Id.* at 9; *see also Alexander Milburn Co.*, 270 U.S. at 400 (“one really must be the first inventor in order to be entitled to a patent”).

It would subvert patent policy to grant a patent to a later inventor, as *Dynamic Drinkware* and *Amgen* would do, merely because an invention was disclosed in a published provisional application but not claimed. *Cf. Hazeltine*

Research Inc. v. Brenner, 382 U.S. 252, 256 (1965) (rejecting a policy that would limit prior art where it “would create an area where patents are awarded for unpatentable advances in the art”). It would grant a patent right with no concomitant benefit of new knowledge provided to the public. The public, instead, would be granting a monopoly even though it already possessed, and *was free to use*, any unclaimed inventions in the published provisional application.⁵

Furthermore, the *Dynamic Drinkware* rule creates a troubling instability in determinations of patentability for others who may seek patent rights or seek to use what has been publicly disclosed. Under the current rule, what is patentable at one time could become unpatentable later, lending to undesirable unpredictability in the patent system. The unpredictability this causes brings unnecessary uncertainty to the patent system that can be easily avoided through construing § 119(e)(1) to provide priority for any invention, regardless of whether it is claimed.

CONCLUSION

For the foregoing reasons, this Court should hear this case en banc, and overrule *Dynamic Drinkware* and *Amgen*.

⁵ Illumina argues that there are many circumstances where information is not treated as prior art. *See* Illumina Br. at 21–22. While this may be true, any such exemption from the usual policies should be clearly and explicitly made by Congress, not imposed via a statute that is, at best, ambiguous.

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Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE
REQUIREMENTS PURSUANT TO FED. R. APP. P. 32(A)(7)(C)**

I hereby certify as follows:

1. The petition complies with the type-volume limitations of Fed. R. App. P. 40(b) and 35(b), and the Rules of this Court applicable to cases docketed between April 1, 2016 and November 30, 2016, because the petition does not exceed 10 double-spaced pages.

2. The brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5), and with the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). The brief has been prepared in a proportionally spaced typeface using Microsoft® Word for Mac Version 15.40 in 14-point Times New Roman font.

February 23, 2018

/s/ Daniel K. Nazer

Daniel K. Nazer

Attorney for *Amici Curiae*

CERTIFICATE OF SERVICE

I hereby certify that on this 23rd day of February, 2018, I caused copies of the foregoing Brief of *Amici Curiae* the Electronic Frontier Foundation and the R Street Institute to be served by electronic means via the Court's CM/ECF system on all counsel registered to receive electronic notices.

/s/ Daniel K. Nazer
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