

No. 18-109

IN THE
Supreme Court of the United States

ARIOSIA DIAGNOSTICS, INC.,

Petitioner,

v.

ILLUMINA, INC.,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED
STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

**BRIEF OF *AMICI CURIAE* ELECTRONIC
FRONTIER FOUNDATION AND R STREET
INSTITUTE IN SUPPORT OF PETITIONER**

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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 40,000 dues-paying members have a strong interest in helping the courts and policy-makers ensure intellectual property and law serves 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 Supreme Court Rule 37.3(a), all parties have provided their consent to the filing of this brief. Pursuant to Rule 37.6, 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 the brief. No person or entity, other than amici, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

INTRODUCTION

The Federal Circuit has departed from the fundamental principle of the patent system: an invention must be new to be patentable. Instead, it held that second-comers may receive the powerful rights of a U.S. patent, even for ideas that someone else previously described in a published patent application. That result contravenes this longstanding principle and undermines the patent system's goal of promoting innovation, instead swinging the door open to applicants who wish to patent old ideas. The Federal Circuit's decision to impose this new requirement is an erroneous departure from this Court's precedents, Congress's intent, and the Constitution's mandate that the patent power promote rather than inhibit innovation in this country.

This departure from well-settled law must not be taken lightly. Unless reversed, *Ariosa* will winnow incentives and opportunities for innovation by allowing patents on old and known ideas to continue impeding the economically fruitful endeavors of others. This will not only insulate weak patents from meaningful post-issuance review, but also encourage future applicants to claim as their own advances that others already made, leading the Patent Office to issue patents that impede rather than promote technological progress. It further introduces problematic instabilities into the mechanics of the Patent Act and into the administration of the Patent Office as an agency. These serious consequences necessitate this Court's review.

1. By allowing a second applicant to collect a patent on an invention earlier disclosed by a first applicant,

the Federal Circuit ignores a principle of constitutional dimensions, that a patent is not to “remove existent knowledge from the public domain, or to restrict free access to materials already available.” *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 6 (1966). That principle underlies the seminal case on the effect on a second-comer’s patent application of an earlier application filed with the Patent Office. Because “one really must be the first inventor in order to be entitled to a patent,” *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390, 400 (1926), any information disclosed in the earlier application is existent knowledge that the second-comer may not patent.

Here, the existent knowledge was presented in a provisional patent application, known as the “Fan reference.” This application was submitted to the Patent Office over seven months before Respondent sought its patent application, and it was duly published and made open to the public under U.S. law. There is no dispute that this preexisting knowledge would invalidate Illumina’s patent if it appeared in the applicant’s claims—the part of the application specifying the boundaries of the applicant’s legal rights—as well as the part describing the nature and operation of the applicant’s work.

But the Federal Circuit held that a technical exception attached: The knowledge disclosed in the Fan reference could only count as prior art if it was also recited in the claims. Thus, based on the placement rather than the substance of this otherwise invalidating disclosure, the court sustained Illumina’s patent, and thus the Patent Office’s grant to a second-comer.

In so doing, the court approved a patent that violates the *Graham* and *Milburn* rule against patents covering old ideas already available to the public. The technical exception devised by the Federal Circuit allows for second-comers, such as Respondent, to obtain patents on ideas already put before the Patent Office, such as the Fan reference. Neither *Graham* nor *Milburn* countenances such an exception, and certiorari should be granted to correct that deviation from precedent.

2. The Federal Circuit justified its departure from this Court's cases based on its construction of the text of the Patent Act, but a review of the statutory text and its legislative history leaves no room for that construction. The plain meaning of 35 U.S.C. § 102(e)² renders any description in a published application or granted patent effective as prior art as of the date of the earliest application from which it claims priority. Furthermore, Congress's intent as reflected in the legislative history of the 1952 Patent Act as well as the 1999 amendments to the Act make apparent that Congress was codifying this Court's case law, not altering it. Statutory construction thus confirms that the rule this Court set forth in *Milburn* applies with full force to published patent applications such as the Fan reference at issue here, requiring consideration of all it teaches, not just what is claimed.

3. Correction of the Federal Circuit's erroneous departure from precedent and statute is of critical importance, because otherwise the Federal Circuit's

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).

erroneous decision will hurt innovation and patent quality, render the patent laws unstable, create bad incentives for patent applicants, and complicate federal administration of the patent system.

First, 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.

Second, *Ariosa's* rule will render the criteria for patentability unstable over time, even as applied to a single patent, because it renders the prior art status of a patent application dependent on the contents of applications filed later. Under the Federal Circuit's rule, then, what is prior art one day could evaporate the next, or vice versa.

Third, applicants will have even less motivation to draft narrow claims, which give the public greater notice and certainty as to a patent's scope. Drafting broad claims will now not only allow them to ensnare more infringers, but will also be necessary to ensure their submission prevents the allowance of claims covering all it teaches.

Fourth, examiners will have to choose between allowing overbroad claims to issue and requiring amendments that narrow the claims, but in so doing, shrink the pool of prior art available to the examiner in future patent applications. This potentially affects incentives both for their substantive work, in terms of whether to allow or reject patent claims, and for their procedural incentives to complete examination more or less quickly.

The Federal Circuit's decision will create these perverse incentives that undermine the quality of issued patents as well as the patent system's ability to serve its goal of promoting innovation into the future. These are serious harms to the government, as administrator of the patent laws, and to the public, as intended beneficiary of those laws. Certiorari should be granted.

ARGUMENT

I. The Federal Circuit Decision Violates the Fundamental Principle That, to Be Patentable, an Invention Must Be New.

Section 102(e) of the Patent Act codifies a fundamental principle this Court has long recognized: an invention must be *new* to receive a patent. That requirement comes from the Constitution, which makes clear that “[t]he patent monopoly was not designed to secure to the inventor his natural right in his discoveries,” but as “a reward, an inducement, to bring forth *new knowledge*.” *Graham*, 383 U.S. at 9 (1966) (emphasis added). In other words, patents are not designed to compensate individual inventors for their efforts, but to create an incentive for further innovation.

The novelty requirement is critical to ensuring that patent protection strikes an appropriate balance that serves the public's interest in advanced research and continued technological development. Patents promote innovation by giving patent owners the right to exclude others from using the advances they have made. But when those rights cover subject matter that is not new, patents hurt the public by allowing patents owners to prevent

others from using tools that would otherwise be available as part of the public domain. *See, e.g., Lear, Inc. v. Adkins*, 395 U.S. 653, 670-71 (1969).

In recognition of that principle, both before and after the 1952 Patent Act, this Court held patents invalid based on material in patent applications, and treated patent applications as prior art for all they contain—not just what they claim—as of the date they claim priority against others. *See Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252 (1965); *Milburn*, 270 U.S. at 400-402. That rule makes sense in light of the Constitution’s patent clause. Subject matter that is disclosed by one applicant and then claimed by another may seem inventive in the eyes of the second applicant, but is not new from the perspective of the Patent Office, which has the earlier disclosure on file.

As the Court explained in *Milburn*, information already submitted to the Patent Office is no longer *new*, and thus no longer patentable by others: “In view of the gain to the public that the patent laws mean to secure . . . one really must be the first inventor in order to be entitled to a patent.” *Milburn*, 270 U.S. at 400. Preventing patents based on disclosures such as those at issue here not only aligns with the Constitution but encourages the Patent Office to conduct thorough examinations that consider related work on record in their files.

Shortly after its creation, the Federal Circuit recognized that this constitutional principle precluded patents on preexisting knowledge already available to the public. It explained: “[N]o patent should be granted which withdraws from the public domain technology already available to the public. . . . Society, speaking through

Congress and the courts, has said ‘thou shalt not take it away.’” *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1453-54 (Fed. Cir. 1984) (citing *Graham*, 383 U.S. at 6). The contrary decision below flies afoul of that principle as well as this Court’s precedents. This Court should reverse that decision, and direct the Patent Office to invalidate patents, such as Illumina’s, that claim subject matter already invented by others.

II. The Statutory Text and Legislative History Offer No Basis for the Federal Circuit’s Exception to the Rule that Inventions Must Be New to Be Patentable.

The statutory text and legislative history of the 1952 Patent Act and 1999 American Inventors Protection Act (“AIPA”) confirm that Congress intended to codify and extend this Court’s holdings in *Milburn* and *Hazeltine* to published patent applications.

Under the 1952 Act, an applicant may receive no patent on an invention “described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent”—that is, a prior-filed application that matures to a granted patent. 35 U.S.C. § 102(e) (1994). The AIPA created a new avenue for publicizing patent applications—publication under 35 U.S.C. § 122(b)—and extended the § 102(e) prohibition to further include a prior-filed “application for patent, published under section 122(b).” 35 U.S.C. § 102(e) (1) (2000). Congress thus explicitly included a reference to prior art such as Fan—an application published pursuant to the provisions for publication set forth in § 122(b). And as should be apparent from this text, neither provision on its face says anything about the claims of the prior application, referring instead to what is “described.”

Furthermore, the legislative history confirms that Congress was merely codifying *Milburn*'s holding, not altering it. The House Committee Report expressly states that § 102(e) “enacts the rule of *Milburn*.” H.R. Rep. No. 82-1923, at 17 (1952). It further explains: “Subsection (e) is another well-recognized condition imposed by a decision of the Supreme Court which was not expressed in the existing law; for the purpose of anticipating subsequent inventors, a patent disclosing the subject matter speaks *from the filing date of the application disclosing the subject matter*.” *Id.* at 6-7 (emphasis added).

Any lingering doubt that Congress intended to change the *Milburn* rule was laid to rest in *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252 (1965), which considered the effect of the 1952 Act on *Milburn*. Noting that “Congress showed its approval of the holding in *Milburn*,” the Court rejected the “interesting” argument of the petitioners that Congress had departed from that holding, seeing “no reason to depart from the plain holding and reasoning in the *Milburn* case.” *Hazeltine*, 382 U.S. at 255. Mirroring *Milburn*, the Court held that to allow an exception to the rule against second-comer patents “would create an area where patents are awarded for unpatentable advances in the art.” *Id.* at 256.

Similarly, when in 1999 Congress provided for the default publication of patent applications within 18 months of filing,³ Congress amended § 102(e) to make clear that such publications would qualify as prior art under *Milburn* just as granted patents had.

3. The AIPA amended the Patent Act (§ 122(b)) so that patent applications would be published by default within 18 months of filing if the applicant did not request an exception. American Inventors Protection Act of 1999, Pub. L. No. 106-113, § 4502, 113 Stat. 1501, 1501A-561 (1999).

Congress at the time of enactment explained that this amendment was meant to extend *Milburn* to published applications so that they would have effect as prior art as of their filing date. As the House Report explains, the change to § 102(e) was intended to give “a published application . . . prior art effect as of its earliest effective U.S. filing date against any subsequently filed U.S. applications.” H.R. Rep. No. 106-464, at 132 (1999) (Conf. Rep.). Congress could not have been much clearer in drafting § 102(e)(1) to ensure that published applications would not escape the rule of *Milburn*.

Congress’s intent to make disclosures in patent applications effective as of their priority date should not be taken lightly or cast aside. The Federal Circuit was wrong to reach the opposite conclusion, and this Court should grant certiorari to ensure its error does not undermine the patent system by eroding the scope of prior art that Congress and this Court have long made available to invalidate patents that would otherwise prevent the public from using tools an applicant was not the first to invent.

III. This Case Raises Important Questions on the Fundamental Public Policies of Patent Law, Stability of the Patent System, and Complexity of Federal Administration of the Patent Laws.

This case raises several questions of national importance, relating to the proper functioning of the patent system and to the government’s administration of those laws through patent examination. Certiorari is warranted to resolve these issues of widespread concern.

First, public policy supports treating any description in a published provisional application as prior art to a later-filed patent application. It would subvert patent policy to grant a patent to a later inventor, as the Federal Circuit's *Ariosa* decision will do, merely because an invention was disclosed in a published application but not claimed. It would grant a patent right with no concomitant benefit of new knowledge provided to the public. *Cf. Bonito Boats v. Thunder Craft Boats*, 489 U.S. 141, 150-51 (1989). The public, instead, would be granting a monopoly even though it already possessed, and *was free to use*, any unclaimed inventions in the published application.⁴

Second, the *Ariosa* approach creates troubling instability in determinations of patentability for others who may seek patent rights or seek to use what has been publicly disclosed. Under its rule, what is patentable at one time could become unpatentable later, lending to undesirable unpredictability in the patent system. That is because whether information in an application qualifies as prior art will depend on the contents of later-filed applications—specifically, whether the claims they contain map onto the earlier-filed disclosures. The unpredictability this causes brings unnecessary uncertainty to the patent system that can be easily avoided by construing § 102(e)(1) in the same way as § 102(e)(2), such that published applications are given prior art effect for all they teach from their priority date.

4. Certainly there are unusual situations where existing knowledge does not fall within § 102, such as when that knowledge is secret or in use in a foreign country. But here Congress has expressly provided for descriptions in published patent applications to be prior art. Any exception to that policy should be clearly and explicitly made by Congress.

Third, the Federal Circuit’s decision threatens further harm to the quality of issued patents and incentives for enhancing quality throughout the patent system. Its rule will discourage applicants from drafting, and examiners from requiring, clear and narrow patent claims that should be encouraged because of the greater public notice they provide. Following *Ariosa*, applicants may feel they have little choice but to file broad claims to ensure that nobody else can get a patent on what they disclosed to the public in their application.

Fourth, the appellate decision creates difficult incentives for patent examiners and thus difficult problems for the federal agency that administers patent examination. Under the Federal Circuit’s rule, examiners who require applicants to narrow claims during prosecution will have to worry that imposing a requirement that enhances public notice will come at the expense of knowledge that would be otherwise available to the public if left within the scope of the applicant’s claims. These perverse incentives reward patent draftsmanship and take tools away from real innovators. Furthermore, examiners will be put between a rock and a hard place in terms of examination speed. A virtue of the *Milburn* rule is that the “delays of the patent office ought not to cut down the effect of what has been done.” *Milburn*, 270 U.S. at 401. In other words, the Patent Office’s failure to review materials timely—or at all—does not change the invalidating effect of those materials. Exceptions to that rule thus pile upon the Office pressure to complete examination more quickly, pressure that is already immense given the well-known backlog of pending applications, and that time pressure likely leads to poorer-quality examination and lower-quality patents. See Michael D. Frakes & Melissa F. Wasserman, *Is the*

Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents? Evidence from Microlevel Application Data, 99 Rev. Econ. Stat. 550 (2017). Left alone, the Federal Circuit’s rule thus places the government in the difficult position of assessing these lose-lose tradeoffs and instructing its examiners on them.⁵

If *Ariosa* stands, the effect will not be more innovation, but more patents—and lawsuits—that could have been avoided if the Patent Office had simply considered all the material available to it during a patent examination. Given the Patent Office’s application backlog, that feat may be impracticable, but that only confirms the importance of the rule the Federal Circuit has rejected. If the Patent Office cannot be expected to examine all of the pending applications in its files before issuing granted patents, the public must be able to raise patent challenges based on material that, if considered, would have shown the Patent Office the applicant was not the first to invent the subject matter claimed.

To be sure, this approach will lead to more disappointed applicants than *Ariosa*’s approach, but the concerns of second-comers to the Patent Office do not justify the cost of systematically allowing patents that deplete rather than add to the stock of publicly available knowledge. That is especially true where, as here, we know that information would have been available because it had already been disclosed in a submission destined for publication by the Patent Office itself. The Patent Office’s failure to conduct

5. In view of these implications for the federal government, it would be warranted at a minimum for this Court to call for the views of the Solicitor General in this case.

a thorough examination *ex ante* does not justify the cost to the public of wrongfully preventing the use of knowledge that would be available if the Patent Office had just said no.

CONCLUSION

For the foregoing reasons, this Court should grant certiorari, and reverse the Federal Circuit's decision in *Ariosa* and any decisions contrary to this Court's holdings in *Milburn* and *Hazeltine*.

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