

IN THE  
**United States Court of Appeals  
for the Federal Circuit**

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ARIOSIA DIAGNOSTICS, INC.,

*Appellant,*

v.

ILLUMINA, INC.,

*Appellees,*

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

*Intervenor.*

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

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**BRIEF OF INTELLECTUAL PROPERTY LAW PROFESSORS  
AS *AMICI CURIAE* IN SUPPORT OF  
PETITION FOR REHEARING EN BANC**

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

Ariosa Diagnostics, Inc.

v. Illumina, Inc.

Case Nos. Nos. 2016-2388, 2017-1020

**CERTIFICATE OF INTEREST**

Counsel for the:

(petitioner)  (appellant)  (respondent)  (appellee)  (amicus)  (name of party)

Law Professors

certifies the following (use "None" if applicable; use extra sheets if necessary):

1. Full Name of Party Represented by me	2. Name of Real Party in interest (Please only include any real party in interest NOT identified in Question 3) represented by me is:	3. Parent corporations and publicly held companies that own 10 % or more of stock in the party
Law Professors (See Attachment A)	None	None

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (**and who have not or will not enter an appearance in this case**) are:

Juelsgaard Intellectual Property & Innovation Clinic, Mills Legal Clinic, Stanford Law School: Phillip R. Malone, Jef Pearlman

February 23, 2018

Date

/s/ Phillip R. Malone

Signature of counsel

Please Note: All questions must be answered

Phillip R. Malone

Printed name of counsel

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## ATTACHMENT A TO CERTIFICATE OF INTEREST

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## TABLE OF CONTENTS

CERTIFICATE OF INTEREST .....	ii
ATTACHMENT A TO CERTIFICATE OF INTEREST .....	iii
TABLE OF CONTENTS.....	v
TABLE OF AUTHORITIES .....	vi
INTEREST OF <i>AMICI CURIAE</i> .....	1
SUMMARY OF ARGUMENT .....	1
ARGUMENT .....	2
I. It Has Long Been Established That Disclosures in a Patent Application Count as Prior Art as of the Application’s Filing Date. ....	2
A. Beginning with <i>Milburn</i> , the Supreme Court Has Consistently Held That a Patent Disclosure Is Effective as Prior Art from the Application’s Filing Date.....	2
B. Congress Adopted the <i>Milburn</i> Rule in the Patent Act of 1952. ....	4
C. The <i>Milburn</i> Rule Applies Equally to Provisional Applications. ....	4
II. The Federal Circuit Has Departed from the <i>Milburn</i> Rule.....	5
A. In Light of <i>Milburn</i> , <i>Wertheim</i> Was Wrongly Decided. ....	5
B. <i>Wertheim</i> ’s Erroneous Concern About Secret Prior Art Was Nullified by the 1999 Amendments to the Patent Act.....	7
C. The Federal Circuit Has Perpetuated <i>Wertheim</i> ’s Error. ....	8
III. The Faulty <i>Wertheim</i> Rule Creates Additional, Unnecessary Burdens and Uncertainty for Patent Applicants.....	9
A. The <i>Wertheim</i> Approach Adds Burdensome, Uncertain Analysis to Prior Art Determinations. ....	9
B. Under <i>Wertheim</i> and its Progeny, a Valid Patent Could Be Invalidated by Amendments Made to an Unrelated Application.....	10

## TABLE OF AUTHORITIES

### Cases

<i>Alexander Milburn Co. v. Davis-Bournonville Co.</i> , 270 U.S. 390 (1926).....	<i>passim</i>
<i>Dynamic Drinkware, LLC v. National Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015).....	8
<i>Hazeltine Research, Inc. v. Brenner</i> , 382 U.S. 252 (1965).....	3
<i>In re Wertheim</i> , 646 F.2d 527 (C.C.P.A. 1981) .....	5, 6, 7, 9

### Statutes

35 U.S.C. § 102(e) (2000).....	4
35 U.S.C. § 111(b)(8) (2000).....	4
35 U.S.C. § 119(e)(1) (2018).....	8
American Inventors Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501 (1999).....	7
Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792 .....	4

### Legislative Materials

H.R. Rep. No. 82-1923 (1952).....	4
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## INTEREST OF *AMICI CURIAE*

*Amici curiae*<sup>1</sup> are 19 professors of law at universities throughout the United States. Professors have no personal interest in the outcome of this case, but a professional interest in seeing patent law develop in a way that efficiently encourages innovation.<sup>2</sup>

## SUMMARY OF ARGUMENT

This Court's current framework for identifying prior art under section 102(e) of the 1952 Patent Act contradicts both Supreme Court jurisprudence and the Patent Act. Taken to its logical conclusion, this Court's jurisprudence would require a § 112 analysis of the claims of every patent to determine if its application is prior art. These departures are unwarranted and undesirable as a matter of policy. If the Federal Circuit continues in this direction, it will create uncertainty as to a patent's validity and effectively prevent public knowledge from qualifying as prior art. The Federal Circuit should rehear this case en banc to clarify that provisional patent applications, like other patent applications, are prior art for what they teach, not for what they might later claim.<sup>3</sup>

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<sup>1</sup> *Amici*'s unopposed motion for leave accompanies this brief. Per Rule 29(c)(5), no counsel for a party authored this brief in whole or in part, and no counsel or party or any person or entity, other than *amici*, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

<sup>2</sup> *Amici* wish to thank Stanford Juelsgaard Clinic certified law students Edward Nugent and Royce Ryu for their substantial assistance in drafting this brief.

<sup>3</sup> *Amici* take no position on the ultimate validity of the challenged claims.

## ARGUMENT

### **I. It Has Long Been Established That Disclosures in a Patent Application Count as Prior Art as of the Application's Filing Date.**

For nearly a century, the Supreme Court has consistently held that disclosures in a patent application constitute prior art as of the application's filing date. The Court first announced this rule in 1926. It was later codified by Congress and then reaffirmed by the Supreme Court in 1965. The rule, moreover, applies with equal force to provisional as well as non-provisional applications.

#### *A. Beginning with Milburn, the Supreme Court Has Consistently Held That a Patent Disclosure Is Effective as Prior Art from the Application's Filing Date.*

In *Alexander Milburn Co. v. Davis-Bournonville Co.*, 270 U.S. 390 (1926), the Supreme Court held that the teachings contained in a patent constitute prior art as of the date the application for patent is filed—*irrespective* of whether the disclosures are claimed. *Id.* at 400-01. Two co-pending applications each received a patent. The first “gave a complete and adequate description of the thing” in the second, “but did not claim it.” *Id.* at 399. Although the first application was not yet publicly available when the second was filed, the Court ruled that the disclosure in the first patent was effective as prior art as of the first application's filing date.

The patent system is designed to incentivize the public disclosure of new knowledge, *id.* at 399-400, so issuing a second patent for an invention that had already been described would undermine the exchange of a patent for a *previously*



*unknown* invention. Furthermore, had the first application been published in a periodical, or if it had issued before the second application was filed, its teachings would unquestionably constitute prior art. *Id.* at 400-01. But no “sound distinction” can be drawn between such disclosures and an earlier co-pending application. *Id.* at 401. In each case, the content of the second patent would not be new knowledge.

Thus, even though amendments might be required, or a new application might be filed based on the original description, the teachings of an original application were held to be prior art as of its filing date. *Id.* at 401-02. Rather than having kept the description in a “portfolio uncommunicated to anyone,” an applicant has done as much as possible to make a public disclosure, which in turn must count as prior art. *Id.* at 400-01. The Court held that it would be anomalous if later applicants could secure a patent on previously disclosed knowledge, or if the particular medium of the disclosure could affect its status as prior art. *See id.*

The Court extended *Milburn* to obviousness inquiries in *Hazeltine Research, Inc. v. Brenner*, 382 U.S. 252 (1965). There, a later applicant argued that *Milburn* applied only to § 102, and that an earlier-filed, co-pending patent was not prior art under § 103 because its teachings “were secret and not known to the public” at the time. *Hazeltine*, 382 U.S. at 253-54. The Court dismissed these concerns about secret prior art and reaffirmed that “the disclosures contained in [a] patent become a part of the prior art as of the time the application was filed.” *Id.* at 254-55.

*B. Congress Adopted the Milburn Rule in the Patent Act of 1952.*

In the Patent Act of 1952, Congress codified *Milburn* in § 102(e), which states that a patent cannot issue if “the invention was 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.” Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, 797. As the House Committee Report explained, “Paragraph (e) is new and enacts the rule of *Milburn* . . . by reason of which a United States patent disclosing an invention dates from the date of filing the application for the purpose of anticipating a subsequent inventor.” H.R. Rep. No. 82-1923, at 17 (1952).

*C. The Milburn Rule Applies Equally to Provisional Applications.*

The *Milburn* rule has applied with equal force to provisional applications since they were added in the 1994 amendments to the Patent Act. Section 111 provides that “[t]he provisions of this title relating to applications for patent shall apply to provisional applications for patent,” subject to several exceptions, none of which is relevant here. 35 U.S.C. § 111(b)(8) (2000). A provisional can therefore serve as the effective “fil[ing]” of an application within the meaning of § 102(e)(1)-(2). *See* 35 U.S.C. § 102(e) (2000). This is also consistent with the logic of *Milburn*: unless a provisional is abandoned before publication (akin to an invention being kept in a “portfolio uncommunicated to anyone,” 270 U.S. at 400), its disclosure is intended for the public and can be used to invalidate later claims.

## II. The Federal Circuit Has Departed from the *Milburn* Rule.

This court's predecessor, the United States Court of Customs and Patent Appeals ("C.C.P.A."), strayed from the Supreme Court's clear holdings and the 1952 Act's adoption of the *Milburn* rule when it decided *In re Wertheim*, 646 F.2d 527 (C.C.P.A. 1981). The Federal Circuit then continued this departure from the well-established rule *even after* the 1999 amendments to the Patent Act nullified *Wertheim*'s concerns about secret prior art. These decisions cannot be reconciled with Supreme Court precedent and the Patent Act, and should be revisited en banc.

### A. *In Light of Milburn, Wertheim Was Wrongly Decided.*

*Wertheim*, decided in 1981, ignored the reasoning in *Milburn* and *Hazeltine*. Instead, the C.C.P.A. followed its own rationale about secret prior art—despite the Supreme Court's rejection of such concerns when raised in *Milburn* and *Hazeltine*.

In *Wertheim*, the Patent and Trademark Board of Appeals ("the Board") rejected *Wertheim*'s patent application on the grounds that the invention was obvious in light of the prior art. *Wertheim*, 646 F.2d at 531. The primary reference was the "Pfluger" series of patent applications. *Id.* at 529. "Pfluger I" became the Pfluger patent after two continuations-in-part and a continuation. *Id.* *Wertheim*'s earliest priority date came partway through the Pfluger series. *Id.*

The Board found that Pfluger I, combined with two publications, rendered *Wertheim*'s invention obvious. *Id.* at 531. But the C.C.P.A. reversed, finding that

the Pfluger patent was not entitled to the filing date of Pfluger I, *id.* at 539, and thus could not be used to support a § 103 rejection. *Wertheim* not only distorted key aspects of *Milburn*, but also pursued an irrelevant inquiry in determining whether information disclosed in a patent application constitutes prior art.

First, the C.C.P.A. invented a “but-for” rationale that cannot be reconciled with *Milburn* and *Hazeltine*. The *Wertheim* court construed *Milburn* as saying that, by filing an application, “the inventor was presumed to have disclosed an invention which, *but for the delays inherent in the prosecution*, would have been disclosed to the public on the filing date.” *Id.* at 536 (emphasis added). Because continuations were required for the Pfluger patent to issue, the court reasoned, it was not only the delays of the Patent and Trademark Office (PTO) that kept the teachings of Pfluger I from the public. *Id.* at 539.

*Milburn*, however, forecloses the “but-for” misinterpretation adopted in *Wertheim*. In fact, the Supreme Court recognized that the earlier applicant “had taken steps that would make [his disclosure] public as soon as the Patent Office did its work, *although, of course, amendments might be required of him before the end could be reached.*” *Milburn*, 270 U.S. at 401 (emphasis added). Indeed, the Court noted that even if a *new application* were filed based on the original description, prior art would be established as of the earlier filing date. *Id.* at 402. Thus, delays *not* inherent in prosecution—such as amendments and new applications in *Milburn*

or continuations in *Wertheim*—do not alter the application’s status as prior art.

The C.C.P.A. further deviated from *Milburn* by pursuing an irrelevant prior art inquiry, focusing on whether the disclosures in Pfluger I were sufficient to support the claims in the Pfluger patent in accordance with § 112. *Wertheim*, 646 F.2d at 537. Because limitations necessary for the Pfluger patent to issue were only added later in the series of continuations, the *Wertheim* court held that the Pfluger patent was not entitled to the Pfluger I filing date. *Id.* at 538-39.

*Milburn*, however, demonstrates that this inquiry is entirely beside the point; what matters for prior art is not what a reference claims but what it teaches. 270 U.S. at 401. Thus, in *Wertheim*, because Pfluger I disclosed knowledge inconsistent with the allowance of *Wertheim*’s claim and such matter was ultimately available to the public, 646 F.2d at 536, the rejection of *Wertheim*’s application should have been upheld.

*B. Wertheim’s Erroneous Concern About Secret Prior Art Was Nullified by the 1999 Amendments to the Patent Act.*

*Wertheim* was wrong under Supreme Court precedent when it was decided. Its misguided concern about secret prior art, *see* 646 F.2d at 539, was then vitiated (with limited exceptions) by the 1999 amendments to the Patent Act, in which Congress amended § 122(b) to mandate the publication of patent applications within eighteen months of filing. *See* Pub. L. No. 106-113, § 4502, 113 Stat. 1501, 1501A-561 (1999). Congress thus eliminated the accumulation of undisclosed

applications in the PTO, thereby nullifying the secret-prior-art rationale that (mistakenly) grounded *Wertheim*'s divergence from Supreme Court precedent.

*C. The Federal Circuit Has Perpetuated Wertheim's Error.*

Though the 1999 amendments effectively invalidated *Wertheim*, this Court has continued to apply its faulty reasoning. In *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375 (Fed. Cir. 2015), this Court refused to reject certain patent claims as anticipated by a prior patent, holding that a reference patent can only date back to the filing date of its provisional if the provisional gives § 112 support for the patent. *Id.* at 1382 (citing *Wertheim*, 646 F.2d at 537).

This decision, like *Wertheim*, directly contravenes the long-established *Milburn* rule. There is no basis for applying a § 112(a) requirement to an application or provisional application for the purposes of identifying prior art. *Dynamic Drinkware* bases its prior art § 112 requirement on the § 119(e)(1) (similar to the pre-AIA § 120) statement that

[a]n application for patent . . . for an invention disclosed in the manner provided by section 112(a) . . . in a provisional application . . . shall have the same effect, as to such invention, as though filed on the date of the provisional application.

35 U.S.C. § 119(e)(1) (2018); *see also* 800 F.3d at 1378. However, the critical “for an invention . . . as to such invention” language makes clear that § 119(e)(1) only applies for determining if an application can claim priority to *its own provisional*. Section 112 support for claims is irrelevant when a provisional is used as prior art

against a *different* invention. That is, if the provisional provides § 112 support “as to such invention” in the patent in accordance with § 119(e)(1), then even unclaimed teachings in the provisional become prior art against other patents.

### **III. The Faulty *Wertheim* Rule Creates Additional, Unnecessary Burdens and Uncertainty for Patent Applicants.**

This Court’s continued departure from *Milburn* in favor of *Wertheim*’s flawed and obsolete rationale unnecessarily complicates patent proceedings, creates harmful confusion and uncertainty about prior art and patent validity, and threatens to stifle efficient patenting and innovation relying on the public domain.

#### *A. The Wertheim Approach Adds Burdensome, Uncertain Analysis to Prior Art Determinations.*

Under this approach, an inventor will need to do a § 112 written description analysis to determine if a patent application after a continuation-in-part or any provisional application qualifies as prior art. *See Wertheim*, 646 F.2d at 537. This inquiry is highly uncertain, often requiring court intervention to resolve. Even if the application’s disclosure was clear and unquestionably public, a prior art determination would require analysis of later patent claims, which could be very complex, or even in a different technological field. And this inquiry would have to be repeated for every application or provisional that *on its face* disclosed relevant material, even though the later claims are irrelevant to the prior art disclosure.

This burdensome requirement has no basis in law or policy and produces

particularly bizarre results when applied to cases where the issue is the prior art status of a provisional with an identical specification to that of the published application. It makes no sense to include a § 112 written description requirement to create different prior art dates for public documents with identical disclosures.

*B. Under Wertheim and its Progeny, a Valid Patent Could Be Invalidated by Amendments Made to an Unrelated Application.*

Keeping this Court's rule will have undesirable practical consequences for patentees, as well. Consider an inventor who files a provisional that discloses inventions M and N, and then a non-provisional application that incorporates the provisional by reference but claims only M. Even once published, N is not prior art under *Wertheim*. Suppose a second inventor then applies for and receives a patent on N. If—but only if—the first inventor later amended the application to claim N, the provisional's disclosure of N would *retroactively* become prior art as of the provisional's filing date. The second inventor's issued patent would silently and retroactively become invalid. This is true even though the disclosures were public when the second inventor's patent was filed and the disclosures had not changed at all—instead, the invalidation resulted from a change in the claims of *another* application. That makes no sense. It is inconsistent with *Milburn* and the rest of § 102, both of which focus on what a prior art reference teaches, not what it claims.

/s/ Phillip R. Malone  
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## APPENDIX

*Amici curiae* law professors are listed below. Affiliation is provided for identification purposes only. All signatories are participating in their individual capacity, not on behalf of their institutions.

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## CERTIFICATE OF SERVICE

I hereby certify that on February 23, 2018, I electronically filed foregoing Brief of Intellectual Property Law Professors as *Amici Curiae* in Support of Petition for Rehearing En Banc with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

Dated: February 23, 2018

/s/ Phillip R. Malone  
Phillip R. Malone  
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