21-1725

In the

United States Court of Appeals

for the

Federal Circuit

DYFAN, LLC,
Plaintiff-Appellant

v.

TARGET CORPORATION,
Defendant-Appellee

———————————————————

*Appeal from the United States District Court for the Western District of Texas,
in Case No. 6:19-cv-00179-ADA · Honorable Alan D. Albright, Judge*

BRIEF *AMICI CURIAE* OF INTELLECTUAL PROPERTY PROFESSORS IN SUPPORT OF REHEARING *EN BANC*

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May 16, 2022

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CERTIFICATE OF INTEREST

Case Number 21-1725

Short Case Caption Dyfan, LLC v. Target Corporation

Filing Party/Entity Amici Curiae Intellectual Property Professors

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Instructions: Complete each section of the form. In answering items 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance. **Please enter only one item per box; attach additional pages as needed and check the relevant box**. Counsel must immediately file an amended Certificate of Interest if information changes. Fed. Cir. R. 47.4(b).

I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: 05/16/2022

Signature: /s/ Mark A. Lemley

Name: Mark A. Lemley

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	2. Real Party in Interest. Fed. Cir. R. 47.4(a)(2).	3. Parent Corporations and Stockholders. Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.　　☑ None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.　　☑ None/Not Applicable
Appendix A is attached.		

☑　　Additional pages attached

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

☑   None/Not Applicable   ☐   Additional pages attached

5. Related Cases. Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

☑   None/Not Applicable   ☐   Additional pages attached

6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

☑   None/Not Applicable   ☐   Additional pages attached

Appendix A
List of Signatories[1]

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TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

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INTEREST OF AMICI

Amici are intellectual property professors at schools throughout the United States. We have no personal or financial stake in the outcome of this case, but we have an academic interest in seeing that patent law develops in an orderly and predictable way and that it promotes the progress of the useful arts.[1]

SUMMARY OF ARGUMENT

The panel opinion is inconsistent with this Court's en banc decision in *Williamson v. Citrix*, 792 F.3d 1339 (Fed. Cir. 2015) (en banc). This Court should grant rehearing en banc in order to preserve the integrity of the Court's en banc process and to avoid the reintroduction of pure functional claiming of software in violation of the language of the statute.

ARGUMENT

In *Williamson*, this Court confronted the problem of functional claiming in software. As scholars have noted, "it is broad functional claiming of software inventions that is arguably responsible for most of the well-recognized problems with software patents." Mark A. Lemley, *Software Patents and the Return of*

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[1] No one other than the undersigned has written any part of this brief or made a monetary contribution to support it. All parties have consented to the filing of this brief.

1

Functional Claiming, 2013 WIS. L. REV. 905, 906; Kevin Collins, *Patent Law's Functionality Malfunction and the Problem of Overbroad, Functional Software Patents*, 99 WASH. U. L. REV. 1399 (2013). Prior to *Williamson*, software patentees frequently claimed to own the function of their program, not merely the particular way they achieved that goal. Both because of the nature of computer programming and because they avoided using the term "means" in favor of equally empty nonce words like "module" or "mechanism," those patentees wrote those broad functional claims without being subject to the limitations of section 112(f). As a result, they effectively captured ownership of anything that achieves the goal the patent identifies. They claimed to own the function itself. And quite often they did so without ever having disclosed *any* way of achieving that goal, much less *every* way. That "resulted in a proliferation of functional claiming untethered to section 112, para. 6 and free of the strictures set forth in the statute." *Williamson*, 792 F.3d at 1349.

Williamson put an end to that practice – until now. In *Williamson*, this Court en banc unanimously held that the use of "nonce words" other than "means" still invoked section 112(f). The particular term at issue there was "module." Critically, the court held that "module" was such a "nonce word" because it "is simply a generic description for software or hardware that performs a specified function." *Id*. at 1351. Software patent claims written in means plus function

2

format are indefinite unless the patent specification discloses an algorithm that implements the function. *Id.*

In this case, the panel opinion refused to apply *Williamson* to conclude that the term "code" was similarly a nonce word. That was error. The term "code" is no more and no less than "a generic description for software . . . that performs a specified function." The Free Dictionary defines code as "the symbolic arrangement of data or instructions in a computer program." https://www.thefreedictionary.com/computer+code. Indeed, the Court relied on the patentee's expert's testimony that made it clear that the words "code" and "application" were merely generic references to software that performs a specified function: "Dr. Goldberg testified that the term "application" would have been commonly understood to mean a "computer program intended to provide some service to a user. . . . Dr. Goldberg explained that a person of ordinary skill would understand that "code" is "a bunch of software instructions."" *Dyfan*, slip op. at 12. While the panel opinion seemed to take that testimony as evidence that the terms code and application provided sufficient structure to escape section 112(f), in fact it shows exactly the opposite – that the terms are nothing more than "a generic description for software . . . that performs a specified function."

The panel opinion credited testimony that off-the-shelf software could perform the functions in question.[2] But even assuming that is true, it has no bearing at all on whether the words "code" and "application" invoke section 112(f) in the first place. At most it goes to the question of whether the patent is indefinite, or whether the patentee can show that the patent sufficiently discloses structure in the form of an algorithm by pointing to that off-the-shelf software. But it does not mean that the terms "code" and "application" by themselves provide that structure. They don't. They are merely generic references to the idea of using software to achieve a goal.

If software patentees can avoid *Williamson* and write purely functional claims merely by using the word "code" in place of actual structure, this Court will have rendered *Williamson* a dead letter. This Court's unanimous en banc ruling that nonce words can't avoid the application of section 112(f) will have an enormous loophole: any nonce words that a panel decides it likes simply won't count. "Code" and "application" (and perhaps others – "software"?) will become magic words that suffice to avoid the statutory rules. Patentees can and will drive a truck through that loophole, writing patents that claim any device programmed in any way to achieve a goal but that disclose no algorithms or structure to achieve

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[2] *Cf. Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003 (Fed. Cir. 2018) (holding that functional language did not trigger section 112(f) where it was not at the point of novelty and was expressly limited to prior art systems).

that goal. And unless this Court revisits the panel decision, they will have a

conflict in this Court's precedent they can point to as supporting their position.[3]

That's bad for the integrity of the Court.

It's also bad law. There is a reason Congress limited functional claiming in

1952. And that reason applies with particular force in the software industry. Many

of the problems with abuse of software patents can be traced to the fact that we

historically allowed patentees to claim functions, not implementations. It is broad

functional claiming that leads to assertions that every part of a complex technology

product is patented, often by many different people at the same time. It is broad

functional claiming that puts stars in the eyes of patent plaintiffs, who can demand

huge royalties on the theory that there simply is no other way to implement the

technology they have patented. And it is broad functional claiming that makes

most of the resulting patents invalid, since even if ten programmers developed ten

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[3] Indeed, the panel opinion has already begun unsettling the law. The very next day, a different panel of this Court relied on *Dyfan* to reject *Williamson* and conclude that the phrase "a processor adapted to [perform five functions] had sufficient structure to avoid section 112(f). *VDPP LLC v. VIZIO, Inc.*, No. 2021-2040, 2022 WL 885771 (Fed. Cir. Mar. 25, 2022). *Contra Aristocrat Techs. Austl. Pty Ltd. v. International Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) ("this court has consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor.").

different algorithms to solve a problem only one of them could be the first to solve the problem at all. Lemley, *supra*, at 943; Collins, *supra*.

Williamson reined in those abuses by setting a clear rule: patentees can't avoid section 112(f) simply by picking a magic word other than "means." The panel opinion directly contradicts *Williamson*. This Court should grant en banc rehearing to resolve the conflict.

Dated: May 16, 2022

Respectfully submitted,

/s/ Mark A. Lemley
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Appendix A
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CERTIFICATE OF SERVICE

I hereby certify that on May 16, 2022, I electronically filed the foregoing with

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by using the appellate CM/ECF system.

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/s/ Mark A. Lemley
Mark A. Lemley

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

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Case Number: 21-1725

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Name: Mark A. Lemley