NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: BRIAN DAVID MCFADDEN,

Appellant

2024-2107

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 16/231,749.

Decided: September 5, 2025

BRIAN McFADDEN, Miami, FL, pro se.

MONICA BARNES LATEEF, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for appellee Coke Morgan Stewart. Also represented by KAKOLI CAPRIHAN, AMY J. NELSON.

Before Reyna, Bryson, and Stoll, $Circuit\ Judges$. Per Curiam.

Brian McFadden appeals the decision of the Patent Trial and Appeal Board affirming the examiner's rejection of certain claims of U.S. Patent Application No. 16/231,749 as unpatentable under 35 U.S.C. §§ 101 and 112. For the

Case: 24-2107 Document: 30 Page: 2 Filed: 09/05/2025

2 IN RE: MCFADDEN

following reasons, we reverse-in-part, vacate-in-part, and remand.

BACKGROUND

U.S. Patent Application No. 16/231,749 claims a "system and methods for controlling and optimizing information distribution between users in an information exchange." J.A. 70 (capitalization normalized). The specification states that information exchange networks, such as social media networks, lack the ability to "precisely and optimally regulate the flow of information between producers and consumers." *Id.* As a solution, the '749 application discloses an information exchange that facilitates the flow of information between producers and consumers. The specification generally teaches a producer entering information into the exchange, a consumer indicating what information she would want or not want to receive, and various matrices and loops facilitating the optimal flow of information between the producer and consumer.

Claims 10 and 18 are illustrative. Claim 10 recites:

- 10. A social network system, comprising:
- a post or other equivalent information item from a first user of the social network;
- a subsystem configured to use the method of claim 1 to determine an include region for a second user of the social network; [and]
- a module capable of using the include region to determine inclusion of the post into a news feed or equivalent information stream directed to the second user.

J.A. 32. Claim 18 recites:

- 18. An information exchange apparatus for generating an include region comprising:
- a distribution of information items;

IN RE: MCFADDEN 3

a subsystem configured for processing a region of the distribution to:

- (a) determine a number of items for the region,
- (b) determine an expected item value for the region,
- (c) compute a metric for the region, wherein the metric computation depends on the expected item value and the number of items; and

a module for selecting the include region, wherein the include region is preferred over other regions of the distribution at least in part according to the metric.

J.A. 33-34.

In the Final Office Action, the examiner rejected claims 10–18 of the '749 application based on two grounds.¹ First, the examiner rejected claims 10–17 as indefinite under 35 U.S.C. § 112(b), determining they were mixed claims reciting both apparatus limitations and method steps. The examiner also rejected claims 10–18 under 35 U.S.C. § 101. According to the examiner, the claims were directed to software without any hardware or structural limitations and thus did not fall within the four categories of patent eligible subject matter (process, machine, manufacture, or composition of matter).

The Board affirmed the examiner's rejection of claims 10–18 under both §§ 101 and 112. Regarding § 101, the Board determined that the claims recited "software per se,' i.e., a product without any structural recitations." J.A. 5 (citing Manual of Patent Examining Procedure

¹ The examiner also rejected other claims in the Final Office Action, but those claims are not at issue on appeal.

4 IN RE: MCFADDEN

(MPEP) § 2106.03)). The Board concluded that the claims did not "explicitly recite any limitations directed to hardware, such as circuitry, computers, CPUs, memory, or computer-readable storage medium," nor did they "use the words 'means' or 'step' to tie the claim limitations to any hardware structure described in the Specification." J.A. 6–7; see also J.A. 16 ("[The] Specification [] does not contain any description of structural limitations that would change the characterization of [] claim 18 to something other than software per se.").

The Board also agreed with the examiner that the claims were indefinite under § 112 because they claimed both an apparatus and a method of using the apparatus in a single claim. The Board analogized the claims to those held indefinite in *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005), determining that the claims at issue here, like those in *IPXL*, "not only allow[ed] one to practice the method steps of [the method claim—i.e., recited the capability of the structure], but also recite[d] practicing the method steps of [the method claim]." J.A. 8–9, 21–22.

Mr. McFadden, appearing pro se, appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

"We review the Board's legal determinations *de novo*, and the Board's factual findings underlying those determinations for substantial evidence." *Honeywell Int'l Inc.* v. *Mexichem Amanco Holding S.A. DE C.V.*, 865 F.3d 1348, 1353 (Fed. Cir. 2017) (internal citations omitted). After review, we determine that the Board erred in affirming the

IN RE: MCFADDEN 5

examiner's rejection of claims 10–18 under §§ 101 and 112.2

Ι

Turning first to the rejection under § 101, the Board erred in concluding that apparatus and system claims 10-18 are ineligible under § 101 solely because they lack any structure and thus do not fall within a statutorily provided category. Under § 101, an inventor may obtain a patent for "any new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. "[A] § 101 analysis begins by identifying whether an invention fits within one of the four statutorily provided categories of patent-eligible subject matter." Aatrix Software, Inc. v. Green Shades Software, Inc., 882 F.3d 1121, 1125 (Fed. Cir. 2018) (citation omitted). Once a claim meets that threshold, the § 101 analysis continues under the two-step Alice/Mayo framework. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 216–18 (2014); see Aatrix, 882 F.3d at 1125 (citing post-Alice cases that addressed the threshold statutory category question).

Applying this framework, "[w]e have held that claims to pure data and claims to transitory signals embedded with data are directed to ineligible subject matter under § 101." Aatrix, 882 F.3d at 1125 (first citing Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344,

We note that while Mr. McFadden appears to appeal the examiner's rejections of claims 10–17 under 35 U.S.C. §§ 102 and 103, see Appellant's Br. 11–12, the Board did not sustain the examiner's rejections under those sections. J.A. 9–10. We therefore will not address that portion of Mr. McFadden's appeal because generally, a party may not appeal from a favorable decision. See Elec. Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241, 242 (1939).

6 IN RE: MCFADDEN

1348–50 (Fed. Cir. 2014); and then citing *In re Nuijten*, 500 F.3d 1346, 1353–57 (Fed. Cir. 2007)). But here, the Board erred by concluding that the claims at issue lack the necessary structure to fall within one of the statutorily provided categories. Like many claims that focus on software innovations, these claims are system and apparatus claims that recite hardware as well as software.

Mr. McFadden asserted both before the Board and on appeal that the claim limitations should be interpreted as means-plus-function limitations under 35 U.S.C. § 112(f). J.A. 15; Appellant's Br. 16. We agree with Mr. McFadden. "The first step of a [§ 112(f)] analysis is to determine whether the claim term at issue is in means-plus-function format." Fintiv. Inc. v. PayPal Holdings, Inc., 134 F.4th 1377, 1381 (Fed. Cir. 2025). When, as here, a claim does not use the word "means," a rebuttable presumption arises that § 112(f) does not apply. Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc in part). "We have not, however, blindly elevated form over substance when evaluating whether a claim limitation invokes [§ 112(f)]." *Id*. The presumption can be overcome if a claim term "fails to 'recite [] sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function." Id. at 1349 (alteration in original) (quoting Watts v. XL Sys., Inc., 232 F.3d 877, 880 (Fed. Cir. 2000)). For example, when a claim uses a nonce word analogous to "means" followed by functional language, it invokes § 112(f). Id. at 1350 (noting that the claim at issue replaced the term "means" with the nonce word "module," then recited "functions performed" by the module).

Here, claim 10, for example, recites "a subsystem configured to use the method of claim 1 to determine an include region for a second user of the social network."

IN RE: MCFADDEN 7

J.A. 32.3 The term "subsystem" as used in the claims is not a term of art that conveys a particular structure to a person of ordinary skill. Rather, as the Board recognized, much like the term "means," the term "subsystem" is a term devoid of particular structure. *See*, e.g., J.A. 7 ("[I]ndependent claim 10, which recites a system comprising... a subsystem to determine an include region, ... does not recite any hardware structure."). Accordingly, this claim limitation is properly understood as being written in meansplus-function format.

Having determined the claims invoke § 112(f), "we proceed to the second step of the analysis: identifying the corresponding structure described in the specification." Fintiv, 134 F.4th at 1384. We thus turn to the specification to determine what structure corresponds to the claimed "subsystem," that is, what structure in the specification performs the recited claim functions such as "processing a region of the distribution" or "us[ing]" the method of claim 1 to determine the include region. J.A. 32–34. The specification teaches a system that can operate as a "subsystem [that] interact[s] with the information exchange." J.A. 74. The specification elaborates on the various different structures that can operate as the computer system/subsystem:

In one embodiment, the system is computer coded software operating on a computer system. The computer system can be any combination of one or more physical computer hardware systems, physical servers, devices, mobile devices, CPUs, auxiliary CPUs, embedded processors, workstations, desktop computers, virtual devices, virtual servers,

³ Claims 11–18 are very similar. Claims 11–17 recite subsystems configured to use the methods of claims 1, 4, and 5, and claim 18 recites "a subsystem configured for processing a region of the distribution." *See* J.A. 32–34.

8 IN RE: MCFADDEN

virtual machines, or similarly related hardware with an applicable operating system appropriate for the specific hardware and, in the case of more than one, interconnected via a private or public network.

Id. The specification also discloses that the computer system/subsystem uses a decision matrix 70 to determine if an information item should be included. J.A. 78–79. Because the specification discloses structure that corresponds to the recited subsystem—i.e., a computer system running software—we conclude that, contrary to the Board's holding, the claims recite tangible structure and fall within one of the statutorily provided categories.

The Board acknowledged that the "[s]pecification states that the information exchange system 'is computer coded software operating on a computer system," but it characterized this recitation as a "generic description of computer hardware." J.A. 17. For the purposes of this specific inquiry under § 101—whether the claims at issue contain enough structure such that they do not constitute "software per se"—the alleged generic nature of the corresponding structure does not render the structure nonexistent.⁴ The Board therefore erred in interpreting the claims to be devoid of physical structure.

The examiner and the Board stopped their § 101 analyses after concluding that the claims fail to fall within any of the four statutorily provided categories. We thus remand for consideration of whether these claims satisfy § 101 under the two-step *Alice/Mayo* framework.⁵

⁴ We do not address whether this is sufficient structure for purposes of indefiniteness under § 112.

⁵ Going forward, we encourage the Board to conduct an analysis under *Alice/Mayo* whenever presented with an examiner rejection under § 101.

IN RE: MCFADDEN 9

Specifically, on remand, the Board should analyze whether the claims are directed to an abstract idea. We do not decide in the first instance whether claims 10–18 are eligible under *Alice/Mayo*.

Π

The Board also erred in finding claims 10–17 indefinite under § 112(b) based on the rationale in *IPXL*. We held in *IPXL* that "a single claim covering both an apparatus and a method of use of that apparatus is invalid." 430 F.3d at 1384. We reasoned that "a manufacturer or seller of the claimed apparatus would not know from the claim whether it might also be liable for contributory infringement because a buyer or user of the apparatus later performs the claimed method of using the apparatus." *Id*.

When evaluating whether a system or apparatus claim improperly incorporates a method of use, we evaluate the limitation to see if it is "directed to user actions, not system capabilities." In re Katz Interactive Call Processing Pat. *Litig.*, 639 F.3d 1303, 1318 (Fed. Cir. 2011). The claim limitations at issue in IPXL and Katz were directed at user actions: "the user uses the input means" and "callers digitally enter data," respectively. IPXL, 430 F.3d at 1384 (emphasis omitted) (citation omitted); Katz, 639 F.3d at 1318. Conversely, claim limitations that "do not explicitly claim the user's act . . . , but rather, claim the system's capability," do not fall within the rationale of IPXL. MasterMine Software, Inc. v. Microsoft Corp., 874 F.3d 1307, 1316 (Fed. Cir. 2017). "[W]hile a claim directed to both a method and an apparatus may be indefinite, 'apparatus claims are not necessarily indefinite for using functional language." Id. at 1313 (quoting Microprocessor Enhancement Corp. v. Tex. Instruments Inc., 520 F.3d 1367, 1375 (Fed. Cir. 2008) ("MEC")). When claims "merely use permissible functional language to describe the capabilities of the claimed system," the claims are not indefinite because

10 IN RE: MCFADDEN

they "inform those skilled in the art about the scope of the invention with reasonable certainty." *Id.* at 1316.

The claims at issue here permissibly claim the functionality of the system. Claims 10–17 contain the limitation "a subsystem configured to use the method of" one of the method claims. J.A. 32–33. The language "configured to" in the claims indicates that the subsystem must be capable of using the claimed method. The Board incorrectly found that the claims "recite practicing the method steps." J.A. 9. Properly read, the claims do not require performance of the method steps. Rather, the claims are limited to a system or apparatus "possessing the recited structure and capable of performing the recited functions." *MEC*, 520 F.3d at 1375 (emphasis omitted). We thus reverse the Board's affirmance of the examiner's rejection of claims 10–17 under § 112(b).

CONCLUSION

For the foregoing reasons, we vacate the Board's decision affirming the examiner's rejection under 35 U.S.C. § 101 and reverse the Board's decision affirming the examiner's rejection under 35 U.S.C. § 112 and remand for further proceedings consistent with this opinion.

REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED

Costs

Costs to Appellant.