NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

WSOU INVESTMENTS LLC, DBA BRAZOS LICENSING AND DEVELOPMENT,
Plaintiff-Appellant

v.

GOOGLE LLC,
Defendant-Appellee

2022-1064

Appeal from the United States District Court for the Western District of Texas in No. 6:20-cv-00577-ADA, Judge Alan D. Albright.

Decided: October 6, 2023

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SWIZE, Washington, DC; THARAN GREGORY LANIER, Palo Alto, CA.

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Before LOURIE, LINN, and STOLL, *Circuit Judges*.

LINN, *Circuit Judge*

WSOU Investments LLC ("WSOU") appeals from a final judgment of invalidity of independent claim 9, and claims 10–16 dependent therefrom, of WSOU's U.S. Patent 8,751,585 ("'585 patent") by the United States District Court for the Western District of Texas. *WSOU Invests., LLC dba, Brazos Licensing and Dev. v. Google LLC*, No. 6:20-CV-00577 (W.D. Tex. 2021). The district court construed several limitations in independent claim 9 to be indefinite as means-plus-function limitations without sufficient corresponding structure, and the parties jointly stipulated to a final judgment of invalidity of claims 9–16 under the district court's construction. J.A. 598. The district court granted the stipulation and entered final judgment of invalidity. WSOU timely appeals the relevant constructions. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

Because the district court correctly construed the limitation "a collaborative application management processor configured to manage collaborative applications" to be in means-plus-function form, and because the specification lacks corresponding structure, we *affirm*. We need not and do not address the district court's holding of indefiniteness of the remaining limitations at issue.

BACKGROUND

I. The '585 Patent

The '585 patent, filed March 31, 2009, is directed to a management method for electronic messages in a user's inbox integrated into a communications system. '585 patent, Abstract. The method comprises filtering electronic

messages using user-created archiving rules that respond to the user's carrying out actions responsive to the content of the email message. '585 patent, col. 2, ll. 1–54. The '585 patent includes a single image showing an overview of the system:
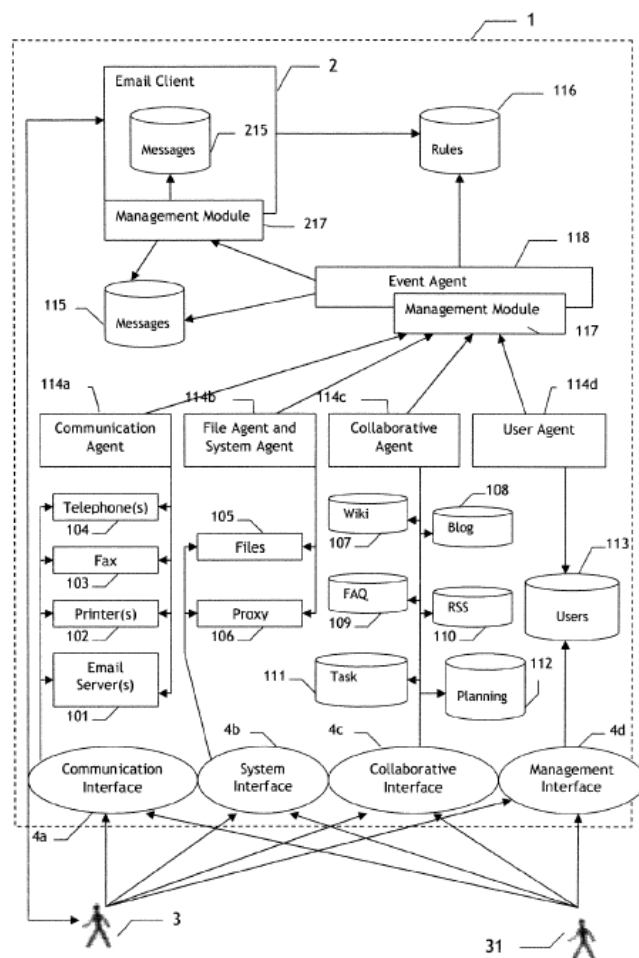
'585 patent, FIG. 1. Independent claim 9, which contains the limitations that are the subject of this appeal, reads as follows, with the contested limitations italicized:

9.   Communication system, comprising

an electronic message client configured to enable a user to use the electronic message client to manage one or more electronic message of a plurality of electronic messages in an inbox associated with the user, the plurality of electronic messages stored in a message storage database, the electronic message client comprising:

a client management processor configured to enable the user to select an electronic message from the inbox, assign an archiving rule to the selected electronic message that includes a definition of an action that can be subsequently carried out using at least some portion of the communication system,

wherein the action defined in the archiving rule is selected by the user from a list of actions that can be detected by the communication system, wherein the action defined in the archiving rule is based at least in part on content of the selected electronic message, and define an archive location within the communication system to which the selected electronic message is moved after the action is detected, and

the communication system further comprising:

a detection processor configured to detect the action defined in the archiving rule assigned to the selected electronic message was carried out,

an event management processor configured to generate an archiving command to move the selected electronic message from the inbox to the archive location after detection of the action defined in the archiving rule; and

a collaborative application management processor configured to manage collaborative applications;

wherein the list of actions includes at least one of the following actions:

update to a page associated with a collaborative application by the user or another user associated with the communication system in which the collaborative application is hosted by the communication system; and

update to a page associated with a collaborative application in which the collaborative application is hosted outside the communication system.

'585 patent, col. 9, l. 37–col. 10, l. 32 (emphases added).

II. District Court Proceedings

WSOU filed suit against Google LLC ("Google") for infringement of fifteen patents owned by WSOU, including the '585 patent. The district court issued a single claim construction order that covered all fifteen cases. J.A. 2–9. The constructions relevant to this appeal are as follows:

"client management processor configured to enable the user to select an electronic message from the inbox"	Subject to 35 U.S.C. § 112, ¶ 6 Function: to enable the user to select an electronic message from the inbox Structure: indefinite
"a detection processor configured to detect the action defined in the archiving rule assigned to the selected electronic message was carried out"	Subject to 35 U.S.C. § 112, ¶ 6 Function: to detect [when] the action defined in the archiving rule assigned to the selected electronic message was carried out Structure: indefinite
"a collaborative application management processor configured to manage collaborative applications"	Subject to 35 U.S.C. § 112, ¶ 6 Function: to manage collaborative applications Structure: indefinite

J.A. 5–6.

The district court held that the "collaborative application management processor" limitation and the other contested processor limitations did not use the word "means," and therefore were subject to the presumption against a means-plus-function construction. J.A. 659 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc in applicable part)). The district court then held that the presumption was overcome for each limitation. In particular, the district court held that words of the "collaborative application management" limitation did not have "a generally understood structural meaning in the art or on their own provide structural significance." J.A. 668. Specifically, the district court held that the word "'processor' in the context of the '585 patent is used as a nonce word," that is "used generically as an equivalent to 'means,'" based on the claim language and the lack of any description of a collaborative application management processor in the specification. J.A. 669. Moreover, the district court found that the phrase "managing collaborative applications" was a statement of function, J.A. 660, and concluded that the functional characterization of the limitation at issue was "bolstered by the self-referential language of the claim." J.A. 669.

The district court then held that the specification failed to provide adequate corresponding structure because it failed to provide an algorithm for achieving the special-purpose computer function of managing collaborative applications. J.A. 669. The databases identified as comprising the "collaborative application management means" in the specification did not constitute an algorithm because they were merely a list of components and did not describe structure for the processor. *Id.* The district court thus held the limitation to be indefinite. *Id.*

DISCUSSION

I. Standard of Review

"Regarding questions of claim construction, including whether claim language invokes 35 U.S.C. § 112, para. 6, the district court's determinations based on evidence intrinsic to the patent as well as its ultimate interpretations of the patent claims are legal questions that we review de novo." *Williamson*, 792 F.3d 1346 (citing *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331 (2015)). "Indefiniteness is a question of law that is also reviewed de novo." *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1098 (Fed. Cir. 2014) (citing *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999)).

II. The applicability of 35 U.S.C. § 112, ¶ 6 to "collaborative application management processor"

If the limitation does not use the term "means," it is subject to a rebuttable presumption that it is *not* in means-plus-function form. *Williamson*, 792 F.3d at 1348. The presumption may be overcome "if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Id.* (cleaned up). We determine whether a limitation is in means-plus-function form by the following standard: "whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349.

WSOU argues that the district court erred in construing "collaborative application management processor configured to manage collaborative applications" as a means-plus-function limitation. WSOU argues both procedural and substantive error. We address each argument in turn.

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First, WSOU argues that the district court procedurally erred by failing to give effect to the presumption against means-plus-function claiming. The district court, however, expressly applied the presumption, J.A. 640, 659, explaining that the presumption may be overcome if the petitioner "demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function," J.A. 569 (quoting *Williamson*, 792 F.3d at 1349), and explained that "processor" does not categorically provide sufficient structure, J.A. 663. The district court then held that, *in this case*, the claimed processor limitation was written in means-plus-function form because nothing in the claim or the specification describes structure. J.A. 668–69. We identify no error.

WSOU argues that the district court was required to expressly state that the presumption was overcome rather than just explain why it was construing the limitation as a means-plus-function limitation. We are unaware of any such requirement, and WSOU cites no authority to support that proposition. To the extent that WSOU argues that some *extrinsic* evidence is always required to overcome the presumption, WSOU is incorrect. *Diebold Nixdorf, Inc. v. Int'l Trade Comm'n*, 899 F.3d 1291, 1299 (Fed. Cir. 2018) ("[N]one of our cases mandate that a party seeking to overcome the presumption against application of § 112, para. 6 can only do so by presenting extrinsic evidence that one of ordinary skill would *fail* to understand that a term connotes a definite structure." (emphasis in original)). Just as a district court may construe structural claims without resort to extrinsic evidence, so too it may construe functional limitations without the aid of expert testimony. Intrinsic evidence alone may suffice to do so. *See Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022) ("Intrinsic evidence, such as the claims themselves and the prosecution history, can be informative in determining whether

the disputed claim language recites sufficiently definite structure or was intended to invoke § 112, ¶ 6.").

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We next turn to whether the district court was substantively correct that Google overcame the presumption. Google argues that the presumption was overcome because: (1) "processor" here is used as a generic equivalent to "means"; (2) neither "configured to manage collaborative applications" nor the adjectival description "collaborative application management processor" provide structure because they simply refer to the overarching functions of the "processor," citing *Rain Computing, Inc. v. Samsung Electrs. Am.*, 989 F.3d 1002, 1006 (Fed. Cir. 2021); and (3) the specification of the '585 patent does not describe any "processor," much less a "collaborative application management processor configured to manage collaborative applications" that can inform the structural meaning of the claim term.

We agree with Google. There is no categorical rule that "processor" is or is not structural, as the district court recognized. J.A. 663. WSOU appears to agree, Appellant's Opening Br. at 21–22. We must look to the case-specific record here to determine whether the phrase "collaborative application management processor configured to manage collaborative applications" is "understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Williamson*, 792 F.3d at 1349.

The phrases "collaborative application management processor" and "configured to manage collaborative applications" both describe the same purely functional characteristics of an undefined and uncertain "processor." As the district court noted, that makes the claim limitation self-referential. J.A. 669. What manages the collaborative applications? The processor. What structures will the claim limitation read on? Any that fulfill the function of

managing collaborative applications. This is the epitome of functional claiming: a black box that captures any and all structures that fulfill the function, just as if "means" was used. *See Williamson,* 792 F.3d at 1350. In *Williamson,* we explained that "distributed learning control module" failed to describe sufficiently definite structure because "the claim does not describe how the 'distributed learning control module' interacts with other components in the distributed learning control server in a way that might inform the structural character of the limitation-in-question or otherwise impart structure[.]" *Id.* at 1351. The same is true for the "collaborative application management processor" here: there is no indication of *how* the processor manages collaborative applications, and the claims do not describe how this processor interacts with the other claimed components in a way that might inform the structural character of the limitation.

The specification confirms the non-structural nature of the limitation. As WSOU acknowledged during oral argument,[1] the specification nowhere actually discusses a "collaborative application management processor," a "processor configured to manage collaborative applications," or any "processor" whatsoever. Indeed, the closest passage in the specification discussing collaborative application management describes only a "collaborative application management *means*." '585 patent, col. 3, ll. 21–31 (emphasis added). The full passage of the specification WSOU cites for support reads:

> The communication system 1 may also comprise collaborative application management means such as, in particular: databases 107, 108, 109 enabling recording of data related to Wiki pages,

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[1]   Oral Arg. at 10:16–10:27, No. 22-1064, available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=22-1064_09082023.mp3.

> collaborative FAQs, or blogs, whether or not hosted
> by the communication system 1; a database 110,
> enabling storing of data related to RSS flows emit-
> ted by collaborative applications, whether or not
> hosted by the communication system 1; databases
> 111, 112 enabling, among other things, storage of
> task information or planning information shared
> by different users 3, 31.

Id.

As can be appreciated, the specification describes each of the "databases" WSOU links to the collaborative application management processor limitation in entirely functional terms. While the databases enable the storage of data related to collaborative applications, the specification says nothing about how the databases manage the collaborative applications or reveals that they might be understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.

WSOU presents a number of contrary arguments, none of which we find convincing. First, WSOU argues that the adjectival qualifier "collaborative application management" preceding "processor" renders the processor more definite, not less. Appellant's Opening Br. at 23 (citing *Personalized Media Commc'ns, LLC v. I.T.C.*, 161 F.3d 696, 705 (Fed. Cir. 1998)). The argument is inapt as the adjectival qualifiers here add nothing more than the description of what functions the processor is configured to perform.

Second, WSOU argues that *Dyfan* acknowledges that "the specific structure of software code and applications is partly defined by its function," and that we should "look beyond" the "processor" term to "see if a person of ordinary skill would have understood the claim limitation as a whole to connote sufficiently definite structure." *See Dyfan*, 28 F.4th at 1368 (citing *Zeroclick LLC. v. Apple Inc.*, 891 F.3d 1003, 1008 (Fed. Cir. 2018)). Looking beyond "processor" as a bare term is precisely what the district court did

here—but there was no conventional code, like in *Dyfan* and *Zeroclick*, that could be identified as constituting a "collaborative application management processor" and no expert testimony, like in *Dyfan*, supporting a structural understanding of "processor" in the context of the claim. *See Dyfan*, 28 F.4th at 1368–69; *Zeroclick*, 891 F.3d at 1008.

Third, WSOU argues that the prosecution history favors a structural reading of the processor term. The patentee expressly amended the claims during prosecution to replace "means for management of collaborative applications" in the original claims with "a collaborative application management processor configured to manage collaborative applications." Accordingly, WSOU argues, "processor" cannot mean the same thing as "means." Appellant's Opening Br. at 29–30 (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 589 (Fed. Cir. 2000) (en banc), *vacated and remanded on other grounds by* 535 U.S. 722 (2002) (noting that "a claim amendment that replaces means-plus-function language with language reciting the corresponding structure narrows the literal scope of the claim")). WSOU is incorrect. WSOU's amendment here failed to recite the corresponding structure. The patentee cannot avoid a means-plus-function construction by merely replacing the term "means" in the claims with other, equally functional language. This superficial change does not change the functional nature of the limitation.

WSOU likewise argues that the recitation of "processor" in the claims contrasts with the recitation of "means" in the specification, and that the claim term should thus be read differently. We do not agree. As discussed above, WSOU cites to the specification's description of the "collaborative application management means" as the only description of the claimed "collaborative application management processor." The intrinsic evidence *links* the two phrases—it does not contrast them. Moreover, as with the prosecution history argument discussed above, the

replacement of the phrase "means" with equally functional language does not avoid functional claiming.

Finally, WSOU argues that the specification describes "how the function is achieved in the context of the invention," which can support a structural construction. *See Dyfan*, 28 F.4th at 1366. As discussed above, the description in the specification refers solely to "means," not the structure of the claimed processor. Moreover, the functional descriptions of the databases in the specification does not describe *how* the management of collaborative applications is achieved.

For the foregoing reasons, we affirm the district court's construction of "collaborative application management processor configured to manage collaborative applications" as a means-plus-function limitation.

III. Indefiniteness of "collaborative application management processor"

The next step of the means-plus-function inquiry requires identifying the function and the corresponding structure in the specification. *Williamson*, 792 F.3d at 1351. "If the patentee fails to disclose adequate corresponding structure, the claim is indefinite." *Id.* at 1352.

Both parties agree that the function of the "collaborative application management processor" here is to manage collaborative applications. J.A. 7; J.A. 425 (Plaintiff's Reply in Support of Opening Claim Construction Brief); Appellee's Opening Br. at 56. The specification must identify "corresponding structure for performing the claimed function and clearly link that structure to the function." *Triton Tech. of Tex., LLC v. Nintendo of Am., Inc.*, 753 F.3d 1375, 1378 (Fed. Cir. 2014).

Google carries the ultimate burden to show indefiniteness due to lack of corresponding structure by clear and convincing evidence. *Budde v. Harley-Davidson, Inc.*, 250

F.3d 1369 1376–77 (Fed. Cir. 2001); *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1365–66 (Fed. Cir. 2003).

Google argues that there is no corresponding structure because the specification does not disclose an algorithm. WSOU responds that Google forfeited the argument that the specification must disclose an algorithm to provide corresponding structure. WSOU also argues that the district court procedurally erred by placing the burden to show corresponding structure on WSOU rather than Google. Finally, WSOU argues that the specification disclosed sufficient algorithmic and other structure, pointing exclusively to its argument that the processor limitations should not have been construed in means-plus-function form.

We are not persuaded by WSOU's argument. First, Google did not forfeit its argument that the claim term was indefinite for failure to disclose an algorithm in the specification. Google argued to the district court that the '585 specification "does not provide any algorithm or other structure for carrying out that specific function." J.A.217; *see also* Appellant's Opening Br. at 52 (acknowledging this argument). WSOU focuses on the phrase "*or other structure*," but this does not mean that Google forfeited its argument that WSOU failed to provide an algorithm, and as discussed below, WSOU has not identified *any* structure *or* algorithm that would constitute corresponding structure for purposes of § 112, ¶ 6.

Google demonstrated by clear and convincing evidence that the specification failed to provide sufficient structure to perform the function of managing collaborative applications. As noted above, the specification nowhere actually discusses a "collaborative application management processor." When discussing collaborative application management as a function, the specification only refers to *means* for managing collaborative applications, such as databases that enable the recording and storing of data. '585 patent, col. 3, ll. 21–31. This functional discussion does not

describe structure. Moreover, as discussed above with respect to Step 1, the specification does not indicate how the databases "manage" collaborative applications. The databases do not constitute an "algorithm" for the execution of the function. *See Alfred E. Mann Found. for Sci. Res. v. Cochlear Corp.*, 841 F.3d 1334, 1342 (Fed. Cir. 2016) (noting that an algorithm is "a step-by-step procedure for accomplishing a given result," and that an algorithm is required as supporting structure for "a general purpose computer or microprocessor" to "prevent[] pure functional claiming").

CONCLUSION

For the foregoing reasons, we affirm the district court's holding that claims 9–16 of the '585 patent are invalid as indefinite based on its determination that the claim limitation "a collaborative application management processor configured to manage collaborative applications" is a means-plus-function limitation lacking corresponding structure in the specification. Because we affirm indefiniteness of this limitation, and because all the claims on appeal include this limitation, we need not and do not address WSOU's arguments regarding the other appealed limitations.

AFFIRMED