NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IMAGE PROCESSING TECHNOLOGIES LLC,
Plaintiff-Appellant

v.

LG ELECTRONICS INC., LG ELECTRONICS USA, INC.,
Defendants-Appellees

2023-2136

Appeal from the United States District Court for the Eastern District of Texas in No. 2:22-cv-00077-JRG-RSP, Chief Judge J. Rodney Gilstrap.

Decided: January 29, 2025

MICHAEL KARSON, Winstead PC, Dallas, TX, argued for plaintiff-appellant. Also represented by DAVID WILLIAM HIGER, JAMIE HERBERT MCDOLE, PHILLIP B. PHILBIN.

MARK LIANG, O'Melveny & Myers LLP, San Francisco, CA, argued for defendants-appellees. Also represented by DAVID ALMELING, CLARENCE ROWLAND; GRANT GIBSON, Dallas, TX.

Before HUGHES, MAYER, and STARK, *Circuit Judges*.

STARK, *Circuit Judge*.

Image Processing Technologies, Inc. ("IPT") sued LG Electronics, Inc. ("LG") in the United States District Court for the Eastern District of Texas for infringement of U.S. Patent No. 6,959,293 ("'293 patent"). The district court conducted claim construction and, thereafter, the parties entered into a stipulated final judgment of invalidity. IPT appeals, arguing that the district court's construction was erroneous. Specifically, IPT contends that the construction was improperly broader than the broadest reasonable interpretation ("BRI") that the United States Patent and Trademark Office ("PTO") applied when it construed the same claim term. As we agree with the district court's construction, we affirm.

I

The '293 patent, entitled "Method and Device for Automatic Visual Perception," generally relates to visual perception devices and devices for image processing using histogram calculation units ("HCUs"). '293 patent at 1:6-10. Claim 1 recites:

> A visual perception processor for automatically detecting an event occurring in a multidimensional space (i, j) evolving over time with respect to at least one digitized parameter in the form of a digital signal on a data bus, said digital signal being in the form of a succession a_{ijT} of binary numbers associated with synchronization signals enabling to define a given instant (T) of the multidimensional space and the position (i, j) in this space, the visual perception processor comprising:
>
> the data bus;
>
> a control unit

> a time coincidences bus carrying at least a time coincidence signal; and
>
> at least two histogram calculation units for the treatment of the at least one parameter,
>
> *the histogram calculation units being configured to form a histogram representative of the parameter* as a function of a validation signal and to determine by classification a binary classification signal resulting from a comparison of the parameter and a selection criterion C, wherein the classification signal is sent to the time coincidences bus, and wherein the validation signal is produced from time coincidences signals from the time coincidence bus so that the calculation of the histogram depends on the classification signals carried by the time coincidence bus.

Id. at 26:34-59 (emphasis added).

The claim term at issue in this appeal – "the histogram calculation units being configured to form a histogram representative of the parameter" (the "Disputed Term") – was construed in proceedings that occurred before IPT sued LG. The first construction was provided by the PTO's Patent Trial and Appeal Board ("Board") in an *inter partes* review ("IPR") proceeding in 2017. There, after noting that the petitioner implicitly agreed with IPT's proposed construction, the Board adopted it, construing the Disputed Term as "at least two histogram calculation units being configured to each form a histogram representative of at least one common parameter." J.A. 2362 (*Samsung Elecs. Co. v. Image Processing Techs. LLC*, IPR2017-00336 (PTAB May 9, 2018)) (internal quotation marks and emphasis omitted). The Board applied this same construction in two subsequent proceedings: an appeal of an *ex parte* reexamination

and another IPR, this one initiated by LG. In LG's IPR petition, LG noted it did not agree with the Board's prior construction of the Disputed Term, but added there was "no need" to dispute the construction because the prior art LG was asserting "discloses [c]laim 1 [of the '293 patent] even under the Board's narrow 'common parameter' construction," which LG applied in its petition "for the purposes of this proceeding only." J.A. 3350.

At the district court, in the suit presently before us, IPT and LG advanced competing constructions of the Disputed Term. IPT urged the district court to apply the Board's construction; LG countered that the court should apply the term's plain and ordinary meaning, which it contended "[d]oes *not* include a requirement that all of the at least two histogram calculation units form a histogram representative of the same (or a common) parameter." J.A. 723. After briefing and a hearing, the district court construed the Disputed Term as "the histogram calculation units being configured to form one or more histograms representative of the at least one parameter." J.A. 726, 744. Unlike the Board's construction, the district court's construction does not limit the claimed "at least one parameter" to "at least one *common* parameter."

Based on the district court's construction, IPT conditionally stipulated that claim 1 of the '293 patent is invalid, and the district court entered final judgment for LG. IPT then timely filed this appeal. The district court had jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). We have jurisdiction pursuant to 28 U.S.C. §§ 1292(c)(2) and 1295(a)(1).

II

Claim construction is a matter of law that, when conducted solely with intrinsic evidence, we review de novo. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 332-33 (2015). Generally, the words of a claim carry the plain and ordinary meaning that they would have to a

person of ordinary skill in the art, looking at the patent, at the relevant time. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). The claims, however, do not stand alone. The patent's specification, which is required to contain a written description of the invention in "full, clear, concise, and exact terms," is always relevant and often dispositive. *Id.* at 1315-16 (internal quotation marks and citation omitted); *see also* 35 U.S.C. § 112(a). When placed in evidence, the patent's prosecution history should be considered as well. *See Phillips*, 415 F.3d at 1317. When, as here, the proper construction can be determined using only intrinsic evidence, there is no need to consider extrinsic evidence. *See id.* at 1318-19.

III

This appeal involves a single claim construction dispute. The district court construed the Disputed Term, "the histogram calculation units being configured to form a histogram representative of the parameter," as "the histogram calculation units being configured to form one or more histograms representative of *the at least one parameter*." J.A. 728 (emphasis added). IPT contends that, instead, the proper construction is the one the Board has consistently applied: the at least two histogram calculation units being configured to each form a histogram representative of *at least one common parameter*. The only dispute is whether, as IPT advocates, the construction should require that at least two HCUs, each of which forms a single histogram (at any moment in time), must have histograms that are representative of a *common* parameter. Our review of the claim language, specification, and prosecution history leads us to the same conclusion as the district court, which rejected IPT's "common parameter" limitation as unduly narrow.

A

We agree with the district court that a person of ordinary skill in the art would have understood "the

parameter" of the Disputed Term to refer back to the "at least one parameter" recited earlier in the claim and would not have limited the claimed "two or more histogram calculation units" to a common parameter, given the teachings of the patent as a whole. Rather, as the district court accurately explained, "the claim covers embodiments in which two or more HCUs together form a histogram representative of only one parameter, but it is *not limited* to such embodiments." J.A. 725 (emphasis added).

In arguing for its preferred construction, IPT asserts that the histograms permitted by the district court's construction are "a technical impossibility that would render the invention of claim 1 of the '293 Patent inoperable." Open. Br. 26-27. IPT insists that the parameter referred to in the Disputed Term must be singular, as "a single HCU forming a single histogram of multiple parameters is a technical impossibility." *Id.* Even if IPT were correct, which it largely is not (as we explain below), these issues would not necessarily render the court's construction wrong. *See Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) ("[C]ourts may not redraft claims, whether to make them operable or to sustain their validity.").

In any event, IPT has failed to show that our construction brings inoperable embodiments into the claims. It is true that "a single HCU can only create a single histogram of a single parameter at a time." Open. Br. 26 (citing '293 patent at 1:59-60). It does not follow, however, that multiple HCUs are limited to forming histograms of a single (i.e., common) parameter. Nothing in the claims precludes, for example, a first HCU forming a first histogram of a first parameter, and a second HCU forming a second histogram of a second parameter. Likewise, nothing precludes a first and second HCU from forming first and second histograms of a first parameter while a third HCU forms a histogram of a second parameter.

Before us, IPT argued that the Disputed Term, which is contained in the last limitation of claim 1, would be recognized by a person of ordinary skill in the art as signaling a "shift in focus," such that "the parameter" of the Disputed Term is not the same "parameter" referred to in the preamble of the claim as the "at least one digitized parameter." Oral Arg. at 2:50-3:59. We are unpersuaded. "Parameter" appears four times in claim 1. After the preamble recites "at least one digitized parameter," the subsequent three references are to "*the* parameter" (emphasis added), indicating that the patentee is referring back to *the* "at least one digitized parameter." *See, e.g.*, *Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (concluding that "anode gel" provided implied antecedent basis for "said zinc anode"); *see also Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1343 (Fed. 2008) ("[I]f two different levers are recited earlier in the claim, the recitation of said lever in the same or subsequent claim would be unclear where it is uncertain which of the two levers was intended.") (internal quotation marks and citation omitted).

In sum, the claim language strongly supports the construction adopted by the district court, not IPT's alternative proposed construction.

B

The specification, which discloses embodiments that would be excluded from the scope of the claims under IPT's construction, further supports our construction. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (explaining it "is rarely, if ever, correct" to construe a claim to omit the preferred embodiment, and such a construction "would require highly persuasive evidentiary support").

For example, Figure 30 of the '293 patent discloses an embodiment in which five HCUs (labelled 1A, 1B, 1C, 1D, and 1E) form histograms of five different parameters (DATA(A), DATA(B), DATA(C), DATA(D), and DATA(E)), as shown below:

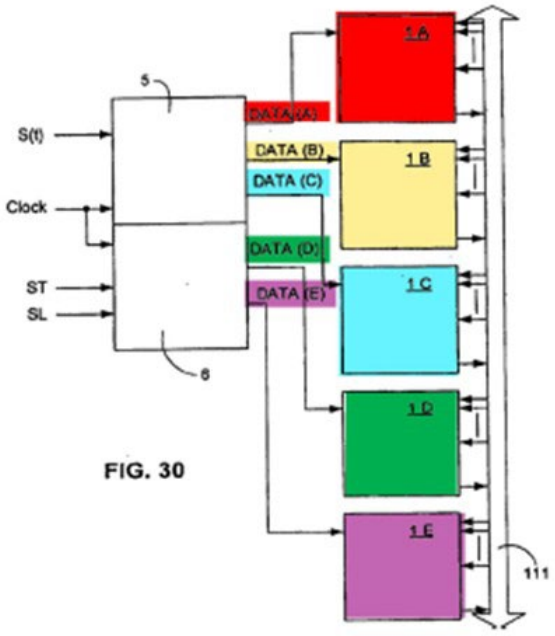

FIG. 30

'293 patent at Figure 30 (as annotated at Resp. Br. 7); *see also* '293 patent at 20:26-30. In this embodiment, then, each of five HCUs forms a histogram of a single parameter but no two of these histograms represent the same parameter. Rather, HCU 1A creates histograms of parameter DATA(A), HCU 1B creates histograms of parameter DATA(B), and so on, without any of the two or more HCUs being required to create histograms of a common parameter.

IPT insists that the Figure 30 embodiment is captured by claim 3 and not claim 1, pointing out that claim 3 uses

parameter names ("DATA(A), DATA(B), . . . DATA(E)") while claim 1 does not. But we see no reason to conclude that a person of ordinary skill would read claim 1 as not encompassing the Figure 30 embodiment.

IPT argues that the embodiment shown in Figure 32 is "particularly important" to the claim construction dispute. Open. Br. 30-31 (citing '293 patent at Fig. 32 and col. 21:44-47). That may be so, but it does not help IPT. Figure 32, shown below (as annotated at Resp. Br. 9), depicts numerous HCUs ($1a_{00}$, $1a_{01}$, . . . $1a_{33}$), each of which may process any of numerous parameters (L, S, T, L, p0, p1, . . . p15).

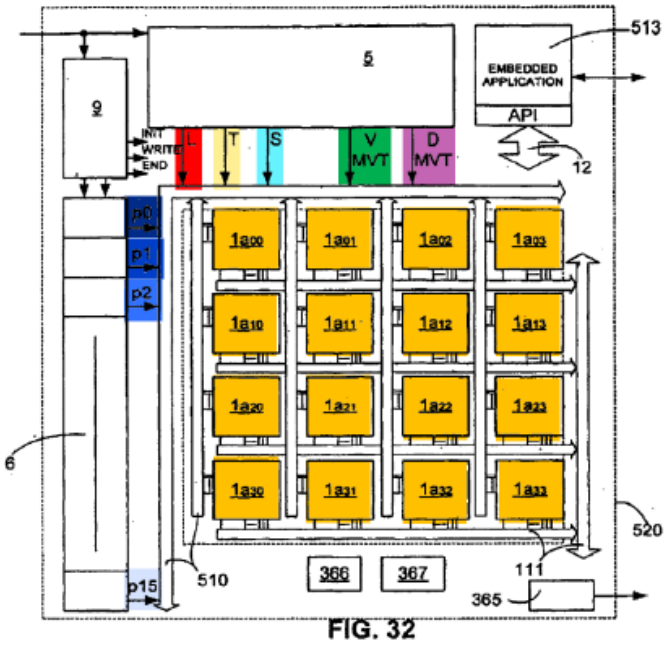

FIG. 32

'293 patent at Figure 32; *see also id.* at 21:37-47. Like Figure 30, Figure 32 does not require its HCUs to process a common parameter. Rather, the embodiment shown in Figure 32 depicts HCUs that may process the same parameters, different parameters, or even multiple parameters over time (by processing a first parameter for a first

amount of time and then processing a second parameter for a second amount of time).

IPT's additional references to the specification establish nothing more than the undisputed fact that an HCU can only create a histogram of a single parameter at any particular moment in time. The district court's construction is entirely consistent with this reality; it simply establishes, further, that each HCU may create a histogram for a different single parameter, at any one time. Thus, as we have explained, the specification supports our construction.

C

Finally, we turn to the prosecution history, which IPT characterizes as largely dispositive of the claim construction dispute. We do not agree.

IPT points first to the original prosecution of the application that led to the '293 patent. IPT cites the applicant's amendments and response to the patent examiner's nonfinal rejection as purported support for its contention that the "common parameter" requirement was "an important novelty distinction in view of the prior art and thus necessary for patentability." Open. Br. 34-35 (citing J.A. 1310, 1319-20). IPT goes so far as to characterize a claim amendment made during prosecution as a "disclaimer" of claim scope, which the "district court's construction eviscerated." Open. Br. 37.

IPT's arguments fail for multiple reasons. Most importantly, IPT forfeited its prosecution history disclaimer contentions by failing to raise them before the district court. *See, e.g.*, *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1426 (Fed. Cir. 1997) ("[T]his court does not 'review' that which was not presented to the district court."). In any event, a disclaimer of claim scope must be clear and unmistakable. *See SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1286-87 (Fed. Cir. 2005). The prosecution

statements IPT points to do not meet this exacting standard; they do not even mention the "common parameter" claim element or do anything more than tout the invention's purported advances over the prior art. J.A. 1319 (applicant stating that prior art "fails to teach or suggest two or more [HCUs] . . . configured to form a histogram representative of the parameter as a function of a validation signal"); J.A. 1320 ("Advantageously, in the present invention, the use of a time coincidences bus, which is shared between the histogram calculation units, allows for a time dependent amplification effect.").

The claim amendments do not further IPT's argument either. IPT amended nearly every word of its claim, drawing no particular attention to the Disputed Limitation or even to the term "parameter." J.A. 1310. We see no clear and unmistakable disavowal of claim scope.

IPT also points to the positions it advanced in the various post-issuance proceedings before the Board, where, it contends, it disclaimed "claim scope to which it has never been entitled and which it has always disclaimed." Open. Br. 38-40. "[S]tatements made by a patent owner during an IPR proceeding, whether before or after an institution decision, can be considered for claim construction and relied upon to support a finding of prosecution disclaimer." *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017); *see also Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1266 (Fed. Cir. 2012) (same for reexamination proceedings). This argument, too, is forfeited, as IPT did not present it to the district court. Even had IPT preserved this issue for appeal, the post-issuance prosecution history reflects only that IPT pressed claim construction positions it believed would aid its effort to survive invalidity challenges. While post-issuance prosecution history can be useful to understanding claims, it "cannot enlarge, *diminish*, or vary the limitations in the claims," as IPT is attempting to do. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996) (internal

quotation marks and citations omitted; emphasis added). A patentee does not meet the high burden for a disclaimer by merely proposing a narrowing construction during an IPR. *See CUPP Computing AS v. Trend Micro Inc.*, 53 F.4th 1376, 1383 (Fed. Cir. 2022) ("A rule permitting a patentee to tailor its claims in an IPR through argument alone would substantially undermine the IPR process."). Rather, Congress has "created a specialized process for patentees to amend their claims in an IPR." *Id.* IPT never moved for the Board to amend its claims and never clearly and unmistakably stated it was disclaiming all claim scope that falls outside the scope of the claims as it proposed they be construed. *See id.* ("If patentees could shapeshift their claims through argument in an IPR, they would frustrate the [PTO]'s power to 'revisit' the claims it granted, and require focus on claims the patentee now wishes it had secured.").

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In sum, based on the intrinsic evidence, we agree with the district court. The correct construction of the Disputed Term, "the histogram calculation units being configured to form a histogram representative of the parameter," is, as the district court held, "the histogram calculation units being configured to form a histogram representative of the at least one parameter."

IV

IPT argues that the district court's construction of the Disputed Term is broader than the Board's construction, which must make the court's construction wrong because the Board's construction is necessarily the *broadest* reasonable interpretation. IPT is right that, in district court litigation, the proper construction cannot be broader than the BRI, as such a construction would not be reasonable. *See, e.g.*, *TF3 Ltd. v. Tre Milano, LLC*, 894 F.3d 1366, 1371 (Fed. Cir. 2018) (explaining that BRI cannot be so broad as to be unreasonable in view of claim language and patent

disclosure). But, for all the reasons we have explained, the district court's construction of the Disputed Term is entirely consistent with the patent's claims, specification, and prosecution history. IPT's narrower construction, which – like the Board's construction – reads into the claims a "common parameter" requirement that is not supported by the intrinsic evidence. As the district court was right to recognize, there is nothing improper about a construction that is broader than an *incorrect* BRI.

V

We have considered IPT's remaining arguments and find they lack merit. Accordingly, for the reasons given above, the district court's judgment is affirmed.

AFFIRMED

COSTS

Costs awarded to LG.