

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

HYBRID AUDIO, LLC,

Plaintiff,

v.

ASUS COMPUTER INTERNATIONAL
INC, et al.,

Defendants.

Case No. [3:17-cv-05947-JD](#)

CLAIM CONSTRUCTION ORDER

In this patent infringement suit, plaintiff Hybrid Audio, LLC accuses defendant Asus Computer International, Inc. of infringing United States Reissue Patent No. RE40,281 (the '281 patent). This order construes the one claim that the parties identified for construction.

The briefing leading up to this order was not well done. The parties' joint claim construction statement identified 19 disputed claim terms for construction. Dkt. No. 122-1. That did not conform to the Court's Standing Order, which states that a party must request leave to designate more than 10 terms for construction. Standing Order for Claim Construction in Patent Cases ¶¶ 3-4. Neither side asked for leave. The parties are advised that future filings that do not conform to the Court's Standing Orders will be summarily terminated, and they may not be afforded an opportunity to file a corrected version.

The proposed constructions themselves were poorly formulated on several occasions. For multiple terms, one side said no construction was necessary, and the other that plain and ordinary meaning should prevail, but then both sides disagreed what the plain meaning should be, without actually proposing a definition. *See e.g.*, Dkt. No. 122-1 at 7; Dkt. No. 125 at 4. In these

1 situations, they Court declines to do anything other than enforce the plain and ordinary dictionary
2 meaning of the terms.

3 Both sides also declined to present a technology tutorial for claim construction. The
4 tutorial is a very useful session for the Court to get into the claimed invention and the patent, and
5 it is a rare day that parties give up that opportunity. For unknown reasons, Hybrid and Asus
6 forsook the tutorial, which the Court mentions only to highlight the parties' unhelpful approach to
7 claim construction.

8 After all this, the parties narrowed the construction dispute to the single term of "signal
9 processing." The Court construes that term here.

10 DISCUSSION

11 I. PATENT BACKGROUND

12 The '281 patent concerns audio signal processing. The claims are directed to methods of
13 signal processing that split a signal into subbands using filter banks. Dkt. No. 1-2 at Abstract.
14 The signal may be split into subbands of different sizes that "approximate the bands of the human
15 auditory system." *Id.* In order to accomplish this splitting, the method uses several filter bands in
16 a tree-structured array. *Id.* The process may also be reversed using synthesis filter banks, also in a
17 tree-structured array. *Id.*

18 II. LEGAL STANDARD

19 Claim construction "must begin and remain centered on the claim language itself, for that
20 is the language the patentee has chosen to particularly point[] out and distinctly claim[] the subject
21 matter which the patentee regards as his invention." *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*,
22 753 F.3d 1291, 1299 (Fed. Cir. 2014) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration*
23 *Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). Claim terms are given their "ordinary and
24 customary meaning," which is "the meaning that the term would have to a person of ordinary skill
25 in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-
26 13 (Fed. Cir. 2005) (en banc) (internal quotation omitted). "The subjective intent of the inventor
27 when he used a particular term is of little or no probative weight in determining the scope of a
28 claim (except as documented in the prosecution history)." *Markman v. Westview Instruments*,

1 *Inc.*, 52 F.3d 967, 985 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). “Rather the focus is
2 on the objective test of what one of ordinary skill in the art at the time of the invention would have
3 understood the term to mean.” *Markman*, 52 F.3d at 986. The parties do not dispute the definition
4 of a person of ordinary skill in the art.

5 As the Federal Circuit has underscored, the “only meaning that matters in claim
6 construction is the meaning in the context of the patent.” *Trustees of Columbia Univ. v. Symantec*
7 *Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016). The presumption in favor of giving terms their plain
8 and ordinary meaning may be overcome by a patentee’s express definition of a term, or express
9 disavowal of the scope of the claim. *Id.* at 1364. A term may be redefined “by implication” when
10 given a meaning that is ascertainable from a reading of the specification or the patent documents.
11 *Id.* Redefinition and disavowal need not be explicitly stated or called out *in haec verba*. *Id.* at
12 1363. “The ordinary meaning of a claim term is not the meaning of the term in the abstract,” but
13 the term’s “meaning to the ordinary artisan after reading the entire patent.” *Astra Zeneca AB v.*
14 *Mylan Pharm. Inc.*, 19 F.4th 1325, 1330 (Fed. Cir. 2021) (quotations omitted) (quoting *Eon Corp.*
15 *IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1320 (Fed. Cir. 2016)).

16 A claim and its constituent words and phrases are interpreted in light of the intrinsic
17 evidence. The touchstones are the claims themselves, the specification and, if in evidence, the
18 prosecution history. *Phillips*, 415 F.3d at 1312-17. This intrinsic evidence is the most significant
19 source of the legally operative meaning of disputed claim language. *Vitronics Corp. v.*
20 *Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The claim language can “provide
21 substantial guidance as to the meaning of particular claim terms,” both through the context in
22 which the claim terms are used and by considering other claims in the same patent. *Phillips*, 415
23 F.3d at 1314. The specification is also a crucial source of information. Although it is improper to
24 read limitations from the specification into the claims, the specification is “the single best guide to
25 the meaning of a disputed term.” *Id.* at 1315 (“[T]he specification ‘is always highly relevant to
26 the claim construction analysis. Usually, it is dispositive . . .’”) (internal quotations omitted); *see*
27 *also Merck & Co., Inc. v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1370 (Fed. Cir. 2003)
28 (“[C]laims must be construed so as to be consistent with the specification . . .”). The Court may

1 also use extrinsic evidence (*e.g.*, dictionaries, treatises) to resolve the scope and meaning of a
2 claim as circumstances warrant. *Phillips*, 415 F.3d at 1317.

3 **III. CLAIM CONSTRUCTION**

4 **A. Agreed Constructions**

5 The Court typically does not address agreed-upon constructions, as stated in the Standing
6 Order. The parties should have filed an amended joint claim construction statement because their
7 claim construction positions changed. Standing Order ¶ 6. The parties did not do so.
8 Consequently, the Court will memorialize the agreed-upon constructions to avoid gamesmanship
9 later in the case.

10 Hybrid previously sued High Tech Computer Corp. for infringement of the '281 patent in
11 the Eastern District of Texas. *Hybrid Audio, LLC v. High Tech Comput. Corp.*, No. 6:11-cv-195-
12 LED-JDL (E.D. Tex.). The Texas court issued a provisional claim construction order, with intent
13 to issue a memorandum opinion and order at a later date. *Id.* at Dkt. No. 257. The parties
14 ultimately dismissed the case before the memorandum opinion and order was issued. *Id.* at Dkt.
15 No. 280.

16 Hybrid and Asus have agreed to use the Texas court’s provisional claim constructions for
17 several claims. Asus asserts that these constructions represent the plain and ordinary meaning of
18 the terms, Dkt. No. 125 at 1-3, and Hybrid has agreed to these constructions for the purpose of
19 narrowing the issues, Dkt. No. 132, at 3-4. Consequently, the Court adopts the Texas court’s
20 constructions for the following claim terms:

Claim Term	Texas Court’s Provisional Construction
“filter banks”	“an array of filters operating on an input signal”
“tree structured array”	“an array of filter banks wherein the outputs of a first level filter bank become the inputs to a second level filter bank”
“sub-band component”	“the signal frequencies that make up a sub-division of the frequency spectrum of an input time-domain signal”

Claim Term	Texas Court’s Provisional Construction
“root node”	For analysis claims: “point in the tree-structured array where the input signal is applied” For synthesis claims: “point in the tree-structured array where an output signal is made available”
“leaf node”	For analysis claims: “point in the tree-structured array where frequency component signals that are not inputs to another filter bank of the tree-structured array are made available” For synthesis claims: “point in the tree-structured array where sub-band signals that are not outputs of another filter bank of the tree-structured array are applied”
“synthesis”	“generating by combining separate elements”
“modulating”	“multiplying a signal by another signal”

For the terms “at least one of the filter banks is designed to utilize cosine modulation” and “filter banks is designed to utilize polyphase components,” Hybrid states that it is willing to adopt the Texas court’s provisional constructions for “cosine modulation” and “polyphase components,” and that no further construction of the claim terms is required. Dkt. No. 132 at 4. Asus says that the Texas court’s provisional constructions are the plain and ordinary meaning of these terms. Consequently, the Court adopts the Texas court’s constructions as follows:

Claim Term	Texas Court’s Provisional Construction
“at least one of the filter banks is designed to utilize cosine modulation ”	“cosine modulation”: “multiplying a signal by a cosine signal”
“filter banks is designed to utilize polyphase components ”	“polyphase components”: “components generated within a polyphase filter bank”

The parties also agree that the terms “plurality of filter banks” and “splitting signal into subbands using a plurality of filter banks” require no construction beyond the construction of “filter banks.” Dkt. No. 125 at 3-4 (Asus); Dkt. No. 132 at 3 (Hybrid). Because the parties agree to the Texas court’s provisional construction for the term “filter banks,” no further construction is necessary.

For the following seven terms, neither party provided a construction, but say they somehow still disagree with each other on meaning:

- 1 • “audio information”
- 2 • “audio signal”
- 3 • “signal is an audio signal”
- 4 • “first level”
- 5 • “second level”
- 6 • “512 samples”
- 7 • “window comprising 512 samples”

8 Asus asks that these terms be given their plain and ordinary meaning, without saying what that
9 might be. Dkt. No. 125 at 4. Hybrid says that none of these terms require construction by the
10 Court. Dkt. No. 132 at 6. A reasonable conclusion from these positions is that the plain and
11 ordinary meaning will prevail, but the parties say they have reached no agreement about what the
12 plain and ordinary meaning of these terms is. *Id.* at 5. In effect, the parties state that there is no
13 dispute about these terms, other than that they disagree on what they mean.

14 This is a bizarre and totally unhelpful approach to claim construction, for which each side
15 bears responsibility. While a “determination that a claim term needs ‘no construction’ or has the
16 ‘plain and ordinary’ meaning may be inadequate when a term has more than one ‘ordinary’
17 meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute,”
18 the parties here have not identified a dispute for the Court to resolve. *O2 Micro Int’l, Ltd. v.*
19 *Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). At the claim
20 construction stage, the Court’s task is “to resolve a dispute about claim scope that has been raised
21 by the parties.” *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1319 (Fed. Cir.
22 2016). Hybrid and Asus here have advised the Court that there is a dispute, but have not told the
23 Court what that dispute is or given the Court any means to resolve that dispute. Consequently, the
24 Court declines to construe these seven terms, and the plain and ordinary meaning of the words as
25 defined by the dictionary will be enforced.

26
27
28

B. “signal processing”

Hybrid’s Proposed Construction	Asus’s Proposed Construction	Court’s Construction
“digital signal processing”	Plain and ordinary meaning	“digital signal processing”

The only term remaining for construction is “signal processing” and whether it should be limited to “digital signal processing,” as Hybrid urges, Dkt. No. 124 at 15. Hybrid says that the specification demonstrates that the patent is directed toward digital signal processing only. *Id.* Asus says only that Hybrid is wrong, without offering any support for its claim that signal processing should not be limited to just digital signal processing. Dkt. No. 125 at 3.

The patent indicates that “signal processing” as used in the claims and the specification is limited to “digital signal processing.” “Signal processing,” as used in the claims is a descriptor for the methods recited in the claims. *See, e.g.*, Dkt. No. 1-2 at 24:23-30 (reciting a “signal processing method”). The signal processing methods described start by using filter banks to split signals into subbands. *Id.*

The claims themselves do not provide insight into what type of signal is being used or if the signal processing is solely digital signal processing. But the specification makes clear that the signal being processed in the signal processing method is a digital signal. The specification states that the “input signal is preferably digital in nature,” but “an analog signal may be used by including an analog-to-digital converter prior to filter bank 12.” *Id.* at 9:55-58. This language explains that before the signal may be processed through the filter banks, it must be converted into a digital signal.

Other portions of the specification confirm that the signal processing is digital signal processing. For example, while describing Figure 1, the specification states that the signals are digitized. *Id.* at 8:12-13. The specification also explains that signals stored in a shift register “represent, in digital form, the next segment of the signal.” *Id.* at 7:65-67. Asus points to nothing to the contrary, and nothing to suggest that the implementation of the method in a digital environment is only one embodiment of the claimed method. Consequently, the Court construes “signal processing” to mean “digital signal processing.”

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Going forward, it is the Court’s expectation that the parties and their lawyers will follow the Standing Orders to the letter, and elevate the quality and professionalism of their filings. Future shortfalls on either expectation may result in sanctions, including monetary sanctions, claim, issue, or defense preclusion, and professional conduct sanctions.

IT IS SO ORDERED.

Dated: August 12, 2022



JAMES DONATO
United States District Judge