

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

INGENIOSPEC, LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 1:25-cv-00867-ADA
(LEAD CASE)

JURY TRIAL DEMANDED

INGENIOSPEC, LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 1:25-cv-00877-ADA
(MEMBER CASE)

JURY TRIAL DEMANDED

PLAINTIFF'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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Ex. A	U.S. Patent No. 8,112,104
Ex. B	U.S. Patent No. 8,582,789
Ex. C	U.S. Patent No. 11,644,693
Ex. D	U.S. Patent No. 11,921,355
Ex. E	U.S. Patent No. 12,044,901
Ex. F	U.S. Patent No. 12,001,599
Ex. G	Excerpts of Random House Webster's College Dictionary (2001)
Ex. H	Excerpts of The New Oxford American Dictionary (2001)
Ex. I	U.S. Patent No. 9,854,343
Ex. J	Excerpts of U.S. Patent No. 12,001,599 Prosecution History (Office Action dated Jan. 25, 2024)

TABLE OF ABBREVIATIONS

IngenioSpec or Plaintiff	Plaintiff IngenioSpec, LLC
Apple or Defendant	Defendant Apple Inc.
'104 patent	U.S. Patent No. 8,112,104
'789 patent	U.S. Patent No. 8,582,789
'901 patent	U.S. Patent No. 12,044,901
'355 patent	U.S. Patent No. 11,921,355
'693 patent	U.S. Patent No. 11,644,693
'599 patent	U.S. Patent No. 12,001,599
Asserted Patents	Collectively, the '104, '789, '901, '355, '693, and '599 Patents
Dkt. 50	Defendant's Opening Claim Construction Brief
POSITA	Person of ordinary skill in the art

The disputed claim terms should be given their plain and ordinary meaning because nothing in the intrinsic record supports the narrowing constructions Apple proposes. Apple’s brief does not identify any lexicography or disclaimer that supports its proposed rewrites. Instead, Apple repeatedly asks the Court to replace the claim language with different requirements drawn from selected embodiments or alleged validity concerns. That is not claim construction. The Court should apply the claims as written and reject Apple’s narrowing constructions.

I. “provide[d] that . . . the wireless headset is active” / “provide[d] that said determining determines . . . the wireless headset is active” and “said determining comprises determining whether the wireless headset is active” (’104 Patent, Cls 2, 6, 10)¹

IngenioSpec’s Proposed Construction	Apple’s Proposed Construction
Plain and ordinary meaning	“upon establishing a communication link between the wireless headset and the wireless communication system”

These terms are easy to understand by both POSITAs and nonexperts. Thus, plain and ordinary meaning is appropriate. Apple disregards this basic tenet of claim construction and improperly attempts to import limitations from the specification into the claims. Apple’s proposed construction replaces the claim terms “provided that” and “active” with the phrase “upon establishing a communication link between the wireless headset and the wireless communication system,” which introduces new concepts of “upon establishing” and “communication link” that do not appear in the claims. Put simply, Apple’s proposal is a wholesale substitution of phrases, not a clarification of claim language, and offers no improvement in clarity. It is not supported by the intrinsic record and contrary to the plain and ordinary meaning of the terms.

¹ In its brief, Apple incorrectly adds “provided that” to claim 10 of the ’104 Patent. “Provided that” does not appear anywhere in claim 10 and was not included in the exchange of terms associated with claim 10 of the ’104 Patent. Thus, IngenioSpec is proceeding under the assumption “provided that” was added in error and will omit that language from the disputed claim terms.

A. The Claim Language Confirms That “Provided That” States a Condition, Not a Timing Requirement

The claim language uses a conditional clause. “Provided that” introduces a prerequisite that must be satisfied for certain processing to occur; it does not impose a temporal trigger or require a subsequent step to occur upon immediate satisfaction of that condition. Apple’s argument also attempts to treat “automatically” as a timing requirement, but “automatically” describes how the conversion is performed without user intervention, not when it must occur or whether intervening processing is permitted. Apple’s construction collapses these concepts by rewriting a conditional requirement into an immediacy requirement that is not in the claim language.

In claims 2, 6, and 10, the relevant processing occurs if the wireless headset is determined to be active. That determination answers whether the condition is met, not a timing question about when any subsequent steps must occur. Nothing in the claims requires that the text-to-audio conversion occur immediately, instantaneously, or only upon establishment of a communication link. The patentee could have claimed ‘upon establishing a communication link between the wireless headset and the wireless communication system,’ but did not do so. By nevertheless substituting “upon establishing a communication link” for the claim’s conditional language, Apple converts a prerequisite into a timing limitation and impermissibly rewrites the claims.

Apple incorrectly argues that “provided that” is synonymous with “upon.” Dkt. 50 at 3. To support that rewrite, Apple relies on the specification and selectively combines steps from Figures 5 and 6. *Id.* at 3-4. Apple contends that “once the determination is made that the wireless headset is active (502), then the process immediately converts the incoming text message to an audio message (step 606).” *Id.* at 4. Apple further argues that the “specification does not disclose or contemplate any other intervening steps or checks in making this determination.” *Id.* From that premise, Apple concludes that “in the only disclosure that could reasonably be read as

corresponding to this claim term, the text-to-audio conversion occurs automatically upon determining that the wireless headset is active.” *Id.*

Apple’s assertions are not supported by the claim language. Figures 5 and 6 describe exemplary embodiments, not claim requirements, and Apple’s argument improperly substitutes an embodiment’s sequencing for the conditional structure recited in the claims. The absence of disclosed intervening steps in a particular embodiment does not transform a prerequisite into a timing mandate, nor does it create a claim-level prohibition on intervening processing steps not shown in a flowchart. Apple’s argument rests on an incorrect claim construction premise.

Apple’s approach also contradicts well-established Federal Circuit precedent. “Embodiments in the specification—even if there is only one embodiment—cannot limit the scope of the claims absent the patentee’s ‘words or expressions of manifest exclusion or restriction.’” *Apple Inc. v. Wi-LAN Inc.*, 25 F.4th 960, 967–69 (Fed. Cir. 2022) (citations omitted). Absent such language, courts “do not import limitations from the written description into the claims.” *Id.* Because the specification contains no words of disavowal or clear manifestation of restriction, Figures 5 and 6 are illustrative examples, not limitations. Apple’s proposed construction therefore fails because it depends entirely on importing an embodiment’s sequencing into the claims. *Bayer AG v. Biovail Corp.*, 279 F.3d 1340, 1348 (Fed. Cir. 2002).

Moreover, there is no requirement that a claim limitation be disclosed in a single figure or flowchart, and Apple’s “no embodiment” theme is a written description complaint, not a basis to rewrite the claim language. The specification explains that “FIG. 5 is a flow diagram of an automated call response process according to one embodiment of the invention” and “FIG. 6 is a flow diagram of a message presentation process according to one embodiment of the invention.” Ex. A (’104 patent) at 3:37-40. Nothing in the intrinsic record suggests that these figures define

the timing, exclusivity, or immediacy of the claimed condition. Apple has articulated no basis to depart from the plain and ordinary meaning of the claim language.

B. Apple Improperly Imports a “Communication Link” Limitation

Apple’s construction adds a new requirement, “establishing a communication link,” that appears nowhere in the claim language. The claims ask only whether the headset is “active.” That inquiry concerns the status of the headset itself, not the existence of a connection or link with another device. The claims do not require, or even mention, a “communication link.”

Apple relies on *R.N. Nehushtan Trust Ltd. v. Apple Inc.*, No. 22-cv-01832-WHO, 2023 WL 11643884 (N.D. Cal. Apr. 4, 2023), which is inapposite. There, the court construed the term “active connection,” not “active.” *R.N. Nehushtan*, 2023 WL 11643884, at *8. Here, the claims refer to whether the headset is “active.” Apple’s attempt to equate distinct concepts improperly rewrites the claim language by converting a device-status inquiry into a connection-status requirement.

Absent lexicography or disavowal, the claim term “active” carries its plain and ordinary meaning. *See Apple*, 25 F.4th at 967. Nothing in the claims, specification, or prosecution history supports redefining “active” to require establishment of a communication link. Apple’s proposed construction therefore adds an extra limitation with no textual hook and should be rejected.

II. Preamble, Including “input signals” (’789 Patent, CI 13)

IngenioSpec’s Proposed Construction	Apple’s Proposed Construction
Plain and ordinary meaning	Preamble is limiting + “signals input to the audio system”

Claim 13 of the ’789 patent is directed to a hearing enhancement apparatus, and the preamble of the claim provides context for the environment in which that apparatus operates. Generally, a preamble does not limit the claims. *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017). The Court should apply that rule here.

A. Claim 13's Preamble Provides Context, Not Limitation

Apple provides three reasons why, in its view, the preamble is limiting: antecedent basis, alleged necessity to make the claim “make sense,” and generalized references to a “system” in the specification. Each of those reasons fails because the claim body recites a structurally complete apparatus, and the preamble merely supplies context for the signals, which is not enough to convert it into a limitation.

Apple points to four terms it contends derive antecedent basis from the preamble: “a user,” “an audio system,” (recited in dependent claim 29), “up-converted signals,” and “hearing enhancement apparatus” (recited in dependent claims 29-44, 46, 55, 62, 70, 78-79, 81). Ex. B (’789 patent). But none of these claim terms derive their antecedent basis from the preamble in such a way that the preamble needs to be limiting, nor do they supply essential structural meaning that the claim body otherwise lacks. At most, the preamble provides context for the signals and environment. The only term arguably germane to Apple’s “input signals” argument is “audio system,” which the claim body already recites as “an audio system, which is configured to up-convert input signals.” *Id.* at claim 13.

“Where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.” *STX, LLC v. Brine, Inc.*, 211 F.3d 588, 591 (Fed. Cir. 2000) (cleaned up). In the ’789 patent, the reference to an “audio system” in the preamble describes an intended use, to couple the hearing enhancement apparatus to an audio system, but this use is not the required use. *See* Ex. B (’789 patent) at Fig. 10 (describing inputs such as a TV/stereo, CD player, radio, phone, conference speaker, or speaker at a theater); *id.* at 5:64-66 (audio input as a friend speaking to the user). Each of these terms is used in the preamble in a way that is not limiting.

Claim drafting further confirms the preamble is not limiting as Apple proposes. Claim 1 claims an entire hearing enhancement system comprising an audio system, and other related components. Ex. B ('789 patent) at cl 1. Claim 13, by contrast, claims a hearing enhancement apparatus that is coupled to an audio system configured to up-convert input signals, and other related components. *Id.* at cl 13. Apple nevertheless argues that the “system” “is the invention of the '789 patent.” That argument, however, collapses the distinction the claims themselves draw. Claim 13 claims the hearing enhancement apparatus; claim 1 claims the entire system. Claim 1 confirms that the patentee knew how to claim a complete system when it intended to do so and chose not to do so in claim 13.

Additionally, the claim body recites a complete invention (a wireless receiver, a down-converter, a modifier, and a speaker). The preamble merely explains the source of the claimed up-converted signals. Each term re-recited in the claim body is not defined in the preamble in such a way that it limits the claims (and “input signals” is not repeated in the body of the claim). The body of claim 13 fully describes that the apparatus receives up-converted signals, down-converts them, modifies them, and generates audio output. The body of the claim recites the apparatus structure and function after up-conversion, so the preamble is describing steps that happen upstream of the apparatus. Deletion of the preamble would not alter the structure or operation recited in the claim body.

Apple also argues the preamble is necessary to “make sense” of the “overall structure of the claim,” pointing to the limitation reciting a “wireless receiver configured to wirelessly receive the up-converted signals” because the preamble explains where the up-converted signals originate and how the reception happens. Dkt. 50 at 7. But the test is not whether the preamble provides helpful context. It is whether the preamble is required to give meaning to the claim. The claim

language itself answers that question, and the body supplies the operative structure and function of the claimed apparatus.

B. Apple Attempts to Improperly Import the Specification into the Claims

Apple’s proposed construction of “input signals” rests on selectively invoking examples from the specification and importing them into the claim. That approach is improper. The Federal Circuit has cautioned that, although the specification may describe embodiments, courts should not confine the claims to those embodiments. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005).

Apple points to two examples in the specification that, in its view, describe signals “input to the [audio] system from other instruments” and argues claim 13 must be limited accordingly. Dkt. 50 at 8. That argument fails for two independent reasons. First, absent disavowal, it is improper to limit “input signals” to those described in particular embodiments, and Apple identifies no disavowal or language in the specification excluding any specific input audio signals.

Second, Apple’s argument depends on cherry picking. Apple ignores embodiments describing other types of input signals, including audio signals accessed from portable and non-portable units (Ex. B (’789 patent) at Fig. 10 and 12:17-29) and audio signals of a “friend’s speech, namely, her audio signals” picked up by a microphone (*id.* at 5:65-66). These disclosures confirm that “input signals” are not limited to Apple’s narrow construction. While “input” has meaning, it does not follow that “input signals” must be restricted to a subset of sources or pathways, nor does anything in Claim 13 or the specification support such a limitation. The claim itself specifies what happens to the input signals: they are up-converted into up-converted signals to be wirelessly transmitted. Apple’s construction does not resolve an ambiguity in the claim language. Instead, it imposes source and pathway limitations that the patentee did not claim. By converting exemplary

embodiments into claim scope, Apple’s construction improperly narrows “input signals” and should be rejected in favor of the term’s plain and ordinary meaning.

III. “head-worn personal electronic apparatus” / “head-worn wearable electronic device” / “head-worn electronic personal audio apparatus” / “head-worn electronic device” / Preamble (’355 Patent) (’355 Patent, Cls 1-3, 5-19, 21-54, 57-70, 72, 75-82, 85-92, 95-100; ’693 Patent, Cls 24-27, 30, 31, 33-38, 42, 49, 50, 52-54, 61, 64, 70-73; ’901 Patent, Cls 1-7, 9-10, 12-15, 18, 20-21, 25-28, 30-31, 35, 38-50, 53-54, 56-58)

IngenioSpec’s Proposed Construction	Apple’s Proposed Construction
Plain and ordinary meaning	“electronic eyewear or headwear”

Apple proposes to construe these terms narrowly to mean “electronic eyewear or headwear.” In offering that construction, Apple asserts that “head-worn” devices are limited to those worn only over a user’s eyes or on top of the user’s head. That construction improperly narrows the claim terms by substituting closed product categories divorced from the claim language and by imposing categorical and positional limitations unsupported by the claims or the specifications. In particular, Apple’s construction treats the “head-worn” aspect of these terms as defining a product class and limited position on the head, even though the claims and specifications use “head-worn” to describe where a device is worn. The claim terms are readily understood and require no construction beyond their plain and ordinary meaning.

A. Apple’s Construction Contradicts the Plain and Ordinary Meaning

Apple’s proposed construction conflicts with the plain and ordinary meaning of “head-worn.” The plain meaning encompasses devices worn on any part of the head, not only over the eyes or on top of the head. Dictionary definitions confirm that the “head” includes ears, and that to “wear” means to have on one’s body or a part of one’s body. *See, e.g.*, Ex. G, Random House Webster’s College Dictionary (2001) at 605; Ex. H, The New Oxford American Dictionary (2001) at 1910. Nothing in the ordinary meaning of “head-worn” limits the term to the positions or product

categories Apple proposes. Accordingly, the ordinary meaning of “head-worn” encompasses devices worn anywhere on the head, including at or in the ear.

Apple’s own patent confirms this understanding. U.S. Patent No. 9,854,343, assigned to Apple, describes “headsets” as “communication devices that are worn on a user’s head.” Ex. I at 6:30-31. It further explains that “headsets can be embodied as an *earpiece*.” *Id.* at 6:37-40. This confirms that, in ordinary technical usage, head-worn devices include configurations at or in the ear and are not limited to the positions or product categories Apple proposes. Apple improperly imports categorical limitations absent any disclaimer.

Absent lexicography or disavowal, courts do not depart from the plain meaning of claim language. *Luminara Worldwide, LLC v. Liown Elecs. Co. Ltd.*, 814 F.3d 1343, 1353 (Fed. Cir. 2016). Apple identifies no lexicography and does not show any expression of manifest exclusion or restriction limiting “head-worn” devices to the product categories it proposes. Instead, Apple attempts to narrow the claims by importing particular embodiments. Federal Circuit law rejects that approach. Embodiments in the specification, even if there were only one, cannot limit claim scope absent words or expressions of manifest exclusion or restriction. *Apple*, 25 F.4th at 967–69.

Apple’s theory ultimately depends on reading the specification’s illustrative examples as if they were definitional limits. But broad descriptions of example applications, background problems, or advantages cannot narrow the issued claim language absent clear and unmistakable disclaimer. And here, the specifications expressly use non-exhaustive language (“e.g.,” “such as,” and “or other”) and never state that head-worn devices are limited to eyewear or headwear. Instead, they use “head-worn” as a positional descriptor and identify eyewear only as one illustrative example of devices worn on the head.

The '693 and '355 patents state: “Generally speaking, the invention pertains to techniques for providing wearable electronic devices (*e.g., head-worn electronic devices, such as eyewear*) with electrical components” Ex. C ('693 patent) at 2:66-3:2; Ex. D ('355 patent) at 3:37-40. The phrase “such as” confirms that eyewear is an example, not a definitional limitation. The '901 patent makes this point even more explicit by distinguishing “eyewear” from “other head-worn personal electronic apparatus”: “Generally speaking, the invention pertains to techniques for providing *eyewear or other head-worn personal electronic apparatus* with electrical components.” Ex. E ('901 patent) at 6:57-60. The specifications’ use of inclusive language confirms the patentee did not limit “head-worn” to Apple’s proposed closed product categories or particular positions.

B. Apple’s Construction Would Improperly Exclude Disclosed Embodiments

Apple asserts that “the only types of ‘head-worn’ apparatuses/devices shown or described in all three patents are those worn over a user’s eyes and/or on top of a user’s head.” Dkt. 50 at 12. That assertion is factually incorrect. The patents expressly disclose components worn at or in the ear. Apple’s assertion misconstrues the positional nature of “head-worn.” The term describes where a device is worn, *i.e.*, on the head, including at or in the ear. It does not impose a limitation based on product classification or form, such as eyeglasses, eyewear, a headband, or in-ear mounting. Because there are no words or expressions of manifest exclusion or restriction, Apple’s assertion cannot limit claim scope. *Apple*, 25 F.4th at 967–69.

All three patents disclose head-worn devices worn at or in a user’s ear. Figure 43 of the '693 patent shows “a tube extending from a speaker at a temple of the glasses to guide sound to one of the ears of the user.” Ex. C ('693 patent) at Fig. 43, 12:38-40. The specification further explains: “In one approach, *there also is a plug 4115* at the end of the tube 4114 *for inserting into an ear of the user*, as shown in FIG. 43. The plug 4115 can be an *ear bud*.” *Id.* at 64:20-25. Similar

in-ear embodiments are shown in Figure 22 of the '355 patent and Figures 3D and 3E of the '901 patent. Ex. D ('355 patent) at 42:1-23; Ex. E ('901 patent) at 12:41-13:3.

Apple's attempt to relabel disclosed ear-inserted components as mere "accessories" does not change the analysis. The patents contemplate audio components positioned at or in the ear in connection with a head-worn device. Nothing in the claim language draws the categorical line Apple proposes. The claims recite "head-worn" devices and apparatuses, a positional term describing where the device is worn. As disclosed in the embodiments, within the claim language, a device with audio components positioned at or in the user's ear is "head-worn," regardless of whether it is supported by a glasses frame, headband, or in-ear mounting. That some embodiments include eyeglass frames does not limit the claims to devices worn over the eyes or on top of the head, as Apple argues.

Apple's proposed construction, which Apple articulates as limited to devices worn only over the eyes or on top of the head, would exclude these disclosed embodiments at or in the ear. A construction excluding disclosed embodiments is "rarely, if ever correct," and there is no basis to exclude here. *CUPP Computing AS v. Trend Micro Inc.*, 53 F.4th 1376, 1381 (Fed. Cir. 2022).

C. Apple's New Matter and Written Description Arguments Do Not Justify a Narrowing Construction

Claim construction is based on the issued patents, not on comparisons to earlier applications in the priority chain. It is a "bedrock principle" that "the claims of the patent define the invention to which the patentee is entitled the right to exclude." *Phillips*, 415 F.3d at 1312. The patent specification as issued "is always highly relevant to the claim construction analysis" and is "the single best guide to the meaning of a disputed term." *Id.* at 1315. Courts therefore construe claims in light of the issued patent, even where defendants allege that earlier applications or amendments raise new-matter or written-description concerns. *See Biac Corp. v. Intel Corp.*, No.

2:05-cv-184, 2007 WL 677132, at *4–5 (E.D. Tex. Mar. 1, 2007) (“*Biax I*”); *Biax Corp. v. Nvidia Corp.*, No. 09-cv-01257-PAB-MEH, 2010 WL 2539769, at *4 (D. Colo. June 21, 2010), *aff’d*, 498 F. App’x 998 (Fed. Cir. 2013) (“*Biax II*”).

Apple’s construction argument rests almost entirely on provisional applications that it describes as using “eyewear” terminology rather than the “head-worn” language that appears in the issued claims. Dkt. 50 at 9-14. That approach is legally improper. Courts do not narrow claim scope by adjudicating alleged new-matter disputes during claim construction. To the contrary, “determining whether the patentee introduced new matter during prosecution is not appropriate during claim construction.” *Commonwealth Scientific Indus. Research Org v. Buffalo Tech. (USA), Inc.*, No. 2:05-cv-53, 2006 WL 1233122, *5 (E.D. Tex. May 8, 2006); *accord Pliant Corp. v. MSC Mktg. & Tech., Inc.*, 416 F. Supp. 2d 632, 643 n.5 (N.D. Ill. 2006); *Reiffin v. Microsoft Corp.*, No. C-98-0266 VRW, 2002 WL 31268220, *6 (N.D. Cal. Apr. 30, 2002).

In *Biax I*, the Eastern District of Texas rejected the same maneuver Apple attempts here. The defendant urged the court to construe claims narrowly based on alleged new matter. 2007 WL 677132, at *4–5. The court refused, explaining that resolving claim construction based on alleged new-matter theories would improperly decide a validity issue at the construction stage. *Id.* The District of Colorado reached the same conclusion, holding that reliance on the original specifications would “effectively be resolving the new matter issue in defendants’ favor,” an issue that was “not ripe for disposition.” *Biax II*, 2010 WL 2539769, at *5.

Apple’s reliance on *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347 (Fed. Cir. 2000), is misplaced.² *Schering* involved a specific claim amendment followed by an express PTO new-

² Contrary to Apple’s suggestion, *Network Commerce, Inc. v. Microsoft Corp.*, 422 F.3d 1353 (Fed. Cir. 2005), did not involve any written-description dispute, nor did it authorize narrowing

matter rejection that shaped the scope of the claim term at issue. *Id.* at 1352. Nothing comparable exists here. “Head-worn” appears in the issued claims, and Apple identifies no amendment, rejection, or prosecution event in which the Patent Office questioned the term as new matter. Nor does Apple point to any disclaimer or narrowing statement in the prosecution history.

Apple’s construction argument asks the Court to prematurely render a new-matter ruling based on disputed interpretations of priority applications, without the procedural safeguards that governed *Schering*. Resolving Apple’s argument would require determining whether the provisional applications provide adequate written description for “head-worn” scope, which is a validity issue that must be addressed, if at all, on a proper evidentiary record at summary judgment or trial, not at claim construction.

The intrinsic record confirms that “head-worn” is a positional descriptor describing where a device is worn, *i.e.*, on the head, not a label for particular device categories or particular location on the head. Nothing in the claims, specifications, or prosecution history restricts “head-worn” to specific positions on the head or excludes configurations worn at or in the ear. Apple identifies no lexicography, disclaimer, or prosecution history imposing such limitation.³

For the reasons set forth above, the intrinsic record contains no words of restriction, lexicography, or disclaimer limiting the “head-worn” claim terms in the manner Apple proposes. The specifications disclose embodiments that extend beyond the positions and categories Apple

claim scope based on comparisons to provisional applications. The court construed the term from the issued intrinsic record, not by adjudicating new-matter at claim construction.

³ Even if the Court were to consider Apple’s written description arguments, the specifications demonstrate possession of the claimed scope by, for example, disclosing devices with audio components positioned at or in the ear and describe audio delivery to the ear as a core inventive concept, as described above. Further, the PTO issued these patents without any objection to the “head-worn” terminology, which invokes the “especially weighty presumption” that the claims include no new matter and satisfy the written description requirement. *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1574 (Fed. Cir. 1992).

identifies, and Apple’s construction would improperly exclude those disclosed embodiments while contradicting the plain and ordinary meaning of the claim language. Apple’s narrowing construction thus finds no support in the claims, specifications, or prosecution history, and instead depends on an impermissible new-matter theory that cannot be resolved at claim construction. The “head-worn” terms should therefore be given their plain and ordinary meaning.

IV. “[a/the] speaker[s] . . . proximate to an ear of the user” / “the first speaker . . . proximate to a first ear of the user” / “the second speaker . . . proximate to a second ear of the user” (’693 Patent, Cls 24, 42, 75; ’355 Patent, Cls 1, 17, 65, 77, 87; ’901 Patent, Cls 1 and 35)

IngenioSpec’s Proposed Construction	Apple’s Proposed Construction
Plain and ordinary meaning	“[a/the] speaker[s] . . . near an ear of the user” / “the first speaker . . . near a first ear of the user” / “the second speaker . . . near a second ear of the user”

The parties do not meaningfully dispute that “proximate” denotes relative closeness. The dispute is whether Apple may impose an unstated outer boundary on proximity that excludes contact with, or placement within, the ear. Nothing in the claim language or intrinsic record supports that restriction. To the contrary, the claims and specifications confirm that “proximate to an ear” encompasses configurations in which the speaker is positioned at, near, or at least partially within the ear. Apple’s proposed construction improperly narrows the claims by excluding disclosed configurations and should be rejected in favor of the plain and ordinary meaning.

A. “Proximate To” Does Not Exclude Contact With or Placement Within the Ear

Apple argues that “proximate” means “near” and therefore excludes configurations in which a speaker contacts or is partially inserted into the ear. That argument fails at the claim level. The claims themselves confirm that “proximate to an ear” includes inserting into the ear. Dependent claim 76 of the ’693 patent expressly recites that the speakers may be “configured to be at least partially inserted into an ear of the user.” Ex. C (’693 patent), cl 76. Because dependent

claims are presumed to fall within the scope of their independent claims, “proximate to an ear” necessarily encompasses at least partial insertion into the ear. Any construction that excludes in-ear placement would improperly read claim 76 out of the ’693 patent. *See also* Ex. D (’355 patent), cl 53 (at least one speaker “configured to be at least partially inserted into an ear of the user”).

Claim 76 confirms what the intrinsic record shows across these related patents. The same phrase “proximate to an ear” is used in the ’355 and ’901 patents, and the shared specifications contemplate in-ear configurations. Apple identifies no patent-specific lexicography, disclaimer, or prosecution history that would justify giving “proximate to an ear” a narrower meaning in the ’355 or ’901 patents than in the ’693 patent. Nothing in the intrinsic record suggests the patentee intended “proximate to an ear” to mean one thing in claim 76 and something narrower elsewhere.

Apple also relies on cases stating that “proximate” can mean “near,” but those cases do not support Apple’s proposed exclusion. They do not hold that proximity excludes contact or insertion, nor do they authorize courts to impose a minimum separation distance that the claims do not recite. *See Valve Corp. v. Ironburg Inventions Ltd.*, 8 F.4th 1364, 1380 (Fed. Cir. 2021) (rejecting Apple’s proposed additional limitation on “disposed proximate to”); *Transdata, Inc. v. Centerpoint Energy Houston Elec. LLC*, No. 6:10-cv-557-RWS-JDL, 2016 WL 3172791, at *3 (E.D. Tex. June 7, 2016) (recognizing “proximate” as a term of degree, not a fixed boundary); *Xerox Corp. v. X Corp.*, No. 2023-1913, 2025 WL 1692962, at *4–5 (Fed. Cir. June 17, 2025) (confirming that “proximal” means “near or next to,” without excluding closer configurations). Other courts have recognized that terms such as “adjacent to” can mean “next to or adjoining.” *Boss Indus., Inc. v. Yamaha Motor Corp. U.S.A.*, 333 F. App’x 531, 542 (Fed. Cir. 2009).

B. The Intrinsic Record Confirms a Broader Understanding of “Proximate”

The intrinsic record independently confirms that the patentee contemplated a hearing enhancement apparatus positioned at, or within, a portion of the user’s ear. The patents repeatedly

disclose embodiments where audio components are positioned at or within the ear. For example, the '693 patent describes a tube extending from a speaker with a plug “for inserting into an ear of the user.” Ex. C ('693 patent) at 64:20–25; *see also* Ex. E ('901 patent) at 26:20–21, Ex. D ('355 patent) at 25:28–29. Similar in-ear configurations are disclosed in the '355 and '901 patents, including embodiments depicting ear buds, plugs, and tubes configured to deliver audio into the ear canal. Ex. D ('355 patent) at Fig. 22; 42:1–23; Ex. E ('901 patent) at Figs. 3D–3E; 12:41–13:3.

Construing “proximate to an ear” to exclude contact with or placement within the ear would improperly read these disclosed configurations out of the claims. Such constructions are “rarely, if ever, correct,” (*CUPP Computing*, 53 F.4th at 1381) and there is no basis to construe as such here. The claims impose no minimum distance requirement between the speaker and the ear, and Apple identifies no lexicography or disclaimer establishing such a limitation. To the extent Apple relies on dictionary definitions to argue that the “plain meaning” of “proximate” is merely “near,” that reliance does not advance its position. Dictionaries are extrinsic evidence and cannot be used to impose an unstated outer boundary that excludes disclosed configurations and contradicts the intrinsic record. *See Phillips*, 415 F.3d at 1318. The claims and specifications make clear that “proximate to an ear” encompasses speakers positioned at, near, or at least partially within the ear.

Accordingly, “proximate to an ear” should be given its plain and ordinary meaning, which encompasses speakers positioned at, near, or partially within the ear.

V. Preamble, including “to at least help [a/the] user hear audio outputs produced by the device” ('599 Patent, Cls 1, 20, 22, 24)

IngenioSpec’s Proposed Construction	Apple’s Proposed Construction
Plain and ordinary meaning	Preamble is limiting + indefinite

The preambles of the independent claims contain two parts: (1) a statement of intended purpose, (“to at least help [a/the] user hear audio outputs produced by the device”) and (2) a

structural statement describing aspects of the claimed device (the remainder of the preamble). The statements of intended purpose are non-limiting and require no construction, and also are not indefinite. The remainder of each preamble should be given its plain and ordinary meaning.

A. The Preambles Include a Non-Limiting Statement of Intended Use or Purpose

A preamble is limiting only when it “recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim. Conversely, a preamble is not limiting where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *TomTom, Inc. v. Adolph*, 790 F.3d 1315, 1323 (Fed. Cir. 2015) (internal citation and quotations omitted). Statements of intended use or purpose “are rarely treated as claim limitations.” *Marrin v. Griffin*, 599 F.3d 1290, 1294 (Fed. Cir. 2010). In addition, when a preamble includes both structure and a statement of intended use or purpose, it is appropriate to parse such preambles and construe only the structural limitations. *TomTom*, 790 F.3d at 1323-1324; *Marrin*, 599 F.3d at 1295.

In *TomTom*, the court considered “[a] method for generating and updating data for use in a destination tracking system of at least one mobile unit comprising.” 790 F.3d at 1322. The court separated this preamble into two parts: a statement of intended purpose (generating and updating data) and necessary structure (destination tracking system of at least one mobile unit). Only the structural portion was limiting, because the statement of intended purpose did not “recite essential structure or steps, or give necessary life, meaning, and vitality to the claim.” *Id.* at 1324. Rather, the remainder of the claim described a structurally complete invention “such that deletion of the preamble phrase [did] not affect the structure or steps of the claimed invention.” *Id.* This is true here; deleting the “help” language does not alter the structure of the claimed devices. Accordingly, the “help” language does not give life, meaning, or vitality to the claims and is non-limiting.

Apple nevertheless argues that the “help” phrase is limiting because it provides antecedent basis for the terms “user” and “audio output.” That argument fails. “User” derives its antecedent basis from the preamble phrases “wireless wearable device configured to be worn in at least one ear of a user.” *See, e.g.*, Ex. F (’599 patent) at claim 1. In addition, the claims do not recite a “user” as a limitation of the claimed devices; rather, the preambles employ the term to describe aspects of how the claimed devices are configured.

As for “audio output,” it appears in the body only in dependent claim 3. This claim describes one aspect of how the claimed device is configured, but does not require the presence of an audio output. Moreover, the fact that a dependent claim may derive antecedent basis from an independent claim’s preamble does not render the preamble limiting for all claims. *See Super Interconnect Techs. LLC v. Huawei Device Co. Ltd.*, No. 2:18-cv-462-JRG, 2020 WL 60145 (E.D. Tex. Jan. 5, 2020). In *Super Interconnect*, the court relied on the preamble’s recitation of essential structure for other language used in the body of the claim. *Id.* at *12. That is not the case here.

B. Even If Considered Limiting, the “Help” Language Is Not Indefinite

“Help” is a simple term, easily understood as “to give assistance or support to.” Dkt. 50-11 at 579. The intrinsic record provides multiple examples of how to help a user hear audio outputs in the context of the claimed invention. For example, the ’599 patent describes embodiments where: (1) a funnel structure guides sound from a speaker into a tube, improving sound coupling (Ex. F (’599 patent) at 7:60-8:1); (2) a tube and plug, including an ear bud, guide sound into the user’s ear and enhance coupling to the ear canal (*id.* at 7:37-59); and (3) a speaker, tube, and ear bud cooperate to bring audio signals to the user (*id.* at 29:1-6); *see also id.* at Fig. 4 & 22.

Moreover, the intrinsic record also describes noise cancellation as another way of helping a user hear audio outputs. The specification teaches that “the audio output from the speaker can serve to cancel the environmental sounds in the vicinity of the user.” Ex. F (’599 patent) at 26:26-

35. In a corresponding manner, dependent claim 3 states that the claimed device is “configured to cancel at least a portion of the sound captured by the another microphone to produce the audio outputs.” *Id.* at 46:5-9. These examples in the intrinsic evidence confirm that the claims use the term “help” according to its plain and ordinary meaning: to assist sound delivery to the user’s ear.

Apple’s indefiniteness theory ignores the plain meaning of “help” and instead rests on a false premise that claim scope turns on a user’s subjective perception. It does not. The claims are directed to device configuration and operation, not to whether or to what extent a particular user subjectively experiences improvement. Apple offers no evidence that a POSITA would adopt its user-specific interpretation, or that a POSITA would fail to understand that the examples given in the specification help a user to hear audio outputs. In fact, Apple offers no evidence that a POSITA would find any ambiguity in the structures described by the claims. Instead, Apple selectively relies on a secondary dictionary definition of “help” (“to make more pleasant or bearable”) while ignoring the dictionary’s primary definition (“to give assistance or support to”), which aligns with the intrinsic disclosures describing how to assist sound delivery to the ear. Dkt. 50-11 at 579.

Apple also argues that “help” is a term of degree. It is not. But even if it is considered as such, Apple’s argument fails. The Federal Circuit has repeatedly held that descriptive terms or terms of degree are not indefinite so long as the intrinsic record provides objective boundaries for their scope. *Niazi Licensing Corp. v. St. Jude Medical S.C., Inc.*, 30 F.4th 1339, 1347-48 (2022). In *Niazi*, the court found the terms “resilient” and “pliable” definite because the specification identified exemplary structures and materials that achieved those objectives. *Id.* at 1349-50.

The intrinsic record here does the same, by providing examples and describing exemplary structures (*e.g.*, a tube, funnel, plug or earbud) and exemplary processing (*e.g.* noise cancellation) that achieve the objective of configuring a device to help a user hear audio outputs. By these

examples, the intrinsic record provides non-subjective criteria for assessing whether a device “helps” by, as non-limiting examples, guiding sound into a user’s ear or canceling noise.

In *Niazi*, the Federal Circuit expressly distinguished Apple’s cases, including *Datamize*, *Intellectual Ventures*, and *Interval Licensing*, because in those cases the intrinsic and extrinsic evidence failed to provide “*any* objective boundaries for the claims.” *Niazi*, 30 F.4th at 1348. Instead, the claim language at issue there was purely subjective, “resulting in a variable claim scope depending on the particular eye of any one observer.” *Id.* at 1350. Here, by contrast, the claims do not ask whether a user believes the device “helps” them hear better. They are directed to a device configured in specified ways that assist delivery of audio outputs to the ear. And the intrinsic record teaches using specific structures and processing to accomplish that objective.

The prosecution history further confirms the claims are definite. While the examiner rejected different claims in a predecessor application that used the word “help,” those claims were directed to different devices and used different language than the claims at issue here. Dkt. 50-15. And, when the applicant presented the language now used in the ’599 patent claims, the examiner did not renew the prior rejection. Rather, the examiner found the claims allowable over the closest prior art. Ex. J (’599 FH, Office Action dated Jan. 25, 2024) at 14-16. The examiner’s application of the claim language to the prior art confirms that a POSITA would understand their scope with reasonable certainty.

Accordingly, the preamble is not limiting, and, in any event, the “help” language is not indefinite and should be accorded its plain and ordinary meaning.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on February 4, 2026.

/s/ Robert Kramer

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