UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

24/7 CUSTOMER, INC., et al., Plaintiffs, v. LIVEPERSON, INC., Defendant.	Case No.15-cv-02897-JST **CLAIM CONSTRUCTION ORDER** Re: ECF No. 89

Before the Court is Plaintiff 24/7 Customer, Inc.'s ("[24]7") Opening Claim Construction Brief, ECF No. 89. [24]7 and Defendant LivePerson, Inc. ("LivePerson") propose competing constructions of four terms in U.S. Patent No. 8,396,741 ("the '741 patent"), two terms in U.S. Patent No. 6,798,876 ("the '876 patent"), and four terms in U.S. Patent Nos. 8,737,599 ("the '599 patent") and/or 9,077,804 ("the '804 patent"). The Court construes the terms as set forth below.

I. BACKGROUND

On June 22, 2015, [24]7 filed a Complaint against LivePerson, alleging infringement of four patents. No. 15-cv-02897, ECF No. 1. Subsequently, [24]7 filed a Complaint against LivePerson on December 7, 2015, alleging infringement of eight other patents. No. 15-cv-05585, ECF No. 1. On January 5, 2016, the Court consolidated the two cases, designated Case No. 15-cv-02897 as the lead case, and ordered all documents to be filed in the lead case. ECF No. 57.[1] On January 7, 2016, [24]7 amended its Complaint for Case No. 15-cv-02897 to allege infringement of a fifth patent. ECF No. 63. As a result of a Court-ordered reduction in the number of asserted claims, the Court, pursuant to the parties' stipulation, dismissed two of the asserted patents on November 21, 2016 to decrease the total number of asserted patents to eleven. ECF No. 105.

[1] Accordingly, the docket numbers will refer to the documents filed in Case No. 15-cv-02897.

The ten claim terms proposed for construction stem from four of those patents. The '741 patent, titled "Mining Interactions to Manage Customer Experience Throughout a Customer Service Lifecycle," claims priority to two provisional applications filed in October 2008. ECF No. 89 at 7-8; ECF No. 89-4. The '876 patent, titled "Method and Apparatus for Intelligent Routing of Incoming Calls to Representatives in a Call Center," claims priority to a provisional application filed on December 29, 1998. ECF No. 89 at 8; ECF No. 89-5. The '599 and '804 patents, both titled "Interaction Management," claim priority to a provisional application filed on November 23, 2011. ECF No. 89 at 8; ECF No. 89-6; ECF No. 89-7. The '804 patent is a continuation of the '599 patent, and both patents share a common specification. See ECF Nos. 89-6, 89-7.

On September 30, 2016, [24]7 filed its Opening Claim Construction Brief. ECF No. 89. LivePerson then filed its Responsive Claim Construction Brief on October 14, 2016, with [24]7's Reply Brief filed on October 24, 2016. ECF Nos. 91, 93.

II. JURISDICTION

Because this is a civil action arising under an Act of Congress relating to patents, this Court has jurisdiction over this action pursuant to 28 U.S.C. § 1338.

III. LEGAL STANDARD

A. Claim Construction

The construction of terms found in patent claims is a question of law to be determined by the court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). "[T]he interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005) (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). The "correct construction," therefore, is one that "stays true to the claim language and most naturally aligns with the patent's description of the invention." Id.

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention.'" Id. at 1312 (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Federal Circuit has held that words of a claim are generally given

their "ordinary and customary meaning," which is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Id. at 1312-13. In some cases, the ordinary meaning of claim language is "readily apparent," and "claim construction . . . involves little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314. In other cases, "determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art." Id. Claim construction may deviate from the ordinary and customary meaning of a disputed term only if "a patentee sets out a definition and acts as his own lexicographer" or if "the patentee disavows the full scope of a claim term either in the specification or during prosecution." Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing Vitronics Corp v. Conceptronic, Inc., 90 F.3d 1576, 1580 (Fed. Cir. 1996)).

In claim construction, "the claims themselves provide substantial guidance as to the meaning of particular claim terms." Phillips, 415 F.3d at 1314. The "context in which a term is used in the asserted claim," "[o]ther claims of the patent in question, both asserted and unasserted," and "[d]ifferences among claims" are all instructive. Id. "The claims, of course, do not stand alone" and instead "must be read in view of the specification," which is "[u]sually . . . dispositive" and "the single best guide to the meaning of a disputed term." Id. at 1315. Courts "normally do not interpret claim terms in a way that excludes disclosed examples in the specification." Verizon Servs. Corp. v. Vonage Holdings Corp., 503 F.3d 1295, 1305 (Fed. Cir. 2007). Additionally, the Federal Circuit has cautioned that "limitations from the specification are not to be read into the claims." Comark Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1186 (Fed. Cir. 1998). Even if a patent describes only a single embodiment, the Federal Circuit has "expressly rejected" the contention that the claims must be construed as being limited to that embodiment. Phillips, 415 F.3d at 1323. In addition to consulting the specification, "the court should also consider the patent's prosecution history." Markman, 52 F.3d at 980 (citing Graham v. John Deere Co., 383 U.S. 1, 33 (1966)). However, because the "prosecution history represents an ongoing negotiation between the [Patent and Trademark Office] and the applicant, rather than

the final product," it "often lacks the clarity of the specification" and therefore "is less useful." Phillips, 415 F.3d at 1317.

Though intrinsic evidence—the claims, specification, and prosecution history—is more significant and reliable than extrinsic evidence, courts may also consider the extrinsic record in claim construction, including expert and inventor testimony, dictionaries, and learned treatises. Id. at 1317-18. Within the class of extrinsic evidence, dictionaries, and especially technical dictionaries, "can assist the court in determining the meaning of particular terminology to those of skill in the art" because they "endeavor to collect the accepted meanings of terms used in various fields of science and technology." Id. at 1318. Expert testimony can also be useful for establishing a particular meaning of a claim term in the field of the patent, so long as it does not include "conclusory, unsupported assertions" and is not "clearly at odds with . . . the written record of the patent." Id.

B. Indefiniteness

A patent specification must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention." 35 U.S.C. § 112(b). "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014).

IV. ANALYSIS

A. The '741 patent

[24]7 asserts claims in the '741 patent, which relates to data and text mining of customer-agent transcripts to provide feedback to the agents. Four disputed terms stem from the '741 patent.

1. "said interaction data" (claims 1, 7)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"said interaction data"	"said interaction data" refers to interaction data. "Interaction data" means data gathered from one or more interactions between at least one customer and at least one customer service representative	indefinite

LivePerson argues that the phrase "said interaction data" is invalid for indefiniteness because "the term lacks antecedent basis and the generic term 'data' is used in different contexts within the claim and specification." ECF No. 91 at 13. [24]7 asserts that the "claim language and the specification demonstrate that 'said interaction data' has a definite meaning—data from customer-agent interactions." ECF No. 89 at 9.

Looking to the claim language, the claims provide no definition of the term "said interaction data" or context from which a definition can be derived. For instance, claim 1 recites elements containing different variations of the term "data," including "gathering, by the processor, said data relevant to a customer experience . . . ; ingesting said data; processing, by the processor, said data using one or more processing modules, forming one or more insights . . . ; [and] recording said interaction data." ECF No. 89-4, '741 patent at 15:29-35. The Court agrees with LivePerson that it is ambiguous whether these variations of "data" are "equivalents, data subsets of each other, or completely different sets of data." See ECF No. 91 at 14.

In response, [24]7 argues that "interaction data" is described in claim 7 and that its "proposed construction of 'interaction data' adopts the claim 7 description." See ECF No. 89 at 10. Claim 7 claims "a customer-agent interaction platform for conducting an interaction between at least one customer and at least one customer service representative and for memorializing said one or more interactions, in the form of interaction data." ECF No. 89-4, '741 patent at 16:46-50 (emphasis added). The claim language fails to add precision as to what data constitutes "interaction data."

The specification provides no clarity. [24]7 points to a section titled "Interaction Data" to

assert that the specification "describ[es] 'interaction data' as 'information from interactions between a customer [] and an agent [].'" See ECF No. 89 at 10. But that portion of the specification does not provide examples of "interaction data" or otherwise explain to one of skill in the art what that term means. ECF No. 89-4, '741 patent at 5:54-6:27. As such, no reasonable certainty exists as to the data being recorded and the scope of the claimed "said interaction data," and therefore claims 1 and 7 are invalid for indefiniteness. See Nautilus, 134 S. Ct. at 2124 ("[A] patent is invalid for indefiniteness if its claims, read in light of the specification . . . fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.").

2. "survey NES" and "overall NES" (claims 1, 7)[2]

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"survey NES"	a measurement of customer experience derived from survey data	a numerical measurement of customer experience determined from text-mining unstructured survey data, weighted using an algorithm with weights determined based on the customers' interaction channel, life cycle stages, or issue type
"overall NES"	a measurement of customer experience derived from interaction data and survey data	a numerical measurement of customer experience determined by combining the text-mining NES and the combined CSAT and survey NES scores

The parties dispute three things: (1) whether "survey NES" is weighted using an algorithm, (2) whether "survey NES" and "overall NES" are numerical measurements, and (3) how "survey NES" and "overall NES" are derived.

a. Whether "survey NES" is weighted using an algorithm

LivePerson argues that a "survey NES" must be weighted using an algorithm because "the

[2] As explained above, the Court finds claims 1 and 7 of the '741 patent—containing the term "said interaction data"—indefinite, but nonetheless construes "survey NES" and "overall NES" for completeness and in case the claims should become relevant again (e.g., following an appeal).

'741 patent discloses only one way of practicing the invention—calculating 'Survey NES' by 'weight[ing] using an algorithm.'" ECF No. 91 at 15. [24]7, on the other hand, notes that the language surrounding the "weighted using an algorithm" phrase is permissive and that the specification does not disclaim NES scores that do not include a weighted algorithm. ECF No. 89 at 13; see ECF No. 89-4, '741 patent at 9:31-32 ("The Net experience score can be weighted using an algorithm . . . .") (emphasis added). Additionally, [24]7 states, the patent specification broadly defines NES as "a measurement of customer experience" without any reference to a weighted algorithm. ECF No. 89 at 12-13 (quoting '741 patent at 9:30-31).

The Court agrees with [24]7's proposed construction and finds LivePerson's argument problematic. The Federal Circuit has "expressly rejected" the contention that claims must be limited to a single embodiment simply because the patent only describes that one embodiment. See Phillips, 415 F.3d at 1323. Although courts have made an exception where "the patentee has demonstrated a clear intention to so limit the claim's scope" or where "the preferred embodiment is described in the specification as the invention itself," that is not the case here. In re Rembrandt Techs., LP, 496 F. App'x 36, 44 (Fed. Cir. 2012).

The cases that LivePerson relies on are distinguishable. Unlike the patent at issue in In re Rembrandt Technologies, LP, which "repeatedly refer[red]" to the limitation and whose "specification clearly define[d]" the term according to that limitation, the '741 patent does not "repeatedly" refer to "survey NES" as involving a weighted algorithm and the specification does not define NES as not requiring a weighted algorithm. See id.; ECF No. 89-4, '741 patent at 9:30-32. Wang Laboratories, Inc. v. America Online, Inc. is similarly inapposite. See 197 F.3d 1377 (Fed. Cir. 1999). Though the court held that the claims were limited to the only embodiment described in the patent, Wang Laboratories is distinguishable because the embodiment was described multiple times in the specification and drawings, while here a weighted algorithm is described once. See id. at 1381-83. Likewise, Bell Atlantic Network Services, Inc. v. Covad Communications Group, Inc. is not on point because the disputed term was "consistent[ly] use[d] throughout the . . . patent specification" in a certain way, and therefore was construed that way. See 262 F.3d 1258, 1272-73 (Fed. Cir. 2001).

b. Whether "survey NES" and "overall NES" are numerical measurements

LivePerson seeks to construe "survey NES" and "overall NES" as "numerical measurements." ECF No. 91 at 16. LivePerson identifies two statements in the patent to support importing the "numerical" limitation into the claims. Id. at 17. The first is in the specification, which explains that "[t]he multifaceted solution includes making one or more numerical measurements of customer satisfaction." See ECF No. 89-4, '741 patent at 2:19-21. The second is in the Abstract, which states that "[o]ne or more numerical measurements of customer satisfaction are derived." See id. at Abstract; see also Hill-Rom Co., Inc. v. Kinetic Concepts, Inc., 209 F.3d 1337, 1341 (Fed. Cir. 2000) ("[Courts] have frequently looked to the abstract to determine the scope of the invention."); Innova, 381 F.3d at 1121 (cautioning that the Abstract "speaks generally to the invention and, much like the syllabus of an opinion, sets forth general information about the document's content, which is described in more detail in the remainder of the document").

The Court finds that these statements in the patent do not limit "survey NES" and "overall NES" to "numerical measurements." As to the statement in the specification, it is important to note that the reference to "numerical measurements" is only part of a "preferred embodiment[]." ECF No. 89-4, '741 patent at 2:13-14. As [24]7 states, "it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." GE Lighting Sols., LLC v. AgiLight, Inc., 750 F.3d 1304, 1309 (Fed. Cir. 2014) (quoting Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 913 (Fed. Cir. 2004)). The Court finds no such clear indication. Indeed, the express definition of "NES" in the specification does not include "numerical measurement" language. ECF No. 89-4, '741 patent at 9:30-31 ("An NES score is a measurement of customer experience."). Additionally, in Figure 5, the axis measuring NES does not include a numerical scale, but rather a scale that goes from "Low" to "High." Id. at Fig. 5.

In light of the non-limiting description of NES in the specification, the "numerical measurement" language in the Abstract is best understood as a general summary of the preferred

embodiment, rather than a limitation on claim scope. See Verco Decking, Inc. v. Consol. Sys., Inc., No. CV-11-2516, 2014 WL 3894144, at *6 (D. Ariz. Aug. 8, 2014) (reasoning that while "the abstract does give a more specific description" of the disputed term, it is not enough to restrict the language of the claim because the abstract "does not purport to . . . describe the full scope of all of the claims" and is merely a "summary of the preferred and illustrative embodiment described in the specification"). Furthermore, LivePerson's argument that the Abstract limits claim scope is unpersuasive because the two cases it relies on are factually distinct. See ECF No. 91 at 17. Although the court in Netcraft Corp. v. eBay, Inc. found that the "first two sentences of the Abstract" supported limiting the claim scope, "the common specification, including the Abstract, consistently describe[d] the invention in terms of [the limitation]." 549 F.3d 1394, 1398-99 (Fed. Cir. 2008) (emphasis added). Here, in contrast, there is no consistent description of "NES" as requiring numerical measurements. Similarly, the patents at issue in SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc. consistently described the claimed invention with a specific configuration and even contained "language defin[ing] SciMed's invention in a way that excludes the [alternative] arrangement." 242 F.3d 1337, 1342-43 (Fed. Cir. 2001). Such exclusion of non-numerical measurements is not seen here.

Finally, the extrinsic evidence supports [24]7's construction. A person of ordinary skill in the art would understand that the meaning of the disputed term is not restricted to numeric, quantifiable results. ECF No. 89-1 ¶ 23 (expert testimony and dictionary definition). As [24]7 explains, "scores" are commonly non-numeric; for instance, scores of "True, Mostly True, Half True, Mostly False, False, and Pants on Fire" are used in fact-checking political statements. ECF No. 89 at 13-14.

c. How "survey NES" and "overall NES" are derived

[24]7 argues that "existing claim language" already explains that "'survey NES' is derived from survey data" and "'overall NES' is derived from interaction data and survey data." ECF No. 89 at 15-16. To support its argument, [24]7 points to expert testimony that shows that its proposed construction is "consistent with the plain meaning of the words 'survey' and 'overall,' used in conjunction with 'NES scores.'" Id. at 15.

LivePerson's primary objection to [24]7's construction is that "[24]7 fails to acknowledge that [the disputed terms] appear repeatedly in different claim elements and their definitions are not repeated each time." ECF No. 91 at 18. But beyond this objection, LivePerson provides little reason for the Court to construe "survey NES" as determined "from text-mining unstructured survey data" and "overall NES" as determined "by combining the text-mining NES and the combined CSAT and survey NES scores." See id.

The Court concludes that [24]7's construction is appropriate, as it is the meaning a person of ordinary skill in the art would give to the disputed terms upon consideration of the claim language and plain meaning of the words "survey" and "overall." The Court construes "survey NES" as "a measurement of customer experience derived from survey data" and "overall NES" as "a measurement of customer experience derived from interaction data and survey data."

3. "common results between the text-mining NES and said combined CSAT and survey NES scores" (claims 1, 7)[3]

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"common results between the text-mining NES and said combined CSAT and survey NES scores"	common data from text-mining data and survey data	plain and ordinary meaning

[24]7 argues that the term "has no plain meaning outside the context of the '741 Patent." ECF No. 89 at 16 (citing expert testimony). Further, [24]7 asserts that the intrinsic evidence supports the construction that "'common results' are extracted from the text-mining data and survey data." Id. LivePerson objects to [24]7's proposed construction for two reasons: [24]7 "ignores the '741 patent specification and figures," and the prosecution history demonstrates [24]7's "disclaimer of the use of generic text-mining and survey data." ECF No. 91 at 19.

The specification supports [24]7s proposed construction. The patent discloses that "the process 310 [illustrated in Fig. 3C] for measuring and analyzing the abilities of an agent continues

[3] As explained above, the Court finds claims 1 and 7 of the '741 patent—containing the term "said interaction data"—indefinite, but nonetheless construes the disputed term for completeness and in case the claims should become relevant again (e.g., following an appeal).

by correlating the common records from voice mining and from the data obtained from surveys, and extracting common data 319 [referred to as "Extract Common Results" in Fig. 3C]." ECF No. 89-4, '741 patent at 9:54-57 (emphases added). The language suggests that "extracting common results" encompasses extraction of data that is not limited to scores. The portions of the specification that LivePerson points to focus on how NES and CSAT scores are derived, not on how "common results" are extracted, and therefore they do not alter the Court's conclusion. See ECF No. 91 at 20.

In looking at the prosecution history, there is support for LivePerson's argument that the applicant disclaimed the use of "generic" text-mining and survey data by "repeatedly emphasiz[ing] the complex and specific nature of the claimed metrics [the text mining NES, the follow up survey NES, and the follow up survey CSAT]." See id. at 19. In the August 2012 Appeal Brief, the applicant distinguishes the claim element, "extracting common results between the text-mining NES and said combined CSAT and survey NES scores, forming an overall NES," from the cited references by explaining the following:

> [N]ot only does the art fail to teach such a combined set of values to produce an overall NES, the constituent metrics are entirely lacking in the references . . . . The vague teachings of [the cited references] do not guide the skilled person to produce the specific and complex metric claimed by Applicant . . . .

ECF No. 91-7 at 56.

Nonetheless, the prosecution history "often lacks the clarity of" and "is less useful" than the specification, as it "represents an ongoing negotiation between the PTO and the applicant, rather than the final product." Phillips, 415 F.3d at 1317. As such, the Court adopts [24]7's proposed construction because it aligns with the specification.

B. The '876 patent

[24]7 asserts claims in the '876 patent, which relates to the routing of calls based on the profiles of the caller and call center representative. Two disputed terms stem from the '876 patent.

1. "call/caller" (claims 1, 2, 5, 6, 7, 10)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"call/caller"	communication/communicator	plain and ordinary meaning

LivePerson asserts that nothing in the intrinsic record suggests a departure from the plain and ordinary meaning of the disputed terms, which relate to "traditional voice or telephone calls." ECF No. 91 at 8. [24]7 objects to LivePerson's proposal because of the specific meaning of "call" for those of ordinary skill in the art at the time of the invention. ECF No. 89 at 18, 20.

The specification refers to telephone calls and voice systems multiple times, which lends support to LivePerson's proposed construction. See '876 patent at 1:16 (disclosing in the "Background of the Invention" that "[i]ncoming telephone calls to a call center, e.g. to a customer service help center, are generally routed to the next available call center service representative"); 2:57-58 ("With reference to Fig. 1, a caller at a telephone 101 places a call to a call center 120."); 2:62-63 ("Communications carrier network 110 [in Fig. 1] is comprised of telephone switching and signaling systems . . . ."); 2:66-3:1 ("The call is completed to a PBX/ACD 130 [in Fig. 1] at the call center, which is a premises-based voice switching system designed to receive calls destined for the call center 120 . . . ."); 3:8-9 ("A voice response unit (VRU) 140 [in Fig. 1] is available which is capable of prompting the caller for specific information . . . .").

However, [24]7 correctly notes that references to a telephone in Fig. 1 "relate[] only to a single embodiment." See ECF No. 89 at 19; ECF No. 89-5, '876 patent at 2:55-57 ("Fig. 1 is a schematic diagram of a communication system arranged in accordance with an embodiment of the present invention."). As a general rule, the Court does not limit the claim language to specific embodiments in the specification. See Comark, 156 F.3d at 1186 ("[L]imitations from the specification are not to be read into the claims."). Outside of Figure 1, the patent only references "telephone" calls once—in the "Background of the Invention." See ECF No. 89-5, '876 patent at 1:16. As such, the Court finds persuasive [24]7's argument that the "[i]ncoming telephone calls" language present in the "Background of the Invention" only "describes a typical scenario faced by customer service centers, not the scope of the invention." See ECF No. 93 at 13. Therefore, the

intrinsic evidence narrowly supports [24]7's construction.

The extrinsic evidence further supports [24]7's proposed construction. The expert testimony, which is not contradicted, relies on the language in the specification to conclude that a "person of ordinary skill would understand that a 'call' encompasses non-telephonic calls." ECF No. 89-1 ¶ 32. Additionally, [24]7 references four technical dictionaries that "define a call as a communication or connection irrespective of the specific technology use for the call" in or around 1998, the priority date for the patent. ECF No. 89 at 19. LivePerson cites to a general-usage dictionary for a definition consistent with its proposed construction, which does not overcome [24]7's art-specific evidence. See Vanderlande Indus. Nederland BV v. ITC, 366 F.3d 1311, 1321 (Fed. Cir. 2004) ("[W]here evidence—such as expert testimony credited by the factfinder, or technical dictionaries—demonstrates that artisans would attach a special meaning to a claim term, . . . general-usage dictionaries are rendered irrelevant with respect to that term . . . .").

LivePerson argues that "claims should not be 'construed to have a meaning or scope that would lead to their invalidity for failure to satisfy the [written description and/or enablement] requirements of patentability.'" See ECF No. 91 at 10 (quoting Wang Laboratories, 197 F.3d at 1383). But LivePerson fails to explain why construing "call/caller" as "communication/communicator" would create a written description or enablement problem. Further, the Court finds that the scope of the claims is not ambiguous given the credible evidence, especially the extrinsic evidence, that the disputed term encompasses non-telephonic calls. See Liebel-Flarsheim, 358 F.3d at 911 ("[U]nless the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous, the axiom regarding the construction to preserve the validity of the claim does not apply.").

The Court therefore adopts [24]7's construction.

2. "updating at the completion of the call" (claims 1, 6)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"updating at the completion of the call"	updating within minutes or hours after completion of the call	plain and ordinary meaning

The parties dispute whether "updating at the completion of the call" should be construed to expressly include a "moderate period of time (minutes or hours)" after the call. ECF No. 89 at 20.

The claim language and specification are not dispositive. The portions of the patent on which [24]7 relies do not clearly describe that "updating" occurs "minutes or hours" after completion of the call. For instance, claim 5 recites "[t]he method for routing an incoming call according to claim 1, further comprising the step of: conducting a post-call survey, during the updating step." ECF No. 89-5, '876 patent at 5:62-64 (emphasis added). But the fact that a "post-call" survey is conducted during the updating step does not mean that "updating" encompasses "minutes or hours" after completion of the call. Likewise, the specification's disclosures, such as "a survey using a voice response unit could be performed after the completion of the call," are not persuasive evidence that "updating at the completion of the call" expressly includes a "moderate period of time" after the call. Id. at 5:8-9 (emphasis added). LivePerson points to the specification to assert that the "'voice response unit' is defined by the patent as a system that asks survey questions while the caller is still on the call." ECF No. 91 at 12; see ECF No. 89-5, '876 patent at 3:8-13 ("A voice response unit . . . is capable of prompting the caller for specific information . . . and collecting information by detecting and interpreting DTMF signals entered by the caller or by recognizing speech input from the caller."). Yet, the Court does not find that this description of the voice response unit is inconsistent with [24]7's construction that "updating" can occur "within minutes or hours after completion of the call."

The prosecution history counsels against [24]7's proposed construction. In a May 2002 Office action, the Examiner rejected the pending claims as anticipated by a Bushey et al. patent. To distinguish the invention from the Bushey patent, the applicant explained:

> [T]his updating [in Bushey et al.] occurs when a caller initializes a call to ensure that the credit information (and any other customer-pertinent information) is accurate before continuing with the call. In contrast, the 'updating' as it is defined in [the pending claims] is a valuable step at the end of [the] call . . . .

ECF No. 89-14 at 10 (emphases added). The applicant further distinguished the Bushey et al. by noting differences in the "post-call survey" language. Id. (noting that Bushey disclosed "surveys

taken of customers, serviced by the particular agent, after a period of time (i.e., days or weeks) since the customer's request"). The applicant argued:

> The teaching of the use of a survey by Bushey et al., which occurs 'days or weeks' after the call, cannot be found to disclose or suggest the real-time arrangement as defined by [the pending claims], where the 'post-call survey' is defined as part of the 'updating' process that occurs at call completion.

Id. at 10-11. (emphasis added). Based on this language, the Court finds that the applicant did not just narrowly disclaim "updating" that occurs "days or weeks" after the call; rather, the applicant's statements emphasize that "updating" occurs "at call completion" or "at the end" of the call in "real-time." See ECF No. 89-14 at 10-11.

Because the intrinsic record fails to reflect the interpretation [24]7 puts forth, the Court adopts LivePerson's proposed construction. Though [24]7 offers expert testimony as support for its construction, the Court finds it unpersuasive in light of the prosecution history. See Phillips, 415 F.3d at 1317-18 (explaining that intrinsic evidence is more "significant" and "reliable" than extrinsic evidence).

C. The '599 and/or the '804 patents

[24]7 asserts claims in the '599 and '804 patents, which relate to the optimization of customer-agent sessions. Four disputed terms stem from the '599 and '804 patents.

1. "processor implemented application server on which said application is resident" ('599 patent, claims 1, 9; '804 patent, claims 1, 16)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"processor implemented application server on which said application is resident"	a server where the application resides	plain and ordinary meaning

The parties dispute whether the term should be construed to have its plain and ordinary meaning, which is a server that "runs" applications, or whether the term has a broader meaning to include both a server that "runs" applications and a server that "provides" applications to a client device to run on that device. ECF No. 89 at 23; ECF No. 91 at 21. The Court finds that [24]7's proposed construction of a broader meaning is persuasive for two reasons.

First, the intrinsic and extrinsic evidence provide credible support for [24]7's construction. The specification discloses that an "application may also be launched by the agent on the phone belonging to the customer," demonstrating that the term refers to a server that can provide applications to a client device. See ECF No. 89-6, '599 patent at 2:42-43; ECF No. 89-7, '804 patent at 2:43-44. Additionally, the specification discloses an alerting functionality encompassing "alerts generated by the interaction engine 101/application server 105." ECF No. 89-6, '599 patent at 2:58-59; ECF No. 89-7, '804 patent at 2:59-60. As noted by the expert testimony, this alerting functionality is broader than what an application server does outside the context of the patents and, therefore, "a person of ordinary skill in the art would understand that the term 'application server' in the '599 and '804 Patents is not being used in the same manner as the term is typically used." ECF No. 89-1 at 13.

Second, LivePerson's construction would improperly exclude an embodiment disclosed in the specification. See Verizon Servs., 503 F.3d at 1305 (stating that courts "normally do not interpret claim terms in a way that excludes disclosed examples in the specification"). Because the plain and ordinary meaning would exclude a server that provides applications to a "phone belonging to the customer," LivePerson's proposed construction would be inappropriate. See ECF No. 89-6, '599 patent at 2:42-43; ECF No. 89-7, '804 patent at 2:43-44.

LivePerson's primary objection to [24]7's construction is that the patentee did not "clearly express [an] intent" to redefine its claim term away from the ordinary meaning. ECF No. 91 at 22-23; see Merck & Co. v. Teva Pharm. USA, Inc., 395 F.3d 1364, 1370 (Fed. Cir. 2005) (noting that the Federal Circuit has "repeatedly emphasized" that the specification must have "sufficient clarity" that the inventor intended to redefine a claim term). In Merck, the court found that the patentee did not clearly redefine the term "about" to mean "exactly" and away from the ordinary definition of "approximately." 395 F.3d at 1372. In so holding, the court reasoned that there was "ambiguity" in the specification rendering the writing "amenable to a second (and more reasonable) interpretation" of an ordinary meaning for the term. Id. at 1370-71 (noting that a passage relied on by the district court to construe "about" as "exactly" could "easily be read" another way when assessing the context of and sentences surrounding that passage). Furthermore,

the court pointed to portions of the specification that suggest "about" should be given its ordinary meaning of "approximately." Id. at 1371 ("The specification repeatedly describes a range of acceptable dosage amounts . . . .").

The Court finds that the specification provides a clear expression of intent for [24]7's construction. Here, unlike in Merck, there is no ambiguity surrounding the description of the application launching on the client device and the alert functionality that would render the writing amenable to a second interpretation. Additionally, nothing in the specification supports construing the disputed term to a server that only runs—and does not provide—applications.

Because the intrinsic and extrinsic evidence suggests that the inventor intended for the disputed term to be given a broader meaning, the Court adopts [24]7's proposed construction.

2. "scores" ('599 patent, claims 1, 4, 9)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"scores"	plain and ordinary meaning	predicted calculated performance value[4]

[24]7 argues that "scores" "is not a term of art in the field of software design and/or networking, and it has no special meaning to practitioners of skill in the art beyond its ordinary, everyday meaning." ECF No. 89 at 24 (citing to expert testimony). LivePerson argues that the "scores" are both "calculated" and "used to predict performance value." ECF No. 91 at 23. The Court agrees with [24]7 for two reasons.

First, the Court finds that the meaning of "scores" is "readily apparent" and a "commonly understood word[]," and therefore claim construction involves only the "application of the widely accepted meaning." Phillips, 415 F.3d at 1314; see also ECF No. 89-1 at 14 (stating through expert testimony that the term "scores" has "no special meaning . . . beyond its ordinary meaning").

Second, the Court finds that the specification does not disclose the limitations proposed by

[4] In order to minimize disputes, LivePerson has amended its construction from "predicted calculated performance value expressed as a numeric or alphanumeric value." ECF No. 91 at 23.

LivePerson. LivePerson points to the specification to argue that scores are "derived by calculations." ECF No. 91 at 23; see ECF No. 89-6, '599 patent at 3:49-50 ("All such information is then analyzed using analytical models to arrive at scores . . . ."); '599 patent at 7:1-3 ("Based on each individual interaction, these parameters can be calculated, scored, and shared . . . ."). Not so. As [24]7 notes, "[a]nalyzing data to arrive at scores is not synonymous with . . . 'calculating' scores." ECF No. 93 at 16 (providing an example of analyzing qualitative data). Additionally, the specification's statement that "parameters can be calculated, scored, and shared" fails to disclose that scores are derived by calculations. See ECF No. 89-6, '599 patent at 7:1-3.

LivePerson next argues that the specification "discuss[es] what scores are used for: they are used to predict the performance of an agent or an action." ECF No. 91 at 24. For instance, LivePerson points to the portion of the specification that states, "[p]redictive models are used to . . . suggest a response" and "[i]f, for a similar chat . . . there has been a highly rated interaction that has been scored high by QA as well, the content of the same can be made available to the agent handling the current interaction." See ECF No. 89-6, '599 patent at 5:25-35. The Court finds that this statement fails to clearly limit the use of scores to predicting performance or action. Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012) (requiring either clear intent to redefine the term or clear disavowal of claim scope to deviate from the ordinary meaning of a claim term).

LivePerson also points to the following statement: "The routing module 203 routes the sessions to the identified agent 103 based on factors comprising . . . predicted scores on agent parameters that are relevant to the type of issue/query." Id. at 4:20-27. The Court finds that this reference to "predicted scores" does not limit the scope of the disputed term, "scores." The same language—i.e., "predicted scores on agent parameters that are relevant to the type of issue/query"—is recited in claim 4, which depends on claim 1. See ECF No. 89-6, '599 patent at 10:3-4. "Differences among claims" are instructive. Phillips, 415 F.3d at 1314. Indeed, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." Id. at 1315. There is no evidence in the specification that would merit a departure from this presumption.

Finally, LivePerson asserts that "scores" are a "performance value," citing to a dictionary definition of "score" as "performance of an individual or group" for support. ECF No. 91 at 24. Looking to the intrinsic record, the Court finds no reference to "performance value" in the patent. The Court weighs the intrinsic evidence more heavily than the extrinsic evidence, and accordingly finds LivePerson's argument unpersuasive. See Phillips, 415 F.3d at 1317-18 (stating that the intrinsic evidence is more "significant" and "reliable" than extrinsic evidence).

The Court thus agrees with [24]7 that a plain and ordinary meaning construction is appropriate.

3. "predictive technologies (to pre-populate any of an interaction summary and disposition form)" ('599 patent, claims 1, 9)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"predictive technologies ~~to prepopulate any of an interaction summary and disposition form~~"	data analytics, text mining, and/or similar machine learning and statistical modeling technologies ~~to populate a portion of the interaction summary or disposition form without direct input~~	technology that analyzes data of past behavior to predict likely future behavior

As an initial matter, the Court construes only the term "predictive technologies" and refrains from construing "to prepopulate any of an interaction summary and disposition form," given that this latter phrase was not proposed by LivePerson for construction. See ECF No. 91 at 26.

Looking to the intrinsic record, the Court finds no support in the specification for LivePerson's proposed construction. The single reference to "predictive technologies" states the following: "The automation module 207 leverages predictive technologies . . . . These technologies comprise, in an embodiment, transcription, text mining models, and problem and response prediction models." ECF No. 89-6, '599 patent at 5:36-40. This statement does not disclose the limitation that LivePerson seeks to import into the claims, that "predictive technologies" analyze data of past behavior to predict likely future behavior. Indeed, there is no reference to "behavior" anywhere in the specification.

Rather, the specification lends more support to [24]7's argument that the patent discloses a "broad variety" of predictive technologies. See ECF No. 89 at 26. The remainder of the paragraph describing "predictive technologies" provides more context: "The automation module 207 may pre-populate the forms in real time based on the analysis of the text from the chat session . . . . This is accomplished in an embodiment by using data analytics, text mining, and similar data machine learning and statistical modeling tools." ECF No. 89-6, '599 patent at 5:48-55. This language supports [24]7's construction.

As for the extrinsic record, [24]7 provides credible expert testimony stating that "[p]redictive technologies encompass a wide range of technologies for analyzing data and making predictions" and that "[a] person of ordinary skill would understand that predictive technologies are not limited to technologies used for the particular purpose of analyzing past behavior to predict future behavior." ECF No. 89-1 ¶¶ 44-45. LivePerson offers the dictionary definition of "predictive," but the general-usage dictionary definition of "predictive" does not directly address the particular meaning of the technical term "predictive technologies" in the field of art. ECF No. 91 at 26. Therefore, the extrinsic evidence also weighs in favor of [24]7's proposed construction.

Finally, the Court does not agree with LivePerson that [24]7's construction "attempts to read out the word 'predictive' from the claims and expand the claim scope to cover any type of technology that populates forms." See id. at 25. [24]7's construction repeats language from the specification's discussion on "predictive technologies." See ECF No. 89-6, '599 patent at 5:36-55. The claim scope is thus supported by the record.

Because the intrinsic and extrinsic record supports [24]7's proposed construction, the Court construes "predictive technologies" as "data analytics, text mining, and/or similar machine learning and statistical modeling technologies."

4. "application" ('599 patent, claims 1, 2, 9; '804 patent, claims 1, 11, 16)

Disputed Claim Term	[24]7's Proposed Construction	LivePerson's Proposed Construction
"application"	plain and ordinary meaning	self-service software

[24]7 argues that "'application' requires no construction" because the patents "use 'application' in accordance with its plain and ordinary meaning." ECF No. 89 at 28. LivePerson asserts that the claim language, specification, and prosecution history "limit[] the application . . . to be a self-service application." ECF No. 91 at 27.

The intrinsic record does not suggest that "the patentee disavow[ed] the full scope of [the] claim term" such that the Court may deviate from the ordinary and customary meaning of "application." See Thorner, 669 F.3d at 1365. The evidence LivePerson points to indicates only that an "application" can be "self-service."

LivePerson first cites the claim language, which states:

> said interaction engine configured to send a link to said customer at said agent's request to allow said customer to access an application at a processor implemented application server on which said application is resident and to which said link is resolved for customer access to, and launching of, said application; and said interaction engine configured to allow said agent to proactively monitor progress of the customer while the customer is using said application

ECF No. 89-6, '599 patent at 8:59-67; ECF No. 89-7, '804 patent at 8:59-67 (emphases added). LivePerson also points to "self service" references in the specification. ECF No. 91 at 27-28; see ECF No. 89-6, '599 patent at 1:57-58 ("Actions may be performed such as monitoring the journey of a customer across a self service application . . . ."); id. at 3:3-6 ("[T]he agent can get involved only in scenarios that do need agent assistance as against just keeping the customer company while the customer performs Web based self service . . . ."). This language suggests that the "application" is "self-service."

However, the remainder of the specification confirms that "application" is not necessarily limited in this way. For instance, the specification states that "[t]he application may also be launched by the agent," suggesting a definition of "application" that is not as narrow as LivePerson proposes. See ECF No. 89-6, '599 patent at 2:42-43. The specification also refers to "external applications" that would not constitute a self service application used by the customer. See id. at 4:59-66 ("The command module 205 enables the agent 103 to execute

commands . . . . The command module 205 accesses . . . external applications . . . based on the command."); 6:14-19 ("The command interface 303 also enables the agent 103 to pass parameters while executing the command . . . while looking up a map application . . . or while looking up an external customer relations management system for customer data . . . .").

Further, the specification refers to the invention as "self service" only twice, and these statements do not indicate a clear disavowal of claim scope. See Merck, 395 F.3d at 1370 (requiring a patentee to "clearly express [an] intent" to redefine the meaning of a particular term away from its ordinary meaning). For example, the language, "[a]ctions may be performed, such as monitoring the journey of a customer across a self service application," is permissive. ECF No. 89-6, '599 patent at 1:57-58 (emphasis added). Additionally, the statement "the agent can get involved only in scenarios that do need agent assistance as against just keeping the customer company while the customer performs Web based self service that is part of the resolution journey" does not indicate a clear intent to limit the meaning of "application." See id. at 3:3-7.

The prosecution history is also informative. In the May 2013 Office Action, the Examiner rejected the claims as being anticipated by Kelly et al. (a patent application). ECF No. 91-9 at 73. The applicant distinguished the Kelly reference by explaining that Kelly "provides links to the customer service agent only for the agent's use to learn about the customer," but does not teach "send[ing] a link to a customer with which the customer launches an application." Id. at 75 (emphases added). Although this language refers to "self service" applications, the prosecution history reveals that the distinguishing factor was sending a link to the customer, not the use of a self service application. Id. at 75 (explaining that Kelly "begins with the customer in a self service application that can be monitored by an agent" and "does not contemplate the sending of a link by an agent during a session with which a customer initiates a self service application"). Moreover, the prosecution history references self service applications because Kelly involves self service applications, not because the applicant is defining its invention as a "self service application." See id. at 74 ("Kelly et al provides a system in which a user in a self service application may be monitored by an agent . . . ."). Other language in the prosecution history further suggests that the patent is not restricted to "self service" applications. For example, the applicant states that

"[u]nlike Kelly, the claimed invention begins with a live session between a customer and an agent, during which the agent can send a link to the customer for an application, such as a self service application." Id. at 74 (emphasis added).

Absent a clear disavowal of the term's full scope, the Court adopts the plain and ordinary meaning for the disputed term.

CONCLUSION

For the foregoing reasons, the Court construes the disputed claim language as follows:

Claim(s)	Term	Construction
'741 patent		
1, 7	Said interaction data	Indefinite
1, 7	Survey NES	A measurement of customer experience derived from survey data
1, 7	Overall NES	A measurement of customer experience derived from interaction data and survey data
1, 7	Common results between the text-mining NES and said combined CSAT and survey NES scores	Common data from text-mining data and survey data
'876 patent		
1, 2, 5, 6, 7, 10	Call/caller	Communication/communicator
1, 6	Updating at the completion of the call	Plain and ordinary meaning
'599 and/or '804 patents		
1, 9 ('599); 1, 16 ('804)	Processor implemented application server on which said application is resident	A server where the application resides
1, 4, 9 ('599 patent)	Scores	Plain and ordinary meaning

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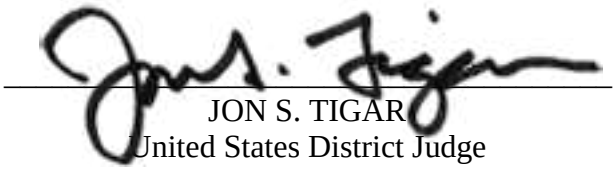
1, 9 ('599 patent)	Predictive technologies	Data analytics, text mining, and/or similar machine learning and statistical modeling technologies
1, 2, 9 ('599); 1, 11, 16 ('804)	Application	Plain and ordinary meaning

IT IS SO ORDERED.

Dated: December 7, 2016



JON S. TIGAR
United States District Judge

United States District Court
Northern District of California