

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

IPA TECHNOLOGIES INC.,

Plaintiff,

v.

AMAZON.COM, INC., and AMAZON  
DIGITAL SERVICES, LLC,

Defendants.

Civil Action No. 16-cv-1266-RGA

MEMORANDUM OPINION

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May 21, 2020

/s/ Richard G. Andrews

**ANDREWS, U.S. DISTRICT JUDGE:**

Before me is the issue of claim construction of multiple terms in U.S. Patent Nos. 6,851,115 (“the ’115 patent”), 7,069,560 (“the ’560 patent), and 7,036,128 (“the ’128 patent”). I have considered the Parties’ Joint Claim Construction Brief. (D.I. 118). I heard oral argument by videoconference on May 14, 2020. At oral argument I ruled on constructions of five of the nine terms in dispute. I construe the four remaining terms here.

## **I. LEGAL STANDARD**

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted). “[T]here is no magic formula or catechism for conducting claim construction.’ Instead, the court is free to attach the appropriate weight to appropriate sources ‘in light of the statutes and policies that inform patent law.’” *SoftView LLC v. Apple Inc.*, 2013 WL 4758195, at \*1 (D. Del. Sept. 4, 2013) (quoting *Phillips*, 415 F.3d at 1324) (alteration in original). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). Of these sources, “the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (internal quotation marks omitted).

“[T]he 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 (citations and internal quotation marks omitted). “[T]he ordinary meaning of a

claim term is its meaning to [an] ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court’s construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317–19 (internal quotation marks omitted). Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

“A claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GMBH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (citation and internal quotation marks omitted).

## **II. CONSTRUCTION OF DISPUTED TERMS**

### **1. “Base goal”**

- a. *Plaintiff’s proposed construction*: plain and ordinary meaning, or “A goal for which a goal satisfaction plan is constructed”

- b. *Defendants' proposed construction*: same as “compound goal.” “A single-goal expression comprising multiple sub-goals”
- c. *Court's construction*: “starting goal”

The term “base goal” does not appear in the specification of the asserted patents. (D.I. 118 at 3, 6). The term is used in the prosecution history and was introduced into the claims through amendment. (*See id.* at 3, 7). Defendants argue that “base goal” is used interchangeably with “compound goal.” (*Id.* at 6). The parties agreed that “compound goal” means “a single-goal expression comprising multiple sub-goals.” (*Id.* at 11). While “base goal” and “compound goal” are used similarly and may, in some claims, refer to the same goal, I do not think that they mean the same exact thing. Claims 26 and 29 of the '115 patent illustrate their difference. Claim 26 recites: “A computer-method as recited in claim 1 wherein the base goal is a compound goal having sub-goals separated by operators.” ('115 patent, col. 31:37-39). Claim 29 recites, in part, “interpreting a service request in order to determine a base goal that may be a compound, arbitrarily complex base goal.” ('115 patent, col. 31:59-61). If “base goal” were construed to be exactly the same as “compound goal,” then these claims would have some element of redundancy. I therefore reject Defendants' proposed construction.

Claims 26 and 29 of the '115 patent do make clear that the “base goal” may be a “compound goal.” Plaintiff agrees with this notion. (D.I. 118 at 3). Plaintiff proposes that “base goal” be construed to have its plain and ordinary meaning. (D.I. 118 at 2). Defendants, likely unintentionally, articulate the term's plain and ordinary meaning. Defendants state: “The prosecution history consistently confirms that the base goal . . . is the starting goal that is divided into sub-goals for agents to cooperatively complete.” (*Id.* at 6). Defendants' understanding of the “base goal” as the “starting goal” is the plain and ordinary meaning of the term. This is consistent with the use of the term in the claims. For example, claim 1 recites “receiving a

request for service as a base goal in the inter-agent language,” which is then “dynamically interpret[ed]” and used as the foundation for the “goal satisfaction plan.” (’115 patent, col. 29:25-43). Claim 29 recites that the computer program contains computer executable instructions for “determining any task completion advice [and constraints] provided by the base goal.” (’115 patent, col. 32:5-8). The use of “base goal” in these claims is consistent with the notion that the base goal is the starting goal for the cooperative task completion.

Defendants argue that the term must be construed to require that the “base goal” is comprised of multiple sub-goals. (*Id.* at 4). Defendants point to the claims and prosecution history to support this argument. Defendants highlight claims that recite “sub-goals” (in plural) to show that the patent requires multiple sub-goals. (*Id.*). Regarding the prosecution history, Defendants argue that patentees “repeatedly relied on [the] purported ability to use reasoning to decompose a base goal into sub-goals to distinguish the prior art.” (*Id.* at 7). Defendants also include a figure from the prosecution history that shows a “base goal” broken down into sub-goals. (*Id.*). These examples are demonstrations that a compound goal can be a “base goal,” but I am not convinced that they indicate that only compound goals can be “base goals.” Including the requirement of multiple sub-goals in the construction of “base goal” would therefore be inappropriately adding in an unnecessary limitation. Thus, I construe “base goal” to mean “starting goal.”

2. “Inter-agent language” / “inter-agent communication language” / “ICL”
  - a. *Plaintiff’s proposed construction*: “An interface, communication, and task-coordination language used by agents, which is capable of expressing parameters and events”
  - b. *Defendants’ proposed construction*: “A common interface, communication, and task coordination language used by agents, regardless of what platform they run on or what computer language they are programmed in”

- c. *Court's construction*: “An interface, communication, and task coordination language”

At the May 14, 2020 *Markman* hearing, I stated that Plaintiff's proposed construction is not acceptable because its phrase, “which is capable of expressing parameters and events,” is both redundant and partial. It is redundant because it restates some of the limitations recited in the claims. (*See* '115 patent, col. 29:18-21). If it were appropriate to include those limitations, Plaintiff's proposed construction is then partial because it does not include other similar limitations from the claims. (*See* '115 patent, col. 29:22-24). At the hearing I also stated that I did not think Defendants' construction is correct because it imports preferred embodiments, and because I am not convinced that the patentees were truly disparaging prior interagent communication approaches.

The parties agreed during the hearing that, while the concept of interagent communication was known in the art, the Interagent Communication Language (“ICL”) at issue was created by the inventors. The specification defines the term: “Interagent Communication Language (“ICL”) refers to an interface, communication, and task coordination language.” ('115 patent, col. 10:49-51). Plaintiff agrees to this. (D.I. 118 at 29). This is also the basis of Defendants' construction, to which they have appended preferred embodiments. (*See id.* at 30; '115 patent, col. 10:41-42, 10:51-53). Therefore, I construe “Inter-agent language” / “inter-agent communication language” / “ICL” to mean “an interface, communication, and task coordination language.”

3. “A content layer”

- a. *Plaintiff's proposed construction*: plain and ordinary meaning, or “A layer consisting of specific goals, triggers and data elements that may be embedded within various events”
- b. *Defendants' proposed construction*: “A separate layer from the conversation layer, which specifies the content of interagent messages”

- c. *Court's construction*: "A layer, which specifies the content of interagent messages"

Plaintiff argues that its proposed construction is patentees' lexicography as taught in the specification. (D.I. 118 at 47). Plaintiff relies on a portion of the specification that reads: "The content layer consists of the specific goals, triggers, and data elements that may be embedded within various events." ('115 patent, col. 11:13-15). This excerpt, however, is not lexicography; it merely describes characteristics of the "content layer" rather than defining the term. I therefore reject Plaintiff's proposed construction.

At oral argument I explained that I was not convinced by Defendants' argument that the "content layer" must be separate from the "conversational protocol layer" and that I would not construe either term to require separateness from the other. Thus, I construe "a content layer" to mean "a layer, which specifies the content of interagent messages."

#### 4. "Event"

- a. *Plaintiff's proposed construction*: "In communications, a message between agents; in regulating the activities of individual agents, a goal (or element that contains a goal) to be satisfied"
- b. *Defendants' proposed construction*: "A message between agents or facilitators that has a type, a set of parameters, and content"
- c. *Court's construction*: "A message between agents or between an agent and a facilitator"

The parties agree that, at least, an "event" is "a message between agents." (*See* D.I. 118 at 53). Plaintiff argues that the specification also "associates the term 'events' with . . . 'goals to be satisfied,'" and therefore argues that this language should be included in the construction of "event." (*Id.* at 50). Plaintiff's construction, however, ignores the meaning of the full phrase in the specification, which says "[events] may preferably be thought of as goals to be satisfied." ('115 patent, col. 10:66-11:1). Thinking "preferably" of an "event" as a goal is not the same as

defining an “event” as a goal. Further, Plaintiff’s two-pronged, context-dependent construction would not be helpful to a jury without further instruction because the jury should not be deciding which of two meanings applies. I therefore reject Plaintiff’s construction.

Defendants’ proposed construction expands on the meaning of “event” that the parties agree upon by including “facilitators.” Defendants argue that the “specification repeatedly discloses that ‘events’ are the messages that are sent between agents or between an agent and a facilitator.” (D.I. 118 at 56) (citing to ’115 patent, col. 10:62-11:7, 12:44-46). Plaintiff does not seem to disagree that the message can be sent between agents and facilitators. (*See* D.I. 118 at 50). Defendants’ proposed construction adds in the preferred embodiment from the specification that an event “has a type, a set of parameters, and content.” (*See* ’115 patent, col 11:1-2).

Whether an “event” has “a type, a set of parameters, and content,” or other qualities, does not define what an “event” is. It would thus be incorrect to include this limitation in the construction of “event.” Therefore, I construe “event” to mean “a message between agents or between an agent and a facilitator.”<sup>1</sup>

### **III. CONCLUSION**

Within five days the parties shall submit a proposed order consistent with this Memorandum Opinion, and including the five terms construed at oral argument, suitable for submission to the jury.

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<sup>1</sup> The patent specification included an example involving source code for ICL. (’115 patent, col. 11:2-8). Plaintiff also cited to source code submitted with the ’115 application. (D.I. 118 at 55). Both parties included attorney argument purporting to explain how the source code supported their constructions. (*Id.* at 55-57). Without experts’ opinions on what the source code means, I have no basis to evaluate either side’s arguments based on the purported meaning of specified source code.