

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HANSHOW TECHNOLOGY CO., LTD.,

Plaintiff,

v.

SES-IMAGOTAG SA AND SES-
IMAGOTAGGMBH,

Defendants.

Case No. 2:23-cv-174-RWS-RSP

JURY TRIAL DEMANDED

**PLAINTIFF HANSHOW TECHNOLOGY CO., LTD.'S
OPENING CLAIM CONSTRUCTION BRIEF**

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I. INTRODUCTION

Plaintiff Hanshow Technology Co., Ltd. (“Hanshow”) proposes constructions for the disputed terms of the asserted patents¹ that follow the canons of claim construction, and provides interpretations that flow from the intrinsic record and are consistent with the understanding of a person of ordinary skill in the art (POSITA). In contrast, Defendants VusionGroup SA and VusionGroup GmbH (collectively “VusionGroup”) propose constructions that alter the scope of the patents, claims, and terms by unduly narrowing the words the inventors chose to describe their innovations or by disregarding the knowledge of a POSITA. Rather than look for meaning in the claim language and the specification, VusionGroup ignores established precedent and presents constructions for terms that have plain and ordinary meanings and require no construction.

II. LEGAL STANDARDS

This Court knows well the legal standards governing claim construction. *See, e.g., Maxell Ltd. v. Huawei Device USA Inc.*, 297 F. Supp. 3d 668, 677-81 (E.D. Tex. 2018). As such, Hanshow will not recount those principles for the Court here, but will rely on authority where appropriate in discussions for the terms below.

III. LEVEL OF ORDINARY SKILL IN THE ART

A POSITA would have “a Master of Science Degree in an academic area emphasizing in electrical engineering, computer engineering, wireless telecommunication systems, or an equivalent field (or a similar technical Master’s Degree, or higher degree),” or “a Bachelor’s Degree (or higher degree) in an academic area emphasizing electrical engineering, computer engineering, wireless telecommunication systems, or an equivalent field with two or more years

¹ The asserted patents are U.S. Patent Nos. 11,540,216 (Dkt. 25-1, the “’216 Patent”), 8,346,210 (Dkt. 25-2, the “’210 Patent”), and U.S. Patent No. 9,641,994 (Dkt. 25-19, the “’994 Patent”).

of work experience in electrical engineering, computer engineering, wireless telecommunication systems, or an equivalent field.” Sourì Dec., ¶ 47 (Ex. 1).

IV. DESCRIPTION OF THE ASSERTED PATENTS AND THE PROPER CONSTRUCTION OF THE DISPUTED TERMS

A. The '216 Patent

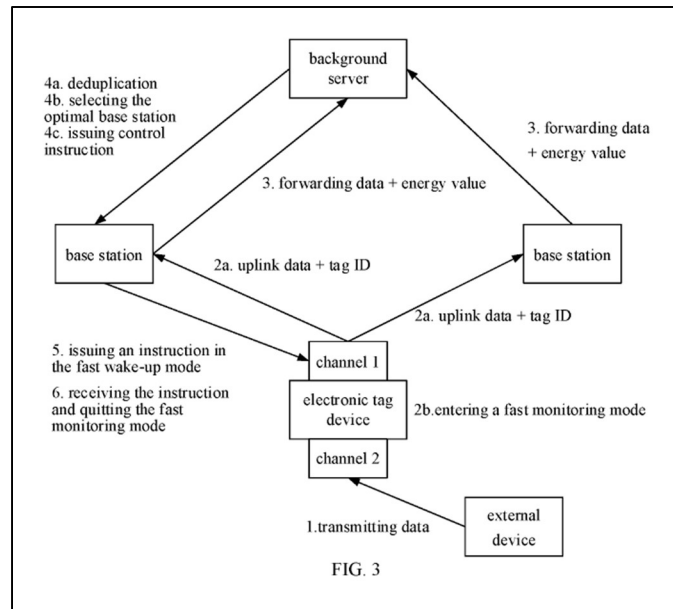
1. Background of the '216 Patent

The '216 Patent has a priority date of July 2, 2018, issued on December 27, 2022, and is entitled “Interactive Electronic Tag Device Communication System and Method.”

The '216 Patent discloses, for example, an electronic tag system that normally utilizes a normal monitoring period to achieve low power consumption, long battery life, less frequent battery replacements, and low labor costs, while being capable of utilizing a shorter monitoring period when needs arise, to achieve high responsive speed and meet user expectations. *See* '216 Patent at 1:23-2:3. This system enables a normal monitoring mode and a fast monitoring mode in an electronic tag device, and a normal wake-up mode and a fast wake-up mode in a base station, and meets customer expectations without shortening the monitoring periods of the electronic tag devices, without increasing battery power consumption, and without increasing labor costs. *Id.* at 2:9-15.

As shown below in Figure 3, the system includes a background server, a base station, an electronic tag device, and an external device. Each of these components is configured to facilitate the transmission of data such that the external device transmits a first data to the electronic tag device through a second communication path in the electronic tag device; the electronic tag device receives the first data and transmits the first data to the base station through a first communication path in the electronic tag device, and enters a fast monitoring mode; the base station receives the first data and transmits the first data to the background server; and the background server generates

a control instruction and second data according to the first data, and transmits the control instruction and the second data to the base station. *Id.* at 6:3-24. After completing the fast communication, the system “returns to the normal monitoring mode.” *Id.* at 6:24.



The '216 Patent further describes that “[t]he base station is . . . configured to receive the control instruction and the second data, communicate with the electronic tag device in a *fast wake-up mode*, and transmit a *fast wake-up instruction*, the control instruction and the second data to the electronic tag device through the first communication path.” *Id.* at 4:21-26 (emphasis added). This *fast wake-up instruction*, the control instruction, and the second data are subsequently received by the electronic tag device. *Id.* at 4:27-30.

2. *VusionGroup's Petition for Inter Partes Review of the '216 Patent*

On May 1, 2024, VusionGroup filed a petition for *inter partes* review of the '216 Patent and argued that “[t]he claims should be given their plain and ordinary meaning” because “no express constructions [were] necessary to assess whether the prior art reads on the challenged claims.” Ex. 6 at 7. Moreover, Dr. Andrew Wolfe—who asserts to be a POSITA—appears to have sufficiently understood the scope of the claimed invention, without clarification or construction,

to provide a detailed declaration in support of VusionGroup’s petition. Ex. 7. Now, VusionGroup argues that many of the terms either require construction or are indefinite. Based at least on Dr. Wolfe’s alleged understanding of the scope and meaning of the claims, the Court should adopt the plain and ordinary meaning for each of the disputed terms. *See Ramot at Tel Aviv Univ. Ltd. v. Cisco Sys.*, No. 2:19-CV-00225-JRG, 2020 WL 2517581, *12 (E.D. Tex. May 15, 2020) (finding Defendant’s inconsistent positions before the PTAB and the Court not credible and explaining that a “nose-of-wax approach to claim construction is not justified”).

3. *Disputed Terms for the ’216 Patent*

a) “normal monitoring mode” (’216 Patent, Claims 1, 7, 14)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes “a monitoring mode of the electronic tag device in which the monitoring period is longer than that of the fast monitoring mode.”	Plain and ordinary meaning, which is “a default mode in which incoming communications are monitored at intervals of a specified time period”

This term is readily understood by a POSITA and requires no construction. *See TiVo Inc. v. EchoStar Commc’ns Corp.*, No. 2:04-CV-1-DF, 2005 WL 6225413, at *8 (E.D. Tex. Aug 18, 2005); Shamos Depo. at 50:4-8 (Ex. 5) (“Q: [Y]ou would agree that a person of skill would understand what a normal monitoring mode is based on the disclosure in the ’216 patent. Correct? A: Yes.”). As a general rule, “terms in the claim are to be given their ordinary and accustomed meaning.” *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1362-63 (Fed. Cir. 1999) (internal citations omitted) (“the ordinary and accustomed meaning of a disputed claim term is presumed to be the correct one”); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). Courts may depart from the plain and ordinary meaning only when a patentee acts as his or her own lexicographer or when the patentee disavows the full scope of a claim term either in the

specification or during prosecution. *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012); *see also Maxell*, 297 F. Supp. 3d at 735 (“The standards for finding lexicography or disavowal are ‘exacting.’”) (citation omitted). For this term (and throughout), the general rule applies and VusionGroup cannot meet its burden to show otherwise. *See Shamos Depo.* at 48:7-16 (Ex. 5) (admitting a lack of lexicography and disavowal for the “normal monitoring mode” term).

Here, VusionGroup improperly seeks to limit the scope of the term to require the monitoring of incoming communications “at intervals of a specified time period,” and to require that the normal monitoring mode be “a default mode.” However, a POSITA at the time of the invention would have understood the scope and meaning of the term based on the claims—especially when used in conjunction with the term “fast monitoring mode”—and the specification.

The ’216 Patent discloses that an electronic tag device supports a data transmission mode, a normal monitoring mode, and a fast monitoring mode. ’216 Patent at 1:29-32, 3:22-29. An electronic tag device may employ different monitoring periods (e.g., 30s, 20s, or 1s) in connection with different monitoring modes, where the monitoring modes with shorter monitoring periods produce an improved (faster) response speed, but at a cost of higher battery power consumption. *Id.* at 1:23-2:3; *see also Souri Depo.* at 112:25-115:4 (Ex. 2) (explaining monitoring periods). Thus, in one exemplary embodiment, “the normal monitoring mode is the default, or normal state of the electronic tag device” where the monitoring period *is not* shortened—thereby minimizing battery power consumption—and the fast monitoring mode is a mode where the monitoring period *is* shortened to achieve improved response speed. *Souri Dec.* at ¶ 56 (Ex. 1); *see also Shamos Dec.* at ¶ 69 (Ex. 3) (“A POSITA would understand that the distinction between a ‘normal monitoring mode’ and any other monitoring mode has to do with the ‘monitoring period’ during which the

electronic tag device is monitoring ‘whether there is a communication request.’’²; ’216 Patent at 3:22-29, 5:11-19.³

In one specific embodiment, the electronic tag device—while in a monitoring mode—is configured to at least monitor incoming communication *requests* once every monitoring period and switch to a data transmission mode when an incoming communication request is received. ’216 Patent at 1:23-32. Thus, VusionGroup’s proposed construction that limits the electronic tag device to monitoring “incoming communications” is inconsistent with this embodiment.

VusionGroup’s proposed construction also adds confusion to a straight-forward term. For example, the term already includes the word “normal” in describing the term, and the specification explains that “[b]y default, the electronic tag device performs monitoring in a normal monitoring mode.” *Id.* at 4:51-52. The specification does not require a “default mode,” nor is the requirement that the term be a “default mode” necessary in view of the express language in the claim.

Therefore, the term requires no construction. *See DSW, Inc. v. Shoe Pavilion, Inc.*, 537 F.3d 1342, 1347 (Fed. Cir. 2008) (“[A]bsent contravening evidence from the specification or prosecution history, plain and unambiguous claim language controls the construction analysis.”). To the extent the Court deems it is necessary to construe the term, Hanshow’s construction states what the intrinsic evidence already confirms. *See, e.g.*, ’216 Patent at 3:22-29, 5:11-19.

² It is to be noted that a “monitoring period” is not a period during which the electronic tag device continuously engages in monitoring, it is the period that elapses between two instances of monitoring. ’216 Patent at 1:23-29; *see also* Souri Depo. at 112:25-113:7 (Ex. 2).

³ The ’216 Patent states that “the electronic tag device cannot be in the fast wake-up mode all the time.” A POSITA would understand that this is referring to the “fast monitoring mode,” as opposed to the “fast wake-up mode,” because monitoring modes are associated with electronic tag devices. ’216 Patent at 5:11-13; *see also* Souri Depo. at 204:19-210:15 (Ex. 2); Souri Dec. at ¶ 34 (Ex. 1).

b) “fast monitoring mode” (’216 Patent, Claims 1, 7, 14)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes “a monitoring mode of the electronic tag device in which the monitoring period is shorter than that of the normal monitoring mode.”	Indefinite

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Moreover, the Court should reject VusionGroup’s argument of indefiniteness, because the claims and specification allow a POSITA to understand the scope of the claim. *See Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir. 2001) (“The definiteness inquiry focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification.”).

VusionGroup’s argument appears to be that “a POSITA would not be able to tell when a monitoring mode is ‘fast’” because it allegedly fails to provide “any measure for guidance.” Shamos Dec. at ¶ 66 (Ex. 3). But “[c]laim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). Here, the explicit relationship between the “normal monitoring mode” and the “fast monitoring mode” is established in the claims and explained in greater detail in the specification. *See Souri Dec.* at ¶ 56 (Ex. 1) (“[T]he claim language for ‘fast monitoring mode’ is clear based on the context offered by the complementary ‘normal monitoring mode.’”). For example, as explained above, a normal monitoring mode is a state where the monitoring period *is not* shortened and a fast

monitoring mode is a mode where the monitoring period—relative to the normal monitoring mode—is shortened to achieve improved response speed. Sourì Dec. at ¶ 56 (Ex. 1); *see also* Shamos Dec. at ¶ 69 (Ex. 3) (“A POSITA would understand that the distinction between a ‘normal monitoring mode’ and any other monitoring mode has to do with the ‘monitoring period’”); Sourì Depo. at 112:25-115:4 (Ex. 2) (explaining monitoring periods); ’216 Patent at 3:22-29, 5:11-19. Thus, the term “informs a skilled artisan with reasonable certainty of the scope of the claim.” *See Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1384 (Fed. Cir. 2015) (the term “spaced relationship”, even though not defined with actual parameters, is not indefinite).

Next, VusionGroup appears to argue that the term is ambiguous based on an allegedly “oblique passage” that explains that “[t]he present disclosure mainly realizes the **fast electronic tag communication (within 3 s)** under a large-scale electronic tag usage scenario” Shamos Dec. at ¶ 62 (Ex. 3) (quoting ’216 Patent at 6:43-45) (emphasis in original). However, this is nothing more than an improper attempt to limit the claims to a preferred embodiment. *See Phillips*, 415 F.3d at 1323 (cautioning against confining claims to specific embodiment disclosed in the specification).

Finally, VusionGroup attempts to introduce ambiguity where none exists. For example, Dr. Shamos argues that a monitoring period “could be simultaneously equal, faster, and slower than a ‘default’ mode,” depending on which time length is measured. Shamos Reb. at ¶¶ 23-24 (Ex. 4). Not only is there no “default mode”, this analysis ignores the explicit aim of the ’216 Patent to *improve the response speed* of the electronic tag device without increasing battery power consumption or labor costs. *See* ’216 Patent at 1:55-2:16; Sourì Depo. at 123:24-132:9 (Ex. 2). There is no ambiguity on what qualifies as “fast”.

Accordingly, a POSITA would understand the term and the scope of the invention without

further clarification or construction. *See DSW*, 537 F.3d at 1347. To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.,* ’216 Patent at 3:22-29, 5:11-19.

- c) “the base station comprises two wake-up modes: a normal wake-up mode and a[/the] fast wake-up mode” (’216 Patent, Claims 1, 7, 14)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes “the base station comprises two wake-up modes for waking up a certain electronic tag device, a normal wake-up mode wherein the base station may assume that the electronic tag device is in its normal monitoring mode, and a[/the] fast wake-up mode wherein the base station may assume that the electronic tag device is in its fast monitoring mode.”	Indefinite

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Moreover, the Court should reject VusionGroup’s argument of indefiniteness, because the claims and specification readily allow a POSITA to understand the scope of the claim. *See Union Pac.*, 236 F.3d at 692.

The ’216 Patent discloses that “[b]y default, . . . [t]he base station communicates with the electronic tag device in a normal wake-up mode.” ’216 Patent at 4:51-54. However, after the electronic tag device enters the fast monitoring mode, the base station will communicate with the electronic tag device in a fast wake-up mode. *See, e.g., id.* at 7:58-63, 8:50-55, 10:1-6. The ’216 Patent further discloses:

When the fast wake-up instruction transmitted by the base station is not received within a preset time range, the electronic tag device will switch to the normal

monitoring mode. Alternatively, when the fast wake-up instruction is received, but the control instruction and the second data are not received within the preset time range, the electronic tag device will switch to the normal monitoring mode.

Id. at 5:13-19. In other words, the base station is configured to operate in different wake-up modes depending upon the corresponding monitoring mode of the target electronic tag devices.

Based at least on these disclosures, a POSITA would appreciate that “it is beneficial for electronic devices to have multiple states of differing power consumption and activity, such that the power used in an example electronic device approaches a minimum while avoiding a decline in performance.” *Souri Dec.* at ¶ 64 (Ex. 1). Moreover, a POSITA would further recognize that a mode of a base station, taking advantage of a “fast” monitoring period corresponding to a fast monitoring mode of the target electronic tag device and allowing for a shorter wake-up instruction transmission duration (as compared to a “normal” monitoring period” corresponding to a normal monitoring mode of the target electronic tag device), would “reduce power consumption” and “reduce electronic activity,” as compared to a mode that works with a “normal” monitoring period. *Id.*; *see also* ’216 Patent at 3:22-29.

VusionGroup again attempts to fabricate an ambiguity where none exists. Specifically, VusionGroup argues that no “definite meaning in the art . . . can be ascribed to the phrase ‘normal wake-up mode’ without some objective basis for determining normality.” *Shamos Dec.* at ¶ 51 (Ex. 3); *see also id.* at ¶ 55. However, this argument ignores the relationship between the monitoring periods associated with the normal wake-up mode and the fast wake-up mode, where a base station needs to communicate with electronic tag devices differently (for example, by adjusting the duration for transmission of wake-up instructions) based on the monitoring modes of the target electronic tag devices. *See* ’216 Patent at 1:32-42 (“If a base station device which communicates with the radio frequency module intends to communicate with a certain electronic tag device, the electronic tag device needs to be waked up at first for a period (hereinafter referred

to as a ‘wake-up duration’ of the base station device, such as 35 s) longer than the monitoring period of the electronic tag device, and then instructions and data can be transmitted. In this case, it requires at least a duration longer than the ‘wake-up duration’ to transmit an instruction to an electronic tag device, so as to complete the communication with the electronic tag device.”).

VusionGroup next argues that it is unclear “what is being awakened, or what it means to communicate ‘in a normal wake-up mode.’” Shamos Dec. at ¶ 54 (Ex. 3). This argument, however, ignores that “*the electronic tag device needs to be waked up* at first for a period . . . longer than the monitoring period of the electronic tag device.” ’216 Patent at 1:34-38 (emphasis added); *see* Souri Depo. at 145:17-146:8. Moreover, as explained above, the base station utilizes the normal wake-up mode to communicate with electronic tag devices that are in their normal monitoring mode and utilizes the fast wake-up mode to communicate with electronic tag devices that are in their fast monitoring mode. *See id.* at 4:51-45, 5:11-19, 7:58-63, 8:50-55, 10:1-6.

VusionGroup finally attempts to discredit Dr. Souri in a clear mischaracterization:

<i>Souri Dec. at ¶ 64 (Ex. 1) (citations omitted).</i>	<i>Shamos Reb. at ¶ 16 (Ex. 4).</i>
Based on the disclosures in the ’216 Patent, it is my opinion that it is beneficial for electronic [tag] devices to have multiple states of differing power consumption and activity, such that the power used in an example electronic [tag] device approaches a minimum while avoiding a decline in performance. The multiple power states allow for a period that a POSITA would recognize as a “normal” wake-up period with reduced power consumption and a corresponding reduced electronic activity, and a shorter time period, with more frequent electronic activity and a corresponding increased power consumption, i.e., a “fast” wake-up period.	Dr. Souri also attempts to define the limitation differently than Plaintiff does by arguing that the “normal wake-up mode” would have “reduced power consumption and a corresponding reduced electronic activity,” whereas the “fast wake-up mode” would be characterized by “more frequent electronic activity and a corresponding increased power consumption[.]” The Patent does not provide any rationale or mechanism for why or how the base station would need to enter “multiple power states” to reduce energy consumption, or why “normal” would necessarily be a lower power state than “fast”.

As illustrated above, Dr. Souri’s opinion is directed to the effect of different wake-up modes on the power consumption of the electronic tag devices, not of the base station—as alleged by Dr.

Shamos. *See* Souri Depo. at 149:5-150:14 (Ex. 2) (explaining how a fast wake-up mode helps electronic tag devices reduce power consumption). Thus, VusionGroup’s rebuttal arguments are based on an improper characterization of Dr. Souri’s opinion and should be disregarded.

In short, “this term and the claim language surrounding it use common, well-understood words that a [POSTIA] would have known and accorded no special meaning.” Souri Dec. at ¶ 61 (Ex. 1). Thus, a POSITA would understand the term and the scope of the invention without further clarification or construction. *See DSW*, 537 F.3d at 1347. To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.,* ’216 Patent at 4:51-54, 5:13-19, 7:58-63, 8:50-55, 10:1-6.

d) “fast wake-up instruction” (’216 Patent, Claims 1, 7, 14)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes “an instruction sent from the base station to a certain electronic tag device to wake up the electronic tag device while the base station is in its fast wake-up mode.”	Plain and ordinary meaning, which is “instruction from the base station to the electronic tag device requiring the tag to remain in fast monitoring mode such that data can be received by the electronic tag device”

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Therefore, the Court should reject VusionGroup’s construction that is inconsistent with the explicit disclosures of the ’216 Patent.

For context, this term as it appears in Claim 1 is reproduced below:

the base station is further configured to . . . transmit a fast wake-up instruction, the control instruction and the second data to the electronic tag device through the first communication path; and

the electronic tag device is further configured to receive the fast wake-up instruction, the control instruction and the second data, and switch to the normal monitoring mode after completing the communication.

'216 Patent at 7:58-67; *see also id.* at 8:50-60, 10:1-10.

Consistent with its use in the claims and the specification, and as understood by a POSITA, “the ‘fast wake-up instruction’ [is] one portion of data that is transmitted from the base station, while it is in the fast wake-up mode, to an electronic tag device while it is in the fast monitoring mode.” Souri Dec. at ¶ 71 (Ex. 1) (citing '216 Patent at 5:64-6:24). The fast wake-up instruction, after being received by the electronic tag device, “allows the electronic tag device to receive the control instruction and the second data from the base station.” *Id.* (citing '216 Patent at 5:64-6:24). If the control instruction and the second data are received (potentially in a data transmission mode rather than a monitoring mode, *see* '216 Patent at 1:29-32) by the electronic tag device within “a certain time period after receipt of the fast wake-up instruction, the electronic tag device then returns . . . to the normal monitoring mode after the communication is complete.” *Id.* (citing '216 Patent at 5:31-56). However, “if the control instruction and the second data are not received by the electronic tag device in a certain time period after receipt of the fast wake-up instruction,” the electronic tag device “will return from the fast monitoring mode . . . to the normal monitoring mode.” *Id.* (citing '216 Patent at 5:11-19). Thus, the fast wake-up instruction is sent from a base station to an electronic tag device and allows the electronic tag device to *quit* the fast monitoring mode at some time after receiving the fast wake-up instruction.

VusionGroup’s proposed construction requires “the [electronic] tag [device] to remain in fast monitoring mode such that data can be received by the electronic tag device.” This construction, however, is not only unsupported in the specification, but also appears to require the electronic tag device to potentially remain in the fast monitoring mode for an unlimited time period, or at least until the completion of the receipt of the control instruction and the second data.

But the electronic tag device of the '216 Patent does not stay in the fast monitoring mode indefinitely, nor is it required to receive data in a monitoring mode. *See* '216 Patent at 1:29-32, 5:11-19. Thus, VusionGroup's proposed construction should be rejected.

In the absence of clear intrinsic support, the Court should not disturb the term's plain and ordinary meaning. To the extent construction is necessary, Hanshow's should be adopted because it is consistent with the intrinsic evidence. *See e.g.* '216 Patent at 5:11-19, 5:31-56, 5:64-6:24, 7:58-67, 8:50-60, 10:1-10.

e) "external device" ('216 Patent, Claims 1, 7, 14)

Hanshow's Construction	VusionGroup's Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes "a device external to the electronic tag device, the device is capable of communication with the electronic tag device directly or indirectly, or otherwise exchanging information with or reading information from the electronic tag device."	Indefinite

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Moreover, the Court should reject VusionGroup's argument of indefiniteness, because the claims and specification readily allow a POSITA to understand the scope of the claim. *See Union Pac.*, 236 F.3d at 692. In fact, Dr. Shamos acknowledged that during his "review of the '216 patent," he "did [not] feel a need to offer any opinions related to a claim construction of [the] term." Shamos Depo. at 111:5-9 (Ex. 5).

The '216 Patent describes two communication pathways used by an electronic tag device: the first is a radio frequency path that allows two-way communication between electronic tag

devices and a base station, and the second is a path that utilizes another wireless communication method which could include, for instance, a magnetic, infrared, or NFC communication. '216 Patent at 4:31-34, 41-50. The '216 Patent further explains that an external device that communicates with an electronic tag device uses the second communication pathway. *Id.*

Based at least on this disclosure, Dr. Sourì opines “that a POSITA would understand that a device matching the above description that is capable of transmitting data to an electronic tag device through, for instance, an NFC coil, could take the form of a mobile phone, PDA, or other electronic handheld device.” Sourì Dec. at ¶ 79 (Ex. 1) (citing '216 Patent at 4:31-50). Accordingly, “a POSITA would, with reasonable certainty, understand the scope of the invention and the plain and ordinary meaning of the term ‘external device.’” *Id.*

Thus, a POSITA would understand the term and the scope of the invention without further clarification or construction. *See DSW*, 537 F.3d at 1347. To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.*, '216 Patent at 2:27-29, 2:49-52, 4:31-50, 4:61-5:10.

B. The '210 Patent and the '994 Patent

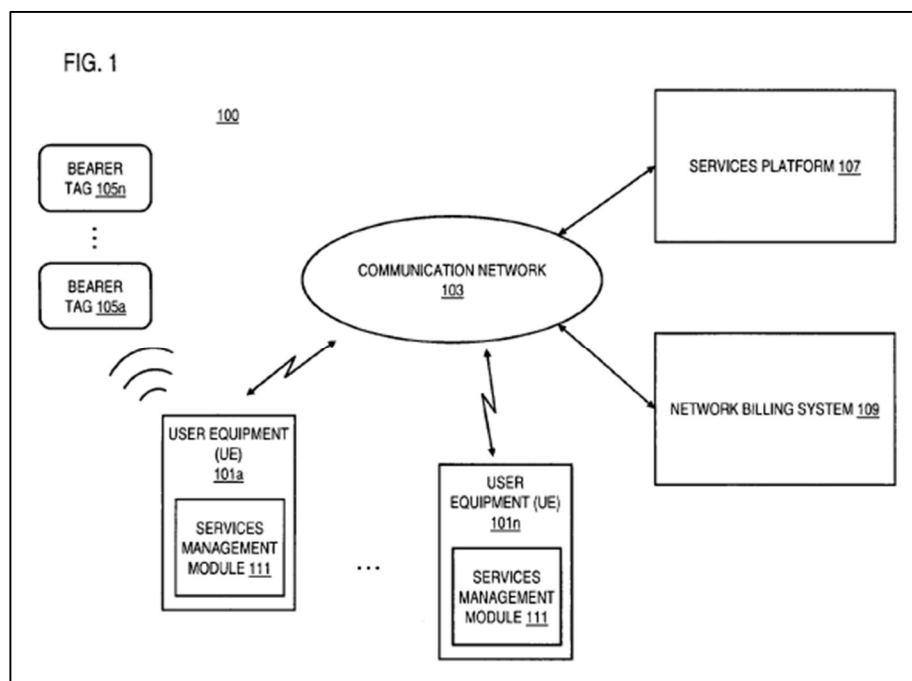
1. Background of the '210 Patent and the '994 Patent⁴

The '210 Patent has a priority date of February 27, 2009, issued on January 1, 2013, and is entitled “Method and Apparatus for Managing Services Using Bearer Tags.” The '994 Patent claims priority to the '210 Patent and was issued on May 2, 2017. The '210 Patent and the '994 Patent, while directed at different claimed subject matter, share the same disclosure which describes an approach for managing one or more services corresponding to a bearer tag (e.g., near

⁴ For purposes of this overview, citations are made to the '210 Patent. However, since the '210 Patent and the '994 Patent share the same disclosure, any discussion regarding the background of the '210 Patent is representative of the '994 Patent.

field communication (NFC) tag, radio frequency identification (RFID) tag, contactless card, or barcode). '210 Patent at Abstract.

The '210 Patent discloses, for example, a simple and automated management of services through the use of bearer tags. *Id.* at 1:27-28, 3:9-10. As shown below in Figure 1, for example, a system may include user equipment (*e.g.*, a mobile phone, a laptop computer, etc.) connected to a services platform and a network billing system via a communication network (*e.g.*, a data network, a wireless network, a telephony network, etc.) “having connectivity to a communication network 103.” *Id.* 3:11-49, 4:41-42. The user equipment is configured to read service information from bearer tags to quickly identify a requested service. *See id.* at 3:56-66.



2. Disputed Terms for the '210 Patent and the '994 Patent

- a) “bearer tag” ('210 Patent, Claims 1, 2, 6, 7, 12, 14, 15, 16; '994 Patent, Claims 1, 2, 6, 7, 12)

Hanshow's Construction	VusionGroup's Construction
Plain and ordinary meaning applies and no construction is necessary.	Plain and ordinary meaning which is “tag containing information related to one or more corresponding services available to the bearer

If the Court decides that a construction is required, Hanshow proposes “an information-bearing tag, such as a near field communication (NFC) tag, a radio frequency identification (RFID) tag, a contactless card, a barcode, or other tag capable of bearing information, or any combination thereof.”	of the tag.”
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This term requires no construction. Shamos Dep. At 117:20-118:5 (Ex. 5) (explaining “I haven’t offered a construction for bearer tag, because I didn’t think it was necessary”); *id.* at 120:18-121:7 (acknowledging that the term bearer tag is a common term used in industry). As with previous terms, there is no reason to depart from the plain and ordinary meaning of the term—VusionGroup can show neither lexicography nor disavowal—and to rewrite the claim to require the unsupported and ambiguous limitation “the bearer of the tag.” *See Thorner*, 669 F.3d at 1365.

The ’210 the ’994 Patents disclose:

The system 100 also includes bearer tags 105 *a*-105 *n* with each bearer tag 105 corresponding, for example, to one or more services. In exemplary embodiments, ***the bearer tag 105*** is a near field communication (NFC) tag, radio frequency identification (RFID) tag, contactless card, barcode, or any combination thereof that ***contains information related to the one or more corresponding services***. The service information contained in the bearer tag 105 may include, for instance, one or more service codes to identify the one or more services represented by the bearer tag 105.

’210 Patent at 3:50-59 (’994 Patent at 3:60-4:2) (emphasis added). The term “‘services’ . . . refers collectively to services, applications, and content in a network and/or user equipment.” ’210 Patent at 2:65-67 (’994 Patent at 3:9-11). In other words, the reading of a bearer tag through the use of user equipment (*e.g.*, an NFC-enabled mobile phone brought into a short-range communication with an NFC-enabled bearer tag) enables the management of one or more services (*i.e.*, services, applications, and content in a network and/or user equipment). Based on this context, a POSITA would readily understand the plain and ordinary meaning of the term.

Despite the term’s clear meaning, VusionGroup seeks to alter the term to include the

unsupported limitation “bearer of the tag” that, on its face, appears to be geared towards future non-infringement arguments. *See K-2*, 191 F.3d at 1362-63 (“[A] party wishing to alter the meaning of a clear claim term must overcome the presumption that the ordinary and accustomed meaning is the proper one, **demonstrating why such alteration is required.**” (internal citation omitted) (emphasis added)); *see also Orion IP, LLC v. Staples, Inc.*, 406 F.Supp. 2d 717, 738 (E.D. Tex. 2005) (“[M]any of Defendants’ constructions seemed geared to their future non-infringement arguments. The Court realizes that claim construction may prove to be crucial to parties’ infringement and invalidity cases, but those issues are best left for summary judgment and jury arguments.”). This construction is not supported by, nor is the term “bearer of the tag” ever used in, the ’210 or the ’994 Patents. Moreover, the term does not appear to be used or recognized in the industry. *See Shamos Depo.* at 123:13-21 (Ex. 5). Rather, each time the word “bearer” appears, it is always part of the phrase “bearer tag” and indicates that the tag “bears” information. Thus, VusionGroup’s proposed construction should be rejected, and the term should be given its plain and ordinary meaning. *See DSW*, 537 F.3d at 1347.

To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g., Shamos Depo.* at 117:20-118:5 (Ex. 5) (admitting that a POSITA would recognize a bearer tag to be “an RFID or NFC tag”); *Souri Dec.* at ¶ 84 (Ex. 1); ’210 Patent at 3:50-4:3 (’994 Patent at 3:60-4:13).

- b) “service management request” (’210 Patent, Claims 1, 6; ’994 Patent, Claims 1, 2, 6, 7, 15, 18)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary.	“a request that identifies a service and contains information for managing that service.”
If the Court decides that a construction is required, Hanshow proposes “request to manage service.”	

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Therefore, the Court should reject VusionGroup’s attempt to improperly restrict the claim to a single embodiment.

The ’210 and the ’994 Patents disclose:

The service selection module 201 then uses the service information to generate a service management request for transmission to the services platform 107. The service management request, for instance, includes information such as the requested service and identification of the user. ***It is contemplated that the request may include other information needed to process to specific requests*** (e.g., quantity of product, duration of subscription, etc.).

’210 Patent at 6:46-53 (’994 Patent at 6:60-67) (emphasis added). While the service management request *may* include “a request that identifies a service and contains information for managing that service,” an attempt to *require* it is improper. *See Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) (refusing to limit claims to a preferred embodiment). Thus, VusionGroup’s proposed construction should be rejected and the term should be given its plain and ordinary meaning. *See DSW*, 537 F.3d at 1347.

To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.*, ’210 Patent at 6:46-53 (’994 Patent at 6:60-67); ’210 Patent at 6:66-7:19 (’994 Patent at 7:13-33); ’210 Patent at 9:30-45 (’994 Patent at 9:44-45).

- c) “initiat[e/ing] determination of service information, related to [the] one or more services, from the bearer tag” (’210 Patent, Claims 3, 8; ’994 Patent, Claims 1, 6)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary.	Plain and ordinary meaning, which is “initiating a process of determining information about one or more services from information contained by the bearer tag.”
If the Court decides that a construction is required, Hanshow proposes “initiat[e/ing] determination of service information, related	

to [the] one or more services, through a use of the bearer tag.”	
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This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Therefore, the Court should reject VusionGroup’s proposed construction and apply the term’s plain and ordinary meaning, which is consistent with Hanshow’s alternative proposed construction.

As an initial matter, VusionGroup’s proposed construction is ambiguous. It is not clear which action, the “initiating” or the “determining”, is “from information contained by the bearer tag.” Thus, for at least this reason, the Court should reject VusionGroup’s proposed construction.

Yet, regardless of how VusionGroup intends its construction to be understood, it is still contrary to the explicit disclosures of the ’210 and the ’994 Patents that the service information to be determined may be exactly the service information contained within the bearer tag. *See, e.g.*, ’210 Patent at 6:36-38 (’994 Patent at 6:50-52) (“More specifically, the module 203 . . . initiates the reader 205 to determine the service information contained in the bearer tag 105”); ’210 Patent at 8:11-14 (’994 Patent at 8:26-29) (The module 111 . . . initiates a determination of the service information contained within the bearer tag 105 by signaling the bearer tag reader 205 to read the bearer tag 105 (at 303).”). Under VusionGroup’s proposed construction, the module 203 of the ’210 Patent (module 111 of the ’994 Patent) would be determining (or initiating a process of determining) the service information from the service information itself, which is nonsensical. *See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1255 (Fed. Cir. 2010) (“A claim construction that renders asserted claims facially nonsensical ‘cannot be correct.’”) (internal citations omitted).

Therefore, the term requires no construction. *See DSW*, 537 F.3d at 1347. To the extent

construction is necessary, Hanshow's should be adopted because it is consistent with the intrinsic evidence. *See e.g.* '210 Patent at 6:36-38, 8:8-14; '994 Patent at 6:50-52, 8:23-29.

- d) The "services platform" terms ('210 Patent, Claims 1, 5, 6, 10, 14; '994 Patent, Claims 1, 6)

Disputed Term	Hanshow's Construction	VusionGroup's Construction
"services platform for management of the one or more services according to a billing arrangement" ('210 Patent, Claims 1, 5, 6, 10, 14)	Plain and ordinary meaning applies and no construction is necessary. In addition, this element is not a means-plus-function element. If the Court decides that a construction is required, Hanshow proposes "an online system through which the one or more services are managed according to a billing arrangement."	<i>Governed by 35 U.S.C. 112 ¶ 6</i> Function: The management of one or more services according to a billing arrangement. Structure: all of a services portal, a services catalog, a billing server, a service activation server, and a payment gateway as depicted Fig. 2B, and as described in '210 Patent at 6:66-7:65.
"services platform communicating with the mobile communication service provider for managing the one or more services and the one or more costs according to the billing arrangement" ('994 Patent, Claims 1, 6)	Plain and ordinary meaning applies and no construction is necessary. In addition, this element is not a means-plus-function element. If the Court decides that a construction is required, Hanshow proposes "a system hosted on one or more computing devices that communicates with the mobile communication service provider and allows, through such communication, the one or more services and the one or more costs to be managed according to the billing arrangement."	<i>Governed by 35 U.S.C. 112 ¶ 6</i> Function: The management of one or more services according to a billing arrangement. Structure: all of a services portal, a services catalog, a billing server, a service activation server, and a payment gateway as depicted Fig. 2B, and as described in '994 Patent at 7:13-8:13.

These are not means-plus-function terms. They each plainly set forth structure to a POSITA and should be accorded their plain and ordinary meanings. *See* Souri Dec. at ¶¶ 92, 100 (Ex. 1).

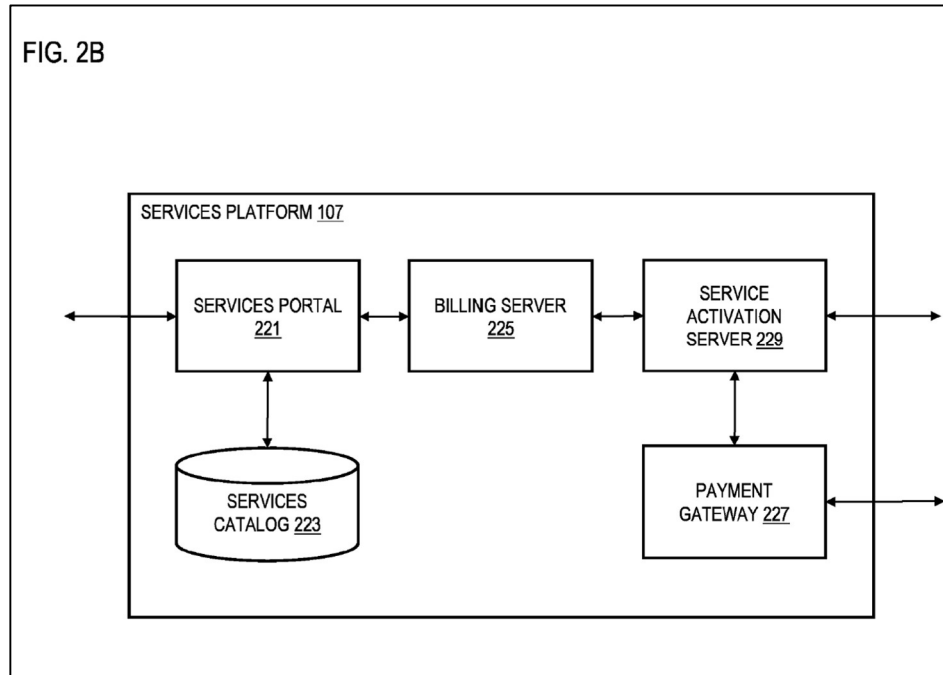
To begin, there is a presumption that the "services platform" terms in dispute are not means-plus-function terms because they do not use the word "means." *See Williamson v. Citrix Online, LLC*, 792 F.3d 1139, 1348 (Fed. Cir. 2015) ("the failure to use the word 'means' also

creates a rebuttable presumption [] that § 112, para. 6 does not apply”).

Second, the terms themselves convey sufficient structure. The terms begin with the structure at issue: a services platform. *See* Souri Dec. at ¶¶ 96, 104 (Ex. 1). As Dr. Souri explains, a “services platform” (1) “link[s] the service information contained in the bearer tags ‘with their corresponding services to activate, modify, or otherwise manage the services on the [user equipment],’” and (2) “interact[s] with the network billing system to coordinate payment and billing for the services.” *Id.* at ¶¶ 93 (citing ’994 Patent at 4:52-67, 7:13-34), 101 (citing ’210 Patent at 4:41-56, 6:66-7:19); *see also* Souri Depo. at 86:2-12 (Ex. 2). These services “can be accessed through a tap of the bearer tag with a user device [and] include a purchase or other exchange of currency for managing, activating, subscribing, or otherwise managing a service, where the services platform can receive information from the user device and determine user information and billing information.” Souri Dec. at ¶¶ 93 (citing ’994 Patent at 9:24-38), 101 (citing ’210 Patent at 9:8-22).

Moreover, as illustrated below in Figure 2B, the services platform may include several components to manage services corresponding to bearer tags. ’994 Patent at 7:14-17. For example, the services platform may include: (1) a services portal (e.g., store front) for receiving service management requests and delivering services to the user equipment; (2) a services catalog database containing information to identify the services of the received request using the service information from the corresponding bearer tag; (3) a database (e.g., services catalog) and billing system (e.g., server) to determine user information and/or the billing information associated with the received service management request; (4) a payment gateway for collecting the fees associated with the request and sending the collected fees to the services portal; and (5) a service activation system that interacts with the services portal to initiate activation or modification of a service according

to the service management request. '201 Patent at 6:66-7:65 ('994 Patent at 7:14-13).



'210 Patent at FIG. 2B ('994 Patent at FIG. 2B).

Thus, the disputed terms combine a known structure (a services platform) with a description of the services platform's operation, using conventional functions of a services platform and sufficient description of the functions for a POSITA to understand the structure. *See* Souri Dec. at ¶¶ 93, 102 (Ex. 1) (explaining that the "specification gives as an example that the network billing system could possibly be owned by the cellular service provider of the user's mobile phone" but also "allows for flexibility, where 'the user, the service provider, or both can configure the payment mechanism used by the services platform.'" (citing '210 Patent at 7:56-57 ('994 Patent at 8:4-6)). The presumption against means-plus-function claiming has not been overcome, and VusionGroup's proposed construction should be rejected. *See Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1366 (Fed. Cir. 2022) ("Claim terms 'need not connote a single, specific structure,' and may instead 'describe a class of structures' and still recite 'sufficiently definite structure' to not invoke § 112 ¶ 6.") (citation omitted).

Finally, Dr. Shamos’s opinion that the terms are means-plus-function terms is nothing more than a legal conclusion. For example, Dr. Shamos argues that “[s]ervices platform is a common nonce term in the art [of computer systems] that is ultimately understood only by context and the particular functions attributed to it.” Shamos Dec. at ¶ 74 (Ex. 3); *see also* Shamos Depo. at 129:9-12 (Ex. 5). Dr. Shamos further acknowledges that the phrase “common nonce term” has no technical meaning outside of the legal context. Shamos Depo. at 125:7-15 (Ex. 5). However, Dr. Shamos offers no insight or perspective into how the term would be read or understood by a POSITA. *See* Shamos Dec. at ¶¶ 71-75 (Ex. 3); Shamos Reb. at ¶¶ 26-31 (Ex. 4). Thus, his opinions carry no technical weight and should be disregarded.

To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.*, ’201 Patent at 6:66-7:65 (’994 Patent at 7:14-13).

3. *Disputed Terms for the ’210 Patent*

- a) “A non-transitory computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause the one or more processors to at least perform the following” (’210 Patent, Claims 1, 15)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. ⁵	The preamble is limiting.

“[T]he purpose of a claim preamble is to give context for what is being described in the body of the claim; if it is reasonably susceptible to being construed to be merely duplicative of the limitations in the body of the claim (and was not clearly added to overcome a rejection), we do not construe it to be a separate limitation.” *Symantec Corp. v. Computer Assocs. Int’l, Inc.*, 522 F.3d 1279, 1289 (Fed. Cir. 2008). Here, the preamble merely provides context and adds nothing of

⁵ Hanshow has dropped its proposed alternative construction as unnecessary. *See* Dkt. 112 at 8-9.

substance to the claims. *See Script Sec. Sols. L.L.C. v. Amazon.com, Inc.*, No. 2:15-cv-1030-WCB, 2016 WL 3959804, at *3 (E.D. Tex. July 22, 2016) (explaining a preamble is not limiting if it “merely describes the general purpose of the invention [and] adds nothing of substance to the claim, but simply summarizes the limitations of the claim”). Moreover, nothing in the claims derive antecedent basis from the preamble. *See Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003) (“When limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.”). Thus, the preamble is not limiting, and the Court should reject VusionGroup’s construction.

- b) “wherein managing the one or more services comprises activating, modifying, discovering, accessing, or setting up the one or more services, and the management of the one or more services comprises activation, modification, discovery, accessing, and setting up of the one or more services.” (’210 Patent, Claims 1, 6)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes “wherein managing the one or more services comprises performing one or more of activating, modifying, discovering, accessing, or setting up for the one or more services, and the management of the one or more services comprises the performance of one or more of activation, modification, discovery, accessing, and setting up for the one or more services.”	“and” is conjunctive, i.e. “management” requires activation, modification, discovery, accessing, and setting up of the one or more services.

Hanshow and VusionGroup differ in their proposed constructions only with regards to whether the word “and” is conjunctive. While the Federal Circuit has interpreted the word “and” to be conjunctive when used after the phrase “at least one of,” *SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 886 (Fed. Cir. 2004), it has not been adopted as “a *per se* rule.”

3rd Eye Surveillance, LLC v. United States, 140 Fed. Cl. 39, 69 (2018) (citations omitted). Rather, courts have identified the following criteria for determining whether to follow *SuperGuide*:

- When “at least one of” precedes a two-item list, and the conjunctive construction may cause surplusage, the disjunctive construction applies.
- When “at least one of” precedes a two-item list, and the conjunctive construction may cause surplusage, the disjunctive construction applies.
- When the “items that follow ‘at least one of’ . . . [are] individual parameters having only one value,” instead of “categories that may have multiple values,” the disjunctive construction applies.
- When “the specification or claims imply a broader meaning” than would be established by the conjunctive construction, the disjunctive construction applies.
- When “the claims, specification, and evidence . . . call for a different outcome” than *SuperGuide*, the disjunctive construction applies.

Shotkam LLC v. Tachyon, Inc., No. CV H-20-1070, 2021 WL 23311, at *5-6 (S.D. Tex. Jan. 4, 2021) (citations omitted).

Here, “activation,” “modification,” “discovery,” “accessing,” and “setting up” are individual services rather than categories of services, thus implying a broader meaning that calls for a disjunctive reading. Indeed, a conjunctive reading would require, for example, the simultaneous management of “setting up” a service and “discovering” a service, which is nonsensical. *See Joao v. Sleepy Hollow Bank*, 348 F. Supp. 2d 120, 124 (S.D.N.Y. 2004) (holding, for the claim term “wherein the banking transaction is at least one of a clearing transaction, a check clearing transaction, an account charging transaction, and a charge-back transaction,” that “[a] single banking transaction cannot be all four, so reading the disputed phrase additively—while grammatically correct—means it does not make any sense.”).

Moreover, adopting a disjunctive construction—which is consistent with the term’s plain and ordinary meaning (*see* Souri Dec. at ¶¶ 109-110 (Ex. 1))—is also consistent with the specification. For example, the ’210 Patent discloses that the user equipment “permit rapid

management, like for example discovery, activation, accessing, modification, and set-up of one or more services, including services, applications, and content, or any combination thereof . . .”).

3:24-28. Thus, the specification implies a broader meaning and calls for a disjunctive construction.

Accordingly, the Court should reject VusionGroup’s proposed construction and adopt either the term’s plain and ordinary meaning (*i.e.*, disjunctive construction) or Hanshow’s proposed alternative construction.

4. *Disputed Terms for the ’994 Patent*

a) “predetermined billing arrangement” (’994 Patent, Claims 3, 8)

Hanshow’s Construction	VusionGroup’s Construction
Plain and ordinary meaning applies and no construction is necessary.	Indefinite.
If the Court decides that a construction is required, Hanshow proposes “a billing arrangement that has been predetermined.”	Alternatively, “an existing arrangement for invoicing the service managed by the service management request that is between one receiving the service and the service manager.”

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Moreover, the Court should reject: (1) VusionGroup’s argument of indefiniteness, because the claims and specification readily allow a POSITA to understand the scope of the claim, *see Union Pac.*, 236 F.3d at 692; and (2) VusionGroup’s unsupported alternative construction.

(1) The Term is Not Indefinite

As explained by Dr. Souri, “[t]he ’994 Patent provides a description of interacting with a bearer tag to initiate a service request according to a predetermined billing arrangement.” Souri Dec. at ¶ 88 (Ex. 1) (citing ’994 Patent at 5:37-43; 6:54-59). This process may “involve a customer tapping a bearer tag with their mobile phone to purchase an item or to allow a similar commercial event to occur.” *Id.* (citing ’994 Patent at 5:37-43; 6:54-59). Moreover, “a services catalog database

and billing system”—that are accessed as a result of a tap on the bearer tag with a user device—enable the determination of the user and related billing information based on identification information present in both the bearer tag and the user device. *Id.* (citing ’994 Patent at 7:14-34).

Within this context, the ’994 Patent discloses:

A request is generated to manage the service according to the service information from the bearer tag 105, and is forwarded to the services platform 107 for processing according to a billing arrangement or a predetermined billing arrangement with, for instance, the carrier. For example, the billing arrangement is effected using mechanisms such as premium short message service (PSMS), wireless application protocol (WAP) billing service. The billing arrangement also may be configured to bill the user periodically (e.g., one a month) without additional action from the user.

’994 Patent at 5:26-36. The patent further discloses:

The device 703 reads the NFC tag and requests activation of the service via, for example, the services platform 107. If this is a first tap 705 by the device 703 on the bearer tag 701, the services platform 107 processes the request and activates the service according to a predetermined billing arrangement (e.g., bill the service directly to the user's phone bill).

Id. at 13:2-8. Thus, an example of a “predetermined billing arrangement” is a billing arrangement that has been predetermined (such as with the carrier), such as billing the service directly to the user’s phone bill.

In view of these disclosures, a POSITA would appreciate that a predetermined billing arrangement includes at least an arrangement between two parties such that a service, for example, can be directly billed to the user’s phone bill. *See* *Souri* Dec. at ¶¶ 88-89 (Ex. 1). Accordingly, a POSITA would understand that the term at least covers predetermined billing arrangements between two parties such as a service provider and a carrier. Thus, a POSITA would understand the term and the scope of the invention without further clarification or construction. *See DSW*, 537 F.3d at 1347.

(2) VusionGroup's Alternative Construction Should Be Rejected

VusionGroup's alternative construction is unsupported in the specification. Specifically, there is *no* disclosure of the predetermined billing arrangement being "between one receiving the service and the service manager." In fact, the term "service manager" never appears in the claims or the specification.

Thus, the Court should reject VusionGroup's construction and not disturb the term's plain and ordinary meaning. To the extent construction is necessary, Hanshow's should be adopted because it is consistent with the intrinsic evidence. *See, e.g.*, '994 Patent at 5:26-36, 13:2-8.

- b) "mobile communication service provider that has a billing arrangement with a user account associated with the user equipment" ('994 Patent, Claims 1, 6)

Hanshow's Construction	VusionGroup's Construction
Plain and ordinary meaning applies and no construction is necessary. If the Court decides that a construction is required, Hanshow proposes "a provider of mobile communication service, wherein the provider has a billing arrangement with a user account, and the user account is associated with the user equipment."	Plain and ordinary meaning which is "the billing arrangement is with the mobile communication service provider."

This term requires no construction and should be accorded its ordinary and customary meaning because the patentee did not set out a definition and did not disavow the full scope of the term. *See Thorner*, 669 F.3d at 1365. Therefore, the Court should reject VusionGroup's proposed construction and apply the term's plain and ordinary meaning.

As an initial matter, "claim construction should generally attempt to 'give meaning to all the words in [the] claims,' and avoid 'reading out' words from the claim." *In re PersonalWeb Techs. LLC*, No. 2020-1566, 2021 WL 3557196, at *4 (Fed. Cir. Aug. 12, 2021) (citations omitted). Here, VusionGroup's proposed construction eliminates any reference to "a user account

associated with the user equipment.” Thus, it fails to give meaning to all the words of the claim and, subject to the other principles of claim construction, is improper. *Id.*

Additionally, the term requires a billing arrangement between a mobile communication service provider and a user account. However, VusionGroup’s proposed construction is nothing more than an incomplete thought that eliminates the user account (*e.g.*, a billing arrangement exists between a mobile communication service provider . . .), rendering the claim nonsensical.

Thus, VusionGroup’s proposed construction should be rejected and the Court should adopt the term’s plain and ordinary meaning. *See DSW*, 537 F.3d at 1347. To the extent construction is necessary, Hanshow’s should be adopted because it is consistent with the intrinsic evidence. *See, e.g.*, ’994 Patent at 4:52-67.

V. CONCLUSION

For the reasons explained above, the Court should hold that plain and ordinary meaning applies for the disputed claim terms and that no construction is necessary, and reject Defendants’ proposed constructions. Alternatively, the Court should adopt Plaintiff’s proposed alternative constructions.

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CERTIFICATE OF SERVICE

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served this 4th day of November, 2024, with a copy of this document via the Court's CM/ECF system.

/s/ Gary M. Hnath
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