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3 **UNITED STATES DISTRICT COURT**
4 **NORTHERN DISTRICT OF CALIFORNIA**
5 **SAN JOSE DIVISION**

6
7 UNICORN ENERGY GMBH,

8 Plaintiff,

9 v.

10 TESLA INC.,

11 Defendant.

Case No. 21-cv-07476-BLF

CLAIMS CONSTRUCTION ORDER

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13 Unicorn Energy GmbH (“Unicorn”) brings this patent infringement lawsuit against Tesla
14 Inc. (“Tesla”) for Tesla’s alleged infringement of U.S. Patent No. 10,008,869 (“the ’869 Patent” or
15 “the Asserted Patent”). The Court held a tutorial hearing on October 7, 2022, and a claims
16 construction hearing on October 14, 2022, for the purpose of construing nine terms of the ’869
17 Patent. After the hearing, the parties submitted a Joint Claim Construction Chart setting forth their
18 proposed constructions. *See* ECF No. 152.

19 **I. ’869 PATENT**

20 The ’869 Patent concerns components of electrical energy supply network. ’869 Patent, at
21 1:15-20. The patent discloses that the components can be configured to store, supply, convert, and
22 consume energy. *See id.* 1:18-20. The claims, however, are limited to components that can store
23 electrical energy. *See id.* at 21:18, 23:3.

24 At the time of the alleged invention, conventional batteries included alkaline batteries of
25 certain standardized housing sizes. *Id.* at 1:23-29. Certain types of rechargeable batteries were
26 also generally known. *Id.* at 1:21-31. These standardized batteries could be adapted to different
27 applications with specific voltage needs by placing them in series. *Id.* at 1:32-34.

28 The patent discloses several problems that arose when combining batteries and battery

1 cells to make larger battery systems. One problem was that, as battery systems became more
2 complicated and subject to more safety requirements, it became necessary to construct battery and
3 charging systems adapted to each application. *Id.* at 1:43-56. Another problem was that, for cells
4 arranged in series, the failure of one cell resulted in a failure of the entire system. *Id.* at 1:57-61,
5 3:35-40.

6 The alleged invention sought to solve these problems by providing a “mobile, stackable,
7 secure and intelligent” component that could connect to an electricity network and store
8 electricity. *See id.* at 5:17-25. These components can be combined to form scalable “energy
9 blocks” that serve a range of different devices with different energy needs, thus overcoming the
10 need to design application-specific systems. *Id.* at 12:23-27, 12:28-44; *see also* 5:12-16. They
11 can also be designed to separate from the network when they develop a defect, thus allowing a
12 system using the components remain operable. *Id.* at 12:1-10.

13 **II. LEGAL STANDARD**

14 **A. General Principles**

15 Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S.
16 370, 387 (1996). “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the
17 invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d
18 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citation omitted). Therefore, “[t]he appropriate
19 starting point . . . is always with the language of the asserted claim itself.” *Comark Commc’ns,*
20 *Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998).

21 Claim terms “are generally given their ordinary and customary meaning,” defined as “the
22 meaning . . . the term would have to a person of ordinary skill in the art in question . . . as of the
23 effective filing date of the patent application.” *Phillips*, 415 F.3d at 1313 (internal citation
24 omitted). The court reads claims in view of the specification, which is “the single best guide to the
25 meaning of a disputed term.” *Id.* at 1315. Furthermore, “the interpretation to be given a term can
26 only be determined and confirmed with a full understanding of what the inventors actually
27 invented and intended to envelop with the claim.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs*
28 *Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). The words of the claims must

1 therefore be understood as the inventor used them, as such understanding is revealed by the patent
2 and prosecution history. *Id.* The claim language, written description, and patent prosecution
3 history thus form the intrinsic record that is most significant when determining the proper meaning
4 of a disputed claim limitation. *Id.* at 1315-17; *see also Vitronics Corp. v. Conceptronic, Inc.*, 90
5 F.3d 1576, 1582 (Fed. Cir. 1996).

6 Evidence external to the patent is less significant than the intrinsic record, but the court
7 may also consider such extrinsic evidence as expert and inventor testimony, dictionaries, and
8 learned treatises “if the court deems it helpful in determining ‘the true meaning of language used
9 in the patent claims.’” *Philips*, 415 F.3d at 1318 (quoting *Markman*, 52 F.3d at 980). Extrinsic
10 evidence may not be used to contradict or change the meaning of claims “in derogation of the
11 ‘indisputable public records consisting of the claims, the specification and the prosecution
12 history,’ thereby undermining the public notice function of patents.” *Id.* at 1319 (quoting
13 *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1578 (Fed. Cir. 1995)).

14 **B. Means-Plus-Function Claiming**

15 Paragraph 6 of 35 U.S.C. § 112 provides for means-plus-function claiming: “An element in
16 a claim for a combination may be expressed as a means . . . for performing a specified function . . .
17 and such claim shall be construed to cover the corresponding structure, material, or acts described
18 in the specification and equivalents thereof.” The means-plus-function analysis involves two
19 steps.

20 At step one, courts “determine whether a limitation is drafted in means-plus-function
21 format” by determining whether the limitation “connotes sufficiently definite structure to a person
22 of ordinary skill in the art.” *Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022).
23 Courts presume that “a claim limitation is not drafted in means-plus-function format in the
24 absence of the term ‘means.’” *Id.* “The presumption can be overcome if a challenger
25 demonstrates that the claim term fails to recite sufficiently definite structure.” *Id.* (citation and
26 internal quotation marks omitted). The essential inquiry is “whether the words of the claim are
27 understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the
28 name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015).

1 Such an inquiry turns on “[i]ntrinsic evidence, such as the claims themselves and the prosecution
2 history,” as well as extrinsic evidence. *Dyfan*, 28 F.4th at 1365-66.

3 At step two, if the limitation is drafted in a means-plus-function format, courts
4 “determine[e] ‘what structure, if any, disclosed in the specification corresponds to the claimed
5 function.’” *Dyfan*, 28 F.4th at 1365 (quoting *Williamson*, 792 F.3d at 1351). A means-plus-
6 function claim is indefinite if the specification fails to disclose adequate corresponding structure to
7 perform the claimed function. *Williamson*, 792 F.3d at 1351-52. The step one inquiry is distinct
8 from, but “may be similar to[,] looking for corresponding structure in the specification.” *Apple*
9 *Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1296 (Fed. Cir. 2014), abrogated on other grounds by
10 *Williamson*, 792 F.3d at 1349.

11 C. Indefiniteness

12 A patent claim must “particularly point[] out and distinctly claim[] the subject matter
13 which the applicant regards as his invention.” 35 U.S.C. § 112 ¶ 2. This language captures the
14 Patent Act’s “definiteness” requirement. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S.
15 898, 901 (2014). A patent claim is invalid for indefiniteness if it fails to inform, “with reasonable
16 certainty,” when read in light of the specification and prosecution history, those skilled in the art
17 about the scope of the invention. *See id.*; *See also Nature Simulation Sys. Inc. v. Autodesk, Inc.*,
18 50 F.4th 1358, 1362 (Fed. Cir. 2022) (“Patent claims must provide reasonable certainty in defining
19 what is patented, in conformity with the requirements of 35 U.S.C. § 112”). “United States
20 patents are accompanied by a presumption of validity, 35 U.S.C. § 282, and invalidity must be
21 established by clear and convincing evidence.” *Nature Simulation Sys.*, 50 F.4th at 1361; *see also*
22 *S3 Inc. v. NVIDIA Corp.*, 259 F.3d 1364, 1367 (Fed. Cir. 2001) (“The claims as granted are
23 accompanied by a presumption of validity based on compliance with, § 112 ¶ 2.”).

1 **III. DISCUSSION**

2 **A. Disputed Terms**

3 **1. “energy storing component” (all asserted claims)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
“Device that stores electrical energy”	“Plain and ordinary meaning, where an energy storing component is an individual component that satisfies elements [1[a]-1[e] / 27[b]-27[f)].”	Plain and ordinary meaning, where the subcomponents of the energy storing component may not be distributed across the supply network.

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8 The term “energy storing component” appears in every claim of the ’869 Patent. Tesla’s
9 proposed construction incorporates the elements of independent claims 1 and 27. Those claims
10 recite:

11 1. An **energy storing component** for a supply network for electrical
12 energy as a network medium, comprising:

13 [1a] at least one contact unit for contacting a further **energy storing**
14 **component** of the supply network;

15 [1b] an energy store comprising at least one battery cell, and

16 [1c] at least one gateway for coupling the at least one contact unit with
17 the energy store,

18 [1d] wherein the at least one contact unit has a communication
19 interface for communicating with a further **energy storing**
20 **component** of the supply network and a transport interface for
21 transporting the electrical energy to the further **energy storing**
22 **component**;

23 [1e] wherein the **energy storing component** comprises at least one
24 switch for separating the energy store from the network medium, the
25 **energy storing component** being configured to cooperate with the
26 communication interface such that the **energy storing component** is
27 separated from the network medium in response to an autonomous
28 identification of incompatibility of the **energy storing component**
with the present supply network.

’869 Patent, cl. 1.

27. An energy storage block for a supply network for electrical energy
as a network medium, wherein the energy storage block comprises:

[27a] a plurality of **energy storing components** for a supply network
for electrical energy as a network medium, each supply network
component comprising:

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[27b] at least one contact unit for contacting a further **energy storing component** of the supply network,

[27c] an energy store comprising at least one battery cell, and

[27d] at least one gateway for coupling the at least one contact unit with the energy store,

[27e] wherein the at least one contact unit has a communication interface for communicating with a further **energy storing component** of the supply network and a transport interface for transporting the electrical energy to the further **energy storing component**, wherein the plurality of supply network components are connected in parallel or in series with one another;

[27f] wherein each of the **energy storing components** comprises at least one switch for separating its respective energy store from the network medium, each of the **energy storing components** being configured to cooperate with the communication interface such that the respective **energy storing component** is separated from the network medium in response to an autonomous identification of incompatibility of the respective **energy storing component** with the present supply network.

'869 Patent, cl. 27.

Before turning to the parties' dispute, the Court highlights what the parties do not dispute. Unicorn proposes, and Tesla does not dispute, that an "energy storing component" is a component within a supply network. *See* Unicorn Br. 7-8, ECF No. 135; Tesla Resp. 2-4, ECF No. 141. And the parties agree that an "energy storing component" may be a multicomponent device. *See* Unicorn Br. 8; Tesla Resp. 4.

The parties' agreement that the "energy storing component" may be a multicomponent device comports with the plain language of the claims. For example, claim 1 discloses "[a]n energy storing component . . . comprising: at least one contact unit . . . [,] an energy store . . . , and at least one gateway." '869 Patent, cl. 1. Under Claim 1's plain terms, an energy storing component may therefore have at least three sub-components: a contact unit, an energy store, and a gateway. *Phillips*, 415 F.3d at 1314 ("Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms.").

The parties' key dispute is whether the subcomponents of the energy storing component—e.g., the contact unit, energy store, and gateway—may be distributed throughout a supply network.

1 See Unicorn Br. 8-9; Tesla Resp. 2-4; Unicorn Reply 2, ECF No. 142. Tesla attempts to capture
2 this requirement through its proposal that an energy storing component is an “individual
3 component.” In its opening brief, Unicorn does not directly addresses whether the subcomponents
4 of the energy storing component may be distributed throughout a supply network. But it does
5 contend that Tesla’s proposed construction is unsupported by the intrinsic record and attempts to
6 add a limitation via claim construction. Unicorn Br. 8. Tesla contends that the subcomponents of
7 the energy storing component may not be distributed throughout a supply network and attempts to
8 capture this limitation by specifying in its proposed construction that an energy storing component
9 is “an individual component.” Tesla Resp. 2-4. Tesla argues that Unicorn disclaimed the
10 possibility of an energy storing component that has subcomponents distributed throughout a
11 supply network to avoid institution of an *inter partes* review (“IPR”) of claims of the ’869 patent
12 by the Patent Trial and Appeal Board (“PTAB”). *Id.* at 2-3. On reply, Unicorn contends that
13 “Tesla’s proposal to limit an [energy storing component] to ‘an individual component’ is . . .
14 unjustified” and that the PTAB’s decision to not institute an IPR turned on the prior art’s failure to
15 disclose the limitations of the challenged claims regardless of any purported disclaimer. *Id.* at 2-3.

16 “When the patentee unequivocally and unambiguously disavows a certain meaning to
17 obtain a patent, the doctrine of prosecution history disclaimer narrows the meaning of the claim
18 consistent with the scope of the claim surrendered.” *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d
19 1353, 1359 (Fed. Cir. 2017) (quoting *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090,
20 1095 (Fed. Cir. 2013)). This doctrine extends to statements made by a patent owner during an IPR
21 proceeding, whether before or after an institution decision. *Id.* at 1362. Accordingly, such
22 statements “can be considered for claim construction and relied upon to support a finding of
23 prosecution disclaimer,” so long as the disclaimer is “clear and unmistakable.” *Id.* at 1361-62.
24 This “ensures that claims are not construed one way in order to obtain their allowance and in a
25 different way against accused infringers.” *Id.* at 1360 (internal quotations omitted).

26 Based on the prosecution history, the Court concludes that Unicorn clearly and
27 unmistakably disavowed an energy storing component with subcomponents that may be
28 distributed throughout a network. Unicorn’s Patent Owner’s Preliminary Response to Tesla’s

1 petition for IPR included a section titled “The Claims Require Elements [a]-[e] To Be Part of the
2 ‘Energy Storing Component,’ Not Remote Devices Elsewhere on a Network.” Smith Decl. Ex. B,
3 at 10, ECF No. 139-3. In that section Unicorn faulted Tesla for “suggest[ing] that an ‘energy
4 storing component’ *itself* can be made up of separate devices distributed across a network.” *Id.* at
5 12 (emphasis in original). Unicorn used its contention that an energy storing component may not
6 be made up of separate devices distributed across a network to distinguish one of Tesla’s proposed
7 prior art references. *Id.* at 30-33, 35-43. Unicorn argued that Tesla failed to show that the prior
8 art reference disclosed an energy storing component because Tesla relied on the combination of
9 two connected—but separate—components to attempt to do so. *Id.* Thus, Unicorn’s disclaimer of
10 an energy storing component with subcomponents distributed throughout a network was clear and
11 unmistakable.

12 Unicorn argues that it is not bound by its disclaimer because the PTAB did not rely on it.
13 *See* Reply 2-3. The Federal Circuit has explained that “[a]n applicant’s argument made during
14 prosecution may lead to a disavowal of claim scope even if the Examiner did not rely on the
15 argument.” *See Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1374 (Fed. Cir. 2005); *see*
16 *also Microsoft Corp. v. Multi-Tech Sys.*, 357 F.3d 1340, 1350 (Fed.Cir.2004) (“We have stated on
17 numerous occasions that a patentee’s statements during prosecution, whether relied on by the
18 examiner or not, are relevant to claim interpretation.”). The Federal Circuit has even found
19 prosecution disclaimer where a patentee’s “statement was unnecessary to overcome [a] reference
20 and [where] the examiner explicitly disagreed with it.” *See Am. Piledriving Equip., Inc. v.*
21 *Geoquip, Inc.*, 637 F.3d 1324, 1336 (Fed. Cir. 2011). By contrast, the Federal Circuit has declined
22 to find prosecution estoppel where a patent owner’s limiting statements “were clearly and
23 expressly rejected by the Patent Office.” *Galderma Lab’ys, L.P. v. Amneal Pharms. LLC*, 806 F.
24 App’x 1007, 1010-11 (Fed. Cir. 2020).

25 Here, the PTAB did not rely on Unicorn’s disclaimer, but it also did not reject it. The
26 PTAB noted that Unicorn’s argument that the prior art does not disclose an energy storing
27 component “rests on the assumption that the claim requires all the elements of the ‘energy storing
28 component’ to be *integrated* into a single device.” Jonas Decl. Ex. 3, at 19 (emphasis in original),

1 ECF No. 136-3. But the PTAB found it “unnecessary . . . to resolve whether the claim requires
2 the elements to be integrated into the same device or not” because the prior art failed to teach one
3 of the elements of the claims. *Id.* at 19, 27-30.

4 Unicorn is bound by its clear and unmistakable disclaimer because the PTAB did not reject
5 it. *Compare Am. Piledriving Equip.*, 637 F.3d at 1336, with *Galderma Lab ’ys*, 806 F. App’x at
6 1010-11. This result makes sense because the PTAB’s decision leaves intact Unicorn’s
7 representations regarding the scope of its claims, and “[c]ompetitors are entitled to rely on those
8 representations when determining a course of lawful conduct, such as launching a new product or
9 de-signing-around a patented invention.” *See Aylus Networks*, 856 F.3d at 1359 (citation omitted).

10 Accordingly, the Court finds that the scope of the term “energy storing component” is
11 limited by Unicorn’s prosecution disclaimer. The Court adopts a modified version of Tesla’s
12 proposed construction, construing “energy storing component” to have its plain and ordinary
13 meaning with the limitation that the subcomponents of the energy storing component may not be
14 distributed across the supply network.

15 The Court finds that this more closely aligns with the disclaimer Unicorn made before the
16 PTAB than Tesla’s proposal. The Court also finds that Tesla’s proposal to specifically state that
17 the energy storing component “that satisfies elements [1[a]-1[e] / 27[b]-27[f]]” is redundant, as
18 claim 1 is expressly directed to “[a]n energy storing component . . . comprising: [the elements of
19 the claim]” and claim 27 is expressly directed to “[a]n energy storage block . . . compris[ing]: a
20 plurality of energy storing components . . . each supply network component comprising: [the
21 remaining elements of the claim].” *See* ’869 Patent cls. 1, 27.

22 **2. “network medium” (asserted claims 1, 24, 27)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
“electrical energy in the supply network”	“no construction necessary”	“electrical energy in the supply network”

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25 The parties dispute whether the term “network medium” requires construction. Unicorn
26 argues that it does and that the term should be construed as “electrical energy in the supply
27 network.” Unicorn Br. 9-10. Unicorn argues that its construction is necessary to “clarif[y] that
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1 the ‘network medium’ is concerned with electrical energy, as opposed to other types of storage . . .
2 that are mentioned in the specification but not claimed in the patent.” *Id.* Tesla argues that
3 Unicorn’s proposed construction adds nothing to the plain language of the claims and therefore
4 does not clarify their scope. Tesla Resp. 4. Tesla also argues that replacing “network medium”
5 with Unicorn’s proposal in the independent claims leaves those preambles “confusingly” phrased.
6 *Id.*

7 The Court agrees with Unicorn that the term “network medium” requires construction.
8 Unicorn explains, and Tesla does not dispute, that the term “network medium” was coined for the
9 ’869 Patent and therefore would not have a plain and ordinary meaning to a person of skill in the
10 art. Unicorn Br. 9. As “network medium” is a technical term whose meaning is not “immediately
11 apparent,” the Court finds that construction would be helpful to the jury. *See Phillips*, 415 F.3d at
12 1314.

13 The plain language of the claims supports Unicorn’s proposed construction. *See id.*
14 (“[T]he claims themselves provide substantial guidance as to the meaning of particular claim
15 terms.”). The preamble of claim 1 discloses “[a]n energy storing component for a supply network
16 for electrical energy as a network medium.” ’869 Patent, cl. 1. The preamble of the patent’s other
17 independent claim, claim 27, discloses “[a]n energy storage block for a supply network for
18 electrical energy as a network medium.” *Id.* cl. 27. Both claims state that “electrical energy” is
19 the “network medium.” Both claims also make clear that the supply network is for electrical
20 energy. It therefore follows that the network medium is “electrical energy within the supply
21 network,” as Unicorn proposes.

22 The specification supports this plain reading of the claims. The specification states, that
23 “[i]n particular, the network medium is electrical energy. However, water, gas, air, petroleum,
24 thermal energy or other energy forms can also be involved, for example.” ’869 Patent, at 5:3-5.
25 The patent also specifies that “[t]he network medium is electrical energy” in each of the disclosed
26 embodiments. *See id.* at 13:58. Although these excerpts would not limit the term “network
27 medium” to include only electrical energy, they make clear that electrical energy is one possible
28 network medium. The claims then disavow any other possibility through their express invocation

1 of electrical energy as the network medium.

2 Tesla does not dispute that Unicorn’s proposed construction captures the plain and
 3 ordinary meaning of the term to a person of skill in the art. *See* Tesla Br. 4. Tesla argues only that
 4 the construction adds confusion because it cannot be directly substituted for the term “network
 5 medium” in the preambles of claims 1 and 27. *See id.* Tesla offers no caselaw to suggest that
 6 such substitution is required, and the Court is aware of none.

7 Accordingly, the Court adopts Unicorn’s version and construes the term “network
 8 medium” to mean “electrical energy in the supply network.”

9 **3. “contact unit for contacting a further energy storing component” (asserted
 10 claims 1 and 27)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
<p>11 “electrical contact(s) for 12 electrically connecting a 13 further energy storing 14 component”</p> <p>15 <u>Alternatively, if the Court applies 112 ¶ 6:</u></p> <p>16 Function: “electrically 17 connecting”</p> <p>18 Structure: 19 “connectors/plugs/sockets 20 with electrical contacts and 21 optionally including cables, 22 and equivalents thereof” as 23 depicted and described at: Figs. 1-4, 6-10 (and related portions of the specification), 9:59-68, 10:19-25, 11:18-21, 12:36-37, 14:49-59, 16:9-15, 17:36-65.</p>	<p>11 Subject to 35 U.S.C. § 112 ¶ 6</p> <p>12 Function: contacting a further 13 energy storing component of 14 the supply network.</p> <p>15 Structure: first contact unit 12 16 or second contact unit 14.</p>	<p>11 “electrical contact(s) for 12 electrically connecting a 13 further energy storing 14 component”</p>

24 The parties dispute whether “contact unit for contacting a further energy storing
 25 component” is a means-plus-function limitation and therefore must be interpreted under 35 U.S.C.
 26 § 112 ¶ 6.
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 Northern District of California

i. Legal Standard for Determining whether § 112 ¶ 6 Applies

“To determine whether § 112, para. 6 applies to a claim limitation, [Federal Circuit] precedent has long recognized the importance of the presence or absence of the word ‘means.’” *Williamson*, 792 F.3d at 1348 (Fed. Cir. 2015). The failure to use the word “means” creates a rebuttable presumption that § 112 ¶ 6 does not apply. *Id.* This presumption is not “strong” and “can be overcome . . . if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.* at 1349 (internal quotation marks, brackets, and citation omitted).

“In making the assessment of whether the limitation in question is a means-plus-function term subject to the strictures of § 112, para. 6, . . . the essential inquiry is not merely the presence or absence of the word ‘means’ but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson*, 792 F.3d at 1348. The determination of whether § 112 ¶ 6 applies to a claim limitation must be made under the traditional claim construction principles, on an element-by-element basis, and in light of evidence intrinsic and extrinsic to the asserted patents. *See, e.g., Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 702-04 (Fed. Cir. 1998) (stating that “[w]hether certain claim language invokes 35 U.S.C. § 112, ¶ 6 is an exercise in claim construction” and that the presumption that § 112 ¶ 6 does not apply “can be rebutted if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrant”).

ii. Whether the Disputed Phrase is Subject to § 112 ¶ 6

The phrase proposed for construction “contact unit for contacting a further energy storing component” does not include the term “means.” The Court therefore presumes that the phrase is not subject to § 112 ¶ 6. *Williamson*, 792 F.3d at 1348.

Unicorn contends that the disputed term is not a means-plus-function term because the word “contact” in “contact unit” connotes sufficient structure to a person of skill in the art. Unicorn Br. 10. Unicorn argues that the specification supports this view. *Id.* at 11. Unicorn’s expert, Mr. Dillard, opines that the phrase “‘contact unit for contacting a further energy storing component of the supply network’ as it appears in claims 1 and 27 of the ’869 patent ‘is not

1 lacking in structure but rather describes a known structure or class of structures.” Dillard Decl. ¶
2 92, ECF No. 135-1. Mr. Dillard cites the Dictionary of Science & Technology (2d ed. 2007) in
3 support of his position. *Id.* ¶ 91. That dictionary defines “contact” as “a section of a switch or
4 connector that provides an electrical path when it touches another conductor.” Dillard Decl. Ex.
5 D, at 141, ECF No. 135-5.

6 Tesla contends that the term is subject to § 112 ¶ 6. Tesla notes that the term is in a format
7 consistent with traditional means-plus-function limitations. Tesla Resp. 5. Tesla argues that
8 nothing in the specification defines a specific structure for the term. *Id.* Tesla argues that the
9 word “unit” is a nonce term and the addition of the word “contact” before it “merely describes the
10 claimed function of ‘contacting a further energy storing component.’” Tesla Resp. 5-6. For
11 support, Tesla offers of the opinion of its own expert, Dr. Christopher D. Rahn. *See id.* at 6. Dr.
12 Rahn opines that “the phrase ‘contact unit’ would not be understood by a POSITA to have a
13 sufficiently definite meaning as the name for any particular structure.” *Id.* ¶ 54.

14 The parties focus their dispute on whether the recited “contact unit” connotes sufficient
15 structure to preclude application of § 112 ¶ 6. Tesla asserts, and Unicorn does not dispute, that the
16 term “unit,” as used here, is a nonce term. Tesla Br. 5. Unicorn contends, however, that the
17 modifier “contact” imparts structural significance into the term and therefore precludes application
18 of § 112 ¶ 6. Unicorn Br. 10. For support, Unicorn cites the Federal Circuit’s decision in
19 *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580 (Fed. Cir. 1996). Unicorn Br. 11;
20 Unicorn Reply 4-5.

21 In *Greenberg*, the court determined that the phrase “cooperating detent mechanism
22 defining the conjoint rotation of said shafts in predetermined intervals” did not invoke § 112 ¶ 6.
23 91 F.3d at 1584. The court disagreed with the district court’s conclusion that the term “detent
24 mechanism” was equivalent to the phrase “means for.” *Id.* at 1583. Noting that “[m]any devices
25 take their names from the functions they perform,” the court explained that the fact that “detent
26 mechanism” is defined in functional terms is not sufficient to bring the term within the ambit of §
27 112 ¶ 6. *Id.* The court determined, based on dictionary definitions, that “the noun ‘detent’ denotes
28 a type of device with a generally understood meaning in the mechanical arts, even though the

1 definitions are expressed in functional terms.” *Id.* The court concluded that “[w]hat is important
2 is not simply that a ‘detent’ or ‘detent mechanism’ is defined in terms of what it does, but that the
3 term, as the name for structure, has a reasonably well understood meaning in the art.” *Id.*

4 The Court finds that, like the term “detent” in *Greenberg*, the term “contact” imparts
5 sufficient structure into the disputed phrase to preclude application of § 112 ¶ 6. Unicorn’s expert,
6 Mr. Dillard, opines that, in the electronic arts, the term “contact” refers to structures providing an
7 electrical path for the flow of current. Dillard Decl. ¶ 89. For support, he cites the Dictionary of
8 Science & Technology, which defines the noun “contact” as “ELEC[:] a section of a switch or
9 connector that provides an electrical path when it touches another conductor.” Dillard Decl. ¶ 89
10 & Ex. D, at 141. He contends these definitions for “contact” support his opinion that “‘contact
11 unit,’ as it appears in claims 1 and 27 of the ’869 patent, is disclosed with sufficient structural
12 properties so that a POSITA would readily understand the structure from that description,
13 including specifically that is a ‘electrical contact(s) for electrically connecting a further energy
14 storing component.’” *Id.* ¶ 89. Tesla’s expert, Dr. Rahn, never responds to Mr. Dillard’s assertion
15 that “contact” has a known meaning in the electronic arts or opines as to why that meaning would
16 not apply here. His only analysis of the word “contact” by itself is one sentence stating that “[t]he
17 modifier ‘contact’ within the phrase fails to connote any particular structure and instead merely
18 describes the function of ‘contacting’ to be performed by the unit.” Rahn Decl. ¶ 54. This
19 unsupported conclusion fails to rebut Mr. Dillard’s showing, which is at least supported by a
20 dictionary definition.¹

21 _____
22 ¹ Unicorn also relies on *Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342 (Fed. Cir.
23 2020). Unicorn Br. 11. The Court finds that case less applicable than *Greenberg*. In *Samsung*,
24 the Court rejected the PTAB’s determination that “digital processing unit” invoked § 112 ¶ 6.
25 *Samsung*, 948 F.3d at 1353-54. The Court held § 112 ¶ 6 did not apply to the term because (1) the
26 PTAB found that, in the context of another claim, “digital processing unit” was a stand-in for
27 general purpose computer or central processing unit, each of which would be understood to
28 reference structure; (2) the claim required the “digital processing unit” to be operably connected to
a data entry device; and (3) there was a presumption that § 112 ¶ 6 does not apply because the
term does not use the phrase “means for.” *Id.* at 1354. Although the disputed term here, like the
disputed term in *Samsung*, includes the word “unit,” the terms otherwise have little in common.
Neither party contends that “contact unit” is a stand in for another known structure. Rather, the
parties dispute whether the term “contact” itself connotes structure. Furthermore, neither party
relies on the context of the claims to argue that the “contact unit” is connected to other structural
components.

1 Unicorn argues that the specification further shows that “contact unit” is structural because
2 the specification states that a contact unit can be structured in the form of a plug or socket, which
3 Unicorn contends are “well-known electrical contacts”; and “the contact units described in the
4 specification include conventional elements of an electrical contact, such as spring pins and rings
5 that electrically connect and are contained in an insulated housing.” Unicorn Br. 11. Tesla
6 responds that Unicorn’s arguments based on the specification do not establish that “contact unit”
7 is structural because Unicorn identifies only the “teachings of lower level known structures.”
8 Tesla Resp. 6.

9 The Court agrees with Unicorn that the specification disclosures further support the
10 conclusion that a person of skill in the art would find “contact unit” to connote structure. *See*
11 *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1296 (Fed. Cir. 2014) (stating that when determining
12 whether a claim limitation is subject to §112 ¶ 6 “[w]e must construe the claim limitation to decide
13 if it connotes ‘sufficiently definite structure’ to a person of ordinary skill in the art, which requires
14 us to consider the specification.”), *overruled on other grounds by Williamson*, 792 F.3d 1339. The
15 specification discloses that contact units may be “designed in the form of a plug and . . . a socket.”
16 ’869 Patent, at 11:1-5. Unicorn’s expert opines, and Tesla’s expert does not dispute, that based on
17 these disclosures, “a POSITA would understand that a ‘contact unit’ is described in the ’869
18 patent with reference to examples of sockets and plugs,” which “are all generally understood by a
19 POSITA to be ‘electric contacts.’” Dillard Decl. ¶ 90. The specification further discloses that a
20 contact unit may have “a coaxial form with three contacts,” ’869 Patent 10:1-2, or may have “at
21 least three spring contacts,” *id.* 16:2. These disclosures all refer to structural components and
22 therefore suggest that the term “contact unit” would have connoted structure to a person of skill in
23 the art at the time of invention.

24 Tesla cites *Diebold Nixdorf, Inc. v. Int’l Trade Comm’n*, 899 F.3d 1291 (Fed. Cir. 2018),
25 and *Nichia Corp. v. VIZIO, Inc.*, No. 8:16-CV-00545-SJO-MRW, 2019 WL 7281927 (C.D. Cal.
26 Apr. 16, 2019), for the proposition that the word “unit” is a nonce term. Tesla Resp. 6. As noted
27 above, the parties appear to agree that “unit” is a nonce term. The Court nevertheless finds it
28 useful to distinguish these cases as they are examples of cases in which a phrase containing the

1 word “unit” was held to invoke § 112 ¶ 6.

2 In *Diebold*, the disputed phrase was “cheque standby unit.” 899 F.3d at 1297. In holding
3 that the phrase invoked § 112 ¶ 6, the Court noted that “the specification does not include any
4 examples of what structures or class of structures fall within the definition of a ‘cheque standby
5 unit.’” *Id.* at 1298. The Court also distinguished *Greenberg* by noting that there was no evidence
6 “in the form of dictionary definitions or otherwise” that a “cheque standby unit” was reasonably
7 well understood by persons of ordinary skill in the art to refer to structure or a class of structures.
8 *Id.* at 1302. But here, as noted above, the specification provides examples of structures that could
9 form the claimed “contact unit.” *See* ’869 Patent, at 11:1-5 (explaining that contact units may be
10 “designed in the form of a plug and . . . a socket.”). And Unicorn has provided the Court evidence
11 in the form of dictionary definitions to support the contention that the disputed term would have
12 been understood by persons of skill in the art to connote structure. The Court therefore finds
13 *Diebold* distinguishable.

14 *Nichia* is even further afield. The Court first notes that the *Nichia* court later vacated the
15 claim construction order Tesla cites. *See Nichia Corp. v. VIZIO, Inc.*, No. 8:16-CV-00545-SJO-
16 MRW, 2019 WL 7281927, at *1 (C.D. Cal. Apr. 16, 2019). Moreover, in *Nichia*, the parties
17 agreed that the disputed phrase invoked § 112 ¶ 6. 2019 WL 196664, at *5. Thus, the court was
18 not presented with the issue of determining whether § 112 ¶ 6 applied.

19 In sum, the Court finds that both the intrinsic and extrinsic evidence support the conclusion
20 that the term “contact unit” would connote structure to a person of skill in the art. Tesla therefore
21 fails to overcome the presumption that the phrase “contact unit for contacting a further energy
22 storing component” does not invoke § 112 ¶ 6.

23 The Court notes that this conclusion is not at odds with the Federal Circuit’s holding in
24 *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). In *Williamson*, the Federal
25 Circuit held that a limitation with the introductory phrase “distributed learning control module”
26 was not subject to § 112 ¶ 6. 792 F.3d at 1350-51. The court determined that the term “module”
27 is a nonce word and that the prefix “distributed learning control” did not impart structure into the
28 term. *Id.* at 1350-51. In reaching this conclusion, the court stated that it found nothing in the

1 intrinsic record that might lead it to construe “distributed learning control” as the name of a
2 sufficiently definite structure as to take the overall claim limitation out of the ambit of § 112 ¶ 6.
3 *Id.* at 1351. The Court also found unpersuasive an expert’s testimony that he would program a
4 computer to perform the recited functions because the fact that one of skill in the art could
5 program a computer in this manner cannot create structure where none is otherwise disclosed. *Id.*
6 at 1351. Here, as described above, the Court has found support in the patent specification for the
7 conclusion that person of skill in the art would understand the term “contact” to connote structure.
8 And unlike the expert testimony in *Williamson*, which sought to impart structure into a term where
9 there was none, the expert testimony here, supported by dictionary definitions, establishes that the
10 term at issue would have connoted structure to a person of skill in the art.

11 **iii. Construction of the Disputed Phrase**

12 Having found that the phrase does not invoke § 112 ¶ 6, the Court now determines its
13 construction. Unicorn proposes that the phrase should be construed as “electrical contact(s) for
14 electrically connecting a further energy storing component.” Unicorn’s proposed construction
15 replaces the claim language “contact unit for contacting” with “electrical contact(s) for electrically
16 connecting” but otherwise leaves the claim language intact. Tesla does not offer a proposed
17 construction as an alternative to its proposal under § 112 ¶ 6.

18 Unicorn’s proposal is supported by the intrinsic evidence. *V-Formation, Inc. v. Benetton*
19 *Group SpA*, 401 F.3d 1307, 1310–11 (Fed. Cir. 2005) (“The intrinsic record in a patent case is the
20 primary tool to supply the context for interpretation of disputed claim terms.”) The ’869 Patent
21 claims state that each contact unit has “a transport interface for transporting . . . electrical energy.”
22 ’869 Patent cls. 1, 27. Likewise, the specification states each of the contact units has a transport
23 interface “which provides an interface for transmitting the network medium,” which the Court
24 determined above to be electrical energy. *See* ’869 Patent, 14:51-54. Furthermore, the patent
25 specification discloses that a contact unit may be designed as a “plug” or “socket,” *see id.* at
26 17:38-39, 17:52-53, which according to Mr. Dillard, are “recognized in the art as ‘electrical
27 contacts,’” Dillard Decl. ¶ 88. Each of these disclosures supports Unicorn’s proposal that a
28 “contact unit for contacting . . .” should be construed as “electrical contact for electrically

1 connecting”

2 Unicorn’s proposal is further supported by the extrinsic evidence. *Phillips*, 415 F.3d at
3 1317 (“Although we have emphasized the importance of intrinsic evidence in claim construction,
4 we have also authorized district courts to rely on extrinsic evidence, which ‘consists of all
5 evidence external to the patent and prosecution history, including expert and inventor testimony,
6 dictionaries, and learned treatises.’”) As noted above, Mr. Dillard explained that a person of skill
7 in the art would understand “contact unit” to mean “electrical contact.” Dillard Decl. ¶¶ 84-88.
8 Mr. Dillard supported his assertion by citing a technical dictionary that defines “contact” as “a
9 section of a switch or connector that provides an electrical path when it touches another
10 conductor.” *Id.* ¶ 89. This evidence further supports Unicorn’s proposed construction.

11 Tesla argues that Unicorn’s proposal cannot be correct because it reads out preferred
12 embodiments. *See* Tesla Resp. 9. Tesla is right that “[a] claim construction that excludes a
13 preferred embodiment . . . is rarely, if ever correct and would require highly persuasive evidentiary
14 support.” *See Epos Techs. Ltd. v. Pegasus Techs. Ltd.*, 766 F.3d 1338, 1347 (Fed. Cir. 2014)). But
15 Tesla is wrong the Unicorn’s proposed construction does so. Contrary to Tesla’s contention,
16 Unicorn’s proposed construction does not read out the embodiment in which contact units are
17 connected by permanent magnets. *See* Tesla Resp. 9 (citing ’869 Patent, at 9:38-50). Unicorn’s
18 proposed construction requires that the contact units are electrically connected but places no other limit
19 on how the contact units are connected. Thus, under Unicorn’s proposed construction, the contact
20 units may be connected by permanent magnets or other means, so long as the contact units are also
21 electrically connected. Unicorn Reply 6.

22 Tesla also suggests that Unicorn’s proposed construction reads out the embodiment claimed in
23 dependent claim 17. Tesla notes that claim 1 requires that the “contact unit has a communication
24 interface” and claim 17, which depends from claim 1, requires that “the communication interface is a
25 wireless communication interface.” But again, Unicorn’s proposal allows for the embodiment Tesla
26 identifies. This embodiment exists under Unicorn’s proposal where, for example, contact units are
27 electrically connected to transport electrical energy through their transport interface and wirelessly
28 communicate information through their communication interface.

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1 Accordingly, the Court adopts Unicorn’s proposed construction and construes “contact unit
2 for contacting a further energy storing component” as “electrical contact(s) for electrically
3 connecting a further energy storing component.”

4 **4. “gateway for coupling the at least one contact unit with the energy store”**
5 **(asserted claims 1 and 27)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
<p>6 “coupler that serves as a connection between the at least one contact unit and the energy store”</p> <p>7</p> <p>8 <u>Alternatively, if the Court applies 35 U.S.C. § 112 ¶ 6:</u></p> <p>9</p> <p>10 Function: “coupling to establish an energy transfer path between”</p> <p>11</p> <p>12 Structure: “coupling unit/coupler that establishes an energy transfer path between the contact unit and the energy store, including a DC/DC converter (79) and optionally including a controlling device (26), and equivalents thereof,” as depicted and described at: Figs. 1, 9, 10 (and related portions of the specification), 6:66-67, 13:64-67, 14:23-38, 17:67-18:3.</p>	<p>6 Subject to 35 U.S.C. § 112 ¶ 6</p> <p>7</p> <p>8 Function: “coupling the at least one contact unit with the energy store.”</p> <p>9</p> <p>10 Structure: “coupling unit 18 shown and described in Figures 1 and 9.”</p>	<p>6 “coupler that serves as a connection between the at least one contact unit and the energy store”</p>

19

20 The disputed phrase appears in claims 1 and 27. Those claims disclose that an energy
21 storing component includes “at least one gateway for coupling the at least one contact unit with
22 the energy store.” ’869 Patent, cls. 1, 27. The parties dispute whether the phrase “gateway for
23 coupling the at least one contact unit with the energy store” is a means-plus-function limitation
24 subject to interpretation under 35 U.S.C. § 112 ¶ 6. The parties also dispute the proper
25 construction of the phrase regardless of whether the Court applies § 112 ¶ 6.

26 **i. Whether the Disputed Phrase is Subject to § 112 ¶ 6.**

27 First addressing whether the disputed phrase “gateway for coupling the at least one contact
28 unit with the energy store” is subject § 112 ¶ 6, the Court notes that the claim phrase does not use

1 the word “means.” Thus, the Court presumes that it is not subject to § 112 ¶ 6. *See Williamson,*
2 792 F.3d at 1348.² A party may overcome this presumption, however, by showing that the claim
3 term fails to recite sufficiently definite structure or else recites function without reciting sufficient
4 structure for performing that function. *Id.*

5 The parties focus their dispute on whether a person of skill in the art would have
6 understood the term “gateway” to connote sufficiently definite structure. See Unicorn Br. 12-13;
7 Tesla Resp. 10-11; Unicorn Reply 6-7. Unicorn contends that Tesla cannot overcome the
8 presumption that § 112 ¶ 6 does not apply because (1) the Federal Circuit has construed the term
9 “gateway” without invoking means-plus-function treatment; and (2) the patentee equated
10 “gateway” with the term “coupling unit” which is a “well-known class of circuit structures.”
11 Unicorn Br. 12-13. Tesla contends that the phrase is subject to § 112 ¶ 6 because a person of skill
12 in the art would not have understood the term “gateway” to have sufficiently definite meaning as
13 the name for structure. Tesla Resp. 10. Tesla agrees with Unicorn that the patentee equated the
14 term “gateway” with the term “coupling unit” but contends that “coupling unit” is “an even more
15 generic descriptor.” *Id.* For the reasons stated below, the Court finds that the term is not subject
16 to § 112 ¶ 6.

17 The Court first addresses Unicorn’s argument that the term “gateway” conveys structure
18 because the Federal Circuit previously construed the term in *Starhome GmbH v. AT&T Mobility*
19 *LLC*, 743 F.3d 849, 854 (Fed. Cir. 2014), “without invoking means-plus-function treatment.” *See*
20 Unicorn Br. 12. The Court finds this argument unpersuasive for two reasons. First, the Federal
21 Circuit has cautioned that “[a] particular term used in one patent need not have the same meaning
22 when used in an entirely separate patent, particularly one involving different technology.”
23 *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1318 (Fed. Cir. 2005). Here, Unicorn notes
24 that the *Starhome* court “found that the word ‘gateway’ had a well-known technical meaning in
25 the telecommunications industry.” Unicorn Br. 12. But Unicorn’s own expert describes the
26

27 ² The Court summarized the legal standard for determining whether a term should be construed
28 under § 112 ¶ 6 above in the section construing the phrase “contact unit for contacting a further
energy storing component.”

1 relevant field of technology of the '869 patent as “electric energy storage,” not
2 telecommunications. *See* Dillard Decl. ¶ 32. Second, even if the patent at issue in *Starhome*
3 concerned the same technology and used “gateway” in a similar way as the '869 Patent, the court
4 was not presented with the issue of whether the term was subject to § 112 ¶ 6. The Federal
5 Circuit’s analysis in *Starhome* is therefore not relevant to whether “gateway” would connote
6 structure in the context of the '869 Patent.

7 The Court next considers Unicorn’s argument that a person of skill in the art would
8 understand the term “gateway” to connote sufficiently definite structure because the patent equates
9 the term with “coupling unit”—a term that a person of skill in the art would understand to connote
10 sufficiently definite structure. The Court finds that Unicorn is on firmer ground with this
11 argument.

12 The parties agree that the patent equates the term “gateway” with the term “coupling unit.”
13 *Compare* Unicorn Br. 12, with Tesla Resp. 10; *see also* Hrg. Transcript 31:3-6, 39:8-13. But they
14 disagree about whether a person of skill in the art would understand the term “coupling unit” to
15 connote sufficiently definite structure. Unicorn argues that a person of skill in the art would
16 understand “coupling unit” as used in the '869 Patent to refer to a known class of circuit
17 structures. Unicorn Br. 12. Tesla argues that “coupling unit” is a “generic descriptor” for the
18 function it accomplishes. Tesla Resp. 10.

19 The Court finds Unicorn’s argument persuasive. Unicorn’s expert Mr. Dillard opines that
20 “[i]n the field of electrical energy storage, and electronics generally, ‘coupling’ refers to
21 transferring energy by means of [various] well-known structures such as wires (at the simplest),
22 capacitors, inductors, transformers, converters, or combinations of such.”³ Mr. Dillard supports
23 his opinion by citing two dictionary definitions for the term “coupling”: (1) “[a] mutual relation
24 between two circuits that permits energy transfer from one to another, through a wire, resistor,

25 _____
26 ³ According to Tesla, Unicorn served Mr. Dillard’s declaration on the deadline set by Patent L.R. 4-3
27 and then untimely filed a new version with its opening brief. Tesla Resp. 13. Tesla asks the Court to
28 disregard “new opinions” offered the untimely declaration. *Id.* Relevant here, Tesla objects that Mr.
Dillard changed the phrase “various well-known structures” in his original declaration to “a class of
well-known structures” in the new declaration. *See id.* & Ex. D, at ¶ 96. The Court uses the term
“various” from the Mr. Dillard’s original declaration but finds the change immaterial.

1 transformer, capacitor, or other device,” Dillard Decl. Ex. E (McGraw-Hill Dictionary of
2 Scientific and Technical Terms (6th ed. 2003)), ECF No. 135-6; and (2) “the act or process of
3 linking two or more circuits so that power can be transferred between them usually by mutual
4 induction, as in a transformer, or by means of a capacitor or inductor common to both circuits,”
5 Dillard Decl. Ex. F (Collins Dictionary (10th ed. 2009)), ECF No. 135-7. Mr. Dillard’s statements
6 and citations to technical dictionaries provide persuasive evidence in support of Unicorn’s
7 contention that a person of skill in the art would understand “coupling unit” to connote a
8 sufficiently meaning as the name for structure.

9 Tesla’s response does not overcome the presumption that § 112 ¶ 6 does not apply. Tesla
10 asserts that coupling unit is a “generic descriptor,” but it never grapples with the definitions
11 Unicorn provided showing that the term “coupling” connotes structure. Tesla therefore does not
12 rebut Unicorn’s showing that “coupling unit” would connote a sufficiently definite structure to a
13 person of skill in the art, much less satisfy its affirmative burden of showing that the term would
14 not connote sufficiently definite structure to a person of skill in the art. *See Apex Inc. v. Raritan*
15 *Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003) (noting that the party seeking to overcome
16 the presumption that § 112 ¶ 6 does or does not apply must do so by a preponderance of the
17 evidence). Because Tesla has agreed that the patent equates “gateway” and “coupling unit,” the
18 Court finds that the Tesla has not overcome the presumption that the phrase “gateway for coupling
19 the at least one contact unit with the energy store” is not subject to § 112, ¶ 6.

20 ii. Construction of the Disputed Phrase

21 Having found that the phrase does not invoke § 112 ¶ 6, the Court now determines its
22 construction. Unicorn contends that the phrase should be construed as “coupler that serves as a
23 connection between the at least one contact unit and the energy store.” Unicorn’s proposed
24 construction replaces the words “gateway for coupling” with “coupler that serves as a connection
25 between” but otherwise leaves the words of the claims intact. Tesla argues that Unicorn’s proposed
26 construction is unsupported because Unicorn’s proposed construction replaces “gateway” with another
27 nonce word “coupler.” Tesla Resp. 12. Tesla also objects that Unicorn’s expert failed to support his
28 assertion that a “gateway” or “coupling unit” is the equivalent of a “coupler.” *Id.* at 13.

1 The Court finds that Unicorn’s construction is supported and would help the jury. As noted
2 above, the parties agreed that the patent uses the terms “gateway” and “coupling units” as equivalents.
3 Mr. Dillard explained in his declaration that “[a]s used in the ’869 patent ‘gateway’ / ‘coupling unit’
4 simply refers to these sorts of coupling structures, often referred to simply as a ‘coupler.’” See Dillard
5 Decl. ¶ 96. While Tesla’s expert disputed Unicorn’s proposed construction, he did not appear to have
6 any difficulty understanding the word “coupler.” See Rahn Decl. ¶ 100.

7 Accordingly, the Court construes the disputed phrase as “coupler that serves as a connection
8 between the at least one contact unit and the energy store.”

9 **5. “configured to cooperate with the communication interface such that the
10 [respective] energy storing component is [separated from the network
11 medium / switched on]” (asserted claims 1 and 26-28)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
<p>12 “configured to cooperate with 13 the communication interface” 14 means “configured to 15 exchange information with the 16 communication interface” 17 18 No construction is necessary 19 for the remainder of the claim 20 term.</p>	<p>Indefinite</p>	<p>“configured to exchange information with the communication interface such that [the energy storing component is separated from the network medium / the energy storing component is switched on / the respective energy storing component is separated from the network medium]”</p>

19 Although the parties list three variations of the disputed phrase, the parties’ key dispute
20 centers on a portion of the phrase that is consistent across all three variations: “configured to
21 cooperate with the communication interface.” Unicorn argues that this phrase means “configured
22 to exchange information with the communication interface.” Unicorn Br. 14. Tesla contends that
23 the phrase is indefinite. Tesla Resp. 13-16. The Court first addresses whether the term is
24 indefinite and then construes the term, if necessary.

25 **i. Whether the Disputed Phrase is Indefinite**

26 Tesla argues that the phrase “configured to cooperate with the communication interface” is
27 indefinite for two reasons: (1) the phrase purports to recite a relationship between two separate
28 components, but the claim is referring a relationship of a component with itself; and (2) a person

1 of skill in the art would not be able to determine with reasonable certainty what it means for the
2 two components to cooperate. Tesla Resp. 14. The Court addresses each point in turn.

3 A patent claim is invalid for indefiniteness if it fails to inform, “with reasonable certainty,”
4 when read in light of the specification and prosecution history, those skilled in the art about the
5 scope of the invention. *Nautilus*, 572 U.S. at 901. Invalidity must be established by clear and
6 convincing evidence. *See Nature Simulation Sys.*, 50 F.4th at 1361.

7 Tesla’s first argument is that the phrase is indefinite because, when read in the context of
8 the claims, it requires that the energy storing component is configured to cooperate with the
9 communication interface. *Id.* According to Tesla, this requirement is “illogical” because the
10 communication interface is part of the contact unit, which is a component of the energy storing
11 component, and therefore the claims require the energy storing component to communicate with
12 itself. *Id.* But Tesla concedes that the energy storing component has multiple subcomponents.
13 *See* Tesla Resp. 4 (“Tesla’s construction [of energy storing component] allows for an energy
14 storing component to be a multicomponent device.”). The communication interface is one of
15 those subcomponents. Thus, it is not “illogical” that a subcomponent of the device—the
16 communication interface—would be configured to cooperate with the remainder of the device,
17 including its other components.

18 The ’869 Patent confirms as much. According to the specification, supply network
19 components may exchange technical data and physical parameters with each other through their
20 communication interfaces. ’869 Patent 9:8-11. Supply network components designed as energy
21 stores may be configured to supply energy only if “a release is given via the communication
22 interface” for example after “identification of compatibility and compliance with . . . physical
23 limits.” *Id.* 8:55-57. Depending on this release, “each supply network component is individually
24 turned on or off.” *Id.* 8:59-60. Likewise, “[e]ach supply network component can . . .
25 autonomously interrupt the current flow through at least one switch,” for example, by using the at
26 least one switch to separate the supply network component’s functional group from the network
27 medium. *Id.* 8:48-54. In this way, “[e]ach supply network component can . . . take responsibility
28 for safe connection to the supply network by means of the communication interface and by

1 monitoring compatibility with the supply network.” *Id.* 8:61-64. The patent specification
2 therefore discloses that a supply network component (e.g., an energy storing component) may
3 cooperate with its communication interface by exchanging information with the communication
4 interface and using that information to determine whether to separate its functional group (e.g., an
5 energy store) from the network medium.

6 At the hearing, Tesla addressed these disclosures. Tesla noted that the claims require that
7 “the energy storing component is separated from the network medium.” *See* Hrg. Transcript
8 64:10-12. Tesla further noted that a different claim element, consistent with the disclosures above,
9 requires that the switch separates the functional group (e.g., or energy store) from the network
10 medium. *Id.* at 64:8-9. Tesla argues that the only component that can separate the energy storing
11 component from the network medium is the transport interface in the contact unit. *Id.* at 64:16-20.

12 Tesla’s argument misses the mark for two reasons. First, it is beside the point. The
13 specification disclosures cited above show how the energy storing component cooperates with the
14 communication interface: it exchanges information with it. It then uses that information to control
15 its other subcomponents. Tesla’s argument that only the transport interface can separate the
16 energy storing component from the network medium does not undermine the fact that the energy
17 storing component may cooperate with the communication interface by exchanging information; it
18 suggests that the subcomponent that gets controlled as a result of the exchanged information is the
19 transport interface. Controlling the transport interface in response to information obtained from
20 the communication interface is consistent with the specification. The specification states that the
21 communication interface exchanges physical parameters, like temperature, and further notes that,
22 based on physical parameters, like temperature, the “transmission of the network medium via the
23 transport interface can . . . be interrupted.” ’869 Patent 9:8-11, 9:27-31.

24 Second, using the switch to separate the energy store from the network medium is not
25 inconsistent with separating the energy storing component from the network medium. The patent
26 specification describes a “refinement of the supply network component” in which “the controlling
27 device is designed in such a way that it separates the functional group from the network medium
28 in the event of a failure of the communication interface.” *Id.* 12:1-5. The specification states that

1 “[d]efective or unsuitable supply network components are thus simply disconnected from the
2 supply network.” *Id.* 12:6-7. The patent thus describes an embodiment in which it equates
3 separating the functional group from the network medium and disconnecting a supply network
4 component (e.g., an energy storing component) from the supply network, which would separate
5 the supply network component itself from the network medium.

6 Tesla next argues that the phrase is indefinite because a person of skill in the art would not
7 understand with reasonable certainty what it means for energy storing component and
8 communication interface to “cooperate.” Tesla Resp. 14. Again, the Court disagrees. As noted
9 above, the patent specification explains what it means for the energy storing component and the
10 communication interface to cooperate. The patent specification discloses that an energy storing
11 component may cooperate with its communication interface by exchanging information with the
12 communication interface and using that information to determine whether to separate its energy
13 store from the network medium. ’869 Patent 8:48-11.

14 To support its two primary arguments, Tesla contends that the patent specification “further
15 confuses the issue.” Tesla Resp. 15. According to Tesla, “[t]he ‘communication interface’ is not
16 used to communicate the network medium, and thus, cannot result in separating the network
17 medium from the energy storing component.” *Id.* But the claims do not require that the
18 communication interface itself “separate[s] the network medium from the energy storing
19 component.” In fact, the claims avoid stating which component separates the network medium
20 from the energy storing component through their use of the passive voice. *See, e.g.*, ’869 Patent,
21 cl. 1 (stating that the “the energy storing component [is] configured to cooperate with the
22 communication interface such that the energy storing component is separated from the network
23 medium”). Tesla’s argument is therefore flawed because it would require a limitation that the
24 claims do not.

25 Accordingly, the Court finds that Tesla has not shown that the disputed phrase is indefinite
26 by clear and convincing evidence.

27 **ii. Construction of the Disputed Phrase**

28 As noted above, the parties dispute centers on the phrase “configured to cooperate with the

1 communication interface.” Unicorn contends that the phrase should be construed to mean
2 “configured to exchange information with the communication interface.” Tesla does not propose a
3 construction but contends that Unicorn’s construction is incorrect and indefinite.

4 The Court finds that Unicorn’s construction is supported by the intrinsic record. Unicorn’s
5 construction proposes to replace the word “cooperate” with “exchange information” but otherwise
6 leaves the words of the claims intact. The specification explains that supply network components
7 exchange information including technical data and physical parameters with each other through
8 the communication interface. ’869 Patent 9:8-11. The patent further explains that “[e]ach supply
9 network component designed as an energy store will only supply energy if a release is given via
10 the communication interface.” *Id.* 8:55-57. As a result, “[e]ach supply network component can
11 thus take responsibility for safe connection to the supply network by means of the communication
12 interface and by monitoring compatibility with the supply network present.” ’869 Patent at 8:55-
13 64.

14 The Court finds unconvincing Tesla’s argument that Unicorn’s proposed construction
15 cannot be right because it results in different claim terms having the same meaning. Tesla argues
16 that “exchange information” is synonymous with “communicate,” therefore, construing
17 “cooperate” to mean “exchange information” would result in two different claim terms—
18 “cooperate” and “communicat[e]”—having the same meaning. Tesla is right that claim terms are
19 generally presumed to have different meanings. *See, e.g., Augme Techs., Inc. v. Yahoo! Inc.*, 755
20 F.3d 1326, 1333 (Fed. Cir. 2014). “That inference, however, is not conclusive; it is not unknown
21 for different words to be used to express similar concepts, even though it may be poor drafting
22 practice.” *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004).
23 The Court finds that where, as here, the meaning of a term to be construed is clear from the
24 intrinsic record, that meaning will not be disturbed by the canon that terms are generally construed
25 to have different meanings. *See Diamond Coating Techs., LLC v. Hyundai Motor Am.*, No. 8:13-
26 CV-01480-MRP, 2014 WL 5698445, at *8-9 (C.D. Cal. Aug. 25, 2014).

27 Accordingly the court construes “configured to cooperate with the communication
28 interface such that [the energy storing component is separated from the network medium / the

1 energy storing component is switched on / the respective energy storing component is separated
 2 from the network medium]” as “configured to exchange information with the communication
 3 interface such that [the energy storing component is separated from the network medium / the
 4 energy storing component is switched on / the respective energy storing component is separated
 5 from the network medium].”

6 **6. “autonomous identification of [incompatibility / compatibility] of the**
 7 **[respective] energy storing component with the present supply network”**
 8 **(asserted claims 1 and 26-28)**

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
“self-determined identification of incompatibility [/or compatibility] with the present supply network by the [respective] energy storing component”	Indefinite	“self-determined identification of incompatibility [/or compatibility] with the present supply network by the [respective] energy storing component”

12 The parties dispute whether this phrase is indefinite and, if not, how it should be construed.
 13 Unicorn argues that the term is not indefinite and that the term “autonomous” means “self-
 14 determined” in the context of the ’869 Patent. Unicorn Br. 15-18. Tesla argues that the phrase is
 15 indefinite because a person of skill in the art would not be able to determine with reasonable
 16 certainty what it means for an energy storing component to be compatible or incompatible with
 17 supply network. Tesla Resp. 16-17. Tesla argues that Unicorn’s proposed construction is also
 18 indefinite because it fails to address this point. *Id.* 18-19. Tesla also objects to equating
 19 autonomous with “self determined” without meaningful discussion. *Id.* at 18.

20 **i. Whether the Disputed Phrase is Indefinite**

21 The Court begins by determining whether the disputed phrase is indefinite. Tesla appears
 22 to rely on two primary arguments to support its contention that the phrase is indefinite: (1) the
 23 specification does not “define what it means for an ‘energy storing component’ to be
 24 ‘[in]compatible’ with a ‘supply network,’” and (2) the phrase is “so vague with so many different
 25 possible criteria” that it fails to apprise the public of what is still open to them. *Id.* 18. The Court
 26 addresses each argument in turn.

27 The Court notes as the outset that the ’869 Patent’s lack of definition for “compatible” or
 28

1 “incompatible” does not resolve whether the term is indefinite. As the Federal Circuit has
2 explained, “The failure to define [a] term is, of course, not fatal, for if the meaning of the term is
3 fairly inferable from the patent, an express definition is not necessary.” *Bancorp Servs., L.L.C. v.*
4 *Hartford Life Ins. Co.*, 359 F.3d 1367 (Fed. Cir. 2004); *see also Niazi Licensing Corp. v. St. Jude*
5 *Med. S.C., Inc.*, 30 F.4th 1339, 1347 (Fed. Cir. 2022) (“[A] patentee need not define his invention
6 with mathematical precision in order to comply with the definiteness requirement.” (citation
7 omitted)). The Court therefore proceeds with its analysis.

8 The Court finds unconvincing Tesla’s argument that the phrase is indefinite because it
9 allows for too many different possible criteria for compatibility or incompatibility. “A claim is
10 not indefinite just because it is broad.” *Niazi*, 30 F.4th at 1347 (citing *BASF Corp. v. Johnson*
11 *Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017)). In *BASF*, the Federal Circuit reversed the
12 district court’s decision finding that the term “effective for catalyzing” was indefinite. 875 F.3d at
13 1362. The Federal Circuit faulted the district court for “not consider[ing] that the specification
14 makes clear that it is the arrangement of the . . . catalysts, rather than the selection of particular
15 catalysts that purportedly renders the inventions . . . a patentable advance over the prior art.” *Id.* at
16 1367. The Federal Circuit also faulted the district court for failing to address “the significance of
17 the facts that both the claims and specification provide exemplary material compositions that are
18 ‘effective’ to catalyze [the relevant components].” *Id.* Finally, the Federal Circuit faulted the
19 district court for determining that the claims fail to sufficiently identify the material compositions
20 that are “effective for catalyzing” based on the patent challenger’s expert’s assertion that “a
21 practically limitless number of materials” could perform this function. *Id.* The court explained
22 that “the inference of indefiniteness simply from the scope finding is legally incorrect: breadth is
23 not indefiniteness.” *Id.* (quotation marks and citation omitted).

24 Here, as in *BASF*, the challenged term, when read in light of the intrinsic and extrinsic
25 evidence, informs those skilled in the art about the scope of the invention with reasonable
26 certainty. This is so for at least two reasons. First, as in *BASF*, the intrinsic record makes clear
27 that the purported patentable advance over prior art is an element of the claims separate from the
28 disputed term. The purported patentable advance is the energy storing component’s

1 “autonomous” identification of compatibility, not the criteria it uses. This is most apparent from
2 the patent’s prosecution history. During prosecution, the applicant added the requirement that the
3 identification of compatibility be accomplished “autonomous[ly]” to distinguish the claims from
4 the prior art. *See* Jonas Decl. Ex D, at 2 (“Mar. 2018 OA Resp.”), ECF No. 136-4. The applicant
5 explained:

6 [The prior art] emphasizes a traditional approach using an external
7 circuit that decides whether a certain battery module may be switched
8 on or not. This lacks any insight or recognition of the problems
9 addressed by the arrangement of claim 1. . . . The arrangement of
10 claim 1 provides a check of compatibility that must be completed
11 successfully in order for the supply network component to be
12 connected to the network medium. Moreover, where multiple supply
network components are employed, each supply network component
may determine its own compatibility (and thus to whether to separate
from the network medium depending [on] whether compatibility is
established or not) “autonomously.” By virtue of this compatibility
check, risk of damage due to incompatibility is effectively minimized
or avoided entirely.

13 *Id.* at 12-13. The applicant thus argued that the autonomous compatibility check was an
14 improvement over the traditional approach of using an external circuit. The absence of discussion
15 about what criteria are evaluated as part of the compatibility check supports the conclusion that a
16 person of skill in the art would have known, with reasonable certainty, the scope of such criteria.

17 Second, as in *BASF*, the patent specification provides examples of what falls within the
18 scope of the disputed term. The specification states that “after authentication, identification of
19 compatibility and compliance with the physical limits, each supply network component is
20 individually turned on or off.”’869 Patent, at 8:55-60. The specification provides examples of
21 criteria that the system may evaluate, including voltage, current, and temperature. *Id.* 8:65-9:3.
22 The specification’s inclusion of this exemplary criteria for determining compatibility further
23 supports Unicorn’s assertion that a person of skill in the art would be able to determine the
24 meaning of the term. *See BASF*, 875 F.3d at 1367; *Niazi*, 30 F.4th at 1349 (finding the term
25 “pliable” not indefinite based, in part, on examples in the specification and noting that this was “in
26 line” with other Federal Circuit decisions holding that “examples in the written description helped
27 provide sufficient guidance to render the claims not invalid as indefinite”).

28 Tesla’s expert’s ability to “generate a very long list of different criteria that could be within

1 the bounds of the phrase” does not undermine the conclusion that the term is not indefinite. The
2 Court in *BASF* found the term “effective to catalyze” not indefinite despite an expert’s assertion
3 that “a practically limitless number of materials” could serve as the claimed catalyst. *BASF*, 875
4 F.3d at 1366-67. Additionally, Unicorn’s expert stated in his declaration, citing a technical
5 dictionary defining the term “compatibility,” that “compatibility . . . has meaning to those in the
6 electrical energy storage art.” Dillard Decl. ¶ 129.

7 Accordingly, the Court finds that Tesla has not shown that the disputed phrase is indefinite
8 by clear and convincing evidence.

9 **ii. Construction of the Disputed Phrase**

10 Having determined that the phrase is not indefinite, the Court construes the phrase.
11 Unicorn proposes that the phrase should be construed as “self-determined identification of
12 incompatibility [/or compatibility] with the present supply network by the [respective] energy storing
13 component.” Unicorn’s proposal replaces the word “autonomous” with “self-determined” but
14 otherwise only rearranges the words of the claim. Tesla argues that the proposal is indefinite for the
15 same reasons the original claim language was indefinite but offers no proposed construction or other
16 argument against Unicorn’s proposal.

17 The Court adopts Unicorn’s proposal because it is well supported and will help the jury. The
18 specification explains that a supply network component may “comprise[] at least one switch for
19 separating a functional group from the network medium.” ’869 Patent, at 8:48-51. Through this at
20 least one switch, “[e]ach supply network component can thus autonomously interrupt current flow . . .
21 in one or both directions.” ’869 Patent, at 8:52-54. The specification explains that “[e]ach supply
22 network component . . . will only supply energy if a release is given via the communication interface.”
23 *Id.* 8:55-57. In this way, “[e]ach supply network component can . . . take responsibility for safe
24 connection to the supply network by means of the communication interface and by monitoring
25 compatibility with the supply network present.” *Id.* 8:55-64. The patent thus discloses that a supply
26 network component (e.g., an energy storing component) may monitor compatibility with the supply
27 network and determine for itself (i.e., self-determine) whether it is safe to connect to the supply
28 network. And the patent equates this self-determination with autonomous interruption of current flow

1 from the energy storing component. *See id.* at 8:52-54. The specification therefore supports Unicorn’s
2 proposal to construe “autonomous” as “self-determined.”

3 The prosecution history supports this understanding. As explained above, during prosecution,
4 the applicant added the requirement that the identification of compatibility be accomplished
5 “autonomous[ly]” to distinguish the claims from the prior art. *See* Mar. 2018 OA Resp., at 2. In
6 explaining the purported benefits of the invention, the patentee aligned a supply network
7 component’s self-determination of compatibility with an autonomous determination of
8 compatibility. *See id.* at 12 (“each supply network component may determine its own
9 compatibility . . . ‘autonomously.’”). These disclosures further support Unicorn’s proposal to
10 construe “autonomous” as “self-determined.”

11 In light of the foregoing, the Court adopts Unicorn’s proposed construction. The Court
12 therefore construes “autonomous identification of [incompatibility / compatibility] of the
13 [respective] energy storing component with the present supply network” as “self-determined
14 identification of incompatibility [/or compatibility] with the present supply network by the [respective]
15 energy storing component.”

16 **7. “switch for separating [the/its respective] energy store from the network
17 medium” (asserted claims 1 and 27)**

18 Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
19 “device that can electrically 20 connect or isolate [the/its 21 respective] energy store from 22 the network medium”	“a device that is used to open or close an electric circuit, without the use of a direct current converter, for separating [the/its respective] energy store from the network medium”	“device that can electrically connect or isolate [the/its respective] energy store from the network medium”

23 The parties dispute the meaning of the phrase “switch for separating [the/its respective]
24 energy store from the network medium.” Both parties contend that their proposed construction
25 captures the ordinary meaning of the phrase as it would have been understood by a person of skill
26 in the art at the time of invention. The parties’ primary disagreement is whether, in the context of
27 the asserted patent, the claimed “switch” may be implemented as a direct current converter. The
28 Court will therefore first address this point and then further construe the term as necessary.

1 As noted above, the parties disagree about whether the claimed “switch” may be
2 implemented as a direct current converter. Unicorn argues that it can because (1) the plain
3 meaning of switch at the time of invention included direct current converter, and the patentee did
4 not disavow this meaning; and (2) excluding a direct current converter as a type of switch would
5 exclude preferred embodiments disclosed in the patent. Unicorn Br. 18-21. Tesla argues that, in
6 the context of the ’869 Patent, a switch cannot include a direct current converter because (1) the
7 ’869 Patent distinguishes between the two; and (2) claim differentiation requires that a switch and
8 direct current converter be treated as two different components. Tesla Resp. 19-22.

9 The Court starts by examining the specification. *See Phillips*, 415 F.3d at 1315 (“The
10 specification is . . . the primary basis for construing the claims”). The parties’ arguments center on
11 the following passage:

12 [i]nstead of a switch, it is possible to provide a direct current converter
13 (DC/DC converter) in the supply network component, which
14 converter enables both a voltage increase and a decrease between the
15 functional units and a system voltage at the at least one contact unit
for this purpose, in a manner similar to a laboratory power supply
unit, an adjustable voltage and current limit for both current
directions.”

16 ’869 Patent, at 8:6-14. Tesla argues that this passage shows that “a ‘switch’ is . . . different than a
17 ‘direct current converter.’” Tesla Resp. 19-20. Unicorn argues that the passage “highlights the
18 additional functionality provided by a [direct current] converter beyond a simple switch” but does
19 not undermine that a direct current converter could be a switch. Unicorn Br. 12. The Court agrees
20 with Unicorn that this language does not preclude a direct current converter from being a switch.
21 By stating that a direct current converter could be used “[i]nstead of a switch,” the passage
22 suggests that the terms “switch” and “direct current converter” are not coextensive. But it does
23 not establish that a direct current converter could not function as a switch.

24 Tesla argued at the hearing that the embodiments of energy storing components shown in
25 Figures 9 and 10 support its contention that, in the context of the ’869 Patent, a direct current
26 converter cannot be a switch. Regarding Figure 9, Tesla noted that the figure depicts an energy
27 storing component with a direct current converter and that the specification explains that the
28 energy storing component has a switch. Regarding Figure 10, Tesla argued that the figure shows

1 an energy storing component with a direct current converter, and though it is not depicted, the
2 energy storing component has a switch. Even if Tesla were right about both figures, neither
3 establishes that a direct current converter cannot be utilized as a switch within the context of the
4 '869 Patent. For example, the embodiment in Figure 9 may have a direct current converter as
5 shown in the figure, while the switch that is described in the specification but not shown in the
6 figure may be implemented as a direct current converter.

7 Unicorn, for its part, argues that Figure 10 shows that Tesla's proposed construction cannot
8 be true because it shows a direct current converter "that acts as a switch." Unicorn Br. 20.
9 Unicorn misconstrues Figure 10. In describing the figure, the specification states that "[e]ach
10 supply network component . . . designed as energy stores comprises within its functional unit a
11 dedicated direct current converter which can regulate charging and discharging individually for the
12 respective functional group of each supply network component." 18:48-53. It is unclear from this
13 disclosure whether the direct current converter in Figure 10 performs the claimed function of
14 "separating the energy store from the network medium." It is therefore unclear whether the direct
15 current converter in Figure 10 is "act[ing] as a switch," as Unicorn contends, or whether the
16 embodiment of Figure 10 has another switch that is not depicted or described, as Tesla contends.
17 Given this ambiguity, Figure 10 does not establish that the Patent discloses an embodiment that
18 uses a direct current converter as a switch. Of course, this is not fatal to Unicorn's position, as the
19 lack of an embodiment expressly disclosing a particular feature does not amount to disclaimer of
20 that feature. *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002)
21 ("Contrary to the district court's analysis, moreover, the specifications did not need to include a
22 drawing of a multi-component, curved member for the claimed invention to cover that particular
23 embodiment.").

24 Tesla also advances an argument based on the language of claims 7 and 8. Tesla argues
25 that "the fact that claim 1 . . . requires a switch whereas claims 7 and 8 (which depend from claim
26 1) separately require a 'direct current converter' confirms that the two are different parts of the
27 claimed system." At the hearing, Tesla clarified that its argument here is not one of claim
28 differentiation. Hrg. Transcript 103:3-21. Regardless of which doctrine Tesla relies upon, its

1 argument fails for two reasons. First, even if claims 7 and 8 require a direct current converter
2 separate from the switch in claim 1, that does not preclude the switch in claim 1 from being
3 implemented as a direct current converter. Second, if a direct current converter is a type of switch,
4 as Unicorn contends, then there is no claim differentiation issue because claims 7 and 8 would
5 narrow the scope of claim 1 by specifying the type of “switch” recited in claim 1. *See TecSec, Inc.*
6 *v. Adobe Sys. Inc.*, 658 F. App’x 570, 577 (Fed. Cir. 2016) (“[W]hile the doctrine of claim
7 differentiation requires that the limitations in a parent claim be construed to be different in scope
8 from those in dependent claims, it does not necessarily mean that they are mutually exclusive. The
9 only requirement is that the limitation in the parent be at least broad enough to encompass the
10 limitation in the dependent claim.”).

11 In light of the foregoing, the Court concludes that there is nothing in the intrinsic record
12 that narrows the scope of switch to exclude a direct-current converter. *See Thorner v. Sony*
13 *Computer Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (“The standard for disavowal of
14 claim scope is . . . exacting.”). The Court thus turns to the extrinsic evidence for clarity. *See*
15 *Phillips*, 415 F.3d at 1317 (“[W]e have also authorized district courts to rely on extrinsic evidence,
16 which consists of all evidence external to the patent and prosecution history, including expert and
17 inventor testimony, dictionaries, and learned treatises. However, while extrinsic evidence can shed
18 useful light on the relevant art, we have explained that it is less significant than the intrinsic record
19 in determining ‘the legally operative meaning of claim language.’ (internal quotation marks and
20 citations omitted)).

21 The Court finds that the extrinsic evidence establishes that a person of skill in the art
22 would understand the term “switch” to include direct current converters. Unicorn’s expert, Mr.
23 Dillard, opines that a switch is a widely known device in the electronic arts that “serves to
24 electrically connect or isolate its input(s) from its output(s), thereby controlling the flow of
25 current.” Dillard Decl. ¶ 152. To support this opinion, Mr. Dillard cites the Dictionary of Science
26 and Technology (2d ed. 2007), which defines “switch” as “ELEC[:] a mechanical or solid state
27 device that can electrically connect or isolate two or more lines.” *Id.* & Ex. D, at 592. Mr. Dillard
28 opines that “typical DC-DC converters plainly are within the ordinary meaning of switch” because

1 “they can isolate or connect their inputs/outputs.” *Id.* at 156. This is because “in a typical DC-DC
 2 converter design, when the converter is not operating (switched off or ‘disabled’) current does not
 3 flow between the inputs and outputs of the DC-DC converter.” *Id.* ¶ 155. Tesla identifies no
 4 evidence that would undermine this opinion. In fact, Tesla’s expert offers no opinion at all about
 5 whether a direct current converter can operate as a switch. The Court therefore finds that the
 6 extrinsic evidence before it establishes that a person of skill in the art would understand the term
 7 “switch” to include direct current converters.

8 Having found that the extrinsic evidence shows that a person of skill in the art would
 9 understand that a direct current converter may operate as a switch and that this understanding is
 10 not undermined by the intrinsic evidence, the Court adopts Unicorn’s proposed construction.
 11 Accordingly, the Court construes “switch for separating [the/its respective] energy store from the
 12 network medium” as “device that can electrically connect or isolate [the/its respective] energy
 13 store from the network medium.”

14 8. “functional group” (asserted claim 9)

15 Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
16 “energy store, <i>i.e.</i> , unit that stores energy within an energy 17 storing component”	Indefinite	“energy store”

18 The parties dispute whether the term “functional group” renders claim 9 indefinite. Claim
 19 9 recites:

20 The energy storing component as claimed in claim 1, wherein the
 21 energy storing component comprises at least one sensor for detecting
 22 a physical parameter of the **functional group**.

23 ’869 Patent, cl. 9. Unicorn argues that the term does not render the claim indefinite because it is
 24 clear from the patent and prosecution history that “functional group” means energy store. Unicorn
 25 Br. 22. Unicorn further argues, in the alternative, that “functional group” is a typographical error,
 26 and the Court should exercise its authority to correct it. *Id.* at 22. Tesla argues that the term does
 27 render the claim indefinite because a “functional group” can be configured as different
 28 components, and the claims and specification leave unclear what the functional group is in the
 context of claim 9. Tesla Resp. 22. Tesla also argues that Unicorn’s construction fails because it

1 results in a failure to differentiate claim 9 from claim 10, which depends from claim 9. *Id.*

2 “It is well-settled law that, in a patent infringement suit, a district court may correct an
3 obvious error in a patent claim.” *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353,
4 1358 (Fed. Cir. 2011). “A district court can correct a patent only if (1) the correction is not subject
5 to reasonable debate based on consideration of the claim language and the specification and (2) the
6 prosecution history does not suggest a different interpretation of the claims.” *Id.* (quoting *Novo*
7 *Indus. L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003)). This inquiry should be
8 conducted “from the point of view of one skilled in the art.” *Ultimax Cement Mfg. Corp. v. CTS*
9 *Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009).

10 The Court first determines whether there is an error in the claim. *See Pavo Sols. LLC v.*
11 *Kingston Tech. Co., Inc.*, 35 F.4th 1367, 1373-74 (Fed. Cir. 2022). The Court finds that there is an
12 error: the term “the functional group” lacks an antecedent basis in claims 9 or 1. *See, e.g.*,
13 *Quanergy Sys., Inc. v. Velodyne Lidar, Inc.*, No. 16-CV-05251-EJD, 2017 WL 4410174, at *14
14 (N.D. Cal. Oct. 4, 2017) (correcting obvious error where term lacked antecedent basis). The Court
15 therefore proceeds to determine whether Unicorn’s proposed correction is not subject to
16 reasonable debate based on consideration of the claim language and the specification. *See Novo*
17 *Indus.*, 350 F.3d at 1357.

18 The Court finds that Unicorn’s proposed correction replacing “functional group” with
19 “energy store” is not subject to reasonable debate. The patent specification explains that “[t]he
20 function of a supply network component is determined by its functional group.” ’869 Patent, at
21 13:61-62. A functional group “can be configured for example as [an] energy store, energy source,
22 or [an] energy consumer.” *Id.* 13:62-64. The parties agree that the claimed “energy storing
23 component” is a type of “supply network component.” *See Unicorn Br. 2* (“The specification
24 describes various types of ‘supply network components,’ including [energy storing
25 components]”); *Tesla Resp. 8* (referring to an “energy storing component” as “one example of a
26 supply network component”). This makes sense because the functional group comprising the
27 “energy storing component” of claim 1 is an “energy store.” ’869 Patent, cl 1. Claim 9 is for “the
28 energy storing component of claim 1.” Therefore, its functional group is too an “energy store.”

1 The prosecution history does not suggest a different interpretation of the claims. The
2 prosecution history shows that the applicant consistently replaced the term “functional group”
3 with “energy store” in every claim in which functional group appeared, except for claim 11—the
4 claim that would become claim 9. Mar. 2018 OA Resp. at 2-7. The applicant offered no argument
5 that would suggest this failure to replace “functional group” with energy store was intentional. To
6 the contrary, the applicant’s remarks suggest that the applicant intended to amend all the claims
7 consistently. The applicant states that “independent claims 1 and 29 have been amended to clarify
8 the scope of the subject matter recited therein” and “each of dependent claims 4-9, 11-22, and 24-
9 48 . . . , have been amended consistent to claim 1, from which they depend.” The applicant
10 includes no statement suggesting an intention to modify the scope of every claim except claim
11 11—the claim that would become claim 9. The Court therefore finds that the prosecution history
12 does not suggest a different interpretation of the claims than the proposed correction.

13 The Court disagrees with Tesla’s argument that replacing “functional group” with “energy
14 store” causes a claim-differentiation conflict between claims 9 and 10. As corrected, claim 9
15 requires that the “the energy storing component comprises at least one sensor for detecting a
16 physical parameter of the energy store.” Claim 10, which depends from claim 9, requires that
17 sensor disclosed in claim 9 detects “a voltage, a current or a temperature of the at least one energy
18 store.” Claim 9 thus requires detection of physical parameters of an energy, and claim 10 more
19 narrowly requires detection of the specific physical parameters of voltage, current, or temperature
20 of the energy store. There is no claim-differentiation problem here, as the claim 9 is broader than
21 the claim that depends from it. *Cf. Littelfuse, Inc. v. Mersen USA EP Corp.*, 29 F.4th 1376, 1380
22 (Fed. Cir. 2022) (“By definition, an independent claim is broader than a claim that depends from
23 it.”).

24 Accordingly, the Court exercises its discretion to correct the term “functional group” to
25 “energy store.” The Court declines to further construe “energy store” as “unit that stores energy
26 within an energy storing component” as Unicorn requests, as it is unclear whether Unicorn’s
27 request is meant to apply consistently to all uses of “energy store” within the claims or just claim
28 9, and the Court finds that this further construction would not be helpful to the jury.

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9. “supply network component” (asserted claim 27)

Unicorn’s Proposal	Tesla’s Proposal	Court’s Construction
“energy storing component”	Indefinite	“energy storing component”

Claim 27 requires reads in relevant part as follows:

27. An energy storage block for a supply network for electrical energy as a network medium, wherein the energy storage block comprises:

a plurality of energy storing components for a supply network for electrical energy as a network medium, each **supply network component** comprising

wherein the plurality of **supply network components** are connected in series or in parallel with one another.

’869 Patent, cl. 27.⁴ Unicorn contends that “supply network component” would be understood in the context of the claim to be “energy storing component.” Unicorn Br. 22. Unicorn further argues, in the alternative, that “supply network component” is a typographical error, and the Court should exercise its authority to correct it. *Id.* at 23. Tesla argues that “supply network component” is indefinite because it is a coined term that lacks an antecedent basis, and nothing in the intrinsic record clarifies the meaning of the term. Tesla Resp. 23-24.

As the Court noted above when construing the term “functional group,” “a district court may correct an obvious error in a patent claim” but “only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *CBT Flint Partners*, 654 F.3d at 1358. The Court finds that the inclusion of the phrase “supply network component” in claim 27 is a typographical error and that it should be corrected to “energy storing component” for the following reasons.

The Court first determines whether there is an error in the claim. *See Pavo Sols.*, 35 F.4th at 1373-74. The Court finds that there is an error: the phrases “each supply network component” “the plurality of supply network components” lack antecedent bases. *See, e.g., Quanergy Sys.*, 2017 WL 4410174, at *14 (correcting obvious error where term lacked antecedent basis). The

⁴ Claim 27 also requires that “the plurality of supply network components are connected in series or in parallel with one another.”

1 Court therefore proceeds to determine whether Unicorn’s proposed correction is not subject to
2 reasonable debate based on consideration of the claim language and the specification. *See Novo*
3 *Indus.*, 350 F.3d at 1357.

4 The first limitation in claim 27 referring to a “supply network component” recites “a
5 plurality of energy storing components for a supply network for electrical energy as a network
6 medium, each supply network component comprising.” The most natural reading of this
7 limitation is that the phrase “each supply network component” refers back to the “plurality of
8 energy storing components.”

9 Reading this language in the context of the specification confirms that Unicorn’s proposed
10 correction replacing “supply network component” with “energy storing component” is not subject
11 to reasonable debate. The patent specification explains that “[t]he function of a supply network
12 component is determined by its functional group.” ’869 Patent, at 13:61-62. A functional group
13 “can be configured for example as [an] energy store, energy source, or [an] energy consumer.” *Id.*
14 13:62-64. The “plurality of energy storing components” of claim 27 is comprised of a functional
15 group configured as an “energy store.” ’869 Patent, cl 27. Therefore, the only reasonable
16 understanding of the disclosures, is that an energy storing component is a supply network
17 component with a functional group configured as an energy store. Although Tesla appears to
18 dispute this conclusion in the section of its briefing on this disputed term, it concedes it elsewhere,
19 acknowledging that an “energy storing component” is “one example of a supply network
20 component.” *Compare* Tesla Resp. 23, *with* Tesla Resp. 8.

21 The prosecution history does not suggest a different interpretation of the claims. “Supply
22 network component” appeared in the claims 54 times, and the prosecuting attorney consistently
23 changed “supply network component” to “energy storing component” 52 times. Mar. 2018 OA
24 Resp. at 2-7. It appears, however, that the prosecuting attorney missed three instances of the term.
25 *See* Tesla Resp. 24. The applicant offered no argument that would suggest this failure to replace
26 “supply network component” to “energy storing component” these three times was intentional. To
27 the contrary, the applicant’s remarks suggest that the applicant intended to amend all the claims
28 consistently. The applicant states that “independent claims 1 and 29 have been amended to clarify

1 the scope of the subject matter recited therein” and “each of dependent claims 4-9, 11-22, and 24-
2 48 . . . , have been amended consistent to claim 1, from which they depend.” The Court therefore
3 finds that the prosecution history does not suggest a different interpretation of the claims than the
4 proposed correction.

5 Tesla argues that the prosecution history suggests that the inclusion of “supply network
6 component” was not a typo because “the applicant relied on these references . . . , even after the
7 amendment had been filed, to distinguish prior art.” Tesla Resp. 24. The section of the
8 prosecution history upon which Tesla relies states in relevant part:

9 [The prior art reference] emphasizes a traditional approach using an
10 external circuit that decides whether a certain batter module may be
11 switched on or not. This lacks any insight or recognition of the
12 problems addressed by the arrangement of claim 1. . . . The
13 arrangement of claim 1 provides a check of compatibility that must
14 be completed successfully in order for the **supply network
component** to be connected to the network medium. Moreover,
15 where multiple **supply network components** are employed, each
16 **supply network component** may determine its own compatibility
17 (and thus whether to separate from the network medium depending
18 whether compatibility is established or not) “autonomously.”

19 Mar. 2018 OA Resp., at 12-13.

20 The Court finds that the section of the prosecution history upon which Tesla relies does not
21 undermine the conclusion that “supply network component” should be corrected to “energy
22 storing component.” The applicant’s argument was that the alleged invention was distinguishable
23 from the prior art because the “supply network component” determines its own compatibility
24 “autonomously.” The component that performs this function in claim 27 is the “energy storing
25 component.” *See* ’869 Patent, cl. 27. This excerpt therefore confirms what was already clear from
26 the specification and other sections of the prosecution history: the applicant equated energy storing
27 component and supply network component.

28 Accordingly, the Court exercises its discretion to correct the term “supply network
component” in claim 27 to “energy storing component.”

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IV. ORDER

For the foregoing reasons, the Court construes the following terms:

	Claim Term	Court's Construction
1	"energy storing component"	Plain and ordinary meaning, where the subcomponents of the energy storing component may not be distributed across the supply network.
2	"network medium"	electrical energy in the supply network
3	"contact unit for contacting a further energy storing component"	electrical contact(s) for electrically connecting a further energy storing component
4	"gateway for coupling the at least one contact unit with the energy store"	gateway for coupling the at least one contact unit with the energy store
5	"configured to cooperate with the communication interface such that the [respective] energy storing component is [separated from the network medium / switched on]"	configured to exchange information with the communication interface such that [the energy storing component is separated from the network medium / the energy storing component is switched on / the respective energy storing component is separated from the network medium]
6	"autonomous identification of [incompatibility / compatibility] of the [respective] energy storing component with the present supply network"	self-determined identification of incompatibility [/or compatibility] with the present supply network by the [respective] energy storing component
7	"switch for separating [the/its respective] energy store from the network medium"	device that can electrically connect or isolate [the/its respective] energy store from the network medium
8	"functional group"	energy store
9	"supply network component"	energy storing component
10	"auxiliary voltage interface for transmitting an auxiliary voltage for supplying at least one of the contact unit or gateway with electrical energy" ⁵	electrical contact that allows auxiliary energy to be supplied to at least one of the contact unit or the gateway

Dated: January 19, 2023


 BETH LABSON FREEMAN
 United States District Judge

⁵ Unicorn argued 10 terms in its opening brief. Tesla "withdr[ew] its proposed construction for the 'auxiliary voltage interface . . .' term" in its Response. *See* Tesla Resp. 1 n.1. The Court therefore adopts Unicorn's proposed construction