IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SUNOCO PARTNERS MARKETING & TERMINALS L.P.,	)	
Plaintiff,	)	
v.	)	Civil Action No. 17-1390-LPS-CJB
POWDER SPRINGS LOGISTICS, LLC, AND MAGELLAN MIDSTREAM PARTNERS, L.P.,	)	
Defendants.	)	

REPORT AND RECOMMENDATION

In this action filed by Plaintiff Sunoco Partners Marketing & Terminals L.P ("Sunoco" or "Plaintiff") against Powder Springs Logistics, LLC ("Powder Springs") and Magellan Midstream Partners, L.P. ("Magellan" and collectively with Powder Springs, "Defendants"), Sunoco alleges infringement of United States Patent Nos. 6,679,302 (the "'302 patent"), 7,032,629 (the "'629 patent"), 9,207,686 (the "'686 patent"), 9,494,948 (the "'948 patent) and 9,606,548 (the "'548 patent" and collectively with the other patents, "the asserted patents").[1] Presently before the Court is the matter of claim construction. The Court recommends that the District Court adopt the construction as set forth below.

I. BACKGROUND

[1] Four of the five asserted patents (the '302 patent, '629 patent, '948 patent and '548 patent) are at issue in another litigation (the "Illinois Litigation"). *See* (D.I. 176 at 4; *Sunoco Partners Mktg. & Terminals, L.P. v. U.S. Venture, Inc.*, No. 15-CV-8178 (D.I. 161) (N.D. Ill. April 10, 2017)). Sunoco also asserts United States Patent No. 7,631,671 (the "'671 patent") in the Illinois Litigation. (D.I. 176 at 5 n.7) The '686, '948 and '548 patents are all continuations of the '671 patent. (*Id.*)

Sunoco filed the instant case on October 4, 2017. (D.I. 1) The case was thereafter referred to the Court to hear and resolve all pretrial matters, up to and including case-dispositive motions. (D.I. 15)

In the currently-operative Second Amended Complaint, Sunoco alleges that Defendants' butane blending system, which allows Defendants to inject butane into gasoline product flowing through an interstate pipeline at the Atlanta Junction facility, and Defendants' related butane blending activities, infringe claims of the asserted patents. (D.I. 149 at ¶¶ 2, 19-25) Sunoco further alleges that Magellan's blending systems and butane blending activities at several other locations infringe claims of the asserted patents. (*Id.* at ¶¶ 26-33) The asserted patents relate to systems and methods for the blending of butane into gasoline at any point along a petroleum pipeline. (*See* D.I. 171 at 1; D.I. 176 at 1)[2]

The parties filed simultaneous opening claim construction briefs on November 20, 2018 and simultaneous responsive briefs on December 11, 2018. (D.I. 171; D.I. 176; D.I. 188; D.I. 191) The Court held a *Markman* hearing on January 23, 2019. (D.I. 315 (hereinafter, "Tr.")) Following the hearing, the parties submitted supplemental letters relating to *inter partes* review proceedings with respect to the '948 patent and the '548 patent that Defendants assert have relevance to the construction of certain disputed terms. (D.I. 277; D.I. 278; D.I. 293; D.I. 295; D.I. 307)

II. STANDARD OF REVIEW

[2] The two earliest issued patents in this case are the '302 patent and the '629 patent. The other three asserted patents, the '686, '948 and '548 patents, are continuations-in-part of the '302 patent and the '629 patent. (*See* D.I. 176 at 3 n.3; Tr. at 27)

It is well-understood that "[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention." *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Claim construction is a generally a question of law, although subsidiary fact finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015).

The Court should typically assign claim terms their "ordinary and customary meaning[,]" which is "the meaning that the term[s] would have to a person of ordinary skill in the art ['POSITA'] in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). However, when determining the ordinary meaning of claim terms, the Court should not extract and isolate those terms from the context of the patent; rather it should endeavor to reflect their "meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321; *see also Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016).

In proceeding with claim construction, the Court should look first and foremost to the language of the claims themselves, because "[i]t is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips*, 415 F.3d at 1312 (internal quotation marks and citations omitted). For example, the context in which a term is used in a claim may be "highly instructive." *Id.* at 1314. In addition, "[o]ther claims of the patent in question, both asserted and unasserted, can . . . be valuable" in discerning the meaning of a particular claim term. *Id.* This is "[b]ecause claim terms are normally used consistently throughout the patent, [and so] the usage of a term in one claim can

often illuminate the meaning of the same term in other claims." *Id.* Moreover, "[d]ifferences among claims can also be a useful guide[,]" as when "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15.

In addition to the words of the claims, the Court should look to other intrinsic evidence. For example, the Court should analyze the patent specification, which "may reveal a special definition given to a claim term . . . that differs from the meaning [that term] would otherwise possess" or may reveal an intentional disclaimer of claim scope. *Id.* at 1316. Even if the specification does not contain such revelations, it "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.* at 1315 (internal quotation marks and citation omitted). That said, however, the specification "is not a substitute for, nor can it be used to rewrite, the chosen claim language." *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). And a court should also consider the patent's prosecution history, if it is in evidence, because it "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution[.]" *Phillips*, 415 F.3d at 1317.

Extrinsic evidence, "including expert and inventor testimony, dictionaries, and learned treatises[,]" can also "shed useful light on the relevant art[.]" *Id.* (internal quotation marks and citations omitted). Overall, while extrinsic evidence may be useful, it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Id.* (internal

quotation marks and citations omitted); *accord Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995).

In utilizing these resources during claim construction, courts should keep in mind that "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

III. DISCUSSION

The parties currently have disputes regarding five terms or sets of terms (hereinafter, "terms"). This Report and Recommendation addresses one such term: "blending unit." The other terms will be addressed in a forthcoming Report and Recommendation(s).

The claim term "blending unit" appears in claims 1, 17 and 36 of the '302 patent and claims 1 and 7 of '686 patent. (D.I. 166, ex. A at 3; D.I. 191 at 6) The use of the disputed term in claim 1 of the '302 patent and claim 1 of the '686 patent is representative. (*See* Defendants' Markman Presentation, Slides DDX-130-31) Accordingly, these claims are reproduced below, with the disputed terms highlighted:

> **1.** A system for blending gasoline and butane at a tank farm comprising:
>
> a) a tank of gasoline;
>
> b) a tank of butane;
>
> c) a *blending unit*, at the tank farm, downstream of and in fluid connection with the tank of gasoline and the tank of butane;
>
> d) a dispensing unit downstream of and in fluid connection with the blending unit; and
>
> e) a rack, wherein the dispensing unit is located at the rack and is adapted to dispense gasoline to gasoline transport vehicles.

('302 patent, col. 13:12-23 (emphasis added))

> **1.** A method for in-line blending of gasoline and a volatility modifying agent comprising:
>
> a) providing a continuously flowing gasoline stream that comprises:
>
> i) a plurality of batches of different gasoline types;
>
> ii) a gasoline flow rate that varies over time; and
>
> iii) a plurality of gasoline vapor pressures;
>
> b) providing an allowable vapor pressure;
>
> c) providing a stream of said agent that comprises an agent vapor pressure;
>
> d) periodically determining said gasoline vapor pressure;
>
> e) periodically determining said gasoline flow rate;
>
> f) calculating a blend ratio based upon said agent vapor pressure, said gasoline vapor pressure, and said allowable vapor pressure;
>
> g) blending said agent stream and said gasoline stream at a *blending unit* at said blend ratio to provide a blended gasoline stream having a blended vapor pressure less than or equal to said allowable vapor pressure.

('686 patent, cols. 15:62-16:13 (emphasis added))

The parties' competing proposed constructions for "blending unit" are set out in the chart below:

Term	**Plaintiff's Proposed Construction**	**Defendants' Proposed Construction**
"blending unit"	"a unit capable of receiving a calculated blend ratio from a [processing/process control] unit and adjusting the actual blend rate to achieve the calculated blend ratio"	"any conventional apparatus that achieves blending of two or more separate streams into one"

(D.I. 171 at 12) The parties' dispute with respect to this term is whether the patents require the "blending unit" to be an automated blending unit (as Sunoco contends) or whether a non-automated apparatus can function as the blending unit (Defendants' proposal). (D.I. 188 at 5-6; Tr. at 73-74, 86-87) For the reasons set out below, the Court concludes that Defendants' proposed construction is better aligned with the intrinsic evidence.

In the Illinois Litigation, the United States District Court for the Northern District of Illinois (the "Northern District of Illinois Court") previously construed the term "blending unit." (D.I. 44, ex. 31 at A393-400; D.I. 176 at 5) In doing so, the Northern District of Illinois Court construed "blending unit" as having two different meanings for the '302 patent and the '671 patent, respectively[3]—for the '302 patent, the Court construed it to have a meaning identical to Defendants' current proposal, and for the '671 patent, the Court construed it to have a meaning similar to Sunoco's current proposal. (D.I. 44, ex. 31 at A393-400) In this case, however, both parties agree that there should be a single construction for "blending unit" that applies across all of the asserted patents. (D.I. 188 at 6-7; Tr. at 79, 93; Sunoco's Markman Presentation, Slide 25) They just disagree as to what that construction should be.

Defendants' proposed construction comes from the specification of the '302 patent. (D.I. 171 at 12; D.I. 188 at 5; Tr. at 89)[4] The '302 patent specification states that "[t]he blending unit can be any conventional apparatus that achieves blending of two or more separate streams into one." ('302 patent, col. 5:29-30) The specification goes on to provide some examples of what

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[3] The '686 patent is not at issue in the Illinois litigation. It is a continuation of the '671 patent, which is at issue in the Illinois litigation, with the two patents sharing an identical specification. (D.I. 176 at 5 n.7)

[4] The specification of the '302 patent is incorporated by reference into the specification of the '686 patent. ('686 patent, col. 1:1-18)

the blending unit can be: "[f]or example, the unit can be a Y-type or T-type junction that consolidates two independent streams. Alternatively, the blending unit can be an injector, which selectively injects butane into a gasoline stream." (*Id.*, col. 5:31-34) Similarly, the specification earlier notes that "[t]he apparatus for blending the butane and gasoline is any conventional Y-type or T-type juncture capable of joining two fluid flows into one." (*Id.*, col. 3:21-23) It is improper to construe a claim in a way that would exclude disclosed embodiments, *see, e.g.*, *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008), and so the above evidence (which suggests a blending unit can simply be a non-automated, mechanical junction) is powerful evidence that Defendants' proposed construction is the correct one.

This description in the specification—i.e., allowing the blending unit to be, *inter alia*, a mechanical device used to combine two or more streams into a single product—also comports with certain of the claims in the relevant patents. That is, some of the claims do not, on their face, require an automated blending unit. (D.I. 171 at 12; D.I. 188 at 7; Tr. at 87) For example, claim 1 of the '302 patent and claim 1 of the '686 patent (set out above) do not contain limitations expressly requiring automation with respect to the blending unit. (D.I. 171 at 12; D.I. 188 at 7; Tr. at 87; Defendants' Markman Presentation, Slides DDX-130-31)

To be sure, it is not disputed that a blending unit *could* have the technological capabilities that Sunoco advocates for (via its proposed construction). (*See* D.I. 188 at 5) Indeed, portions of the '302 patent specification explain that:

> The blending apparatus is *preferably* under the continuous control of a process control unit, which can vary the ratio at which gasoline and butane are blended to attain a desired vapor pressure or vapor/liquid ratio. . . .
>
> The process control unit receives measurements of the vapor pressure of the butane and gasoline, and from those measurements

> calculates the ratio at which the butane and gasoline should be blended to achieve the prescribed vapor pressure. Based upon those calculations, the process control unit emits a ratio input signal that controls the ratio of butane and gasoline blended by the blending unit.
>
> Thus, *in one embodiment*, the system comprises a process control unit, wherein the process control unit generates a ratio input signal that controls the ratio of butane and gasoline blended by the blending unit. . . .
>
> Thus, in *still another embodiment*, the invention provides a process control unit that; comprises one or more information processing units capable of transforming measurements from the gasoline and butane vapor pressure sensors into the ratio input signal, and maintaining or varying the ratio of gasoline and butane blended in the blending unit.

('302 patent, cols. 3:28-31, 6:14-26, 8:7-12 (emphasis added)) These excerpts could be read to describe example embodiments wherein the blending unit is *capable of* receiving a calculated blend ratio from a processing/process control unit and adjusting the actual blend rate to achieve the calculated blend ratio. But, of course, claims are generally not limited in scope to a preferred embodiment. *See, e.g.*, *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1370 (Fed. Cir. 2003). And again, here the specification makes clear that the "blending unit *can be* as simple as 'any conventional Y-type or T-type juncture capable of joining two fluid flows into one.'" (D.I. 188 at 5 (certain emphasis in original) (quoting '302 patent, col. 3:21-23))

While claim 1 of the '302 patent does not require an automated blending unit, dependent claim 2 of the '302 patent recites a process control unit that generates a signal that controls the ratio of butane and gasoline blended by the blending unit. (*See* D.I. 171 at 12-13; Tr. at 88, 91-92) Specifically, claim 2 recites "[t]he system of claim **1** further comprising a process control unit, wherein the process control unit generates a ratio input signal that controls the ratio of butane and gasoline blended by the blending unit." ('302 patent, col. 13:24-27) The "presence

of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004). With claim 1 of the '302 patent not expressly requiring a process control unit to be a part of the claimed system that includes a blending unit, it would not be necessary for the blending unit recited in claim 1 to be capable of receiving a calculated blend ratio from a process control unit and adjusting the actual blend rate to achieve the calculated blend ratio. Yet Sunoco's proposed construction would improperly read in such a requirement.[5]

Defendants' construction, on the other hand, "would make sense both in the context of a blending unit that is just a pipe junction or a blending unit that is doing lots of signaling or receiving signals." (Tr. at 95; *see also id.* at 87 ("A conventional apparatus [that achieves] blending of two or more separate streams into one could be the most complicated, NASA-generated blending unit imaginable or it could be a pipe junction.")) Consideration of the claims

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[5] The written description seems to reveal another reason why Sunoco's proposal does not comport with the intrinsic record. The specification of the '302 patent describes an embodiment where the processor sends a signal to "programmable logic controllers" coupled to the processor, which "directs the programmable logic controllers to allow a certain amount of butane to be blended with the gasoline." ('302 patent, col. 12:25-29) It seems that the programmable logic controllers "control injectors[;]" injectors, as described above, can constitute a blending unit. (*Id.*, col. 11:34-36) Similarly, claim 17 of the '302 patent recites a method of blending gasoline and butane that comprises, *inter alia*: (1) "transmitting a signal that corresponds to the vapor pressure of the blend from the processing unit *to a programmable logic control*"; and (2) "*adjusting the ratio of butane and gasoline* blended in the blending unit *with the programmable logic control.*" (*Id.*, col. 14:45-50 (emphasis added)) Thus, the intrinsic record suggests that another component of the invention (the programmable logic controller) could be responsible for receiving a signal from the processor and adjusting the blend ratio. (*See* D.I. 188 at 7-8; Tr. at 91) Yet Sunoco's proposal would require the *blending unit itself* to always be capable of performing these tasks. (*See, e.g.*, Sunoco's Markman Presentation, Slide 26 (contending that "[i]n [a]ll [a]sserted [p]atents, [t]he '[b]lending [u]nit' [m]ust [p]erform [t]wo [f]unctions": (1) receiving a calculated blend ratio from a processing/process control unit; and (2) adjusting the actual blend rate to achieve the calculated blend ratio))

demonstrates that other claim limitations expressly require, where applicable, that the blending unit be capable of receiving a calculated blend ratio and adjusting the actual blend rate to achieve the calculated blend ratio. For example, claim 7 of the '686 patent recites:

> **7.** A system for in-line blending of gasoline and a volatility modifying agent comprising:
>
> a) a continuously flowing gasoline stream that comprises:
>
> i) a plurality of batches of different types of gasoline;
>
> ii) a gasoline flow rate that varies over time; and
>
> iii) a plurality of gasoline vapor pressures;
>
> b) an agent stream that comprises an allowable agent vapor pressure;
>
> c) a *blending unit* for blending said gasoline stream and said agent stream at an actual blend ratio and an actual blend rate to yield a blended gasoline stream;
>
> d) an upstream vapor pressure sensor in sensory communication with said gasoline stream upstream of said blending unit; and
>
> e) one or more information processing units (IPUs) in informational communication with said upstream vapor pressure sensors, logically programmed to calculate a calculated blend ratio and calculated blend rate based upon vapor pressure and volumetric flow rate of said gasoline stream, and for communicating said calculated blend ratio and calculated blend rate to said blending unit;
>
> f) *wherein said blending unit periodically accesses said calculated blend ratio and calculated blend rate from said one or more IPUs, and adjusts the actual blend ratio and actual blend rate to coincide with said calculated blend ratio and calculated blend rate.*

('686 patent, cols. 16:44-17:3 (emphasis added)); *see also* Defendants' Markman Presentation, Slide DDX-132) Thus, the blending unit recited in claim 7 would be "any conventional apparatus that achieves blending of two or more separate streams into one[,]" and the additional

language in part (f) of the claim expressly recites further requirements of the blending unit (i.e., that it be capable of accessing the calculated blend ratio and blend rate from the IPU, and making adjustments accordingly).[6] *See, e.g.*, *Greatbatch Ltd. v. AVX Corp.*, C.A. No. 13-723-LPS, 2015 WL 1383656, at *3 (D. Del. Mar. 20, 2015) ("Given that claim 1 itself contains another limitation expressly requiring the claimed 'capacitor' has 'first and second sets of electrode plates,' the claim language in context strongly suggests that the phrase 'feedthrough capacitor' alone does not inherently contain such a requirement.").

For the above reasons, the Court recommends that "blending unit" be construed to mean "any conventional apparatus that achieves blending of two or more separate streams into one."

IV. CONCLUSION

For the foregoing reasons, the Court recommends that the District Court adopt the following construction:

1. "blending unit" should be construed to mean "any conventional apparatus that achieves blending of two or more separate streams into one"

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The failure of a party to object to legal conclusions may result in the

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[6] In support of its proposed construction, Sunoco points out that in every embodiment described in the specification of the '686 patent, "it uniformly assumes that the blending unit is (1) capable of receiving digital communications from an information processing unit (IPU) that is transmitting the desired blend ratio and (2) able to execute that blend ratio." (D.I. 176 at 8 (citing '686 patent, cols. 3:29-4:19); D.I. 191 at 6) That may be true, but claim 7 does not seem to just *assume* that the "blending unit" has such capabilities—rather, it *expressly recites* these capabilities as additional limitations in part (f) beyond the disclosure of a "blending unit" in part (c).

loss of the right to de novo review in the district court. *See Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987); *Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at http://www.ded.uscourts.gov.

Dated: July 26, 2019

Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE