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

Pending before the Court in this patent infringement case is Defendants Powder Springs Logistics, LLC ("Powder Springs") and Magellan Midstream Partners, L.P.'s ("Magellan," and collectively with Powder Springs, "Defendants") Motion for Summary Judgment of Non-Infringement and Invalidity (the "Motion"). (D.I. 381) Defendants make a number of different arguments in support of this Motion; this Report and Recommendation will address the Motion only as it relates to Defendants' argument that certain later-filed patents asserted by Plaintiff Sunoco Partners Marketing & Terminals L.P. ("Sunoco" or "Plaintiff") are not entitled to the priority date of the earliest-filed asserted patent.[1] For the reasons that follow, the Court recommends that the Motion be DENIED in that respect.

I. BACKGROUND

Plaintiff alleges that Defendants infringe five of Plaintiff's patents. Those patents are United States Patent Nos. 9,494,948 (the "'948 patent"), 9,606,548 (the "'548 patent"), 9,207,686 (the "'686 patent"), 6,679,302 (the "'302 patent") and 7,032,629 (the "'629 patent") (collectively,

[1] The Court has addressed the remaining portions of the Motion in other Reports and Recommendations.

"the asserted patents" or "the patents-in-suit"). The patents-in-suit relate to systems and methods for the automated blending of butane and gasoline. Defendants' Motion relates specifically to the following asserted claims of certain of the asserted patents that are continuation-in-part patents ("CIP patents") to the '302 patent: claim 3 of the '686 patent, claims 3 and 7 of the '948 patent, and claims 3 and 8 of the '548 patent (the "challenged claims" or "CIP claims"). (D.I. 440 at 2)

The Court hereby incorporates its summary of the technology at issue set out in its January 8, 2018 Report and Recommendation, (D.I. 68 at 1-8); further information about these subjects relevant to the pending Motion will be set out in Section III below. The Court also incorporates its summary of the procedural background of this matter, as set out in its January 16, 2020 Report and Recommendation. (D.I. 447 at 2)

II. STANDARD OF REVIEW

This portion of the instant Motion asserts that summary judgment should be granted, in that there is no genuine dispute as to any material fact that the challenged claims of the CIP patents are not entitled to the priority date of the '302 patent.

A. Summary Judgment

The Court hereby incorporates its prior discussion of the legal standards for resolving summary judgment motions, which was set forth in its January 16, 2020 Report and Recommendation. (D.I. 447 at 2-4)

B. Priority/Written Description

With regard to priority, "'[i]t is elementary patent law that a patent application is entitled to the benefit of the filing date of an earlier filed application only if the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. §

112.'" *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008) (quoting *In re Chu,* 66 F.3d 292, 297 (Fed. Cir. 1995)); *see also* 35 U.S.C. § 120. To satisfy this written description requirement, the disclosure of the prior application must "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession *of the invention.*" *Vas–Cath Inc. v. Mahurkar,* 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) (emphasis in original). "Compliance with the written description requirement is a question of fact but is amenable to summary judgment in cases where no reasonable fact finder could return a verdict for the non-moving party." *PowerOasis*, 522 F.3d at 1307.

III. DISCUSSION

Defendants seek summary judgment that the challenged claims of the CIP patents are not entitled to the filing date of the '302 patent because, according to Defendants, the '302 patent fails to provide written description support for two aspects of the CIP patents' claims—"pipeline blending" and "feedback control." (*See* D.I. 382 at 11-12, 18-23) The Court will discuss these independent bases for summary judgment in turn below.

A. "Pipeline Blending"

First, Defendants argue that the CIP claims are not entitled to the priority date of the '302 patent because the '302 patent does not provide written description support for "pipeline blending." Below, the Court first assesses the meaning of the term "pipeline blending"; thereafter, it addresses whether the '302 patent contains sufficient written description support for such a concept.

1. What Does "Pipeline Blending" Require?

Both parties use the term "pipeline blending" in arguing that the CIP claims are (or are not) entitled to the priority date of the '302 patent. (*See, e.g.*, D.I. 382 at 18; D.I. 405 at 21) The

parties disagree, however, as to what exactly is encompassed by the term. Defendants consider "pipeline blending" to describe blending at a location *other than* the tank farm, and argue that the '302 patent only "repeatedly and consistently describes its invention as blending *at tank farms* immediately before distribution." (D.I. 382 at 19 (emphasis added); *see also id.* at 18-21) Plaintiff, however, reads "pipeline blending" as a term that describes blending that can be performed at a tank farm (so long as it happens in a pipeline). (D.I. 405 at 21 ("blending at a 'tank farm' does not exclude, but rather encompasses, pipeline blending"))

In understanding what sort of "pipeline blending" must be sufficiently disclosed in the '302 patent, the Court must turn to the CIP claims themselves. In doing so, it notes that none of those claims use the term "pipeline" or "pipeline blending." ('548 patent, cols. 17:11-28, 32-35 (claim 3); *id.*, cols. 17:40-18:3, 18:7-10 (claim 8); '948 patent, col. 17:9-32, 35-36 (claim 3); *id.*, col. 18:12-35 (claim 7); '686 patent, cols. 15:62-16:13, 16:16-23 (claim 3)) And only the challenged claims of the '948 patent use the term "pipe." ('948 patent, col. 17:9-32, 35-36 (claim 3) ("[a] system for blending butane with gasoline in a pipe" and "a vapor pressure analyzer connected to said pipe"), *id.*, col. 18:12-35 (claim 7) (same)) Instead, the majority of the CIP claims refer to "in-line blending" and/or the blending of butane in a "gasoline stream." ('548 patent, cols. 17:11-28, 32-35 (claim 3); *id.*, cols. 17:40-18:3, 18:7-10 (claim 8); '686 patent, cols. 15:62-16:13, 16:16-23 (claim 3))

Thus, it appears from the actual limitations of the challenged CIP claims that written description support must be found in the '302 patent simply for "blending butane with gasoline in a pipe," ('948 patent claims) and "in-line blending" of butane with a "gasoline stream," ('686 and '548 patent claims). *Cf. Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1333 (Fed. Cir. 2003) ("the patentee need only describe the invention *as claimed*, and need not describe an

unclaimed method of making the claimed product" (emphasis added)); *see also* Robert A. Matthews, Jr., Annotated Patent Digest § 22:34 (2020) ("The written-description requirement generally does not require a description of unclaimed aspects of the invention, unless those aspects are critical to the claimed invention."). Relatedly, the Court sees no indication that this concept of pipeline blending, captured in the CIP claims at issue, excludes blending in a "pipeline" at a tank farm.

2. Is "Pipeline Blending" Supported by the '302 Patent?

Next, the Court considers whether, as Defendants argue, there is no genuine dispute as to any material fact that the '302 patent does not contain a "pipeline blending" disclosure (as that term is understood in the manner set forth above). For the following reasons, the Court concludes there *is* a genuine dispute of material fact here.

For one thing, pipeline blending is explicitly discussed in the '302 patent specification. In the "Background of the Invention" section, the '302 patent teaches that "[b]utane is also added to gasoline while it is transported in the pipeline, after consolidation of various trunk lines from refineries." ('302 patent, col. 2:10-12; *see also id.*, col. 5:35-38 ("The ratio at which the gasoline and butane streams are blended can be controlled *at a variety of points along the path of travel for the gasoline and butane*, using a variety of methods.") (emphasis added); D.I. 406, ex. A at ¶¶ 688-89)[2] To be sure, as Defendants note, (D.I. 382 at 19, 21), the specification does also

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[2] There are also some portions of the specification that could be read to describe blending operations that relate to gasoline transported in pipelines. (*See, e.g.*, '302 patent, col. 7:20-26 ("Because of the variability in-vapor pressure of gasoline (*due to the varying composition of gasoline delivered through pipelines*) and butane . . . the vapor pressure is preferably measured directly[.]") (emphasis added); *id.*, col. 8:50-54 (noting the "substantial variability in the gasoline received *from commercial pipelines*, and this variability can be taken into consideration, based upon the timing of gasoline deliveries to the tank farm") (emphasis added); *see also* D.I. 406, ex. A at ¶ 689)

describe some "difficult[ies]" in performing blending in a pipeline (i.e., the challenges in blending with precision in a pipeline due to varying rates of flow and vapor pressure, and the difficulty in physically breaching a pipeline to accomplish the blend), ('302 patent, col. 2:14-23). But as Plaintiff points out, in this part of the specification, the patent seems to be describing mere "difficulties—not disadvantages" to pipeline blending. (D.I. 405 at 23 (emphasis omitted)) And just a few lines later, the patent also describes similar "complications" with achieving precise blending at a tank farm (i.e., the very type of blending Defendants say that the patent is directed to). (*Id.* at 23 n.21 (emphasis omitted); *see also* D.I. 406, ex. A at ¶ 688; Tr. at 190-91) In sum, the patent's discussion of certain challenges inherent to pipeline blending does not clearly amount to an indication that the claimed inventions are unusable in the pipeline context (including via pipeline blending that may occur at a tank farm). *See ScriptPro LLC v. Innovation Assocs., Inc.*, 833 F.3d 1336, 1341 (Fed. Cir. 2016) ("[M]ere recognition in the specification that an aspect of a prior art system is 'inconvenient' does not constitute 'disparagement' sufficient to limit the described invention—especially where the same specification expressly contemplates that some embodiments of the described invention incorporate the 'inconvenient' aspect."); *cf. Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1306 (Fed. Cir. 2011) ("In general, statements about the difficulties and failures in the prior art, without more, do not act to disclaim claim scope.").

Moreover, while it is certainly true that the '302 patent states that the "present invention is a system and method for blending butane with gasoline *at the tank farm*, immediately before the gasoline is dispensed to a tanker truck[,]" ('302 patent, col. 3:14-16 (emphasis added); *see also id.*, col. 1:13-14), the Court does not see why, even if the '302 patent claims were all in

some way related to tank farm blending,[3] that would necessarily exclude the concept of blending in a pipeline. Indeed, the CIP patents indicate that it is possible for butane to be "physically added to the pipeline" at the "tank farm[.]" ('948 patent, col. 5:1-8)

Additionally, the prosecution history of a related patent—United States Patent No. 7,631,671 (the "'671 patent"), the first CIP patent—provides further support to Plaintiff's argument. (D.I. 405 at 19)[4] Specifically, the '671 patent underwent supplemental examination (initiated by Plaintiff) in order to examine a butane blending system ("the Macungie system") that the inventors were "involved with" and that bore on the validity of the '671 patent. (*Id.* at 19; *see also* Tr. at 187-88) According to Plaintiff, the Macungie system "blended butane into a pipeline as gasoline flowed past the facility." (D.I. 405 at 19 (citing D.I. 406, ex. I at 44526-27)) The Examiner considered the Macungie system, and determined that it "disclose[d] the claimed limitations of claims 1, 2, 4, 5, 7-9, 12, 13, 42-47, 52 and 53" of the '671 patent (claims to, *inter alia*, methods and systems for "in-line blending"[5]), but "d[id] not qualify as prior art . . . due to the showing that the *'302 priority patent disclosed the claimed features of these claims*[.]" (D.I. 406, ex. I at 44572) (emphasis added)) That this Examiner considered the '302 patent to disclose

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[3] As Plaintiff notes, there are claims of the '302 patent (like claim 27) that, on their face, do not seem to explicitly require blending gasoline from a tank or distributing blended gasoline from a rack. (D.I. 405 at 22; *see also* D.I. 406, ex. A at ¶ 686)

[4] Plaintiff actually points for support not only to the prosecution history of the '671 patent, but also to the prosecution history of other CIP patents. (D.I. 405 at 19-20) Because the Court finds that the prosecution history of the '671 patent is sufficient to help explain why a genuine issue of material fact exists here, the Court need not discuss the other prosecution histories cited by Plaintiff.

[5] (*See, e.g.*, '671 patent, cols. 15:56-16:7 (claim 1 reciting "in-line blending of gasoline and butane"), 20:25-51 (same for claim 42), 22:23-39 (claim 53 reciting "in-line blending of petroleum and butane"))

pipeline blending, while certainly not dispositive here, helps further articulate why there is at least a genuine issue of material issue of fact as to this dispute.[6] (*See also* D.I. 406, ex. A at ¶ 690)

For all of the reasons set out above—which are also cited by Plaintiff's expert, Dr. Harri Kytomaa, in support of Plaintiff's position on this issue, (*Id.* at ¶¶ 685-93)—the Court concludes that there is a genuine issue of material fact as to whether the '302 patent provides sufficient written description support for the concept of "pipeline blending" (as that term is defined above). Therefore, the Court cannot recommend granting summary judgment on this basis.

B. "Feedback Control"

Defendants alternatively argue that the challenged CIP claims are not entitled to the priority date of the '302 patent because the '302 patent fails to sufficiently disclose "feedback control." (D.I. 382 at 21-23; D.I. 414 at 15-16) Defendants describe a "feedback system" as being disclosed in the '671 patent; Defendants refer to this system as one that "'automatically adjust[s] the amount of butane added to a gasoline stream at a petroleum refinery, based on continuous measurements of the Reid vapor pressure [or "RVP"] of the gasoline downstream from the point of blending.'" (D.I. 382 at 22 (quoting '671 patent, col. 2:22-26) (certain

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[6] Defendants do not dispute the content of the above-described prosecution history of the '671 patent. Instead, they argue that the Examiner there "simply got it wrong[,]" in part because the Examiner "relied on [Plaintiff]'s statements without the benefit of the evidence presented here[.]" (D.I. 414 at 12-13) But, regarding Defendants' "pipeline blending" argument, Defendants rely principally on material that was in front of the Examiner at the time of the supplemental examination: the '302 patent specification, the prosecution histories of the '302 patent and the '629 patent, and the specification of the '671 patent. (D.I. 382 at 18-21; D.I. 414 at 12-15) Defendants also argue that because the '671 patent is an unasserted patent, any findings made during proceedings regarding that patent are "irrelevant." (D.I. 414 at 13) Yet Defendants themselves cite to the '671 patent in making other arguments as to the "pipeline blending" issue. (D.I. 382 at 20) It is hard to see why, if the '671 patent is relevant to one side's case here on summary judgment, it could not also be relevant to other side's case too.

emphasis omitted)) Defendants argue that the '671 patent "distinguished [feedback systems] from feedforward systems, explaining that the prior art 'does not include measuring the Reid vapor pressure upstream of the blending operation, or calculating the blend ratio based on the Reid vapor pressure upstream from the blending operation[.]'" (*Id.* (quoting '671 patent, col. 2:27-32) (certain emphasis omitted)) Thus, the key points for Defendants seem to be that, in a so-called "feedback system" utilizing "feedback control," the amount of butane blended into the gasoline is adjusted based on a "downstream" measurement of the vapor pressure of the blended gasoline and butane.[7]

For the reasons set forth below—and even assuming that the meaning Defendants ascribe to the term "feedback control" is correct, and that all of the CIP claims actually require the level of feedback control that Defendants assert[8]—the Court recommends that summary judgment be denied on this ground too. It so concludes for three primary reasons.

First, a portion of the '302 patent specification explicitly refers to how the "system of the present invention can be modified to periodically sample the RVP of the resultant blend [of butane and gasoline] for quality control[.]" ('302 patent, col. 7:10-14) Defendants do not dispute that this is an explicit teaching of measuring the vapor pressure of blended gasoline and butane. (D.I. 382 at 22) Instead, they argue that this is "not a disclosure of a feedback system" because the measurement is merely used "'for quality control'"—and not to adjust the amount of butane blended into gasoline. (*Id.*)

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[7] (*See* Tr. at 183 (Defendants' counsel arguing that "feedback would require" "measuring the blended gasoline and using that to calculate the blend ratio and control the blending"))

[8] The Court does not actually see why at least some of the CIP claims require the type of feedback control described by Defendants.

Yet Plaintiff's expert, Dr. Kytomaa, has testified that a person of ordinary skill in the art *would have* understood the term "quality control" (as recited in the '302 patent specification) to encompass using the vapor pressure measurement of the blended butane and gasoline to adjust the blend ratio. (D.I. 406, ex. Q at 155-56 (Dr. Kytomaa explaining that while this "quality control check" is "primarily [not about] continual active control[,]" there is nevertheless "an overlap between what this quality control concept provides . . . and the concept of feedback or controlling in such a way as to measure the blended gasoline RVP to then continually adjust the RVP to the target RVP"); *see also id.* at 154) Moreover, the positioning of this "quality control" disclosure in the '302 patent specification supports Dr. Kytomaa's opinion. That disclosure occurs at the end of the paragraph discussing "[m]ethods for *determining* blend ratios"—and not in the immediately preceding or immediately following paragraphs regarding "*measuring* vapor pressure[.]" ('302 patent, cols. 6:53-7:27 (emphasis added)) This also provides a clue that the inventor considered the "quality control" measurement of the blended vapor pressure to encompass the "determin[ation of] blend ratios[.]"

Second, claim 17 of the '302 patent supports Plaintiff's written description argument. *See Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1297 (Fed. Cir. 2017) ("Original claims are part of the original specification and in many cases will satisfy the written description requirement."); *ScriptPro*, 833 F.3d at 1341. Claim 16, from which claim 17 depends, recites that the blend ratio is first determined by, *inter alia*, "transmitting the gasoline vapor pressure . . . to the processing unit[,]" and then using the "gasoline vapor pressure" to "calculat[e] the blend ratio[.]" ('302 patent, col. 14:33-44) Claim 17 adds the steps of "transmitting a signal that corresponds to the *vapor pressure of the blend* from the processing unit *to a programmable logic control*" and "*adjusting the ratio of butane and gasoline blended* in

the blending unit *with the programmable logic control*." (*Id.*, col. 14:45-50 (emphasis added)) This certainly reads to the Court like a disclosure allowing for the adjustment of the ratio of butane and gasoline based on the vapor pressure of the blend.

Third, the prosecution history of the '686 patent also helps support Plaintiff's position. At least one allowed claim of the '686 patent (claim 16) explicitly recites "measuring [the] vapor pressure of the blended petroleum stream" and "calculating a blend ratio based upon a blended petroleum vapor pressure"—i.e., feedback control. ('686 patent, col. 18:21-36) And the '686 patent Examiner stated that a "thorough examination of the claims has been conducted to determine the filing date of each claim[,]" concluding that, as to issued claim 16 (application claim 70), the claim should benefit from the filing date of the '302 patent. (D.I. 406, ex. N at 1344-45; *see also id.*, ex. A at ¶ 705) For similar reasons as set out above in the prosecution history discussion regarding "pipeline blending," this is an additional data point supporting the idea that a genuine fact dispute exists here.

For these reasons, the Court recommends that Defendants' Motion should also be denied due to the existence of a genuine issue of material fact as to whether the '302 patent disclosed "feedback control."

IV. CONCLUSION

For all of the above reasons, the Court recommends that Defendants' Motion for Summary Judgment be DENIED as it relates to the priority date of the challenged CIP claims.

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

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

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: March 13, 2020

Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE