UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

SUNOCO PARTNERS MARKETING & TERMINALS L.P.,	)	
Plaintiff,	)	
v.	)	**No. 15 C 8178**
U.S. VENTURE, INC., U.S. OIL, and TECHNICS, INC.,	)	**Judge Rebecca R. Pallmeyer**
Defendants.	)	

MEMORANDUM OPINION AND ORDER

To increase the volatility of gasoline in colder temperatures, gasoline producers mix butane into gasoline before it is sold. Butane is cheaper than gasoline. Thus, the more butane a producer can blend into the product, consistent with environmental regulations that vary by location and season, the greater the producer's profit margin. Plaintiff Sunoco Partners Marketing and Terminals L.P. ("Sunoco") owns several patents on a system that blends butane into gasoline immediately before it is distributed to retail gas stations. The patented system allows a producer to blend the maximum permissible amount of butane based on the destination of the batch. In this lawsuit, Sunoco contends that Defendants U.S. Venture and U.S. Oil (jointly, "Venture") have infringed its patents by using a butane blending system that Venture purchased from former Defendant Technics, Inc. Sunoco now moves for partial summary judgment against Venture on certain claims in two of the patents. Venture moves for partial summary judgment on certain claims, as well; where those arguments overlap with Sunoco's motion, the court addresses Venture's motion here. For the reasons below, Sunoco's motion is granted in part and denied in part. Venture's motion is denied in part; the court reserves ruling on the issues raised in that motion that are not addressed here.

BACKGROUND

Sunoco is the holder of several patents on systems that blend butane into gasoline. (Pl.'s Statement of Facts in Supp. of Mot. for Summ. J. ["Pl.'s SOF"] [132] at ¶¶ 4, 11–12, 14.) Commercial purveyors of gasoline—those that sell gasoline by the tankload to consumer-facing retail gas stations—add butane because it is more volatile than gasoline, allowing cars to start consistently in colder weather. (*Id.* ¶ 8.) Because adding lower-priced butane to gasoline improves profit margins, commercial sellers are motivated to blend as much butane as possible into gasoline before selling it to retail stations. (*Id.*)

That goal, however, is complicated by United States Environmental Protection Agency ("EPA") regulations. As noted, adding butane to gasoline increases the volatility of the blended gasoline (*id.* ¶ 7), but gasoline with higher volatility contributes to smog, a particular concern in warmer climates and during summer months, *Gasoline Reid Vapor Pressure*, EPA.GOV, https://www.epa.gov/gasoline-standards/gasoline-reid-vapor-pressure (last accessed Sept. 20, 2017). The EPA therefore imposes limits on the allowable volatility of gasoline, measured by "Reid Vapor Pressure" or RVP, based on the month and the state where the gasoline is sold. (Pl.'s SOF ¶ 6.) Limits range from an RVP of 7.8 pounds per square inch to 15. (*Id.*)

At issue in this motion are two of Sunoco's patents, U.S. Patent Nos. 6,679,302 (the "'302 Patent") (Ex. 3 to Pl.'s SOF [130-3]), and 7,032,629 (the "'629 Patent") (Ex. 8 to Pl.'s SOF [130-8]). The patented systems allow the patent holder to blend butane into gasoline at the last point of distribution before the gas is taken by tanker trucks to retail gas stations; called "terminals" or "tank farms," these facilities receive gasoline from refineries and store it in large tanks for distribution. (*See* Pl.'s SOF ¶ 13; '302 Patent col. 4 ll. 38–60.) In an exemplary embodiment, the system blends butane into gasoline immediately before it is dispensed into a tanker truck: butane and gasoline are drawn from a tank of each, blended to the desired RVP in a blending unit, and dispensed to the truck. (*E.g.*, '302 Patent col. 3 ll. 14–27.) The '302 patent

has 41 claims, and the '629 patent has 33, which are all restatements and refinements of this idea. (*See generally* '302 & '629 Patents.)

The inventors of the patented system, Larry Mattingly and Steve Vanderbur, filed the application that led to the '302 and '629 patents in February 2001. (Pl.'s SOF ¶ 12.) After the patents were issued, Mattingly and Vanderbur assigned them to Texon Terminals Corporation ("Texon"). (*See id.* ¶¶ 11, 14.) Sunoco bought Texon's butane blending business—and the patents—in 2010. (*Id.* ¶ 14.)

Defendant U.S. Venture, and its division U.S. Oil, retained former-Defendant Technics, Inc. to install a butane blending system in or around 2012[1] at three of Venture's terminals in Wisconsin: Green Bay, Madison South, and Milwaukee Central. (*Id.* ¶¶ 19–20; Defs.' Statement of Material Facts [hereinafter "Defs.' SOF] [197 at p. 28] at ¶ 1.) Venture also owns three other accused blending systems—installed at the Fort Worth, Bettendorf, and Milwaukee West terminals—which Venture developed internally and installed after the Technics systems were installed. (*Id.* ¶¶ 2, 53.) Sunoco contends that all six systems infringe its butane-blending patents, and brought this suit in September 2015 against both Technics and Venture. (*See* Compl. [1].)

Sunoco settled with Technics and dismissed the company from the suit with prejudice in June 2016. (Pl.'s Mot. to Dismiss Technics, Inc. with Prejudice [60].) As part of this settlement, Sunoco agreed not to sue Technics for infringing activities that occurred prior to the date of the settlement agreement. (Settlement Agreement, Ex. 3 to Decl. of Kimberly K. Dodd [195] at 3.)

[1] Neither party includes the date of this agreement or the date on which the terminals were installed. It appears that Venture first contacted Technics in 2010 (E-mail from Mike Koel to Thomas Edwards (May 21, 2010, 2:05 PM), Ex. 41 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 44]), and that Venture planned to install the systems in late 2011 or early 2012. (U.S. Venture, Project Charter: 2012 Terminal Margin Improvement, Ex. 15 to Pl.'s SOF [133-3].) The construction schedules reflect that the Green Bay and Madison South systems were to be installed in March through April 2012. (*See* Green Bay Blending Construction Schedule, Ex. 46 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 76]; Madison South Blending Construction Schedule, Ex. 47 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 79].) The court finds no reference in the record to the Milwaukee Central installation.

The agreement specified, however, that it was not a license that pertained to future use by Technics or Technics's customers. (*Id.*)

Sunoco now moves for partial summary judgment against Venture. Sunoco contends that there is no factual dispute regarding the equipment involved in the systems at Green Bay and Madison South. As to those terminals,[2] Sunoco asserts that Venture infringed (1) the '302 patent's Claims 1–3 and 8–9, and (2) the '629 patent's Claims 1–3, as a matter of law.[3] All of the claims at issue describe a system that blends gasoline and butane from a tank of each through a blending unit, and dispenses the blended product at a "rack" to gasoline transport vehicles. (*E.g.*, '302 patent col. 13 ll. 12–23.) Claims 2, 3, 8 and 9 of the '302 patent and claims 2 and 3 of the '629 patent are various refinements of the system described in Claim 1 of each patent. Venture argues that Sunoco exhausted its patents by settling with Technics, and points to several purported differences between the Green Bay and Madison South blending systems that render the Venture systems non-infringing, at least in some "configurations."[4]

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[2] Though there are six accused systems, Sunoco's motion is limited to the Green Bay and Madison South terminals. (Pl.'s Mem. in Supp. of Partial Summ. J. [131] at 8.)

[3] On September 11, 2017, well after briefing was complete, Sunoco withdrew its assertion that Venture infringed Claims 1, 8 and 9 of the '302 Patent and Claim 1 of the '629 Patent, among others. (Pl.'s Notice of Currently Asserted Claims [251] at 3.) The court is unsure that the withdrawal of those claims would have any material effect on this opinion, which was substantially drafted at the time Sunoco withdrew the claims. As Sunoco acknowledges, Claims 2 and 3 of the '302 patent are dependent upon Claim 1, as are Claims 2 and 3 of the '629 patent on Claim 1 of the '629 patent. (*See id.*) Any finding that these dependent claims were infringed would require that Venture performed all of the steps of Claim 1 of the respective patent. *Honeywell Int'l Inc. v. Univ. Avionics Sys. Corp.*, 488 F.3d 982, 995 (Fed. Cir. 2007) ("Of course, infringement of a dependent claim also entails infringement of its associated independent claim.") Accordingly, the court will invite the parties to make brief submissions explaining what alterations to this court's rulings, if any, are required by Sunoco's withdrawal of those claims.

[4] The court ruled on construction of several terms contained in the claims at issue in this motion after Sunoco filed its motion for summary judgment. (Mem. Op. & Order (Apr. 28, 2017) [171].) At the time it filed the motion, Sunoco believed that none of its arguments would be affected by claim construction. (Pl.'s Mem. in Supp. of Partial Summ. J. [131] at 22–26.) Now that the claim construction opinion has issued, neither party has alerted the court to any effect on Sunoco's motion.

I. Source of the Gasoline

All eight of the claims at issue require blending from a gasoline tank. ('302 Patent col. 13 ll. 11–31; '629 patent col. 13 ll. 11–29.) Dan Morrill (Venture's Director of Terminal Development, who "direct[s] and oversee[s] development of all of U.S. Venture's gasoline terminals"), claims that the Madison and Green Bay systems can use gasoline either from a gasoline tank or "straight from the pipeline." (Decl. of Dan Morrill (May 24, 2017) [194] at ¶¶ 1, 7.) Although Venture apparently concedes that these two systems do sometimes blend from a gasoline tank, Venture claims that it prefers to blend from the pipeline (*see* Pl.'s SOF ¶¶ 21–26); Venture asserts (and Sunoco does not challenge this) that blending from the pipeline does not infringe Sunoco's patents. As explained below, Venture asks the court to consider not only whether Venture infringes the claims, but also to examine these two configurations—blending from a pipeline or from a tank—separately, and to grant summary judgment of non-infringement on the "pipeline configuration."

II. Upstream Vapor Pressure Measurements

As noted, Venture argues that in blending from a pipeline, it does not infringe Claim 1 or any of the dependent claims of the '629 patent. Venture asserts that it does not infringe Claim 3 for an additional reason: the Green Bay and Madison South systems do not have butane vapor pressure sensors upstream of the blending unit. Claim 3 of '629 patent refines the system of Claim 1 by adding vapor pressure sensors to the system; the claim reads as follows:

> The system of Claim 1 further comprises
>
> a gasoline vapor pressure sensor operable for measuring the vapor pressure of gasoline upstream of the blending unit; and
> a butane vapor pressure sensor operable for measuring the vapor pressure of butane upstream of the blending unit,

('629 Patent col. 13 ll. 24–29.) With respect to the systems purchased from Technics (which include the Green Bay and Madison South systems), Venture contends that those systems were never "operable" for taking an upstream butane vapor pressure measurement, and therefore

they do not infringe Claim 3. Venture admits that the physical components for sensing butane vapor pressure upstream of the blending unit were present in Venture's systems at one point. (Defs.' SOF ¶¶ 28–30.) Indeed, Venture acknowledges, Technics *intended* to use vapor pressure measurements of the butane and gasoline taken upstream of the blending unit; that is, the streams of gasoline and butane were to be measured to determine the proportion of each that would achieve the desired RVP in the blended gasoline. (*Id.* ¶ 5.) Technics installed a butane sampling "line" (the court believes this is a small pipe) from the butane stream to the analyzer, the part of the system capable of measuring vapor pressure. (*Id.* ¶¶ 7, 9.) But Venture claims that there is no evidence that these sampling lines were ever actually used. (*Id.* ¶ 8.)

In order to bring butane from the stream to the analyzer, a pump must draw the butane through the line. (*Id.* ¶ 29.)[5] Venture does not dispute that the necessary pumps were present at Green Bay and Madison South. (*See id.* ¶¶ 29–30.) But according to Venture, there is no evidence that the Technics software that controlled the system—this software is referred to by the parties as the "source code"—ever had the necessary programming to control the pumps. (*Id.* ¶ 30.) Venture eventually wrote its own source code to replace the Technics source code, and implemented that code in the three Technics-designed systems: Madison (replaced in July 2013), Green Bay (replaced May 2014), and Milwaukee Central (replaced September 2016). (Pl.'s SOF ¶ 19; Morrill Decl. ¶¶ 8, 23.)[6] The Venture source code, the parties agree, has no programming to control the butane sampling pumps. (Pl.'s 2d Resp. to Defs.' SOF [220] at ¶ 32.)

[5] Sunoco denies that a pump is required to bring butane from the stream to the analyzer, but does not further explain how this could occur, nor does it allege that any alternative method was in place to draw butane into the analyzer in the accused systems. (Pl.'s Resp. to Defs.' SOF [206] at ¶ 29.)

[6] Venture did not provide the dates that the source code was replaced in its statement of facts, but the court concludes those dates are not material to the disposition of this motion.

In addition to the fact that it lacked the source code necessary to control the pumps in the systems furnished by Technics, Venture contends, the connections between the sampling lines and the analyzer in those systems—called "inlet valves"—have always been disabled. (*Id.* ¶¶ 37–40.) Exactly what "disabled" means in this context is not explained in Venture's submissions, but the court understands that the fact that the inlet valves were disabled meant that butane could not enter the analyzer. (*Id.* ¶ 42.)

Eventually, the sampling lines at Green Bay, Madison South, and Milwaukee Central were removed entirely. Specifically, after a February 2013 leak (presumably from the butane sampling line) at the Green Bay terminal, Venture asserts, the butane sampling line was removed from the Green Bay terminal to prevent additional leaks. (*Id.* ¶¶ 43–45.) Sunoco disputes that the line was removed in or around February 2013; in support, Sunoco points to an e-mail from Dan Morrill in July 2016 to three other Venture employees. In his e-mail, Morrill discussed the designs of the systems at the Madison and Green Bay terminals, and stated that the butane sampling lines had not been removed, but he hoped to have them removed in the near future. (E-mail from Dan Morrill to Dan Herman, et al. (July 26, 2016, 8:35 AM), Ex. 44 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 70].)

After the leak at Green Bay in February 2013, Venture contends that it "permanently closed" the valves between the butane stream and the sampling lines at Madison and Milwaukee Central, as well. (Defs.' SOF ¶ 46.) Venture does not explain what "permanently closed" means, and for that reason Sunoco denies this assertion in Venture's statement of facts. (Pls.' Resp. to Def.'s SOF [206] at ¶ 46.) It appears that "permanently" does not mean "irrevocably": a former Milwaukee Central terminal manager, Richard Gibowski, acknowledged in his deposition that re-opening the valves would not require a "tremendous amount of effort." (Dep. of Richard Gibowski, Ex. 63 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 251] at 157:15–21.) The sampling line at Madison was removed in July 2016. (Defs.' SOF ¶ 48.)

Venture contends that the sampling system was never used, even before the physical components of the system were "disabled." The record is muddy on why and when the decision was made not to use the butane sampling system, though Venture asserts that the upstream butane sampling was discontinued because that part of the system did not work. (Venture's Non-Infringement Contentions, Ex. 26 to Pl.'s SOF [133-10] at 6.) Gary Chambers, a former terminal manager for the Green Bay terminal, explains in a declaration that the Technics-designed system installed there had a butane vapor pressure sensor upstream of the blending unit, but it did not "operate as intended." (Decl. of Gary Chambers (Jun. 28, 2016) [190] at ¶ 11). He does not explain exactly what went wrong. (*Id.*)

Because that part of the system did not work, Venture—or Technics, at Venture's direction—closed the valves at the three Technics-designed system locations (Madison, Green Bay and Milwaukee Central) and Venture did not use the butane sampling system. Exactly when this happened is not clear from the record: in its Local Rule 56.1 Statement of Facts, Venture asserts that the problem was discovered during the "installation and testing of the first two systems (Madison and Green Bay)[,]" in 2012,[7] and that Morrill instructed Technics to use only downstream volatility measurements to determine the blend ratio. (Defs.' SOF ¶ 14; Morrill Decl. ¶ 19.) Technics then "implemented the Madison and Green Bay systems to use only 'downstream' measurements." (Defs.' SOF ¶ 14.) Thus, when the two systems were "turned . . . over" to Venture for use, Venture claims, they provided only downstream vapor pressure measurements, rather than the upstream vapor pressure measurements that Sunoco alleges infringe Claim 3 of the '629 patent. (Defs.' SOF ¶ 15.)[8]

[7] Again, the parties do not say exactly when the systems were installed; the court believes based on the construction schedules that these systems were installed in early 2012. *See supra* n.1.

[8] Venture does not explain in what capacity Chambers, Venture's terminal manager at Green Bay, had access to the system during the installation process that was allegedly conducted by Technics, though his declaration implies that he was involved when the problem was discovered. (*See* Chambers Decl. ¶ 11.)

Any initial testing of the butane sampling system was done by Technics alone, Venture asserts. According to Venture, Venture itself has never used or owned a system that had upstream butane vapor pressure sensors in infringement of Claim 3 of the '629 patent. (Defs.' Resp. to Pl.'s SOF [197] at ¶ 68.) There is evidence, though, that Venture was intimately involved in the installation of each of the systems. In an e-mail, Morrill made clear that for the three Technics-designed systems, Venture itself was providing the tanks—Technics provided only the "blending skid"—and that Venture performed the installation. (E-mail from Dan Morrill to Dave Hermann, et al. (October 7, 2011, 6:46 AM), Ex. 37 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 1].) The construction schedules at the three terminals further confirm that Venture or third-party contractors hired by Venture performed substantially all of the installation; Technics installed the blending skid itself at Green Bay, but appears not to have done so at the other two terminals. (*See* Green Bay Blending Construction Schedule, Ex. 46 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 76]; Madison South Blending Construction Schedule, Ex. 47 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 79]; Milwaukee Central Blending Budget Analysis, Ex. 64 to Decl. of Michelle Replogle [220-2 at p. 4] (contractor for blending skid installation "TBD").)

Furthermore, there is some evidence that Venture played a role in initiating Technics's effort to design the butane blending system in the first place. Thomas Edwards, Technics's senior process engineer, testified at his deposition that Technics first decided to design a butane blending system after Venture reached out to Technics. (Dep. of Thomas Edwards, Ex. 43 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 54] at 44:21–45:16.) The excerpted deposition produced to the court does not identify which Venture official contacted Edwards, but in e-mail messages between Venture employee Michael Koel and Edwards in May 2010, Koel asked whether Technics's "system" could be used to blend butane into gasoline. (E-mail from Mike Koel to Thomas Edwards (May 21, 2010, 2:05 PM), Ex. 41 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 44].) Edwards responded in the affirmative. (E-mail from Tom Edwards to Mike Koel (May

21, 2010, 2:44 PM), Ex. 41 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 44].) What Technics's system was before it was used for butane blending is not discussed in the record.

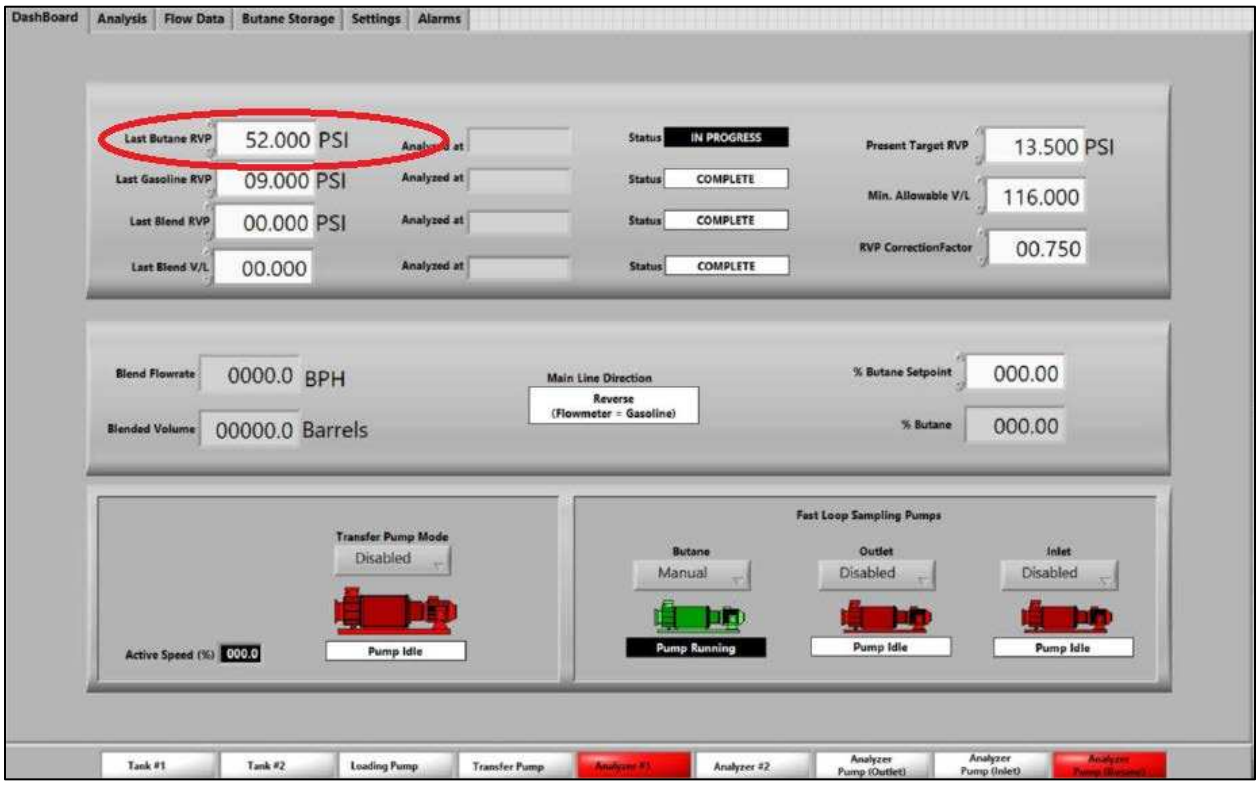
Sunoco insists that the systems at Green Bay and Madison South—the first Technics-designed systems—did in fact have the ability to test butane upstream.[9] In support, Sunoco notes, first, that Venture has conceded that these systems were, at some early point, equipped with butane sampling lines. And neither party disputes that the Technics-designed system was *intended* to sample butane upstream. (Pl.'s SOF ¶ 65; Defs.' Resp. to Pl.'s SOF ¶ 65.) The natural conclusion, Sunoco argues, is that there must have been programming in the Technics source code that enabled operation of the butane sampling pumps. (Pl.'s Reply in Supp. of Summ. J. [204] at 11.) Sunoco cites a Venture interrogatory response, in which Venture admits:

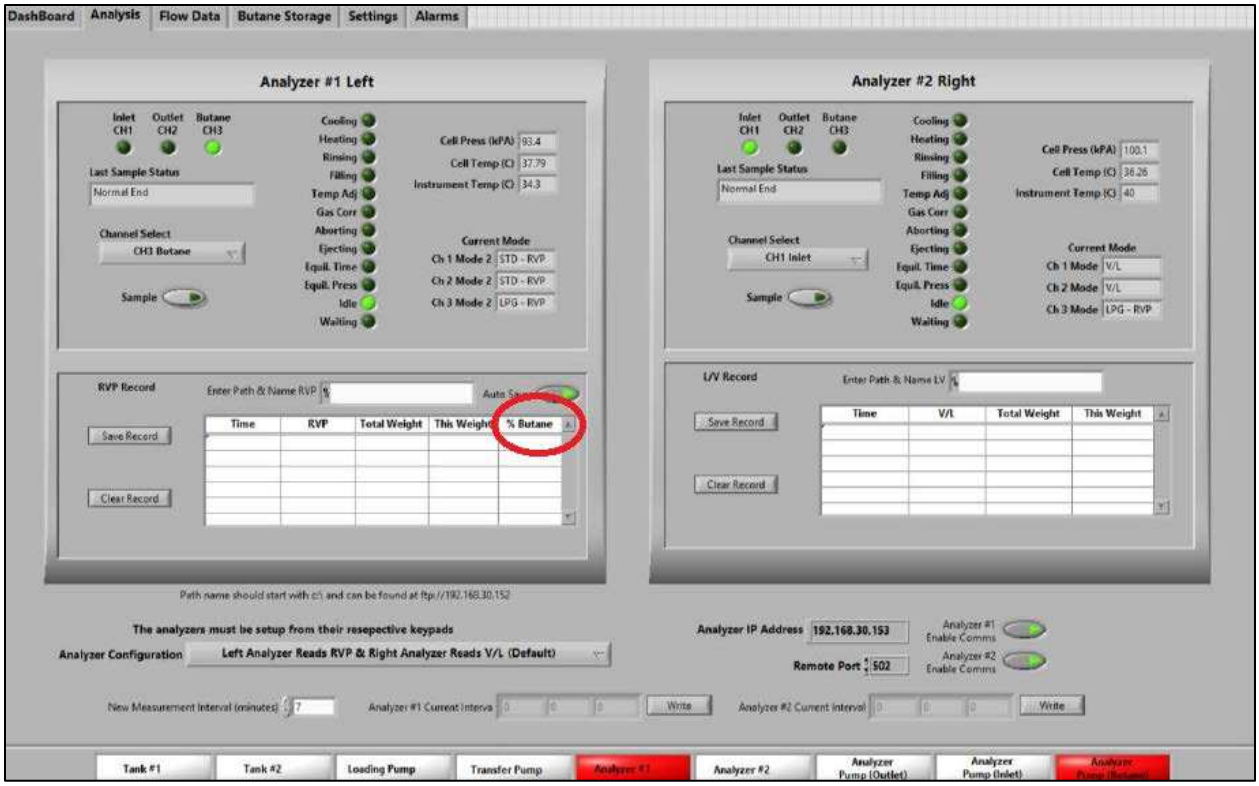
> The Technics systems were designed and marketed to use measurements upstream of the blending point in the control loop. However, U.S. Venture found the Technics systems to be inoperable in this regard. Therefore, the source code was substantially modified including to remove reliance on upstream measurements. . . .
>
> The source code modifications were performed by Technics at the direction of U.S. Venture. The U.S. Venture employees who were primarily involved in the interactions with Technics were Dan Morrill and Chris Lamirande.

(Defs.' Amended Resps. to Interrog's, Ex. 55 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 135] at Nos. 2 & 3.) Though Venture notes, in this response, that the system was inoperable, it also admits that the source code originally relied on upstream vapor pressure measurements. (*Id.*) If the system relied on upstream vapor pressure measurements, Sunoco reasons, the code must originally have had the necessary programming to control the butane pumps. There are also several operating manuals for the Technics systems, Sunoco points out, that include directions for taking an upstream butane vapor pressure measurement using the system. (*See, e.g.*, Technics, Operating Instructions: Inline Butane Blending System for RVP Adjustment (Aug.

[9] Factual disputes evidently remain as to Milwaukee Central, the other Technics-designed system (Pl.'s Mem. in Supp. of Summ. J [131], at 8 ("[T]his [summary judgment] motion is limited to the two terminals whose equipment arrangement cannot be disputed.")), and those disputes are not before the court on Sunoco's motion for partial summary judgment.

20, 2012), Ex. 57 to Pl.'s SOF [206-2 at p. 172] at 5.) Finally, Sunoco produced several screenshots of the user interface for the software—that is, what a user would see when operating the system from a computer—that ran the Technics system, which, it believes, show that the system was capable of controlling the butane pump to the analyzer. (Pl.'s Resp. to Defs.' SOF ¶ 31.) Unfortunately, Sunoco provides no analysis of the screenshots, and has not explained how the screenshots demonstrate that the software was capable of operating the butane pumps. From the court's perspective, the screenshots show only that the user interface references a butane vapor pressure, or a percentage of butane in the blend:





(*Id.* (red circles added).)[10] Though the interface displays a butane vapor pressure, it is not apparent from the screenshots alone that the system itself measures that pressure from the stream; for example, it may be that the number is input manually.

In addition to its affirmative arguments that the system was capable of performing upstream butane sampling, Sunoco takes issue with the factual basis of Venture's assertions that it was not. Venture relies on Morrill's declaration for the proposition that the Technics source code did not contain the necessary programming to operate the pumps. (Morrill Decl. ¶ 18 (His "understanding from working with Technics [was] that the source code written by Technics . . . lacked the ability to calculate a blend percentage using 'upstream' gasoline volatility measurements or 'upstream' butane volatility measurements.").) But Sunoco points out that at his deposition—where he was acting as Venture's corporate representative—Morrill claimed to have very little knowledge about the contents of Technics's code:

[10] There is a third screenshot, but Sunoco has offered no explanation of its significance.

Q: [Before the problem with the butane-sampling system], you would expect the [butane] RVP measurements to be taken; right?
A: Not necessarily. I don't even know if there's ever any source code in there to do anything with that sample or if the analyzer was ever set up to take the sample. From what I could tell, the analyzer was never set up for butane in the first place.
. . . .
Q: Are you talking about in the source code or in the physical connection on the Grabner?
A: In the physical connection. I've never seen the source code, never used it.
Q: This question could be answered though by observing the original Technics source code; is that your understanding?
A: I still don't know if it could -- just because there's source code in there doesn't mean it was utilized.
Q: Well, the source code would tell you, though, one way or the other whether butane RVP measurements were being utilized?
A: I would think so.
Q: You've just never looked at it though?
A: No, I don't -- I don't even know how to read that source code.

(Dep. of Daniel J. Morrill, Ex. 54 to Pl.'s Resp. to Defs.' SOF [206-2 at p. 124] at 91:22–93:2.)

Similarly, Sunoco takes issue with Venture's reliance on Morrill's declaration as evidence that the upstream butane sampling lines were never used. (*See* Morrill Decl. ¶ 22 ("Because none of the butane sampling pumps has ever been used . . . ."); ¶ 25 ("[T]he inlet valve that connects the butane sampling line to the analyzer has always been disabled.").) As Sunoco points out, Morrill's knowledge at his deposition about whether butane measurements were in fact taken in the Technics-designed systems was very limited:

Q: So there was a period of time when the valves for the butane sample were working; correct?
A: There was a period of time the butane sampling valves were open, yes.
Q: But they were never actually -- well, the measurements were -- strike that. Was there also a period of time in which the RVP measurements were being taken of the butane?
A: I've never witnessed that. I'm not going to say that butane measurements were never taken, but I don't think it was ever used in the actual process, maybe in the test phase.
Q: What do you mean by the test phase?
A: Well, the startup was occurring. They were trying to figure out how this thing was going to run.
Q: Like shortly after the system was first installed?
A: Correct, while Technics was on-site.

(Morill Dep. at 91:5–21.)

> Q: Well, but you're not able to tell whether during the test phase at least the butane was being sampled for RVP and used in the blend ratio calculation; is that true?
> A: Yeah. They may have done a test and sampled some butane. I don't know. Not while I was there. I never observed it. But I'm not always in Madison and Green Bay, so –
> . . . .

(*Id.* at 93:6–13.) Sunoco argues that Morrill's testimony at his deposition contradicts his declaration, and Venture cannot rely on it to create an issue of fact.

DISCUSSION

Patent cases can be resolved at summary judgment just as other litigation can. *Tokai Corp. v. Easton Enterps., Inc.*, 632 F.3d 1358, 1366 (Fed. Cir. 2011). Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." FED. R. CIV. P. 56(a). A genuine dispute of fact exists if a reasonable jury could find for the non-movant on the record before the court. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

I. Patent Exhaustion

Venture first argues that Sunoco has exhausted its patent rights with respect to the Madison, Green Bay, and Milwaukee Central systems, which it argues not only defeats Sunoco's motion, but entitles Venture to summary judgment on all patent claims with respect to those three systems. (*See* Defs.' Cross-Mot. for Summ. J.) "The longstanding doctrine of patent exhaustion provides that the initial authorized sale of a patented item terminates all patent rights to that item." *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008). Venture contends that Sunoco's covenant not to sue Technics for infringing activities prior to the Sunoco-Technics settlement was a retroactive authorization of the sale of patented systems (or at least part of those systems) from Technics to Venture. According to Venture, Sunoco's rights in the patented systems were therefore exhausted when Sunoco settled with Technics. Sunoco

responds that patent exhaustion requires that the sale of a patented system be authorized when the sale occurs.

Venture's argument rests on *TransCore, LP v. Electronic Transaction Consultants Corp.*, 563 F.3d 1271, 1276 (Fed. Cir. 2009), which held that a covenant not to sue for future infringing activities, including selling patented items, is equivalent to a license authorizing such sales. As Venture sees it, Sunoco's covenant not to sue Technics is a straightforward application of this rule. But this is an oversimplification of *TransCore*. In that case, the patent holder agreed not to sue its competitor for any "future infringement." *Id.* at 1273. Several years later, the patent holder sued another company who had purchased the allegedly infringing system from the competitor. *Id.* In affirming summary judgment for the defendant, the court pointed out that the earlier agreement "authorize[d] all acts that would otherwise be infringements: making, using, offering for sale, selling, or importing" the patented product. *Id.* at 1276. As a result, the competitor's later sales to a third party were authorized, and the patentee's rights were exhausted. *Id.*

TransCore established that a covenant not to sue is, effectively, a license for purposes of patent exhaustion. *Id.* But *TransCore* has no bearing on whether entering into a covenant not to sue—as Sunoco did with Technics—*retroactively* authorizes past sales of an infringing product. Whether sales can be retroactively authorized and trigger patent exhaustion is not free from doubt, but the court is not inclined to find the patent exhausted in this case. Patent exhaustion requires an "initial authorized sale of a patented item[,]" *Quanta Computer*, 553 U.S. at 625, and part of what is sold is the "freedom from suit" that an authorized sale conveys, *see TransCore*, 563 F.3d at 1275. At the time Technics sold the systems to Venture, it conveyed only the system components; it did not convey "freedom from suit," and could not have done so: Technics did not hold the patent to the technology or a license. Sunoco's subsequent settlement with Technics does not retroactively alter the sale, making it an authorized sale by the patentees. A common analogy in introductory property courses imagines property rights as

a bundle of sticks; a seller can convey only those sticks—that is, those property rights—that she has at the time of the sale. At the time of the sale, the property rights that Technics conveyed to Venture consisted of the components alone, not the "freedom from suit." When Technics later acquired the "freedom from suit" via its settlement with Sunoco, its transaction with Venture did not change retroactively. Technics could only convey to Venture what it possessed, and it did not possess the "freedom from suit" required for patent exhaustion.

At least one other Federal Circuit case elucidates this principle. In *Honeywell International, Inc. v. United States*, 609 F.3d 1292, 1303–04 & n.3 (Fed. Cir. 2010), the plaintiff sold infringing devices to the government, and later acquired the patent for those devices as the result of a merger. After acquiring the patent, the plaintiff sued the government for infringement. *See id.* at 1303–04. The Court of Federal Claims held that patent exhaustion prevented the plaintiff from recovering, but the Federal Circuit reversed. *Id.* The Federal Circuit explained: "[the plaintiff's] sale of infringing [devices] was not authorized because, at the time of the sale, [the plaintiff] had no rights under the '914 patent, which [the previous patent holder] owned. The fact that [the plaintiff] now owns the patent does not retroactively authorize the earlier sale." *Id.* at 1304. The conclusion that a subsequent purchase of the patent itself cannot retroactively authorize an earlier sale of a patented item reinforces the court's determination that a subsequent covenant not to sue cannot do so either.

Another court in this district reached the same conclusion, albeit for slightly different reasons. In *Cascades Computer Innovation, LLC v. Samsung Electronics Co.*, 70 F. Supp. 3d 863, 866 (N.D. Ill. 2014) (Kennelly, J.), a patent holder agreed not to sue Google for any infringement activity, without distinguishing between past and future infringement. The allegedly infringing product was a feature of the Android operating system; the defendants made and sold devices that used that system. *Id.* Google provided the operating system to the defendants, both before and after the agreement. *Id.* The defendants argued that the patentee's agreement with Google retroactively exhausted the patentee's rights with respect to infringing activity

before the agreement. *Id.* at 866, 869. The court disagreed. A covenant not to sue could not retroactively authorize the use of the patented software, the court held:

> Patent exhaustion is a rule that looks forward; it results from the patent holder's sale of a patented item or a product embodying a patented method, or a grant of a license permitting another to use the patented item or method. A release, by contrast, looks backward and takes an alleged infringer off the hook for something it has already done or is alleged to have done.

Id. at 869–70.

The *Cascades* court also concluded that the covenant-not-to-sue in that case was not a license at all; it was a release "expressly limited to Google and its affiliated entities," which did not include the defendants. *Id.* at 870. Sunoco argues that the same principle applies here, because the Sunoco-Technics agreement explicitly stated that it was not a license and did not apply to Technics's customers. Venture urges that this aspect of *Cascades* was wrongly decided; a patent holder's intent regarding whether a license extends to a licensee's customers is not relevant to the question of whether the patent holder's rights are exhausted. *See TransCore*, 563 F.3d at 1277. But the court need not reach this issue: even if Venture is correct that intent is irrelevant and the Sunoco-Technics agreement is a license, that license could not retroactively authorize Technics's earlier sale of the system to Venture.

Venture argues that the court should nevertheless "find exhaustion with respect to any use of the Technics's systems that took place after the settlement agreement," and urges that such a conclusion would be consistent with *Cascades*. (Defs.' Mem. In Opp. to Pl.'s Mot. for Summ. J. [hereinafter "Defs.' Opp. Br."] [193] at 8.) In *Cascades*, the covenant not to sue between the patent holder and Google did not have any temporal limitation to past or future infringement; the patent holder promised not to sue for "any infringement." 70 F. Supp. 3d at 866. The court held that the plaintiff's patent rights were exhausted with respect to devices that the defendants made after the settlement agreement, but not with respect to devices before the settlement agreement. *See id.* at 868–71. Under that rationale, Venture contends, its use of the allegedly infringing systems after the Sunoco-Technics agreement was authorized.

The court sees this differently. In the court's view, the question is not whether Venture performed its infringing activities after Sunoco promised not to sue Technics; it is instead whether Technics conveyed its own freedom from suit to Venture. In *Cascades*, Google had made the operating system continuously available to the defendants, *id.* at 868–69; once the plaintiff in *Cascades* promised not to sue Google for infringing activities, all of Google's *subsequent* provision of the Android operating system to the defendants was authorized. Here, by contrast, Technics sold the allegedly infringing system to Venture once, before Technics settled with Sunoco. Venture was not immunized from liability for its continued use of the system after Technics settled with Sunoco.

Venture also relies on *In re TR Labs Patent Litigation*, No. CIV.A. 09-3883(PGS)(DEA), 2014 WL 3501050 (D.N.J. July 14, 2014). In that case, TR Labs, the patentee, sued Cisco's customers for use of the allegedly infringing products. *Id.* at *1. Cisco then brought a declaratory judgment action against TR Labs, who in response offered a covenant not to use Cisco. That offer, the court held, exhausted TR Labs' patent as to Cisco and Cisco's customers, *id.* at *4–5. In so doing, the court recognized that a covenant not to sue is an "authorized sale," equivalent to a license, and resulted in patent exhaustion despite the patent holder's "stated intent to prevent any rights under the covenant to extend to Cisco's customers . . . ." *Id.* at *4 (citing *TransCore*, 563 F.3d at 1277). But that case also concerned a covenant that would have allowed continued "use and employ[ment] [of] the patented practice"—that is, a covenant not to sue for future infringement, *id.*; perhaps a forward-looking covenant not to sue would have a different effect on exhaustion than the release for past infringement entered into here, but the court need not resolve that question. To the extent *TR Labs* suggests a covenant not to sue one party for past infringement must be understood as retroactive authorization of infringement by that party's customers, this court disagrees.

Venture has two remaining arguments on this issue. First, it claims that "Sunoco has not cited any controlling authority distinguishing past and future sales for purposes of exhaustion."

(Defs.' Opp. Br. 8.) This argument is dispensed with by the court's analysis above: *TransCore* and *Honeywell* lay out the principles that Technics cannot convey property rights that it does not have, and its subsequent acquisition of those rights does not retroactively pass them to Venture. Second, Venture cites the recent Supreme Court case *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523 (2017), in which the Court held that Lexmark, the holder of a patent on printer toner cartridges, exhausted its patent rights by selling toner cartridges to customers, despite the fact that it attempted to restrict the right to use the product to its immediate customers rather than remanufacturers of the cartridges. *Id.* at 1529–30, 1533.

Venture seizes upon the fact that in *Impression Products,* the Supreme Court referred not to an "initial authorized sale" which triggered patent exhaustion—merely to an "initial sale." *See id.* According to Venture, "the adjective 'initial' modifies the word 'sale[,]'" but does not apply to the "authorization" (Defs.' Reply in Supp. of Cross-Mot. for Summ. J. [234] at 14); thus, Venture asserts, a sale need not be initially authorized in order to trigger patent exhaustion. There are several problems with this argument. For one, it ignores other Supreme Court case law concerning exhaustion that does make reference to the "initial authorized sale[.]" *Quanta Computer*, 553 U.S. at 625. More importantly, *Impression Products* had nothing to do with whether sales could be retroactively authorized. It concerned sales that were undisputedly authorized when they occurred; the question was whether the patent holder could retain some patent rights after a sale of a patented item and enforce those rights through an infringement suit. *See Impression Prods.*, 137 S. Ct. at 1529–30.

As *Honeywell* makes clear, it is the sale of the "freedom from suit" property right that triggers the patent exhaustion doctrine. 609 F.3d at 1303. Technics did not sell this "freedom from suit" to Venture, because it did not possess it. Venture's exhaustion defense fails. For the same reason, Venture is not entitled to the summary judgment it requested on all five patents due to patent exhaustion, and to the extent Venture seeks summary judgment on this basis, its motion is denied.

II. Patent Infringement

A company infringes a patent when it "without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . during the term of the patent therefor[.]" 35 U.S.C. § 271(a). The patent statute is worded disjunctively, and thus simply making a patented invention—even without use or sale of that invention—is patent infringement. *Id.* An accused product can infringe a patent either literally or through the "doctrine of equivalents." *Microsoft Corp. v. GeoTag, Inc.*, 817 F.3d 1305, 1313 (Fed. Cir. 2016). "To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly." *Id.* (quoting *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995)). Under the doctrine of equivalents, the accused product infringes the patent if "there is equivalence between the elements of the accused product . . . and the claimed elements of the patented invention." *Id.* (quoting *Duramed Pharm., Inc. v. Paddock Labs., Inc.*, 644 F.3d 1376, 1380 (Fed. Cir. 2011)). Sunoco asserts that Venture's systems literally infringe the claims at issue in its motion. (Pl.'s Mem. in Supp. of Partial Summ. J. [hereinafter "Pl.'s Br."] [131] at 17 n.4.)

A. Pipeline Configuration

Sunoco presents extensive argument explaining how Venture's Madison South and Green Bay terminals infringe each element of the claims at issue. (*See* Pl.'s Br. 3–15, 17–21.) Except with respect to Claim 3 of the '629 patent (addressed below), Venture does not contest the majority of these facts or arguments. Instead, Venture argues that the accused system does not meet one of the limitations common to all the claims: the requirement of a gasoline tank (and, by extension, a blending unit "downstream and in fluid connection" with the gasoline tank). Though Venture tacitly admits that the system uses a gasoline tank at least sometimes, it takes the position that "[a]lthough the Madison and Green Bay systems can be configured in this manner [blending from a gasoline tank] they can also be configured to blend gasoline straight from the pipeline (such that the blending unit would not be downstream of and in fluid

connection with the [a] tank of gasoline)." (Defs.' Opp. Br. 11 (third alteration in original) (internal citation and quotation marks omitted).) As the court reads this, Venture contends that the systems are merely capable of infringing, not that they actually infringe. But an examination of the evidence in support of Venture's argument reveals no genuine dispute that Venture has infringed seven claims.

The Morrill Declaration is the only evidence that Venture cites in support of its argument that the systems merely "can be configured" in a way that would infringe. Morrill avers "the Madison and Green Bay systems have never been set up to blend *solely* from a gasoline tank." (Morrill Decl. ¶ 7 (emphasis added).) This declaration effectively confirms that the Madison and Green Bay terminals *sometimes* blend from a gasoline tank. This is consistent with Venture's characterization of its practice in its non-infringement contentions:

> U.S. Venture has not always blended butane with gasoline. U.S. Venture does not blend butane with every batch of gasoline that it receives from the pipeline. For example, U.S. Venture does not blend butane with reformulated gasoline during the summer months.
> . . . .
> U.S. Venture only sometimes stores unblended gasoline in a tank at its Bettendorf, Madison South, and Green Bay Fox terminals before blending butane with the gasoline.
> . . . .
> At the Bettendorf, Madison South, and Green Bay Fox terminals, the blending usually occurs directly from the pipeline. Sunoco's infringement contentions acknowledge that the blending unit is not always downstream of and in fluid connection with a tank of gasoline.

(*See* Venture's Non-Infringement Contentions 1–4, 10, 38–40.) These contentions effectively concede that Venture has sometimes blended gasoline from a gasoline tank at the Madison South and Green Bay terminals. There is thus no dispute that Venture made and/or used systems that blend from a gasoline tank, and Venture does not contest that the systems meet

the other elements of the seven claims at issue.[11] All the claim elements are therefore present in the two accused systems. Sunoco is entitled to summary judgment on Claims 1–3 and 8–9 of the '302 patent and claims 1–2 of the '629 patent.

Despite its concession, Venture asks the court to grant summary judgment of "non-infringement with respect to the Madison and Green Bay systems when they are in the pipeline configuration for claims 1–17 and 27–41 of the '302 patent and claims 1–16 of the '629 patent." (Defs.'s Cross Mot. for Summ. J. 1.) It is undisputed that Venture does sometimes use its system in a way that does not infringe these claims—when it blends from a pipeline instead of a gas tank. This fact is relevant for damages, but it does not warrant a finding of "infringement sometimes and non-infringement other times." Patent infringement does not depend on the *use* of the accused device; a patent is also infringed when a defendant "makes" a patented system or method. 35 U.S.C. § 271(a). Accordingly, Venture is not liable only when it uses the infringing system; instead, liability turns on Venture's having made an infringing system at all. Because infringement does not depend solely on use, the court cannot rule that Venture's infringement liability tracks directly with its use of these two configurations.

The court concludes that Venture's argument does not defeat summary judgment for Sunoco on Claims 1–3 and 8–9 of the '302 patent and Claims 1–2 of the '629 patent; Venture's request for summary judgment of non-infringement with respect to the "pipeline configuration" of the Madison and Green Bay systems is also denied.[12] As noted above, Venture's motion on this issue covers 48 claims ('302 patent claims 1–17 and 27–41 and '629 patent claims 1–16); this ruling resolves the issue with respect to all but Claim 11 of the '302 patent. Neither party

[11] Venture has other responses in its infringement contentions that it does "not always" meet other elements of the patents. (*See, e.g.*, Venture's Non-Infringement Contentions 2 ("[T]he blended gasoline is not always dispensed at a rack located at the same tank farm where the blending occurred.").) Venture does not make any such arguments in its response to Sunoco's motion, however, and they appear to be forfeited.

[12] Evaluating Venture's response to Sunoco's motion necessarily requires denying summary judgment to Venture as to this and the exhaustion argument.

has asserted that claim in its final infringement or non-infringement contentions. (*See generally* Venture's Non-Infringement Contentions; *see generally* Summ. of U.S. Venture Arguments & Affected Claims, Ex. A to Defs.' Resp. to Pl.'s Sur-Reply in Opp. to Defs.' Cross-Mot. for Partial Summ. J. [244-1] (listing the claims that Sunoco asserts).) The court accordingly declines to exercise jurisdiction over that claim. *See Joao Control & Monitoring Sys., LLC v. Telular Corp.*, No. 14 C 9852, 2017 WL 1151052, at *4 (N.D. Ill. Mar. 28, 2017) (citing *Streck v. Research & Diagnostic Sys.*, 665 F.3d 1269, 1283 (Fed. Cir. 2012)).

B. Claim 3 of the '629 Patent

Claim 3 of the '629 Patent requires, in relevant part, "a butane vapor pressure sensor operable for measuring the vapor pressure of butane upstream of the blending unit . . . ." ('629 Patent col. 13 ll. 28–29.) Venture argues that its system, as it is currently designed, has no ability to test butane upstream, because: (1) there are no butane sampling lines, (2) the inlet valves are closed, and (3) the source code cannot control the butane pumps.[13] The relevant question, however, is whether Venture *ever* made, used or sold an infringing system. If Venture at one time made, used, or sold an infringing system, but later stopped making, using or selling an infringing system, that choice is again relevant only to its exposure at the damages phase.

It is Sunoco's position that the Green Bay and Madison South terminals, at least initially, had operable butane vapor pressure sensors, because (a) they were equipped with the necessary physical components (sampling lines, valves, pumps, and an analyzer), and (b) the Technics source code had the ability to control that sensor system. The parties agree that the

[13] Venture concedes that it has upstream gasoline vapor pressure sensors (*see* Defs.' Opp. Br. 11–12 (arguing only that the accused systems do not infringe Claim 3 of the '629 patent because the systems do not have butane vapor pressure sensors); *see also* Defs.' SOF ¶ 12 (alleging only that "[n]one of the systems is capable of measuring *butane* volatility 'upstream' of the blending point" (emphasis added).) Venture does not concede that its systems *use* the upstream vapor pressure of the gasoline to calculate a blend ratio, however, which is relevant to its own motion for summary judgment: Certain claims in another of Sunoco's asserted patents, U.S. Patent No. 7,631,671, require (in Venture's estimation) using upstream gasoline vapor pressure measurements to calculate a blend ratio. (*See* Defs.' SOF ¶ 11; *see also* Defs.' Opp. Br. 23.)

system as designed by Technics was intended to measure butane upstream of the blending unit using the sensor system. Thus, Sunoco argues, the system must have had the necessary software and hardware to accomplish that task—at the very least, during the testing phase. There are two major factual questions that preclude summary judgment on this issue, however.

First, there is an open factual question about which entity was responsible for the infringing system during the installation and testing phase. Sunoco is correct that an apparatus claim is infringed when an entity makes the system; the accused product need not be used or sold to infringe the claim. 35 U.S.C. § 271(a); *Silicon Graphics, Inc. v. ATI Techs., Inc.*, 607 F.3d 784, 794 (Fed. Cir. 2010). Even if the court accepted Sunoco's argument that the system was infringing until Technics and Venture abandoned upstream butane blending, this does not answer the question of who made that infringing system, or "used" it in the context of testing. Venture raised this argument in its response brief, arguing that "U.S. Venture has never 'made' a system that is 'operable for measuring the vapor pressure of butane upstream of the blending unit.' The Madison, Green Bay, and Milwaukee Central systems were 'made' by Technics." (Defs.' Opp. Br. 17.) Sunoco does not engage directly with which party was responsible for the installation and testing phase, and instead argues that the system was operable for measuring butane vapor pressure well into Venture's use of the system.

Sunoco does identify evidence that Venture was involved in the production of the system—that Venture solicited the product, installed the tanks that made the system possible, and that its employees were involved in testing it. Venture could also be liable for infringement on an inducement or contributory infringement theory. *See Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469 (Fed. Cir. 1990) (discussing both theories). But, for the purposes of summary judgment, Sunoco has not foreclosed a question of fact about Venture's liability at the earliest phase of installation and testing. It is possible, on the record before the court, that Technics made an infringing system but rendered it non-infringing before Venture used it.

Second, it is not clear that the Technics source code had the ability to control the part of the system that enabled butane sampling, specifically, the pumps that took butane from the butane stream to the analyzer. The evidence on this score consists of Technics's interrogatory response, the user manuals, and the user interface of the software, showing that the accused system was originally intended to take upstream butane measurements. As to the screenshots, it is clear only that the system used—in some capacity—a vapor pressure measurement of the butane, and also had a box for "% Butane."[14] The system's apparent use of a vapor pressure measurement does not demonstrate the sensors are operable, as it is possible that number is manually entered (indeed, in its motion for summary judgment, that is what Venture argues). The latter, "% Butane," seems to refer to the blended gasoline product, not the butane stream itself. While the court agrees that it is unlikely that Technics would have designed a system containing all of the necessary hardware to perform upstream butane vapor pressure sampling without providing the necessary software, it is not impossible; the butane vapor pressure sensing function, after all, apparently did not work. Accordingly, summary judgment on Sunoco's motion is denied.

Venture requests summary judgment in its favor on this claim, as well, arguing that there is no evidence of butane vapor pressure sensors in its Green Bay and Madison South systems. The court disagrees. First, Venture relies on Morrill's declaration for its factual claims that the Technics source code did not contain the necessary programming to operate the pumps, and that the sampling system had never been used. There is tension between his declaration and his deposition, however, on the extent of his knowledge about these systems. As detailed above, Morrill admitted at his deposition that he had never examined Technics's source code and did not know how to read it, and he acknowledged that upstream butane vapor pressure

[14] Sunoco provides a much more detailed analysis of Technics's source code with the assistance of an expert, but that evidence is not before the court on Sunoco's motion for summary judgment—it is discussed only in Sunoco's sur-reply to Venture's summary judgment motion. (Pl.'s Sur-Reply in Opp. to Defs.' Cross-Mot. for Partial Summ. J. [237].)

sampling may have been conducted during the installation and testing phase while he was not at the Green Bay and Madison South terminals. Aside from Morrill's declaration, there is evidence that the system could, at least initially, measure butane vapor pressure upstream of the blending unit: (1) the system was designed to test the vapor pressure of the butane stream, (2) at one point, it had all of the necessary hardware to perform that testing (pumps, sampling lines, and analyzers), (3) the original, Technics-created source code may well have had the necessary programming to operate the sensor hardware, and (4) Venture had some involvement in the solicitation, installation and testing of the system. Summary judgment is denied to Venture on Claim 3 of the '629 patent as to the Green Bay and Madison South terminals.[15]

CONCLUSION

Sunoco's motion for partial summary judgment [127] is granted in part and denied in part. Venture's motion for partial summary judgment [187] is denied in part and reserved in part for a future ruling.

ENTER:

Dated: September 27, 2017

REBECCA R. PALLMEYER
United States District Judge

[15] The court will determine whether Venture is entitled to summary judgment as to the other claims it raises when the court addresses the remainder of Venture's summary judgment motion.