

BACKGROUND

I. Facts

This case concerns Sunoco’s patented systems for blending butane into gasoline. Sunoco alleges that Venture infringed several of its patents at Venture’s fuel terminals.¹ Because the court has detailed the facts as length in numerous previous opinions, it recites only the essential details here.

Companies that sell gasoline to consumer-facing retail gas stations “add butane because it is more volatile than gasoline, allowing cars to start consistently in colder weather.” *Sunoco Partners Mktg. & Terminals L.P. v. U.S. Venture, Inc.* (“*Post-Trial Op.*”), 436 F. Supp. 3d 1099, 1107 (N.D. Ill. 2020). “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.* The systems at issue in this case—patented in 2001 by the inventors, assigned to Texon Terminals Corporation (“Texon”), and later acquired by Sunoco—“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.” *Id.* at 1108. EPA rules limit how much butane purveyors may blend into gasoline. Because EPA limits vary based on the time of year and the location where the gasoline will be sold, blending immediately before retail sale enables the user of the patented process to maximize the amount of butane added to the gasoline (and therefore maximize profits). *Id.*

As the court has previously explained, Defendant Venture

operates twenty-five gasoline terminals that store and ship gasoline and diesel via barges, trucks, trains, and pipelines. The company began researching automated butane blending in 2008 and learned of the patents in that year. Later that year, Texon described its patented systems in a confidential presentation to Venture. Venture and Texon entered into negotiations for Texon to provide butane and blending services at Venture’s Green Bay, Wisconsin facility, but a deal between the two parties never materialized. Venture’s interest in automated butane blending did not end, however. The company continued to research the process

¹ As discussed more below, only two patents— U.S. Patents No. 6,679,302 (the “302 Patent”) and No. 7,032,629 (the “629 Patent”)—remain relevant on remand.

of butane blending and exploring the possibility that others in the industry could help it construct a blending system. In 2010, Venture began to recruit former-Defendant Technics, Inc. to design and install such a system.

. . . Though at that time Technics had never built a butane blending system before, it took just two weeks to propose a design for a “blending skid,” which holds the blender that combines the butane and gasoline. As a Venture witness acknowledged at trial, the Technics proposal was “very similar” to the Texon system. . . . Technics installed the blending skid at Venture’s Green Bay terminal, and similar systems were installed at the Madison and Milwaukee Central facilities soon thereafter.

. . . There were some differences between the Texon patented systems and those installed at Venture terminals. For example, the patented systems require that gasoline entering the system come from a gasoline tank. Although Venture’s Milwaukee Central and Milwaukee West terminals always blended gasoline from a tank, the facilities in Green Bay, Madison, and Bettendorf sometimes blended from a tank and at other times blended gasoline coming directly from a pipeline. Likewise, while in the ’302, ’629, and ’671 patents blended gasoline flows directly to a “rack” where it can be dispensed to trucks, Venture’s systems inserted a “rack tank” between the blending unit and the rack.

Id. at 1108–09 (internal citations omitted).

II. Procedural History

This case—now into its eighth year of litigation—has a long and winding history. Following a summer 2019 bench trial, this court held that Venture infringed certain claims. *Post-Trial Op.*, 436 F. Supp. 3d at 1107. Venture appealed, Sunoco cross-appealed, and the Federal Circuit affirmed some elements of the court’s decision and reversed, vacated and/or remanded others, as detailed below. *Sunoco Partners Mktg. & Terminals L.P. v. U.S. Venture, Inc.* (“*Fed. Cir. Op.*”), 32 F.4th 1161, 1181 (Fed. Cir. 2022). In short, after the Federal Circuit’s opinion, the judgment that Venture infringed the ’302 Patent claim 17 and ’629 Patent claim 31 remains intact, as does the \$2 million royalty this court awarded because of that infringement. *Id.* The Federal Circuit remanded for this court to “assess the ready-for-patenting prong of the on-sale-bar analysis and reassess enhancement for the reasons stated above and in light of the now restricted scope of infringement,” but the “\$2 million royalty is not subject to increase” regardless of how the court resolves those issues. *Id.* Sunoco believes the Federal Circuit’s logic also requires this court to reconsider its lost profits analysis.

The court assumes familiarity with both its post-trial opinion and the Federal Circuit's opinion, and briefly summarizes those decisions only with respect to the issues (arguably) remaining on remand.

A. On-Sale Bar

At trial, Venture established that MCE Blending (“MCE”)—a co-venture between Texon and Mid-Continent Energy—contracted on February 7, 2000 with a company called Equilon to sell and install an automated butane blending system at Equilon's Detroit facility. *Post-Trial Op.*, 436 F. Supp. 3d at 1119. This contract, Venture contends, raises the “on-sale” bar to enforcement of several claims under the ‘302 and ‘629 patents.²

Under 35 U.S.C. § 102(b), a patent is invalid if the invention was on sale more than one year before the patent's application date. This “on-sale” bar is triggered if the invention is both “subject of a commercial offer for sale” and “ready for patenting” before that critical date. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 67 (1998). In this case, the inventors of the automated blending system applied for the relevant patents-in-suit on February 9, 2001, meaning that MCE contracted with Equilon more than one year prior to the time the blending system was patented.

Regardless of their timing, however, “sales made primarily for the purposes of experimentation” are excluded from the on-sale bar, and this court determined both at summary judgment and after trial that Sunoco “demonstrated the requisite experimental intent to defeat” the on-sale bar. *Post-Trial Op.*, 436 F. Supp. 3d at 1119 (quotations omitted). In the Equilon contract, MCE “agreed to sell and Equilon agreed to purchase” the automated blending system “in consideration for the purchase and sale of Butane.” *Sunoco Partners Mktg. & Terminals L.P.*

² Specifically, Venture claims that the Equilon sale invalidated ‘302 Patent claims 2, 3, and 16, and ‘629 Patent claim 2. Venture previously argued that the on-sale bar invalidated the ‘302 Patent, claims 12-13 and the ‘548 Patent, claims 1-3 and 6. *Post-Trial Op.*, 436 F. Supp. 3d at 1119. Those claims are no longer at issue. See *Fed. Cir. Op.*, 32 F.4th at 1174 (explaining that the PTAB determined the ‘548 Patent was invalid and the Federal Circuit affirmed); *Post-Trial Op.*, 436 F. Supp. 3d at 1136 (holding that ‘302 Patent claims 12-13 were invalid).

v. U.S. Venture, Inc., 339 F. Supp. 3d 803, 816 (N.D. Ill. 2018) (brackets omitted). As part of that agreement, Equilon agreed to buy at least 500,000 barrels of butane from MCE. *Id.*

The court at summary judgment reasoned that these circumstances did not trigger the on-sale bar because, among other reasons, the contract “did not require Equilon to pay MCE anything in exchange for the system in the normal course of events.” *Id.* at 818. Venture contended that “the contractual provisions relating to the sale of 500,000 barrels of butane makes the sale primarily commercial as a matter of law,” *id.* (citing Venture’s summary judgment briefing), but this court disagreed, pointing out that the contract had two distinct sections, one for installation of the blending system and another for the butane supply agreement. *Id.* at 820–21. In its post-trial ruling, this court reiterated its view that butane was “not the invention” and noted that the Federal Circuit “has made clear that it is the invention itself (in this case, the blending system) that must have been placed on sale.” *Post-Trial Op.*, 436 F. Supp. 3d at 1120. The court did not address the “ready for patenting” prong of the on-sale bar test because it found the Equilon sale was experimental, rather than commercial.

The Federal Circuit reversed that conclusion on appeal. The Court of Appeals began by noting that the Equilon contract itself described that transaction as a “sale” without reference to any experimental purpose. *Fed. Cir. Op.*, 32 F.4th at 1169. Moreover, the contract identified “the purchase” of butane as “consideration” for that sale. *Id.* The Federal Circuit reasoned that while MCE agreed to pay for installation costs, “that does not mean Equilon exchanged no value for the *equipment* it received Rather, Equilon purchased MCE’s equipment by committing to buy MCE’s butane. That’s a sale.” *Id.* at 1170. The court also reasoned that the contract’s provisions “intertwine the sale of the equipment with the butane-supply commitment,” rejecting this court’s holding that the sections were distinct. *Id.* at 1171. Indeed, another provision required Equilon to pay a termination fee “representing the balance of the purchase price of the Equipment” if it had not yet purchased at least 450,000 barrels of butane. *Id.*

The Federal Circuit therefore held that the Equilon sale was commercial in nature, vacated the infringement judgment, and remanded for the court to consider whether the invention was “ready for patenting.” *Id.* at 1174.³

B. Lost Profits

At trial, this court found that Venture infringed six different claims, two of which remain infringed regardless of how the court resolves the on-sale bar issue. *See Fed. Cir. Op.*, 32 F.4th at 1181. At that time, the court rejected Sunoco’s assertion that it was entitled to \$31.585 million in profits it purportedly lost due to Venture’s infringement. *Post-Trial Op.*, 436 F. Supp. 3d at 1126. Sunoco seeks to relitigate that position on remand. *See* Discussion Section I, *infra*. Under the test established in *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978), Sunoco would be entitled to lost profits if it could show: (1) “demand for the patented product,” (2) an “absence of acceptable non-infringing alternatives,” (3) “manufacturing and marketing capability to exploit the demand,” and (4) “the amount of profit it would have made.” *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1285 (Fed. Cir. 2017). While the parties focused mostly on the second *Panduit* factor, this court found that Sunoco had not made a sufficient showing on the fourth factor—the “amount of profit Sunoco would have made, had Venture not infringed.” *Post-Trial Op.*, 436 F. Supp. 3d at 1128.

Sunoco’s expert, Keith Ugone, testified that Sunoco was entitled to \$31.585 million because Sunoco would have made that much “had Venture signed a butane supply agreement with Sunoco” and split the resulting profits with Sunoco fifty-fifty. *Id.* Ugone calculated profits as

³ Sunoco, unsurprisingly, argued on appeal that this court got the on-sale bar analysis right in the first place, and now argues that the invention was not “ready for patenting,” meaning that the challenged claims remain valid [571]. As explained in more detail below, the court finds that it need not determine whether the on-sale bar applies to resolve the other issues remaining on remand. *See* Discussion Section III, *infra*. But Sunoco also argues on remand that—however this court decides the on-sale bar issue—the Federal Circuit’s logic in determining that the Equilon agreement was a commercial sale requires this court to reconsider its earlier decision denying Sunoco lost profits damages. Accordingly, the court’s summary of the on-sale bar focuses only on the butane supply element of the Equilon agreement, which Sunoco believes renders the Federal Circuit’s opinion internally irreconcilable.

“(1) the price of the extra gasoline that can be sold because it was blended with butane [less] (2) the cost to purchase, transport, and blend the butane.” *Id.* But the court rejected that methodology because “neither butane nor blended gasoline is the patented invention. And neither butane nor blended gasoline constitute a ‘functional unit’ with the patented invention.” *Id.* (quoting *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549–50 (Fed. Cir. 1995)). In so holding, the court credited Venture’s expert over Sunoco’s, concluding that “Sunoco’s butane supply agreements do not translate into the value of the patent” and therefore the \$31.585 accounted for “more than just the damage Sunoco incurred from Venture’s infringement.” *Id.* The court denied lost profits damages and instead awarded a reasonable royalty. *Id.* at 1128–30.

The Federal Circuit affirmed that determination on appeal, holding that this court’s rationale was not clear error. *Fed. Cir. Op.*, 32 F.4th at 1180. It credited Venture’s argument that “the butane-supply agreements reflect a bundle of goods and services beyond just the patented invention—e.g., the purchase and sale of butane, equipment maintenance and monitoring, and a license to more than just the patented technology.” *Id.*

C. Enhanced Damages

After determining that \$2 million represented a reasonable royalty, this court exercised its discretion under 35 U.S.C. § 284 to treble damages to \$6 million. *See Post-Trial Op.*, 436 F. Supp. 3d at 1131. In electing to enhance damages, the court relied on substantial evidence of “Venture’s copying, bad faith reliance on [Venture attorney John] Manion’s opinion letter, less-than-ideal litigation conduct, and expansion of butane blending during litigation.” *Id.* at 1135.

First, the court noted that Venture had “effectively copied the Texon system.” *Id.* at 1132. After licensing negotiations between Venture and Texon broke down, Venture hired Technics to design a system. *Id.* Although neither Venture nor Technics had ever designed a butane blending system, Technics came up with a design in just two weeks that was, by Venture’s own admission, “very similar” to the Texon system. *Id.* at 1133. Though Venture made minor changes—most

notably, adding a tank between the blending unit and the truck rack—the court was not persuaded that doing so meant Venture had not copied the Texon design. *Id.*

This court also held that the opinion letter Venture solicited from its attorney, John Manion, failed to establish Venture’s good faith because “critical premises of the letter were flawed.” *Id.* First, Manion’s letter incorrectly stated that the Venture system would involve manual blending by an operator; in fact, the system was always designed to blend automatically. *Id.* Second, Manion wrote that the system would not draw gas from a tank, when several of Venture’s facilities did just that. *Id.* Third, Manion’s letter concluded that Venture’s design did not infringe because it did not blend directly to a truck rack, but instead involved an intermediate tank. *Id.* But this court determined that Manion did not understand that Venture’s system could simultaneously blend into the tank and release that blended mixture from the tank to the truck rack. *Id.*

The court agreed with Sunoco that these flawed premises “show[] that Venture withheld critical information from Manion when he drafted his opinion letter.” *Id.* at 1134. Venture did not provide a detailed technical drawing to Manion—even though it had one—and did not connect its most knowledgeable employee with Manion. *Id.* Even after receiving Manion’s letter, Venture failed to identify or alert Manion to the errors on which it was based. *Id.* Accordingly, the court held that Manion’s letter was not “premised upon the best information known to the defendant,” which undermined Venture’s argument that reliance on his opinion established good faith. *Id.*

Finally, the court held that Venture’s litigation conduct—failing to produce certain documents and misrepresenting certain facts—and its decision to expand its butane blending after this litigation began both supported enhanced damages. *Id.* at 1134–35.

On appeal, the Federal Circuit vacated this court’s decision because, in its view, the court made a “clear factual error” in its treatment of Manion’s opinion, which “impact[ed] its other enhancement grounds.” *Fed. Cir. Op.*, 32 F.4th at 1178. As discussed above, Manion’s opinion “relied on the fact that Venture’s system inserted an intermediate tank between the blending unit and the rack (i.e., the location where gas is dispensed to trucks).” *Id.* While this court believed

that Manion “did not know the blended gasoline in Venture’s system could still flow immediately from the intermediate tank to the rack where it would be dispensed,” the Federal Circuit reviewed the evidence and concluded that Manion “did indeed understand” that point and was merely confused by the term “online rack tank,” which Sunoco’s counsel used instead of “truck rack.” *Id.* at 1178–79.

The Federal Circuit also held that Venture’s culpability for copying and for expanding its blending operations mid-litigation both depended “in part on whether it had a good-faith belief that it was not infringing, which relates to the competence of the Manion Opinion.” *Id.* at 1179.

DISCUSSION

As noted earlier, there are three issues before the court—two matters for which the Federal Circuit remanded this case (the treble damages award and the on-sale bar) and a third: Sunoco’s argument that the court must reconsider its claim for lost profits. The court begins with that third issue.

I. The Mandate Rule Bars Reconsideration of the Decision to Deny Lost Profits.

Sunoco contends that the Federal Circuit’s logic requires this court to revisit its prior decision declining to award profits lost due to Venture’s infringement. Sunoco recognizes that the Federal Circuit explicitly affirmed the decision to deny lost profits. (See Sunoco Lost Profits Br. [563] at 1.) But according to Sunoco, the Federal Circuit’s decision is internally inconsistent. Specifically, Sunoco claims that MCE’s sale of the invention to Equilon—in consideration for signing a butane supply agreement—renders illogical this court’s previous holding that “neither butane nor blended gasoline is the patented invention.” (*Id.*)

The mandate rule dictates that this court may not reconsider “issues implicitly or explicitly decided on appeal.” *SUFI Network Servs., Inc. v. U.S.*, 817 F.3d 773, 779 (Fed. Cir. 2016). That is because “an inferior court has no power or authority to deviate from the mandate issued by an appellate court.” *Banks v. U.S.*, 741 F.3d 1268, 1276 (Fed. Cir. 2014) (quotation marks omitted). Under the mandate rule, “a court below must adhere to a matter decided in a prior appeal unless

one of three exceptional circumstances exist: (1) subsequent evidence presented at trial was substantially different from the original evidence; (2) controlling authority has since made a contrary and applicable decision of the law; or (3) the decision was clearly erroneous and would work a manifest injustice.” *Id.* (quotation marks omitted).

Sunoco argues that revisiting lost profits would not be inconsistent with the Federal Circuit’s mandate or, in the alternative, that an exception to the “mandate rule” applies. As explained here, the court is not persuaded by either argument.

A. Absent an Exception, the Mandate Rule Bars Revisiting the Lost Profits Issue.

Sunoco first briefly argues that the mandate rule does not apply to lost profits at all. Though the mandate rule “forecloses reconsideration of issues implicitly or explicitly decided on appeal,” Sunoco claims that the Federal Circuit never held that lost profits were barred or that it would have been an error to award lost profits. (Sunoco Lost Profits Br. at 3 (quoting *SUFI*, 817 F.3d at 779).)

Sunoco’s linguistic sleight of hand is unpersuasive. The Federal Circuit, after reviewing this court’s rationale on lost profits for “clear error,” explicitly declined to disturb that decision. See *Fed. Cir. Op.*, 32 F.4th at 1180. Sunoco nevertheless contends that even if this court’s decision was not clear error at the time it was made, the Federal Circuit’s logic elsewhere in its opinion means that the mandate rule would not preclude revisiting the matter now. Sunoco is correct that this court could have exercised its discretion differently and awarded lost profits; and the Federal Circuit may well have affirmed that decision under the deferential “clear error” standard that applies. But that is not what happened. Instead, the Federal Circuit explicitly affirmed the court’s lost profits decision and denied Sunoco’s cross-appeal in its entirety.

Sunoco presents no caselaw to suggest that the Federal Circuit’s deferential standard of review permits this court to exercise its discretion anew. To the contrary, Sunoco’s position would allow parties to relitigate any factual issue so long as the district court’s analysis survived nothing

more than a “clear error” standard of review. Whatever the standard of review—and whatever logical errors Sunoco believes the Federal Circuit committed—there is no question that the court affirmed on lost profits. For this court to reconsider lost profits, then, Sunoco must show an exception to the mandate rule.

B. Sunoco Has Not Established an Exception to the Mandate Rule.

Sunoco next argues that the Federal Circuit introduced a logical inconsistency when it (1) characterized the MCE-Equilon butane supply agreement as a sale of the invention, while (2) simultaneously affirming this court’s decision that Sunoco failed to quantify its lost profits under the same type of agreement. Put differently, Sunoco believes the way the Federal Circuit characterized the Equilon sale (in the context of the on-sale bar) was a “complete departure from the rationale this Court relied on to deny lost profits, leaving the lost profits decision wrong on its face given the Federal Circuit’s own statements.” (Sunoco Lost Profits Br. at 1–2.) According to Sunoco, the Federal Circuit’s decision supports two different exceptions to the mandate rule. First, it represents a “substantial change in the evidence.” (*Id.* at 5 (quoting *Tronzo v. Biomet, Inc.*, 236 F.3d 1342, 1349 (Fed. Cir. 2001)).) Second, it is “internally inconsistent, clearly erroneous, and would lead to a manifest injustice.” (*Id.*) The court rejects both arguments—the first as a matter of law, and the second as a matter of fact.

1. The Federal Circuit’s Opinion Does Not Represent a “Substantial Change in the Evidence.”

Sunoco urges that the Federal Circuit’s decision on the Equilon sale represents a change in the evidence under the first exception to the mandate rule. As this court previously noted, Sunoco has not identified any “change” besides the Federal Circuit’s mandate itself [559]. Sunoco responds that, “[w]hile it is true that changed circumstances typically come from an intervening higher court decision or new evidence discovered after remand, the Federal Circuit has considered whether circumstances *created by the remand itself* can warrant deviating from the mandate.” (Sunoco Lost Profits Br. at 6.) In support, Sunoco cites language in *Tronzo v. Biomet*,

Inc., 236 F.3d at 1349. In *Tronzo*, the Federal Circuit reversed a post-trial award of \$7 million in compensatory damages and remanded for a recalculation of those damages. 236 F.3d at 1345. On remand, the district court found that the evidence supported an award of just \$520 in compensatory damages; the court then reduced its punitive damage award from \$20 million to \$52,000, which was the “maximum amount of punitive damages it considered permissible.” *Id.* The plaintiff appealed, and in that second appeal, the Federal Circuit held that the district court had erred by reconsidering punitive damages because that issue was foreclosed by its earlier mandate. *Id.* at 1347–49. A district court may revisit issues otherwise barred by the mandate rule, the court held, in “exceptional” circumstances—like a “substantial change in the evidence”—but there were no such exceptional circumstances in that case. To the contrary, the Federal Circuit could not “conclude that the reduction of the amount of compensatory damages on remand created such a substantial change in the facts to allow the district court to revisit the punitive damage award.” *Id.* at 1349–50.

As Sunoco reads *Tronzo*, it confirms that “there can be an exception to the mandate rule arising from the appellate decision itself.” (Sunoco Lost Profits Br. at 7.) But “the court in *Tronzo* did not substantively analyze whether its own decision was a substantial change in the evidence or facts.” *Retractable Techs., Inc. v. Becton Dickinson and Co.*, 757 F.3d 1366, 1372 (Fed. Cir. 2014). Instead, “the subject of that analysis was the *district court’s* change to the compensatory damages award, not this court’s reversal and remand that prompted the change in the first instance.” *Id.* at 1373.

Here, Sunoco complains that the Federal Circuit’s remand disturbed the logic in one part of this court’s decision, left the same logic untouched elsewhere, and thereby created an irreconcilable internal conflict. Even if that were true—and as discussed below, it is not—*Tronzo* says nothing about whether that kind of appellate decision does (or even could) represent a change in the facts. Sunoco cannot evade the mandate rule on that basis.

2. The Federal Circuit's Opinion Is Not Clearly Erroneous.

Finally, Sunoco urges that this case represents the “admittedly rare” instance where this court can ignore the mandate rule “because the Federal Circuit’s decision created a fundamental and irreconcilable inconsistency.” (Sunoco Lost Profits Br. at 9.) If the MCE-Equilon butane supply agreement is a sale of the invention for validity purposes, Sunoco argues that “it is necessarily [] a sale of the invention for lost profits purposes as well.” (*Id.*) But accepting that butane supply agreements are a “sale of the invention” does not render the Federal Circuit’s logic “irreconcilable.”

In its analysis of the on-sale bar, the Federal Circuit held that “Equilon purchased MCE’s equipment by committing to buy MCE’s butane,” meaning it was “a sale” of the invention. *Fed. Cir. Op.*, 32 F.4th at 1170. According to Sunoco, the court then “directly contradicted itself by holding that lost profits could be denied ‘since neither butane nor blended gasoline is the patented invention.’” (Sunoco Lost Profits Br. at 9 (quoting *Fed. Cir. Op.*, 32 F.4th at 1180).) The Federal Circuit, however, never held that butane or blended gasoline was “the patented invention” for purposes of the Equilon sale. Rather, it held that, in that instance, the butane supply agreement was the vehicle through which the invention—the blending system—was sold.

The butane supply agreements are no doubt relevant to lost profits, but the question the court must answer concerning lost profits is different than the question of whether the on-sale bar applies. To answer that question, the court needed to find only that the blending system was the “subject of a commercial offer for sale.” *Pfaff*, 525 U.S. at 67. This court initially held that the Equilon sale was not commercial; the Federal Circuit reversed. This court is, of course, bound by that finding. Still, to award lost profits, the court must be able to determine “the amount of profit [Sunoco] would have made.” *Mentor*, 851 F.3d at 1285. Accepting that the invention was sold via butane supply agreements is part of that equation but does not itself validate Sunoco’s lost profits calculation.

Put differently, the Federal Circuit's decision that the MCE-Equilon butane supply agreement was a sale says nothing about how to apportion the contractual profits between the invention and other ancillary services. This court turns, again, to the trial evidence on that issue: Ugone, Sunoco's expert, testified that by looking to comparable butane supply agreements signed with Sunoco, he could isolate the profits—\$31.585 million—that Sunoco would have made had Venture signed a similar agreement instead of infringing. (Trial Tr. at 677:4–8.) Ugone reached that figure by splitting projected profits fifty-fifty between the parties after removing a \$0.30 per gallon “butane supply cost,” which he testified accounted for “[e]verything that Sunoco would do under the butane supply agreement,” including transport and operating costs. (*Id.* at 733:22–734:7.) Ugone later reiterated that his \$0.30 per gallon adjustment accounted for all of the ancillary services under the butane supply agreement, like “24/7 [] monitoring, the system training, the software, the know-how, et cetera,” none of which would have been included as part of a bare patent license. (*Id.* at 748:1–749:17.) Sunoco asserts that “by including this ‘supply cost’ that accounts for all other services, Sunoco’s lost profits number apportions out all of the other benefits of the butane supply agreement.” (Sunoco Lost Profits Br. at 13.)

Sunoco twice insists that Ugone’s testimony on apportionment was “unrebutted” at trial. (*Id.* at 11, 13.) But the court explicitly rejected Ugone’s view in its post-trial order, instead crediting Venture’s expert, James Malackowski, who testified that Ugone’s lost profits figure represented more than just the damage from infringement. *Post-Trial Op.*, 436 F. Supp. 3d at 1128. Malackowski testified that the counterparties who signed butane supply agreements with Sunoco were getting butane, yes, but also “all of the operational logistics associated with the supply agreement.” (Trial Tr. 1723:12–1724:1.) He continued: “They’re not paying millions of dollars for a patent license. In fact, if you look to those [butane supply] agreements, it says if the patents expire, you still keep paying the same amount, so we know it’s not for the patent license.” (*Id.* at 1724:2–5.)

While Malackowski never specifically addressed Ugone's choice to apportion just \$0.30 per gallon for "all other services," Malackowski's testimony makes clear that he disagreed about how much of the contract value derived from the invention. He repeatedly reiterated his view that other Sunoco counterparties were "entering into Sunoco supply agreements for the benefits of that supply agreement which substantially are unrelated to the patent." (*Id.* at 1748:12–19.) Those "operational elements" are the "economic driver of the supply agreements." (*Id.* at 1763:25–1763:2.) Of course, the companies could have brought those services in house, but as Malackowski testified:

Our economy's driven by outsourced business services, whether it be payroll, employee hiring, or butane supply, that there are instances where a third party who makes it their specialty to provide a service to customers can do it at a more cost-effective basis than a given customer could themselves. That, in my opinion, is what drives Sunoco's butane supply business. Because of their economies of scale, they can provide that operational service to its clients efficiently.

(*Id.* at 1778:1–15)

The court found that testimony persuasive, and the Federal Circuit affirmed on that basis. In declining to disturb this court's lost profits decision, it reasoned that "the butane-supply agreements reflect a bundle of goods and services beyond just the patented invention—e.g., the purchase and sale of butane, equipment maintenance and monitoring, and a license to more than just the patented technology." *Fed. Cir. Op.*, 32 F.4th at 1180. That reasoning is not at odds with this court's decision that "neither butane nor blended gasoline is the patented invention," nor the Federal Circuit's endorsement of that holding. *Id.* (quoting *Post-Trial Op.*, 436 F. Supp. 3d at 1128). Sunoco insists that the Federal Circuit held that butane supply agreements "were not a sale of the invention" for lost profits purposes (Sunoco Lost Profits Reply [575] at 5), but that is not accurate. The question is not whether the invention was sold through butane supply agreements, as the Federal Circuit determined with respect to Equilon. The question—which no court considered with respect to the Equilon sale—is how to apportion the value of those contracts between the invention and the ancillary services. Ugone presented one opinion; Malackowski

presented another. This court, exercising its discretion, credited Malackowski's apportionment opinion over Ugone's. Nothing about that logic is rendered irreconcilable or unjust by the Federal Circuit's decision on Equilon.

Sunoco cites an Eleventh Circuit case, *Moulds v. Bullard*, as further support for the argument that the court can ignore the mandate rule, but that case differs greatly from this one. See 452 F. App'x 851 (11th Cir. 2011). In *Moulds*, the district court initially granted summary judgment on the plaintiff's due process claim because the plaintiff failed to establish a protected liberty interest. *Id.* at 854. The Eleventh Circuit agreed, but simultaneously held that the plaintiff's "procedural due process rights may have been violated by the disciplinary hearing that led to the imposition of that punishment." *Id.* The district court—recognizing that it was legally impossible to establish a procedural due process claim without a protected liberty interest—determined that it was not bound by the mandate rule. *Id.* at 852. A different Eleventh Circuit panel affirmed, reasoning that if the district court followed the previous panel's mandate, "the defendants could be found liable for violating [the plaintiff's] due process rights, despite the fact that they did not deprive [him] of a protected liberty interest." *Id.* at 855. Because that would be "clear error" and would "work a manifest injustice," the district court was not bound by the mandate. *Id.* at 856.

In *Moulds*, then, the district court was faced with a situation where the appellate court had created an unambiguous and irreconcilable legal conflict. Despite Sunoco's insistence, that is not the case here. True, "[e]ither the contracts are a sale of the invention or they [are] not." (Sunoco Lost Profits Br. at 10.) And they are. But as discussed at length above, the Federal Circuit's decision that MCE sold Equilon the invention via a butane supply agreement does not mean Sunoco can establish "the amount of profit [Sunoco] would have made" from such a contract with Venture. See *Mentor*, 851 F.3d at 1285. The court is bound by the mandate rule and will not reconsider its decision to award a reasonable royalty instead of lost profits.

II. Sunoco Remains Entitled to Trebled Damages.

After awarding a \$2 million royalty, this court trebled damages to \$6 million based on Venture's willful infringement. The Federal Circuit held that that opinion was based (at least in part) on a factual misapprehension and remanded for the court to reconsider whether enhanced damages remain appropriate. See Background Section II.C, *supra*.

After reconsideration, the court elects to reinstate its prior award. As explained below, the court's factual error does not change the logic of its initial opinion. Manion's opinion remains riddled with errors that were never identified because no one gave him the Technics proposal and no one with technical knowledge at Venture reviewed his letter. Manion's opinion could not, then, have served as a good faith basis for Venture's purported belief that its system was non-infringing. The court's previous findings on copying, expansion, and litigation misconduct all stand.

A. Good Faith

In its post-trial analysis, this court determined that enhanced damages were appropriate in part because "the opinion letter provided to Venture by attorney John Manion does not show that Venture had a good-faith belief that it was not infringing the patents." 436 F. Supp. 3d at 1133. The Federal Circuit vacated and remanded after determining that this court made a "clear factual error" in its treatment of Manion's opinion—namely, that contrary to this court's understanding, Manion knew that Venture's system could simultaneously pump blended gasoline from the intermediate tank to the rack where it would be dispensed. See *Fed. Cir. Op.*, 32 F.4th at 1178; see also Background Section II.C, *supra*.

"It is well settled that an important factor in determining whether willful infringement has been shown is whether or not the infringer obtained the opinion of counsel." *Comark Commc'ns., Inc. v. Harris Corp.*, 156 F.3d 1182, 1191 (Fed. Cir. 1998). But such an opinion "must be 'competent' or it is of little value in showing the good faith belief of the infringer." *Id.* Thus, an opinion letter may be a defense to a finding of willfulness, but only if the legal advice provided was sufficiently competent "such that the client was reasonable in relying upon it." *Id.* To provide

a “prophylactic defense,” the Federal Circuit instructs, “counsel’s opinion must be premised upon the best information known to the defendant” or it is “likely to be inaccurate.” *Id.* Indeed, if “material information is intentionally withheld, or the best information is intentionally not made available to counsel during the preparation of the opinion, the opinion can no longer serve its prophylactic purpose of negating a finding of willful infringement.” *Id.*

In this case, even accepting that Manion understood that Venture might simultaneously blend into and pump out of the intermediate tank, the court cannot find that his opinion was “premiered upon the best information known to” Venture. To the contrary, there is significant evidence that Manion was operating on misunderstandings of fact that Venture never bothered to correct.

As Manion testified, his opinion was only as accurate as the information provided by Venture. (Trial Tr. at 1152:16–1153:1.) As it turned out, Venture failed to provide accurate information on several fronts. For example, Manion understood from Venture’s in-house counsel Mike Sharkey that the Green Bay facility blended gasoline directly from a pipeline, not a tank. (*Id.* at 1153:8–1155:9.) He also believed that the proposed system would be operated manually and would not rely on a processor to calculate the blend rate. (*Id.* at 1155:18–1156:10.) Both of those understandings turned out to be wrong. In fact, Venture *was* planning to blend from tanks and *did* plan to blend automatically using a processor. See *Post-Trial Op.*, 436 F. Supp. 3d at 1133. Understandably, Manion testified that he would have wanted to reconsider his opinion had he known those assumptions were wrong. (Trial Tr. at 1157:16–22.)

If Venture had provided Manion accurate information, Manion may well have reached different conclusions. The full Technics proposal—which Venture had as of June 2010, months before Manion issued his letter—revealed that the “blend setup” was algorithmically controlled by a computer, not a manual operator. (*Id.* at 1160:5–1163:7.) But no one at Venture sent Manion that document. Manion testified that he assumed clients “would recognize that if things were not

as they conveyed them” to him, “that would make a difference” to his opinion. (*Id.* at 1164:13–20.)

Though the Federal Circuit determined that Manion understood that butane and gasoline might be blended into the intermediate tank and simultaneously dispensed from that tank to a truck rack, Manion’s opinion still was not based on the best information known to Venture. The court stands by its initial conclusion that the evidence “shows that Venture withheld critical information from Manion when he drafted his opinion letter.” *Post-Trial Op.*, 436 F. Supp. 3d at 1134. Not only did Venture fail to provide Manion with Venture’s own detailed plans, but Daniel Morrill—Venture’s director of terminal operations and the employee most knowledgeable about its blending operations—never spoke with Manion about the proposed system and never reviewed Manion’s opinion letter to evaluate whether it accurately captured the proposal. *Id.* As the court previously reasoned, “Venture’s failure to provide critical information, such as the proposal’s technical details, or to correct obvious errors like Manion’s belief that the proposed system blended butane manually” renders the opinion letter ineffective as a prophylactic defense. *Id.*; see also *nCube Corp. v. Seachange Intern., Inc.*, 436 F.3d 1317, 1324 (Fed. Cir. 2006) (“The record shows that at least one important technical document was not supplied” to opinion counsel, rendering it unsuitable for its “prophylactic purpose”).

Venture, for its part, urges that Manion’s opinion is “still legitimate with respect to all six patent claims asserted at trial because a party needs only one basis for non-infringement.” (Venture Enhanced Damages Opp. [570] at 3.) According to Venture, because one basis remains for Manion’s non-infringement opinion—that Venture would blend to an intermediate tank, not directly at the rack—his letter creates a good-faith belief of non-infringement and his other factual errors “are irrelevant.” (*Id.* at 10–11.) The court disagrees. While a valid basis for non-infringement is clearly necessary to find good faith reliance, it is not sufficient. If it were, there would be nothing to assess on remand.

The Federal Circuit's precedent makes clear that an opinion letter must be based on the "best information known to the defendant" to show good faith. *Comark*, 156 F.3d at 1191. Because there is evidence here that Venture failed to supply Manion the full information it had originally or to review Manion's opinion to verify the accuracy of its factual premises, his opinion was not competent, and Venture cannot use it to establish good faith.

B. Copying

When it awarded enhanced damages after trial, this court noted that Venture appeared to have "effectively copied the Texon system." *Post-Trial Op.*, 436 F. Supp. 3d at 1132. As discussed in that opinion, Venture spent two years trying to develop an alternative to the Texon system, but ultimately hired Technics to do that work. *Id.* Without ever before having designed a butane blending system, Technics was able to come up with a "very similar" system to Texon's in just two weeks. *Id.* at 1133. Indeed, the Technics-designed system used many of the same parts as Texon's system, like the Grabner analyzer and the same two Coriolis meters arranged in the same configuration. *Id.*

Notably, Venture already had the Technics proposal in hand before it ever consulted Manion. In June 2010, Tom Edwards from Technics sent Venture its proposal. (See PTX-83.) It was not until July that Chris Lamirande at Venture brought up the Texon patents and asked: "would [it] be prudent to have someone in our legal group look into these patents to verify we are not infringing on anything?" (PTX-84.) In August, Sharkey reported that he had spoken with Manion, who would "have an answer for us in about a week." (PTX-86.)

The Federal Circuit did not address the facts on copying. Instead, it reasoned that "Venture's culpability (if any) for copying . . . depends in part on whether it had a good-faith belief that it was not infringing," which in turn relates to whether Manion's opinion was competent. *Fed. Cir. Op.*, 32 F.4th at 1179. In other words, the Federal Circuit did not question this court's view that Venture copied the Texon design. It merely suggested that, if Venture had a good faith basis

from the Manion letter to believe the change it made to the otherwise-copied Technics design rendered the design non-infringing, Venture might not be *culpable* for its copying.

Venture's challenge to the finding that it copied does not actually address the facts about the development of its blending system. Instead, invoking Manion's opinion, Venture urges that "characterizing U.S. Venture's activity as copying is unwarranted." (Venture Enhanced Damages Opp. at 14.) The court rejects that argument, both because Manion's opinion was not competent and because Venture copied Texon's system before engaging Manion. *See Stryker Corp. v. Davol Inc.*, 234 F.3d 1252, 1259 (Fed. Cir. 2000) (jury's finding of willfulness supported where "the designs for the accused devices were finalized before obtaining an opinion of counsel").

C. Expansion

As this court previously noted, "Venture's expansion of its butane blending business after this litigation began is troublesome." *Post-Trial Op.*, 436 F. Supp. 3d at 1135. After Sunoco sued, Venture expanded its automated blending operations from three facilities to seven, "dramatically expand[ing] its use of the butane blending system in question" despite "full knowledge of the infringement risk." *Id.* Notably, the four systems added after the litigation began all infringed the '629 Patent claim 31, which the Federal Circuit affirmed was valid and infringed. (See Venture Enhanced Damages Opp. at 5 (summarizing which systems implicated which patent claims).)

The Federal Circuit directed this court to revisit its expansion analysis because the competence of Manion's opinion could affect Venture's culpability for expanding. *Fed. Cir. Op.*, 32 F.4th at 1179. Because the court finds that Manion's opinion was incompetent—and because Venture's new systems infringed, even assuming four out of six remaining claims are invalid because of the on-sale bar—the court finds that Venture's expansion favors enhanced damages.

D. Litigation Conduct

Though Venture disputes this court's previous finding that it committed litigation misconduct, it concedes that the Federal Circuit's opinion did not disturb that finding. (Venture Enhanced Damages Opp. at 15.) Venture argues only that litigation misconduct "standing alone"

cannot support enhanced damages. (*Id.*) Here, however, the court has found other factors that also support enhanced damages; the court therefore stands by its finding that Venture’s “less-than-ideal litigation conduct” supports enhancement. See *Post-Trial Op.*, 436 F. Supp. 3d at 1134–35.

E. Other Factors

Finally, Venture asserts that, if the court finds that the Equilon sale invalidated four of the six claims at issue, the enhancement factors would shift meaningfully toward Venture. (Venture Enhanced Damages Opp. at 5.) Specifically, Venture argues, applying the on-sale bar would move three factors—“closeness of the case, copying, and duration of infringement”—in its favor. (*Id.*) For enhancement purposes, the court will assume without deciding that the on-sale bar applies, leaving only two claims valid and infringed. The court nevertheless disagrees that the enhancement analysis shifts meaningfully in Venture’s favor.

First, in its post-trial opinion, the court did recognize that “several of the factors,” including closeness, “weigh[ed] in Venture’s favor.” *Post-Trial Op.*, 436 F. Supp. 3d at 1131. In other words, the court already credited Venture’s position that this case was “close.” Making it marginally “closer” would not affect the court’s enhancement analysis.

Second, Venture’s decision to copy Sunoco’s patented systems (see Discussion Section II.B, *supra*), supports enhancement even if—as Venture claims—the two remaining claims are not practiced by Sunoco. (See Venture Enhanced Damages Opp. at 6–7.) Venture cites *Read v. Portec*, 970 F.2d 816 (Fed. Cir. 1992) to suggest that “copying is only relevant to enhancement if it amounts to deliberate copying of a product that embodies the patent claims at issue.” (*Id.* at 6.) But *Read* asks “whether the infringer deliberately copied the ideas or design of another,” which “would encompass, for example, copying the commercial embodiment, not merely the elements of a patent claim.” 970 F.2d at 827 & n.7. Venture understands *Read* to limit enhancement for copying *only* to commercial embodiments, but that is backwards. Instead of limiting copying to

only the patent elements, *Read* instructs that copying includes the commercial embodiment of those elements, too.

Read distinguishes the analysis of copying from the infringement analysis, where “it is error for a court to compare . . . the accused product or process with the patentee’s commercial embodiment or other version of the product or process.” *Zenith Labs., Inc. v. Bristol-Myers Squibb Co.*, 19 F.3d 1418, 1423 (Fed. Cir. 1994). For infringement—unlike for copying—“the only proper comparison is with the claims of the patent.” *Id.* The plain meaning of “ideas or design” in *Read* makes it clear that Venture’s culpability for copying is unrelated to whether Sunoco commercially practiced the invention. Indeed, courts have found that copying “mere ideas” that were presented at a conference—even before a patent is issued—supports enhancement under *Read*. See *Barry v. Medtronic, Inc.*, 250 F. Supp. 3d 107, 114 (E.D. Tex. 2017).

Third and finally, the court disagrees that applying the on-sale bar would affect the “duration of [Venture’s] misconduct.” See *Read*, 970 F.2d at 827. As Venture’s own chart shows, assuming the on-sale bar applies, the two remaining claims (‘302 Patent claim 17 and ‘629 Patent claim 31) still cover all seven of Venture’s tank farms, including its “four newest systems.” (Venture Enhanced Damages Opp. at 5.) According to Venture’s back-of-the-envelope math, “the infringing volumes,” as measured by volume of butane blended, “would be significantly less” if the on-sale bar invalidates four of Sunoco’s claims. (*Id.* at 7.) But the court never relied on the volume of butane in determining that Venture’s “expansion of its butane blending business after this litigation began is troublesome.” *Post-Trial Op.*, 436 F. Supp. 3d at 1135. Instead, it viewed the expansion decision as evidence of willfulness. *Id.* The court’s decision that Venture’s reckless expansion of its blending operations mid-litigation supports enhancement is unaffected by the volume of butane blended by those systems.

In sum, even if the on-sale bar invalidates four of the six remaining claims, the court still believes trebled damages are appropriate.

III. The Court Need Not Resolve Whether the Invention Was “Ready for Patenting.”

The final issue remaining on remand is whether the on-sale bar invalidates several of Sunoco’s patent claims, which it would if the blending systems at issue were “ready for patenting” more than a year before the inventors filed the patent application. The court declines to decide the issue because it is no longer relevant.

The \$2 million royalty the court previously ordered “is not subject to increase” regardless of how the court resolves the on-sale bar issue, *Fed. Cir. Op.*, 32 F.4th at 1181, and the court has now determined that the mandate rule bars it from reconsidering lost profits. The only other issue on remand is whether to enhance damages. As just discussed, the court considered enhancement in the light most favorable to Venture—in other words, by assuming the on-sale bar applied—and nonetheless determined that enhancement is appropriate. Because the patents-in-suit are now expired and no remaining issues depend on the outcome of the on-sale bar analysis, the issue is moot. (*Cf. Venture On-Sale Bar Br.* [560] at 1 n.1 (explaining that the court “may wish to decide the enhancement and mandate-rule issues before turning to the on-sale bar” because “no other relief on those patents is possible and no declaratory judgment of invalidity is necessary to prevent their reassertion.”))

CONCLUSION

The court finds that all remaining infringement issues are moot, reaffirms its decision denying lost profits damages, and orders Venture to pay Sunoco \$6 million. Because all the patents-in-suit have expired, no injunctive relief is necessary. The parties are ordered to file, within 21 days, another joint statement on the amount of prejudgment interest on the non-trebled (\$2 million) reasonable royalty award.

ENTER:

Dated: February 2, 2023


REBECCA R. PALLMEYER
United States District Judge