

purported modifications to the manufacturing process that MOSO claims result in non-infringement either were not made or do not create a colorable difference with the original infringing method. Easoon argues that MOSO continues to infringe the '578 patent, thus violating the permanent injunction, which constitutes contempt.

For the reasons set forth below, the Court concludes that Easoon has failed to establish that MOSO's Bamboo Thermo or modified Bamboo X-treme, or the process for making them, are not colorably different from the previous versions or that they infringe the '578 patent. Accordingly, the permanent injunction has not been violated, and the Court therefore denies Easoon's motion for contempt.

Background

The Court assumes familiarity with the case's factual and procedural background as discussed in prior written opinions. See, e.g., *Dasso Int'l, Inc. v. MOSO N. Am., Inc.*, No. 17 C 1574, 2023 WL 5349374 (D. Del. Aug. 21, 2023). The following background is relevant to the underlying contempt motion.

Easoon and MOSO are "head-to-head competitors in the outdoor bamboo decking market." Pls.' Mem. in Supp. of Mot. for Contempt at 2. Easoon sued MOSO for infringement of its '578 patent, titled "Bamboo Scrimber and Manufacturing Method Thereof." See Harries Decl., Attach. A at 2. The '578 patent relates to "bamboo scrimber"—"a variety of engineered wood product"—"including a plurality of pressure-pressed bamboo strips impregnated with an adhesive and modified through heat-treatment and a method of manufacturing such bamboo scrimber." *Dasso Int'l, Inc. v. MOSO N. Am., Inc.*, No. 17-cv-1574-RGA, 2019 WL 2135855, at *1 (D. Del. May 16, 2019) (quoting the '578 patent at 1:20–24).

Two claims of the '578 patent are pertinent to Easoon's motion: claims 1 and 8.

Claim 1 of the '578 patent describes:

1. A bamboo scrimber comprising: a plurality of pressure-pressed bamboo strips impregnated with an adhesive and modified through heat-treatment so that at least a part of hemicelluloses in said bamboo strips is pyrolyzed, *wherein each of said bamboo strips is formed with a plurality of slots penetrating through said bamboo strip* substantially in a direction of thickness defined by said bamboo strip and a substantially longitudinal direction defined by said slots is substantially consistent with a substantially longitudinal direction defined by fibers of said bamboo strip.

Pls.' Mem. in Supp. of Mot. for Contempt at 5 (quoting the '578 patent, claim 1). The Court¹ construed the italicized portion of the passage just quoted to have its plain meaning and further clarified that "[t]he slots need not extend all the way through the strip, but must penetrate deeper than an incision." *Dasso Int'l*, 2019 WL 2135855, at *3.

Claim 8 of the '578 patent, which is a method claim, provides:

A method of manufacturing a bamboo scrimber comprising steps of: preparing bamboo strips from bamboo; *forming a plurality of slots in each of the prepared bamboo strips penetrating through the bamboo strip substantially in a direction of thickness defined by the bamboo strip* and a substantially longitudinal direction defined by the slots is substantially consistent with a substantially longitudinal direction defined by fibers of the bamboo strip; modifying the formed bamboo strips through heat-treatment so that at least a part of hemicelluloses in said bamboo strips is pyrolyzed; impregnating the modified bamboo strips into an adhesive; drying the impregnated bamboo strips; and pressure-pressing the dried bamboo strips in a mold until the adhesive is cured so as to form the bamboo scrimber.

Pls.' Mem. in Supp. of Mot. for Contempt at 5–6 (quoting the '578 patent, claim 8). The Court construed the italicized portion of the '578 patent to have its plain meaning and again noted that "[t]he slots need not extend all the way through the strip, but must penetrate deeper than an incision." *Dasso Int'l*, 2019 WL 2135855, at *3.

¹ Claim construction was handled not by the undersigned judge, but rather by the predecessor judge to whom the case was then assigned.

Easoon's infringement suit included both a "product" claim and a "method" claim—specifically, Easoon alleged that MOSO's product, Bamboo X-treme, infringed claims 1–7 of the '578 patent and further alleged that the method for creating Bamboo X-treme infringed claims 8–15 of the '578 patent. The case was tried before a jury in June 2023.

The parties' dispute at trial "centered on whether MOSO created 'slots' in the bamboo strips (as Easoon contended) or whether MOSO made 'incisions' in the strips (which MOSO contended)." *Id.* at 4. This focused on a particular step in MOSO's manufacturing process for Bamboo X-treme that utilizes a "toothed roller," see Def.'s Ex. 246 (demonstrative of toothed roller), which Easoon characterizes (accurately) as "a circular roller that has multiple blades that protrude from its central cylinder." Pls.' Mem. in Supp. of Mot. for Contempt at 4. At trial, Easoon contended that this toothed roller created slots in the bamboo from which MOSO made Bamboo X-treme, thereby constituting direct infringement. The jury was given the following instructions to determine whether Bamboo X-treme directly infringed the '578 patent:

To succeed on [the claim of direct infringement] with regard to claims 1, 2, and 4–7 of the patent, Dasso and Easoon must prove both the following by a preponderance of the evidence: 1. Every requirement in the particular patent claim you are considering is found in MOSO's product. 2. MOSO made, used, sold, offered for sale, or imported that product in the United States.

Instructions to the Jury at 20, June 8, 2023, Dkt. No. 436. The jury was further instructed, with regard to the method claims of the '578 patent:

Dasso and Easoon also contend that MOSO has infringed claims 8, 9, 10, 13, and 15 of the '578 patent. With regard to each of these patent claims, you must find infringement unless MOSO proves [by] a preponderance of the evidence that at least one requirement in the particular patent claim you are considering is not found in MOSO's process.

Id. Put differently, the jury could find the MOSO's Bamboo X-treme infringed claim 1 of the '578 patent only if (among other things) it found that Bamboo X-treme comprised bamboo strips formed with a plurality of slots penetrating through said bamboo strips, as taught in claim 1. Likewise, the jury could find Bamboo X-treme infringed claim 8 if (among other things) it found that the manufacturing process for that product created a plurality of slots, as taught in claim 8. The jury agreed with Easoon's contention, as described above, and it found that Bamboo X-treme infringed claims 1, 2, 4–7, 8, 9, 10, 13, and 15 of the '578 patent.

Following the jury's verdict, the Court entered a permanent injunction enjoining MOSO from continued infringement of the '578 patent "by making, using, offering for sale, selling, or importing the adjudicated products and any products not more than colorably different from the adjudicated products, in the United States and its territories, until the expiration of the '578 patent, including any USPTO extensions." Am. J. Following Jury Verdict ¶ 4, Dkt. No. 475.

Following the Court's issuance of the permanent injunction, MOSO says, it redesigned "the process for manufacture of thermally-modified bamboo scrimber products" like Bamboo X-treme and Bamboo Thermo. Shmulsky Decl., Ex. C ¶ 4 (declaration of MOSO International CEO Rene Zaal). Specifically, MOSO contends that "[t]he incising stage, which was argued by Plaintiffs to constitute 'slotting' according to [the '578 patent], has been eliminated." *Id.*, Ex. C ¶ 4a. In addition, MOSO says that "[t]he knives used at the planer stage, which remove the inner membrane from bamboo strips, have been replaced with knives having a flatter profile to avoid the creation of superficial incisions in the strip." *Id.*, Ex. C ¶ 4b. MOSO contends that, "[a]lthough

Plaintiffs had never argued that the [knives used at the planer stage] resulted in 'slots,' MOSO made this change proactively" to avoid potential future arguments of infringement related to the planer knives. Defs.' Mem. in Opp. to Pls.' Mot. for Contempt at 5. Following these modifications, MOSO "sought the advice of outside counsel and obtained an opinion that the new process did not infringe the '578 patent." *Id.* Based on this opinion, MOSO began importing products using this new manufacturing process into the U.S.

MOSO further asserts that it has "discontinued the use of the 'X-treme' name for products in the US. New Redesigned Products are sold as Moso Bamboo Thermo Outdoor." *Id.* MOSO says that Bamboo X-treme is no longer used in the U.S. market and that "[a]ll products made after July 7, 2023 and imported into the US are the result of the new process." *Id.* MOSO North America's CEO, Brett Kelly, stated that "MOSO's last importation of X-treme products into the United States was in March, 2023" and that none of the accused X-treme products have been made, used, or sold in the U.S. since the issuance of the permanent injunction. Kelly Decl. ¶ 5.

On March 18, 2025, Easoon filed the present motion for contempt. The Court conducted an evidentiary hearing on Easoon's motion in Chicago, Illinois on August 12 and 13, 2025. Having considered the evidence adduced at the hearing and the arguments in the parties' written submissions and during the motion hearing, the Court now rules on Easoon's motion.

Discussion

"The criteria for adjudicating a violation of a prohibition against continued infringement by a party whose products have already been adjudged to be infringing is

a matter of Federal Circuit law." *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869, 881 (Fed. Cir. 2011) (*en banc*). The Court in *TiVo* noted that contempt is a "severe remedy" and thus warranted only "where there is [not] a fair ground of doubt as to the wrongfulness of the defendant's conduct." *Id.* at 882 (quoting *Cal. Artificial Stone Paving Co. v. Molitor*, 113 U.S. 609, 618 (1885)). To make this determination, courts should assess whether there are "colorable differences between the newly accused product and the adjudged infringing product." *Id.* More specifically, "the party seeking to enforce the injunction must prove both that the newly accused product is not more than colorably different from the product found to infringe and that the newly accused product actually infringes." *Id.*

As an initial matter, Easoon asks the Court to maintain the presumption of infringement imposed on MOSO under 35 U.S.C. § 295 during trial and post-trial proceedings. Section 295 provides:

In actions alleging infringement of a process patent based on the importation, sale, offer for sale, or use of a product which is made from a process patented in the United States, if the court finds—(1) that a substantial likelihood exists that the product was made by the patented process, and (2) that the plaintiff has made a reasonable effort to determine the process actually used in the production of the product and was unable to so determine, the product shall be presumed to have been so made, and the burden of establishing that the product was not made by the process shall be on the party asserting that it was not so made.

Id.

At the trial stage, the Court imposed a presumption of infringement on MOSO based on a finding that the requirements of section 295—mainly Easoon's inability to determine the process actually used in the production of the allegedly infringing product—had been met. At this point, however, the circumstances have changed.

When the Court granted Easoon's motion for a presumption of infringement prior to trial, Easoon had been unable to inspect the Chinese factories involved in the allegedly infringing product and process. But Easoon's expert, Dr. Rubin Shmulsky, was able to visit the facilities in China following the filing of the contempt motion. When there, Shmulsky examined the machinery that processes the bamboo used to manufacture Bamboo Thermo and Bamboo X-treme. Based on this visit, Shmulsky was able to, in the words of section 295, "determine the process actually used in the production of the product." Accordingly, the requirements of section 295 are no longer met, and the Court finds that applying a presumption of infringement is no longer warranted. The Court thus overrules Easoon's request to continue applying the presumption of infringement under 35 U.S.C. § 295.

Having established that the burden is on Easoon to show that Bamboo Thermo and the new Bamboo X-treme and the process for making them infringe the '578 patent, the Court finds that Easoon had failed to establish either requirement for contempt as outlined by the court in *TiVo*. The Court finds that Bamboo Thermo and the newly manufactured Bamboo X-treme, and the process used to make them, *are* colorably different from the previously infringing version and that Bamboo Thermo and the new Bamboo X-treme, and the process used to make them, do not infringe the '578 patent.

A. Colorably different

The court in *TiVo* set out the following standard for assessing whether a newly accused product and the process of manufacturing that product are colorably different from a product and process previously found to infringe:

The analysis must focus not on differences between randomly chosen features of the product found to infringe in the earlier infringement trial and

the newly accused product, . . . but on those aspects of the accused product that were previously alleged to be, and were a basis for, the prior finding of infringement, and the modified features of the newly accused product.

TiVo, 646 F.3d at 882 (internal citation omitted). "Specifically, one should focus on those elements of the adjudged infringing products that the patentee previously contended, and proved, satisfy specific limitations of the asserted claims." *Id.* "Where one or more of those elements previously found to infringe has been modified, or removed, the court must make an inquiry into whether that modification is significant." *Id.* Whether a modification is significant is context-dependent; "[d]etermining the requisite level of difference is a question of fact." *Id.* at 883. Accordingly, a court must consider the relevant prior art "to determine if the modification merely employs or combines elements already known in the prior art in a manner that would have been obvious to a person of ordinary skill in the art at the time the modification was made." *Id.* at 882. A court may also consult expert testimony when determining whether a modified product is colorably different from a previously infringing product. *Id.* at 883.

Easoon contends that MOSO's Bamboo Thermo and new Bamboo X-treme products and the process for making them are not colorably different from, and continue to infringe, the same claims of the '578 patent that the old Bamboo X-treme product and process were found to infringe at trial. MOSO contends that it modified its manufacturing process to entirely eliminate the step that resulted in infringement of the '578 patent—the "incising step" utilizing "toothed rollers," which was found to create the slots recited in claims 1 and 8 of the '578 patent. Easoon disputes that this modification eliminates the slotting step.

Easoon's arguments boil down to two contentions. First, Easoon contends that

the allegedly redesigned version of Bamboo X-treme is identical to the previously infringing version of Bamboo X-treme and that Bamboo Thermo is identical to the redesigned Bamboo X-treme. Therefore, Easoon contends, neither Bamboo Thermo nor the "new" Bamboo X-treme are colorably different from the previously adjudicated infringing product and as such both infringe claim 1 of the '578 patent. Second, Easoon argues that the process for manufacturing Bamboo Thermo is effectively the same as the process used to manufacture Bamboo X-treme and thus infringes claim 8 of the '578 patent.

The Court is not persuaded by Easoon's arguments. The two claims of the '578 patent that all parties agree are at issue—claims 1 and 8—relate to slots in bamboo scrimber and the process for creating these slots. MOSO, however, has presented evidence that, the Court finds, establishes that the manufacturing process for the scrimber no longer includes the "toothed rollers" at issue at trial. See Harries Decl., Ex. B (a schematic displaying the previous method for manufacturing Bamboo X-treme compared to a schematic of the current method used to manufacture Bamboo Thermo). A schematic of MOSO's previous manufacturing process for Bamboo X-treme refers to step 2a as the "[i]ncising stage" during which the toothed rollers created the infringing slots in the bamboo. *Id.*, Ex. B. Another schematic showing MOSO's new manufacturing process for Bamboo Thermo reflects that step 2a has been eliminated. *Id.*, Ex. B.

The parties agree that this schematic showing the process for Bamboo Thermo is incorrect and incomplete. Specifically, MOSO has clarified that step 2a has been modified, not eliminated. The previous method used toothed rollers at the incising stage

to create slots in the bamboo; the new method replaces them with an additional set of rollers of the same type used during a later step of the manufacturing process referred to as the "[c]rushing stage." *Id.*, Ex. B. In other words, MOSO's schematic, as clarified, reflects that the incising stage has been replaced by an additional crushing stage, and the toothed rollers have been replaced by an additional set of crushing rollers. As a result, the particular step of the manufacturing process that produced the infringement of the '578 patent—the incising stage—is no longer part of the process.

Dr. Shmulsky testified during the evidentiary hearing on the contempt motion that, based on the findings at trial regarding the original process, the "slots made by the toothed roller get imparted or penetrate through the depth of the surface of the [bamboo] strip as it goes through the subsequent crushing rollers." Hr'g Tr. Aug. 12, 2025 at 34:22–25. In other words, Dr. Shmulsky confirmed that, at trial, the manufacturing process for Bamboo X-treme had separate steps for, first, slotting, and, then, crushing the bamboo. During the contempt hearing, however, Dr. Shmulsky opined that now, "in the process of going through these crushing rollers, the slotting process has been combined with crushing." *Id.* at 36:8–10. Dr. Shmulsky bases this opinion, at least in part, on his observations that the end products of Bamboo Thermo and the new Bamboo X-treme appear the same and have the same density as the previously infringing product. According to Dr. Shmulsky, the fact that the end products are (as he sees it) the same means that, whatever changes may have been made to the manufacturing process, slots are still created and therefore the products continue to infringe the '578 patent.

MOSO's expert, Dr. Keith Harries, offered a different explanation for how

replacing the incising rollers with crushing rollers impacts the manufacturing process. According to Dr. Harries, the crushing rollers operate in pairs, with one roller on top and another on bottom. The bamboo passes between the rollers, flattening it out—crushing it—and thereby creating cracks in the bamboo as it is crushed. The "teeth" on the crushing rollers—which are flatter, wider, and blunter than the previous incising rollers—are offset. (A roughly analogous comparison would be molars as opposed to incisors.) Dr. Harries explains that the design of these crushing rollers compresses the bamboo such that it creates "lateral tension" and "shear force." See Hr'g Tr. from Aug. 12, 2025 at 90:2–14. Dr. Harries explained what happens during this process as follows:

[T]he [bamboo] has a finite amount of strength, and some of it's going to be used to resist tension, some of it's going to be used to resist shear. And particularly we're looking at the transverse direction in anisotropic material, the presence of shear, the presence of a tension force across a shear plane or the presence of shear across a—perpendicular to a tension force is actually going to make—allow the material to break easier, to crack easier. It's sort of additive effects. And so that's what we have here. And so this sort of geometry through a crushing action allows us to crack the strip, crack the strip apart.

Id. at 90:24—91:10.

The Court finds Dr. Harries's explanation of the process more credible and persuasive than that of Dr. Shmulsky and, more generally, that MOSO has the more persuasive argument. Both experts testified that the toothed rollers at issue at trial are no longer part of the manufacturing process for either Bamboo Thermo or Bamboo Xtreme. Both experts also confirmed that these toothed rollers have been replaced by an additional set of crushing rollers. The first set of crushing rollers creates, through the crushing process, cracks in the bamboo, and these cracks are arguably somewhat similar to the slots that were created during the original process. But cracks created

through crushing the material are not the same as slots created by incising rollers—to use the terminology pertinent here, they are more than colorably different. And, equally important for present purposes, the process of creating cracks by *crushing* the bamboo is colorably different from the process described in claim 8 of the '578 patent, which teaches a method of *slotting* bamboo to create the type of scrimber covered by the patent.

It is of no consequence whether, as Dr. Shmulsky claimed, Bamboo Thermo and new Bamboo X-treme *look* indistinguishable from the previously infringing product once completed. If the process of crushing does not create slots, then the products are not "slotted"—they are, as MOSO contends, crushed and thereby cracked.

In sum, the Court finds that Bamboo Thermo and the new Bamboo X-treme are colorably different from the previously infringing product, and the process is colorably different from the previously infringing process.

B. Infringement

When a court determines that "the newly accused product as a whole [is] more than colorably different from the adjudged infringing one, . . . the inquiry into whether the newly accused product actually infringes is irrelevant." *TiVo*, 646 F.3d at 882. The Court nonetheless addresses the point to ensure a complete record.

The Court finds that Bamboo Thermo and the new Bamboo X-treme do not infringe the '578 patent for the same reasons it finds the new products are colorably different. The specific patent claims at issue—claims 1 and 8—describe a product and method of processing bamboo. The product, as set forth in claim 1, is a bamboo scrimber comprising a "plurality of pressure-pressed bamboo strips . . . *wherein each of*

the said bamboo strips is formed with a plurality of slots penetrating through said bamboo strip." Pls.' Mem. in Supp. of Mot. for Contempt at 5 (quoting the '578 patent, claim 1). And the method, as explained earlier, involves creating the aforementioned slots that, when crushed, break the bamboo. The patent does not teach the use of crushing to create cracks, nor does it describe a product formed with a plurality of cracks in bamboo as it does slots. For these reasons, the Court finds that Bamboo Thermo and the new Bamboo X-treme, and the method for making them, do not infringe claims 1 or 8 of the '578 patent.

Conclusion

In sum, the Court finds that MOSO's Bamboo Thermo and new Bamboo X-treme, and the method for making them, are colorably different from the previously infringing version of the Bamboo X-treme product and method and that they do not infringe the relevant claims of the '578 patent. The Court thus denies Easoon's motion to hold MOSO in contempt [dkt. 509].



MATTHEW F. KENNELLY
United States District Judge

Date: August 25 2025