

UNITED STATES DISTRICT COURT  
DISTRICT OF MAINE

RANGE OF MOTION	)	
PRODUCTS LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	No. 1:22-cv-00091-JDL
	)	
THE ARMAID COMPANY INC.,	)	
	)	
Defendant.	)	

ORDER ON DEFENDANT'S MOTION FOR SUMMARY JUDGMENT

Plaintiff Range of Motion Products, LLC ("ROM"), alleges that the Defendant, The Armaid Company Inc. ("Armaid"), markets and sells a body massaging product that infringes a design patent that ROM owns (ECF No. 1). This dispute is before me for the second time; in an earlier case, *Range of Motion Products LLC v. Armaid Co. Inc.* ("*Range of Motion I*"), No. 1:21-cv-00105-JDL, 2021 WL 3476607 (D. Me. Aug. 6, 2021), I denied ROM's request for a preliminary injunction which would have enjoined Armaid from marketing and selling the Armaid2, the accused product. Afterwards, the parties stipulated to the dismissal of *Range of Motion I* without prejudice.

ROM has filed a new Complaint raising infringement claims similar to those it alleged in *Range of Motion I* (ECF No. 1). Armaid now moves for summary judgment (ECF No. 42). For the reasons explained below, I grant Armaid's Motion for Summary Judgment.

## I. BACKGROUND

### A. Factual Background<sup>1</sup>

Terry Cross, the Armaid Company's late owner, was a sports and occupational injury therapist who created a limb massaging apparatus, the Armaid1, in 1995. Cross designed the Armaid1 to relieve stress and muscle tightness in the arms. In 1998, Cross was awarded a utility patent (the "'081 patent"),<sup>2</sup> which was embodied in the Armaid1. The '081 patent—which has expired and is not at issue in this case—was summarized as “relat[ing] to body massaging devices and more particularly to devices adapted for the treatment of wrists and arms affected by carpal tunnel syndrome.” ECF No. 43 at 2, ¶ 3 (alteration in original). Among the claims in the '081 patent is one for “a device comprising two arms, one of which is ‘hingedly attach[ed]’ to the other, with massaging members on each arm, and with arms that ‘are shaped and dimensioned to adjustably clamp a limb between [the] . . . massaging members.’” ECF No. 43 at 3, ¶ 6 (alterations in original) (quoting ECF No. 43-4 at 4). The description in the '081 patent analogizes the hinge assembly to hinges used in adjustable pliers and notes that users can grab and hold together the device's handles with their free hand.

---

<sup>1</sup> The parties stipulated that the summary judgment record would consist of the record from (1) this case, (2) *Range of Motion I*, and (3) related litigation in California state court between Stahl and Cross's Estate. See ECF No. 37 at 2, ¶ 3 (Court's report memorializing this stipulation).

<sup>2</sup> See U.S. Patent No. 5,792,081.

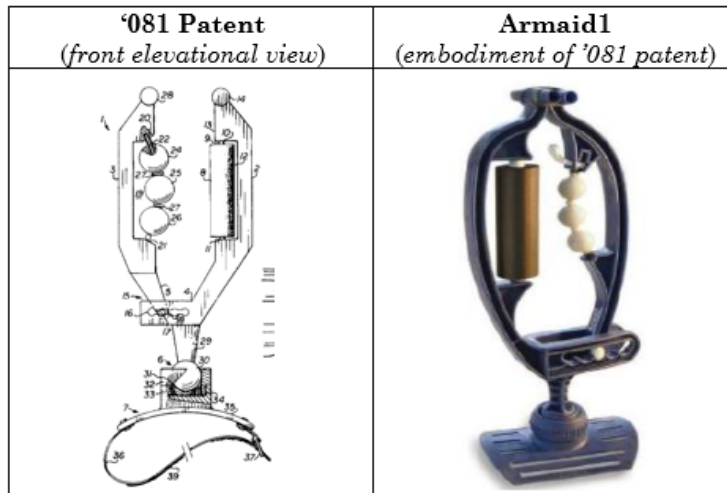


Image 1 - Side-by-side comparison of the '081 Patent and the Armaid1

In 2015, Cross adapted the Armaid1 to create a device that massaged the entire body. Cross's adaptations included: (1) opening the end of the hinge apparatus to permit the therapy arm to be detached from the device; (2) molding the oval connector pivot directly into the end of the detachable therapy arm; (3) changing the base to be shaped like an inverted mushroom that would be stable wherever a user placed it on their body; and (4) increasing the curve of the arms to accommodate larger rollers as well as the user's legs.<sup>3</sup> The adapted device was ultimately known as the "Rolflex." ECF No. 43 at 4, ¶ 8.

<sup>3</sup> In general, I have adopted terms used in Armaid's uncontroverted statements of fact when describing the individual component parts of the various devices and patent illustrations central to this dispute. See e.g., ECF No. 43 at 3-5, ¶¶ 9-11; 9-11, ¶¶ 27-28 and 32.



*Image 2 - The original Rolflex*

In 2015, Cross filed two provisional applications for possible utility patents covering the functional features of the Rolflex.<sup>4</sup> Neither application, which “described the invention embodied in the Rolflex in utilitarian terms,” was approved. ECF No. 43 at 5, ¶ 14.

In 2016, Cross, Nic Bartolotta, Brian Stahl, and an entity controlled by Stahl, formed ROM as a California limited liability corporation to sell the Rolflex. Near that time, ROM’s patent attorney filed an application<sup>5</sup> on behalf of ROM for a design patent that eventually resulted in the patent at issue in this case: U.S. Patent No. D802,155 S (the “D’155 patent”).

---

<sup>4</sup> I use the terms “feature” and “element” interchangeably throughout this order as shorthand for a component part of the devices and patent illustrations relevant to the infringement claim, as both terms are used to that effect in the caselaw underlying my analysis. Relatedly, I use the term “aspect” to indicate the functional or ornament quality of a given feature/element.

<sup>5</sup> Cross signed the application as the inventor and assigned his interest in the application to ROM on the same day.



Image 3 - D'155 Patent

The D'155 patent claims “[t]he ornamental design for a body massaging apparatus,” as shown in eight illustrations (excepting material depicted by dashed lines). ECF No. 43 at 1, ¶ 1 (alteration in original); *see infra* Part II(B)(1)(c) (D'155 patent illustrations). The Rolflex “embod[ies] the design of the D'155 [p]atent,” a point that ROM conceded in *Range of Motion I*. No. 1:21-cv-00105-JDL, ECF No. 8 at 10. ROM applied for a utility patent for the Rolflex, but this patent did not issue in part because it was deemed “obvious” in light of the '081 patent.

Later, after a falling-out with the other members of ROM, Cross concentrated his efforts on his Maine-based company, Armaid, and created the Armaid2, the accused product.



*Image 4 - The Armaid2*

The parties dispute the inspiration for Cross's development of the Armaid2. ROM contends that "Cross either came up with the Armaid2's design in light of the Rolflex or directly used the specifications for the molds of the Rolflex to create the Armaid2." ECF No. 47 at 4, ¶ 23. Armaid contends that the Armaid2 resulted from changes Cross made to the Armaid1 to improve its functionality based on customer feedback. The parties also dispute whether changes to the function or the form drove the Armaid2's development.

On June 1, 2021, Cross was awarded a utility patent (the "'310 patent") that protected at least one feature of the Armaid2 not present in the Rolflex. In the application for the '310 patent, Cross identified the invention as filling a need for a simple and effective self-operated body massaging apparatus that could be used from multiple angles without the risk of inflicting undue pain.

In late 2021, Cross died in an accident.

## B. Procedural History

### 1. *Range of Motion I* Litigation

ROM filed a Complaint in *Range of Motion I* on April 12, 2021, alleging that Armaid's manufacture and sale of the Armaid2 infringed the D'155 patent (No. 1:21-cv-00105-JDL, ECF No. 1). ROM later moved for a preliminary injunction (No. 1:21-cv-00105-JDL, ECF No. 8). After a hearing on the motion, I issued an Order denying ROM's request for a preliminary injunction because ROM had failed to show either a likelihood of success on the merits or that it had suffered an irreparable injury (No. 1:21-cv-00105-JDL, ECF No. 32). *See Range of Motion I*, 2021 WL 3476607, at \*13. Subsequently, the parties stipulated to dismiss the action without prejudice, which ended the *Range of Motion I* litigation (No. 1:21-cv-00105, ECF No. 34).

### 2. Current Case

ROM filed its current Complaint with this Court on April 8, 2022. (ECF No. 1). The Complaint does not differ meaningfully from the previous Complaint ROM filed in *Range of Motion I*. The current Complaint requests: (1) a declaration that Armaid infringed the D'155 patent, (2) preliminary and permanent injunctions, (3) treble damages for willful misuse pursuant to 35 U.S.C.A. § 284 (West 2023), and (4) attorney fees. Armaid filed an Answer denying liability and raising several affirmative defenses (ECF No. 13).

On November 28, 2022, Armaid filed a Motion for Summary Judgment and Statement of Material Facts (ECF Nos. 42, 43). The Statement of Material Facts includes ROM's infringement contentions (ECF No. 43-14) and claims chart (ECF No.

43-15) as attachments. ROM responded in opposition on January 11, 2023 (ECF No. 46), and Armaid replied on January 22, 2023 (ECF No. 48). ROM was granted permission to file and, in fact, filed a Surreply (ECF Nos. 54, 56).

On January 31, 2023, the parties filed a chart delineating their respective constructions of the claims in the D'155 patent (ECF No. 52). They also filed briefs on various claim construction issues thereafter (ECF Nos. 57-60).<sup>6</sup> The parties disagreed about the need for a separate claim construction hearing on those issues: ROM favoring a limited hearing with arguments but no testimony, and Armaid altogether opposing a hearing because the D'155 patent's text and illustrations speak for themselves and, at any, rate, had already been analyzed in *Range of Motion I*. On March 30, 2023, I entered an Order noting that I would "discuss with counsel the need for the scheduling of a formal claim[] construction hearing at the hearing on the Motion for Summary Judgment scheduled April 26, 2023." ECF No. 62.

I heard oral argument on the Motion for Summary Judgment on April 26, 2023 (ECF No. 64), during which the parties also shared their respective views on the need for a separate hearing on claim construction.

## II. LEGAL ANALYSIS

### A. Summary Judgment Standard

"A grant of summary judgment is appropriate when 'there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of

---

<sup>6</sup> After Armaid (ECF No. 16) and ROM (ECF No. 23) requested alternatives to the original scheduling order (ECF No. 14), Magistrate Judge John C. Nivison amended the order to give the parties time to file claim construction briefs and, if requested and deemed necessary, for the Court to hold a hearing on the same (ECF No. 33).

law.” *Garcia-Garcia v. Costco Wholesale Corp.*, 878 F.3d 411, 417 (1st Cir. 2017) (quoting *Ameen v. Amphenol Printed Circuits, Inc.*, 777 F.3d 63, 68 (1st Cir. 2015)). “A genuine issue of fact exists where ‘the evidence is such that a reasonable jury could return a verdict for the nonmoving party.’” *Id.* (quoting *Taylor v. Am. Chemistry Council*, 576 F.3d 16, 24 (1st Cir. 2009)); see also *Feliciano-Muñoz v. Rebarber-Ocasio*, 970 F.3d 53, 62 (1st Cir. 2020) (“An issue is “genuine” if it can “be resolved in favor of either party,” and a fact is “material” if it “has the potential of affecting the outcome of the case.”” (quoting *Tang v. Citizens Bank, N.A.*, 821 F.3d 206, 215 (1st Cir. 2016))). To be entitled to summary judgment, the moving party “must ‘affirmatively produce evidence that negates an essential element of the non-moving party’s claim,’ or using ‘evidentiary materials already on file . . . demonstrate that the non-moving party will be unable to carry its burden of persuasion at trial.” *Ocasio-Hernández v. Fortuño-Burset*, 777 F.3d 1, 4-5 (1st Cir. 2015) (alteration in original) (quoting *Carmona v. Toledo*, 215 F.3d 124, 132 (1st Cir. 2000)). “The court must examine ‘the record in the light most favorable to the nonmovant’ and must make ‘all reasonable inferences in that party’s favor.’” *Garcia-Garcia*, 878 F.3d at 417 (quoting *Ameen*, 777 F.3d at 68). However, the court “must ignore conclusory allegations, improbable inferences, and unsupported speculation.” *Id.* (quoting *Taylor*, 576 F.3d at 24).

## **B. Design Patent Infringement Claim**

Armaid seeks summary judgment on ROM’s claim that Armaid infringed the D’155 design patent by marketing and selling the Armaid2. Under 35 U.S.C.A. § 171 (West 2023), “[w]hoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and

requirements of this title." Design patents protect only the "ornamental design of the article"—they "do not and cannot include claims to the structural or functional aspects of the article." *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186, 1188 (Fed. Cir. 1988); *see also KeyStone Retaining Wall Sys., Inc. v. Westrock, Inc.*, 997 F.2d 1444, 1450 (Fed. Cir. 1993) ("A design patent protects the non-functional aspects of an ornamental design as shown in a patent.").

In patent infringement cases, "[s]ummary judgment is appropriate when it is apparent that only one conclusion as to infringement can be reached by a reasonable jury." *TechSearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002). "Summary judgment of noninfringement is also appropriate where the patent owner's proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial." *Id.*

Resolving a design patent infringement claim involves a two-step inquiry. "Determining whether a design patent claim has been infringed requires, first, as with utility patents, that the claim be properly construed to determine its meaning and scope. Second, the claim as properly construed must be compared to the accused design to determine whether there has been infringement." *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571, 1577 (Fed. Cir. 1995) (citation omitted). The second step is known as the "ordinary observer" test. *Id.* Under this test, "infringement is found '[i]f, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other.'" *Lanard Toys Ltd. v. Dolgencorp LLC ("Lanard Toys II")*, 958 F.3d 1337, 1341

(Fed. Cir. 2020) (alteration in original) (quoting *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 670 (Fed. Cir. 2008) (en banc)).

## 1. Claim Construction

### (a) Applicable Legal Standards

"[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude." *Copan Italia S.p.A. v. Puritan Med. Prods. Co. LLC*, No. 1:18-cv-00218-JDL, 2019 WL 5699078, at \*1 (D. Me. Nov. 4, 2019) (alteration in original) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005)). "The construction of patent claims is a question of law which is 'exclusively within the province of the court.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372, 384 (1996)). Trial courts have a "duty" to undertake claim construction in design patent cases. *Egyptian Goddess*, 543 F.3d at 679.

Design patents "typically are claimed as shown in drawings." *Id.* (quoting *Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.*, 501 F.3d 1314, 1319 (Fed. Cir. 2007)). "In construing a design patent claim, the scope of the claimed design encompasses, 'its visual appearance as a whole,' and, in particular 'the visual impression it creates.'" *Lanard Toys, Ltd. v. Toys "R" Us-Delaware, Inc.* ("*Lanard Toys I*"), No. 3:15-cv-849-J-34PDB, 2019 WL 1304290, at \*11 (M.D. Fla. Mar. 21, 2019) (quoting *Contessa Food Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1376 (Fed. Cir. 2002), *abrogated on other grounds by Egyptian Goddess*, 543 F.3d 665).

Trial courts are not required to provide a detailed verbal description of the claimed design. *Egyptian Goddess*, 543 F.3d at 679. Still, "a court may find it helpful to point out, either for a jury or in the case of a bench trial by way of describing the

court's own analysis, various features of the claimed design as they relate to the accused design and the prior art." *Id.* at 680. And a trial court can "address[] a number of other issues that bear on the scope of the claim" including: (1) "describing the role of particular conventions in design patent drafting, such as the role of broken lines;" and (2) "assessing and describing the effect of any representations that may have been made in the course of the prosecution history;" and (3) "distinguishing between those features of the claimed design that are ornamental and those that are purely functional." *Id.* (citations omitted); see also *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1333 (Fed. Cir. 2015) ("[T]here are a number of claim scope issues which may benefit from verbal or written guidance, among them the distinction between features of the claimed design that are ornamental and those that are purely functional.").

Distinguishing between functional and non-functional features of the claimed design is particularly illuminating. "Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent." *Sport Dimension, Inc. v. Coleman Co. Inc.*, 820 F.3d 1316, 1320 (Fed. Cir. 2016) (quoting *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997)). But a court should not "entirely eliminate a structural element from the claimed ornamental design, even though that element also served a functional purpose." *Id.* at 1321. The mere fact that a component of a product has a function does not mean that the component was designed solely based on functional considerations. See *Lifted Ltd., LLC v. Novelty Inc.*, No. 16-cv-03135-PAB-GPG, 2020 WL 2747814, at \*3 (D. Colo.

May 27, 2020) (acknowledging the distinction between “the functionality of the various components . . . and the functionality of the particular way those components are designed”).

**(b) Need for a Separate Claim Construction Hearing**

Before construing the D’155 patent, I address the threshold question of whether a separate claim construction hearing is needed. ROM argues that a separate hearing is necessary because claim construction involves legal and factual issues distinct from those relevant to deciding the underlying infringement claim. At the April 26, 2023, hearing, however, ROM acknowledged that the Court already had a “complete statement of the evidence that [it] should consider in deciding the claim construction” before it. Tr. at 24:1-5

Whether to hold a separate claim construction hearing is a decision within the Court’s discretion. *See Ballard Med. Prods. v. Allegiance Healthcare Corp.*, 268 F.3d 1352, 1358 (Fed. Cir. 2001) (holding that district courts “need not follow any particular procedure in conducting claim construction”); *see also Revlon Consumer Prods. Corp. v. Estee Lauder Cos., Inc.*, No. 00 Civ. 5960 RMB AJP, 2003 WL 21751833, at \*14 (S.D.N.Y. July 30, 2003) (recommended decision) (“Nothing . . . mandates the use of a [claim construction] hearing in every patent case.”). Under the circumstances of this case, I conclude that a claim construction hearing is unnecessary for several reasons.

First, as ROM conceded at oral argument, there is sufficient record evidence for me to construe the claim in the D'155 patent.<sup>7</sup> The parties submitted a claim construction chart with cited evidence that, as ROM acknowledges, I am entitled to rely upon. Indeed, in its request for a claim construction hearing, ROM notes that it would not seek to present testimony at the hearing. ECF No. 61 at 1. Second, the parties have had a full opportunity to brief claim construction in this case and discuss the issue at oral argument; more argument on the same evidence would not be helpful. Third, to the extent that ROM wishes to provide expert witness testimony at that hearing—as indicated in the parties' claims construction chart, albeit inconsistently with ROM's request for a limited hearing—the deadline to designate expert witnesses has long passed. Finally, I already had the benefit of an initial exchange of claim construction briefs in *Range of Motion I*, and the factual record here is nearly identical to the one in that case, with the addition of only a few documents.<sup>8</sup>

ROM's arguments to the contrary are not persuasive. ROM contends that claim construction in this instance presents a different legal posture than in *Range of Motion I* and, therefore, would benefit from additional argument. But ROM

---

<sup>7</sup> In any event, the record that could be created at such a claim construction hearing is likely limited by Cross's untimely death.

<sup>8</sup> As the parties acknowledge, I am not bound at the summary judgment stage by the claim construction that I conducted when ruling on ROM's Motion for a Preliminary Injunction in *Range of Motion I*. See *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*, 695 F.3d 1285, 1302 (Fed. Cir. 2012) (“[T]he general rule is that tentative claim construction for preliminary injunction purposes does not remove the issue from later review after the facts are elaborated . . .”). The Federal Circuit has implied that, under some circumstances, an initial claim construction can constitute binding “law of the case,” see *id.* at 1301-02, but neither party raises that issue, so I decline to discuss it further.

already raised claim construction arguments in its briefs and at the summary judgment hearing. And ROM's prior indications that additional evidence bearing on claim construction could be submitted at such a hearing are at odds with the narrow scope of the hearing it is actually requesting. As noted, ROM expressly represented that I could rely on the existing evidence in the record to construe the claim in the D'155 patent. Moreover, ROM has failed to detail any additional evidence that would assist the Court with claim construction, or why ROM failed to include that evidence in the summary judgment record.<sup>9</sup>

Accordingly, because a hearing is discretionary and the record before the Court provides a sufficient basis to construe the design claimed in the D'155 patent, I deny ROM's request for a separate claim construction hearing.

---

<sup>9</sup> For example, ROM suggested at oral argument for the first time that it could adduce (1) the testimony of Bartolotta and (2) an email and photograph supporting their contention that Cross designed the Armaid2 from the molds used for the Rolflex. With respect to the latter, ROM did not explain how this evidence can help to elucidate the scope of the D'155 patent or which design features of the D'155 patent are driven by functional considerations.

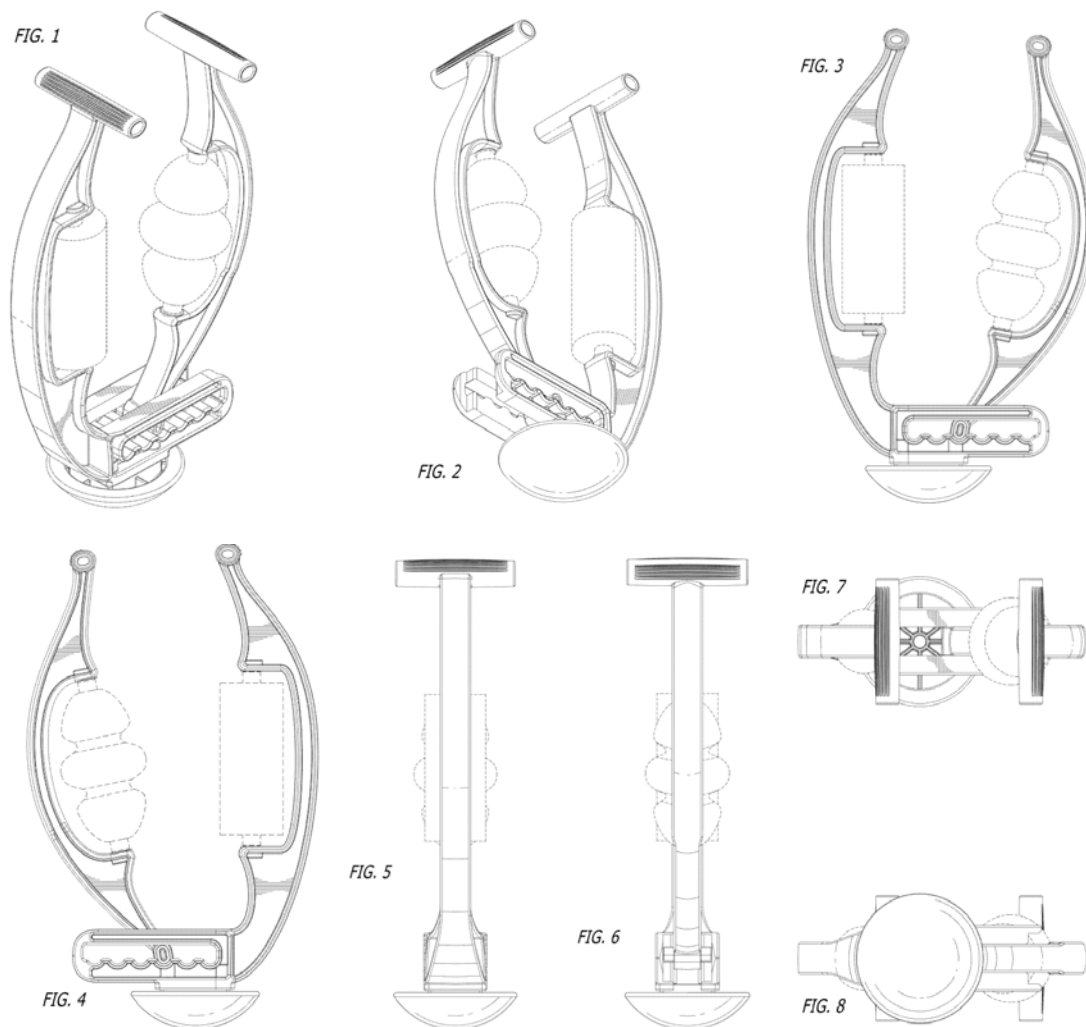
Subsequent to the hearing, ROM filed a Motion for Leave to File Additional Evidence (ECF No. 65), wherein it sought to supplement the summary judgment record to include the email and photograph as additional support for denying Armaid's assertion that Cross modified the Armaid1 to create the Armaid2. ROM's motion argued that the additional evidence was relevant to the issue of whether Cross designed the Armaid2 based on the Armaid1 or the Rolflex:

At the time of filing its opposition, RoM believed and still maintains that this denial is sufficient to create a dispute of material fact sufficient to survive a motion for summary judgment. However, to the extent that the Court believes this critically disputed fact is not properly supported by the evidence of record, RoM respectfully requests the opportunity to provide a single piece of additional evidence in support of Mr. Stahl's statements under Fed. R. Civ. P. Rule 56(e).

ROM's motion did not suggest that the additional evidence was submitted for purposes of claim construction. I denied ROM's motion because "ROM ha[d] previously supported its denial of the fact in dispute" by citing to the affidavit from Stahl. ECF No. 73 at 2. I did not decide whether the product Cross used as a starting point for developing the Armaid2 was material to the disposition of Armaid's Motion for Summary Judgment.

**(c) Construing the Claim in the D'155 Patent**

The D'155 patent is entitled "Body Massaging Apparatus" and recites a claim for "[t]he ornamental design for a body massaging apparatus, as shown and described." ECF No. 52-1 at 2. The patent includes eight design illustrations, reproduced below, representing the apparatus as viewed from several perspectives.



*Images 5-12 - D'155 Patent Design Illustrations*

The portions of the illustrations depicted in dashed lines—*i.e.*, the massage rollers—are expressly disclaimed from the scope of the patent, so they do not contribute to its scope.

Considering the Federal Circuit’s instructions in construing design patents, *see Egyptian Goddess*, 543 F.3d at 679-80, as well as the maxim that a picture is worth a thousand words, I rely on these design illustrations and do not write a detailed, feature-by-feature description to define the scope of the claimed design. I proceed by first comparing various features of the claimed design, the accused design, and the prior art, and later by addressing the functional-vs-ornamental analysis contemplated by *Egyptian Goddess*.

(i) Comparing the Claimed Design, Accused Design, and Prior Art



Image 13 - Side-by-side comparison of the D'155 Patent, the Armaid2, and the Armaid1.

Several similarities among the designs of the D'155 patent (the claimed design), the accused product (the Armaid2), and the only potentially limiting prior

art (the Armaid1) bear noting. As apparent from the side-by-side comparison above the D'155 patent is broadly similar to the Armaid1: both have opposable, curved arms, roller cutouts and handles, with the arms attached to a hinge apparatus with multiple slots for size adjustment. But the three designs also vary considerably—most noticeably in the arms (disregarding distinctions among the bases, each of which serve functional purposes outside the scope of a design patent). The arms in the D'155 patent and Armaid2 curve gradually whereas the Armaid1's arms pinch suddenly just below the handles. Other distinctions among the three designs include (1) the connection between the hinge apparatus and the arm, particularly between the D'155 patent and the Armaid2; (2) the number of adjustment slots in the hinge apparatus; and (3) the shape of the roller cutouts. And, as noted above, some of the changes between the D'155 and the Armaid1 resulted from the fact that the D'155 patent was developed to be used on the entire body, not just the arms.

#### (ii) Functional vs. Ornamental Analysis

"[D]istinguishing between those features of the claimed design that are ornamental and those that are purely functional" can be particularly helpful to the trier-of-fact because the scope of a design patent is limited to the ornamental aspects of a design. *Egyptian Goddess*, 543 F.3d at 680. "[W]hile it may be appropriate to note particular functional features of a design, it is improper to wholly exclude structural elements of a design patent claim simply because they have functional aspects. Instead, the Court should consider the manner in which the functional features of the design patent 'contribute to the overall ornamentation of the design.'" *Lifted Ltd.*, 2020 WL 2747814, at \*2 (citation omitted) (quoting *Sport Dimension*, 820

F.3d at 1323). Determining if a particular design choice is driven by function involves several related inquiries, namely:

whether the protected design represents the best design; whether alternative designs would adversely affect the utility of the specified article; whether there are any concomitant utility patents; whether the advertising touts particular features of the design as having specific utility; and whether there are any elements in the design or an overall appearance clearly not dictated by function.

*Sport Dimension*, 820 F.3d at 1322 (quoting *PHG Techs., LLC v. St. John Cos., Inc.*, 496 F.3d 1361, 1366 (Fed. Cir. 2006)).

Considering these factors, it is evident that many, but not all, of the design features in the D'155 patent—which the Rolflex embodied—are driven by function. This finding accords with my conclusions in *Range of Motion I*, 2021 WL 3476607, at \*5-6, which, although not binding, are informative because the factual record before me is essentially the same as it was in that case. And like in *Range of Motion I*, my conclusions are based primarily on a concomitant utility patent, Cross's affidavit, and Rolflex marketing materials. *See id.*

**The '081 Patent.** First, the '081 patent—embodied in the Armaid1, which ROM concedes is “the only potentially limiting prior art” (ECF No. 46 at 11)—supports finding that the overall design of the D'155 patent is functional. The '081 patent's claims, which define the scope of the protected invention, enumerate the invention's component parts and ascribes each with a utilitarian purpose, with nary a word about ornamentation to indicate either non-functional features or intended aesthetic function (*i.e.*, visual appeal). ECF No. 43-4 at 5-6. To the extent that the D'155 patent is the progeny of the '081 patent, its inheritance is purely functional.

**The Cross Affidavit.** The summary judgment record includes Terry Cross's affidavit [ECF No. 43-1], which also sheds light on which features of the D'155 patent are driven by functional considerations. Cross explained the primary purpose of the Rolflex, which embodied the D'155 patent, was to allow users to massage their entire body, whereas the Rolflex's precursor, the Armaid1, massaged the arms only. Several of the changes from the Armaid1 were functional and designed to enable this broader application, namely: (1) the overall clamshell appearance of the arms, including an increased curve of the therapy arm; (2) the inverted mushroom base; (3) the open slot at the end of the hinge apparatus, which permits the therapy arm to be removed for use as a separate tool; and (4) the oval connector pivot molded into the end of the therapy arm.

**Rolflex Marketing Material.** Finally, ROM's marketing of the Rolflex is also relevant evidence in considering the nature of the design features in the D'155 patent. The description of the Rolflex on ROM's website emphasizes the product's utilitarian features and the ability to use it on multiple parts of the body. For instance, the website highlights (1) how the "clam-shaped roller arms provide significant leverage," (2) how the Rolflex's "ergonomic design enables the user to effectively self-massage over nearly every muscle of the body," and (3) how the Rolflex's "compact design . . . makes it convenient to take and use anywhere." ECF No. 43-10 at 8. ROM's website does not mention the ornamental aspects of the Rolflex at all.

Taking these facts together, it is evident that many of the Rolflex's individual features have a functional purpose and, thus, are beyond the scope of the claim in the D'155 patent. In reaching this conclusion, I do not wholly exclude functional features,

but I consider instead how those features contribute to the overall ornamentation. *See Sport Dimension*, 820 F.3d at 1322-23. To be sure, some features of the D'155 patent appear to be largely ornamental, including the hollowness and length of the handles, the thick ridged outline, the precise shape of the connector pivot, and the shape of the portion of the device where the hinge apparatus attaches to the fixed arm. But given the “design’s many functional elements and its minimal ornamentation, the overall . . . scope of the claim is accordingly narrow.” *Id.*; *see also Ethicon Endo-Surgery*, 796 F.3d at 1334.

ROM’s arguments to the contrary are unpersuasive. At certain points during this litigation, ROM has contended that all features depicted with solid lines in the D’155 patent are necessarily ornamental because they were not disclaimed from the design, as are features drawn with dashed lines. It is unclear whether ROM maintains this position, which, in any event, is unconvincing. The Federal Circuit has repeatedly emphasized that it may be helpful to discuss which features of a design patent are driven by functional considerations. *See Egyptian Goddess*, 543 F.3d at 680. That discussion would be pointless and, indeed, impossible if every feature depicted in solid lines in design patents were *per se* ornamental.

ROM also argues that “the evidentiary questions concerning the scope of the prior art compared to the claimed design and whether the D’155 Patent’s claim is primarily functional or ornamental are material questions of fact” that must be resolved in its favor at the summary judgment stage. ECF No. 46 at 11. I disagree. Although claim construction has “evidentiary underpinnings,” how to construe a claim is a question of law within the exclusive province of the court. *Markman*, 517

U.S. at 386, 388-90; *see also* *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 326-27 (2015). ROM's argument is, therefore, unavailing. Moreover, ROM has produced few—if any—facts that aid my analysis of which design features are functional. Instead, ROM relies largely on (1) the illustrations in the D'155 patent, which alone are insufficient to determine whether design features are principally functional or ornamental; and (2) the Stahl declarations, which barely address feature functionality.

Additionally, ROM seems to argue that a comparison with the prior art—the Armaid1—shows that there was a feasible alternative design for the Rolflex.<sup>10</sup> ROM does not develop any argument as to other alternative designs that could have achieved the same function (contrary to its approach in *Range of Motion I*). But the Cross affidavit explains that many of the changes to the Armaid1 reflected in the D'155 patent (and the Rolflex embodying it) were driven by functional considerations and the desire to make a massaging apparatus that could be used on different parts of the body. Thus, I find unavailing ROM's argument that, because the Armaid1 was an alternative design for the Rolflex, much of the design is entirely ornamental.

---

<sup>10</sup> ROM primarily argues that the Armaid1 provides a reasonable alternative design for the accused product—the Armaid2—and only mentions perfunctorily that the Armaid1 could provide a reasonable alternative design for the Rolflex/D'155 patent. But the latter question is what I must focus on during my claim construction because I am called on to construe the claims in the D'155 patent, not the Armaid2, and to determine whether the design features of the D'155 patent were based on function. *See Sport Dimension*, 820 F.3d at 1322 (considering whether there were reasonable alternative designs for the design patent being construed to determine whether the design features were primarily functional); *see also Lifted Ltd.*, 2020 WL 2747814, at \*4 (same). ROM's focus on whether there were reasonable alternative designs for the Armaid2 is, therefore, misplaced.

## (2) Infringement

### (a) Legal Standard

“A design patent is infringed ‘[i]f, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other.’” *Ethicon Endo-Surgery*, 796 F.3d at 1335 (alteration in original) (quoting *Egyptian Goddess*, 543 F.3d at 670). This assessment must be made “in the context of the claimed design as a whole, and not in the context of separate elements in isolation.” *Id.* In other words, when “the claimed design includes several elements, the fact finder must apply the ordinary observer test by comparing similarities in overall designs, not similarities of ornamental features in isolation.” *Id.* “An element-by-element comparison, untethered from application of the ordinary observer inquiry to the overall design, is procedural error.” *Id.* “[M]inor differences between a patented design and an accused article’s design cannot, and shall not, prevent a finding of infringement.” *Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1303 (Fed. Cir. 2010) (alteration in original) (quoting *Payless Shoesource v. Reebok Int’l Ltd.*, 998 F.3d 985, 991 (Fed. Cir. 1993)).

The ordinary-observer test comprises two steps. “First, ‘where the claimed and accused designs are “sufficiently distinct” and “plainly dissimilar,” the patentee does not meet its burden of proving infringement’ and the Court need not resort to an analysis of the prior art.” *Lanard Toys I*, 2019 WL 1304290, at \*15 (quoting *High Point Design LLC v. Buyer’s Direct, Inc.*, 621 Fed. App’x 632, 641 (Fed. Cir. 2015)). Second, “[i]f the claimed and accused designs are not plainly dissimilar,’ then the

analysis proceeds to the second stage to compare ‘the claimed and accused designs with prior art to identify differences that are not noticeable in the abstract but would be significant to the hypothetical ordinary observer familiar with the prior art.’” *Id.* (quoting *Ethicon Endo-Surgery*, 796 F.3d at 1335).

With respect to the second step, which involves comparison with the prior art, the Federal Circuit has explained:

[T]he ordinary observer is deemed to view the differences between the patented design and the accused product in the context of the prior art. When the differences between the claimed and accused design are viewed in light of the prior art, the attention of the hypothetical ordinary observer will be drawn to those aspects of the claimed design that differ from the prior art. And when the claimed design is close to the prior art designs, small differences between the accused design and the claimed design are likely to be important to the eye of the hypothetical ordinary observer.

*Lanard Toys II*, 958 F.3d at 1344 (quoting *Egyptian Goddess*, 543 F.3d at 676).

In conducting the ordinary-observer test, a court considers only the ornamental features of the design, including the ornamental aspects of functional features, but not the functional aspects of the design. *See Ethicon Endo-Surgery*, 796 F.3d at 1336 (“[B]ecause each of these components has a functional aspect, the underlying elements must be excluded from the scope of the design claims at this general conceptual level.”); *Amini Innovation Corp. v. Anthony Cal., Inc.*, 439 F.3d 1365, 1372 (Fed. Cir. 2006) (“The trial court is correct to factor out the functional aspects of various design elements, but that discounting of functional elements must not convert the overall infringement test to an element-by-element comparison.”); *see also OddzOn Prods.*, 122 F.3d at 1405 (“If . . . a design contains both functional and ornamental features, the patentee must show that the perceived similarity is based

on the ornamental features of the design.”). The proper way to analyze this is with a “side-by-side” comparison of the accused design and the allegedly infringed patent. *See, e.g., Crocs*, 598 F.3d at 1304.

Finally, the fact that the parties or experts disagree about whether a reasonable jury could conclude that the designs are substantially similar does not preclude entry of summary judgment. *See Lanard Toys I*, 2019 WL 1304290, at \*15 (“[E]xpert testimony cannot create a material issue of fact, where [a] visual comparison reveals that the alleged infringing [design] is not substantially similar to the [patented] design.” (alterations in original) (quoting *Dyson, Inc. v. SharkNinja Operating LLC*, No. 14-cv-779, 2018 WL 1906105, at \*8 (N.D. Ill. Mar. 29, 2018))).

#### (b) Application

To determine whether the designs are substantially similar, I compare the D’155 patent and the Armaid2 side-by-side. *See Crocs*, 598 F.3d at 1304.

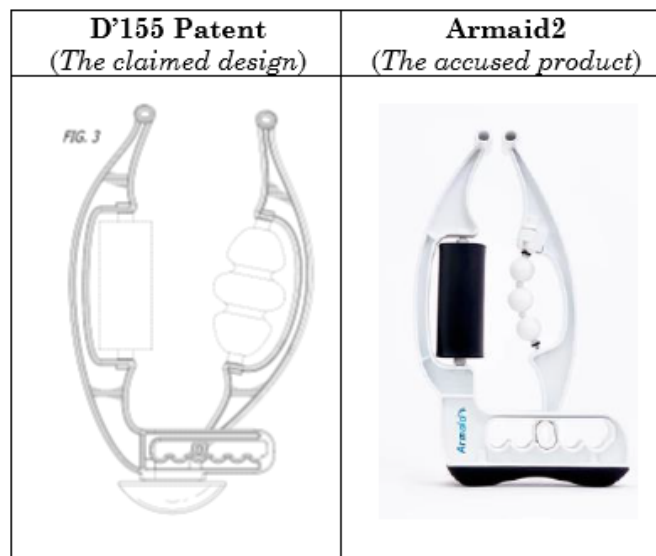


Image 14 - Side-by-side comparison of the D’155 Patent and the Armaid2.

The D'155 patent and the Armaid2 share a "broad design concept" and "at a conceptual level they look quite similar." 2019 WL 1304290, at \*15. But the rub for ROM is that most of the Armaid2's similarities to the D'155 patent are likenesses to the latter's functional features. These functional features are not protected by the D'155 patent and, therefore, do not bear on the ordinary-observer test. *See Lanard Toys II*, 958 F.3d at 1343. Accordingly, without converting the infringement analysis to an element-by-element comparison, I consider the functional features of the D'155 patent only to the extent that they contribute to the overall ornamentation. *See id.; Amini Innovation Corp.*, 439 F.3d at 1372. Looking at the overall visual impression created by the D'155 patent and the Armaid2, I conclude that they are not substantially similar, and are, in fact, plainly dissimilar.

When viewing the D'155 patent and the Armaid2 side-by-side, certain features stand out. In the D'155 patent, the hinge apparatus naturally flows into the fixed arm and would not be the ordinary observer's primary focus; instead, the fixed arm is the most noticeable feature. In contrast, the semi-rectangular hinge apparatus of the Armaid2 makes up proportionally more of the device and forms the entire base of the product, separated from the arm by a horizontal raised edge. The separation of the hinge apparatus contributes to the overall segmented appearance of the Armaid2—a difference reinforced by the presence of raised interior partitions in the clamshell arms present in the Armaid2 but absent in the D'155 patent.<sup>11</sup> Further, the size-selection slots in the Armaid2 are larger, both on their own and in proportion

---

<sup>11</sup> Although the clamshell arms themselves are functional, I must consider their ornamental aspects and the way they contribute to the overall design. *See Sport Dimension*, 820 F.3d at 1323.

to the product as a whole. And the blunter, less rounded end of the hinge apparatus in the Armaid2 also draws the eye more than the subtler, rounder curves of the hinge apparatus in the D'155 patent. These features contribute to the “stylized impression” conveyed by the Armaid2, as I described in *Range of Motion I*, in contrast to the “robust and workmanlike” impression conveyed by the D'155 patent. 2021 WL 3476607, at \*9. In sum, I find that the ornamental aspects of the two designs are plainly dissimilar, such that ROM cannot show patent infringement as a matter of law. See *Ethicon Endo-Surgery*, 796 F.3d at 1335-36.

Even if I were to reach a comparison with the prior art—which I need not do given the plain dissimilarity present here, see *id.* at 1337—the prior art further supports concluding that the designs of the D'155 patent and the Armaid2 are not substantially similar. The only relevant art acknowledged by the parties is the Armaid1. Accordingly, I focus on the differences among the Armaid1, the D'155 patent, and the Armaid2. See *Lanard Toys II*, 958 F.3d at 1344 (“When the differences between the claimed and accused design are viewed in light of the prior art, the attention of the hypothetical ordinary observer will be drawn to those aspects of the claimed design that differ from the prior art.” (quoting *Egyptian Goddess*, 543 F.3d at 676)); see also *ABC Corp. I v. P'ship & Unincorporated Assocs. Identified on Schedule “A”*, 52 F.4th 934, 942 (Fed. Cir. 2022) (“Where a patented design and accused design are not ‘plainly dissimilar,’ the court must conduct a three[-]way analysis comparing the accused product, the patented design, and the prior art.” (quoting *Egyptian Goddess*, 543 F.3d at 678)).

Factoring out the functional aspects of the bases (which are notably different in any event), the most salient differences between the Armaid1 and the Armaid2 are the shape of the arms and the manner in which the fixed arm connects to the hinge apparatus. With respect to arm shape, there are notable differences among the areas just below the cylindrical handlebars in all three images (though the difference is slighter between the D'155 patent and the Armaid2). But again, the hinge apparatus of the Armaid2 differs from the hinge apparatuses depicted in the D'155 patent and of the Armaid1, the latter two being quite similar to each other. Based on that holistic analysis, rather than a piecemeal, feature-by-feature comparison, I conclude that the D'155 patent and the Armaid2 are plainly dissimilar or, at the least, not substantially similar.



Image 15 - Side-by-side comparison of D'155 Patent, the Armaid2, and the Armaid1.

ROM's arguments to the contrary are inapposite. ROM repeatedly emphasizes the substantial differences among the claimed design, the accused product, and the prior art, such that I should construe the claims of the D'155 patent "extraordinarily

broadly” and conclude that the D’155 patent and the Armaid2 are substantially similar. ECF No. 46 at 12. But I need not reach the prior art in light of my conclusion that the ornamental aspects of the design depicted in the D’155 patent and of the Armaid2 are plainly dissimilar. *See Ethicon Endo-Surgery*, 796 F.3d at 1337. And although there is less prior art here than there was in *Lanard Toys I*, it is sufficient to employ that court’s frame-of-reference approach—which supports concluding that the D’155 patent and the Armaid2 are not substantially similar.

Finally, although there is a genuine dispute as to whether Cross developed the Armaid2 based on the Armaid1 or the Rolflex, it is immaterial to the ultimate question I resolve in this case. A dispute is material if it can be outcome-determinative. *See Vineberg v. Bissonnette*, 548 F.3d 50, 56 (1st Cir. 2008). But the linchpin of a design patent infringement claim is whether, when two products are viewed side-by-side, “an ordinary observer, familiar with the prior art, would be deceived into believing that the accused product is the same as the patented design.” *Crocs*, 598 F.3d at 1306. Which product Cross may have used as his starting point for the Armaid2 does not bear on this inquiry such that the parties dispute over the Armaid2’s inspiration, however sincere, does not preclude entry of summary judgment.

Based on the undisputed material facts, Armaid is entitled to summary judgment on ROM’s infringement claim because no reasonable jury could find that the design of the Armaid2 is substantially similar to the very narrow design claimed in the D’155 patent. *See TechSearch*, 286 F.3d at 1369.

### III. CONCLUSION

For the foregoing reasons, Armaid's Motion for Summary Judgment (ECF No. 42) is **GRANTED**.

**SO ORDERED.**

Dated this the 28th day of August, 2023.

/s/ JON D. LEVY  
CHIEF U.S. DISTRICT JUDGE