

# United States Court of Appeals for the Federal Circuit

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**RANGE OF MOTION PRODUCTS, LLC,**  
*Plaintiff-Appellant*

v.

**ARMAID COMPANY INC.,**  
*Defendant-Appellee*

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2023-2427

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Appeal from the United States District Court for the District of Maine in No. 1:22-cv-00091-JDL, Chief Judge Jon D. Levy.

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Decided: February 2, 2026

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JUSTIN TINGER, Lambert Shortell and Connaughton, Boston, MA, argued for plaintiff-appellant. Also represented by DAVID CONNAUGHTON, BRENDAN M. SHORTELL.

JOSHUA JOHN FOUGERE, Sidley Austin LLP, Washington, DC, argued for defendant-appellee. Also represented by CLAIRE HOMSHER, SUSAN K. WHALEY; PETER J. BRANN, STACY O. STITHAM, DAVID SWETNAM-BURLAND, Brann & Isaacson, Lewiston, ME.

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Before MOORE, *Chief Judge*, HUGHES and CUNNINGHAM,  
*Circuit Judges*.

Opinion for the court filed by *Circuit Judge* CUNNINGHAM.

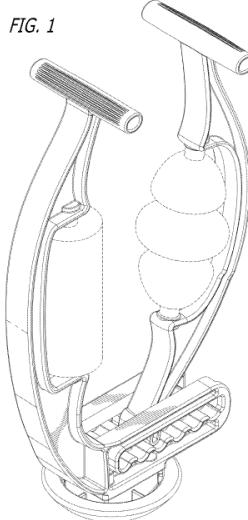
Dissenting opinion filed by *Chief Judge* MOORE.

CUNNINGHAM, *Circuit Judge*.

Range of Motion Products, LLC (“RoM”) appeals the United States District Court for the District of Maine’s grant of summary judgment of non-infringement. *Range of Motion Prods. LLC v. Armaid Co.*, No. 1:22-CV-00091-JDL, 2023 WL 5530768 (D. Me. Aug. 28, 2023) (“Order”). For the reasons discussed below, we affirm.

### I. BACKGROUND

RoM owns U.S. Design Patent No. D802,155, the patent at issue in this case. *Order at \*2*; J.A. 369–70 ¶ 20; J.A. 588 ¶ 20. The D’155 patent is titled “Body Massaging Apparatus” and claims “[t]he ornamental design for a body massaging apparatus, as shown and described.” The patent was filed on May 25, 2016, and issued on November 7, 2017. Figure 1 of the patent is reproduced below:



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D'155 patent, Fig. 1.

The parties agree that the “Rolflex,” a device sold by RoM that is aimed at massaging the entire body, embodies the design of the D'155 patent. *Order* at \*1–2; Appellant's Br. 2; Appellee's Br. 12. The original version of the Rolflex is depicted below:



*Order* at \*1; J.A. 366 ¶ 8; J.A. 587 ¶ 8.

Armaid Company Inc. (“Armaid”) produces and sells the “Armaid2,” the accused product in this case, which is shown below:



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*Order* at \*2; J.A. 370 ¶ 22; J.A. 588 ¶ 22. Beginning in the 1990s, Armaid manufactured and sold the “Armaid1,” a massaging apparatus for the arms. *Order* at \*1; J.A. 364 ¶ 2; J.A. 586 ¶ 2. Terry Cross, the owner of Armaid, obtained U.S. Patent No. 5,792,081, a utility patent that was titled “Limb Massager” and embodied by the Armaid1. *Order* at \*1; J.A. 364 ¶ 3; J.A. 586 ¶ 3. A picture of the Armaid1 is below:



*Order* at \*1; J.A. 364 ¶ 2; J.A. 586 ¶ 2.

In April 2021, RoM sued Armaid in the District of Maine, alleging infringement of the claim of the D'155 patent. *Range of Motion Prods. LLC v. Armaid Co.*, No. 1:21-CV-00105-JDL, 2021 WL 3476607, at \*3 (D. Me. Aug. 6, 2021). After the district court denied RoM's preliminary injunction motion, the parties stipulated to dismiss this suit without prejudice. *Id.* at \*13; *Order* at \*1.

On April 8, 2022, RoM sued Armaid again in the underlying action, alleging infringement of the claim of the D'155 patent. J.A. 71–81. While construing the scope of the claim of the D'155 patent, the district court distinguished between the features of the design that were

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functional versus ornamental and concluded that “many, but not all, of the design features in the D’155 patent—which the Rolflex embodied—are driven by function,” *Order* at \*7, and that “the overall . . . scope of the claim is accordingly narrow,” *Order* at \*8 (alteration in original) (quoting *Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316, 1322–23 (Fed. Cir. 2016)); *see Order* at \*4–9. With respect to infringement, the district court concluded that no reasonable jury could find the design of the Armaid2 substantially similar to the design claimed in the D’155 patent. *See Order* at \*12. On August 28, 2023, the district court granted Armaid summary judgment of non-infringement. *Order* at \*1, \*12.

RoM timely appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## II. STANDARD OF REVIEW

“We review the district court’s ultimate claim construction of a design patent de novo.” *Sport Dimension*, 820 F.3d at 1320. “We review any factual findings underlying the construction for clear error.” *Id.*

“We review a district court’s grant of summary judgment according to the law of the regional circuit.” *Lanard Toys Ltd. v. Dolgencorp LLC*, 958 F.3d 1337, 1341 (Fed. Cir. 2020). In the First Circuit, summary judgment rulings are reviewed de novo. *McKenney v. Mangino*, 873 F.3d 75, 80 (1st Cir. 2017). “A district court may only grant summary judgment when the record, construed in the light most congenial to the nonmovant, presents no genuine issue as to any material fact and reflects the movant’s entitlement to judgment as a matter of law.” *Id.* (citing Fed. R. Civ. P. 56(a)).

## III. DISCUSSION

RoM argues that the district court erred in its claim construction analysis by eliminating entire structural elements from the claimed design. *See* Appellant’s Br. 8–28.

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RoM also argues that, even if the district court’s claim construction is correct, the designs of the D’155 patent and Armaid<sup>2</sup> are substantially similar. *See* Appellant’s Br. 34–37. We address each argument in turn.

## A.

On appeal, RoM argues that the district court’s construction “improperly eliminates entire structural elements from the claimed design.” Appellant’s Br. 8. When asked what elements were improperly eliminated, RoM pointed to the district court’s classification of the “shape” of the arms as functional.<sup>1</sup> Oral Arg. 5:05–10:00, 28:06–28:44, 31:06–31:36, [https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-2427\\_02042025.mp3](https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-2427_02042025.mp3). We agree with the district court’s conclusion that the shape of the arms is functional and disagree with RoM’s contention that the district court entirely eliminated a structural element. In doing so, we reject RoM’s arguments that the intrinsic evidence in this case unambiguously demonstrates that the shape of the arms is solely ornamental.

## i.

“Determining whether a design patent has been infringed is a two-part test: (1) the court first construes the claim to determine its meaning and scope; (2) the fact finder then compares the properly construed claim to the accused design.” *Lanard Toys*, 958 F.3d at 1341. “[A]

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<sup>1</sup> To the extent that RoM challenges the district court’s conclusion that the base had functional aspects, *see, e.g.*, Appellant’s Br. 19, we reject RoM’s challenge for the same reasons as those discussed below with respect to the arms. *See, e.g.*, *Order* at \*8 (identifying the “inverted mushroom base” as functional); *id.* at \*11 (explaining that its infringement analysis only “[f]actor[ed] out the functional aspects of the bases (which are notably different in any event)”).

design is better represented by an illustration ‘than it could be by any description and a description would probably not be intelligible without the illustration.’” *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (en banc) (citation omitted). “While it may be unwise to attempt a full description of the claimed design, 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 (inner quotation marks and citation omitted). For example, “[w]here 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.”<sup>2</sup> *Sport Dimension*, 820 F.3d at 1320 (quoting *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997)). We have previously identified several useful factors for determining whether the patented design is dictated by function, including:

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

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<sup>2</sup> No factual dispute about claim construction functionality precludes summary judgment: “[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996); see *Ethicon*, 796 F.3d at 1333 (Fed. Cir. 2015) (endorsing, at summary judgment, claim construction to remove functional elements from design patents); *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405–06 (Fed. Cir. 1997) (rejecting extrinsic evidence and upholding a summary judgment stage functionality claim construction).

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.

*PHG Techs., LLC v. St. John Cos.*, 469 F.3d 1361, 1366–67 (Fed. Cir. 2006) (quoting *Berry Sterling Corp. v. Pescor Plastics, Inc.*, 122 F.3d 1452, 1456 (Fed. Cir. 1997) (emphasis omitted)); see also *Sport Dimension*, 820 F.3d at 1322 (“Although we introduced these factors to assist courts in determining whether a claimed design was dictated by function and thus invalid, they may serve as a useful guide for claim construction functionality as well.”).

The evidence in the record supports the conclusion that the shape of the arms is functional. The claims of the ’081 patent cover “limb-massaging apparatus[es]” with arms that “are shaped and dimensioned to adjustably clamp a limb between said first and second massaging members.” ’081 patent col. 3 l. 65 to col. 4 l. 9; see *Order* at \*8 (reasoning that the D’155 patent, to the extent it is the ’081 patent’s progeny, inherited these functional aspects). Mr. Cross’s affidavit identified functional aspects of the Rolflex that enabled it to massage the entire body, as opposed to just the arms, such as “the overall clamshell appearance of the arms, including an increased curve of the therapy arm.” *Order* at \*8; J.A. 380–82 ¶¶ 12–18. RoM’s marketing materials further explained that Rolflex’s “clam-shaped roller arms provide significant leverage.” *Order* at \*8. Based on this record, the district court concluded the “clamshell” shape of the arms was functional, but that other features “appear to be largely ornamental,” such as “the thick ridged outline” of the design (which includes the arms). *Id.*; see also *id.* at 11 n.11; *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1333 (Fed. Cir. 2015). We conclude that the district court did not err in construing the claim to identify the functional versus the ornamental aspects of the arms (and the overall design).

## ii.

RoM argues that the intrinsic evidence unambiguously demonstrates that the shape of the arms is ornamental. In doing so, RoM relies on (1) the drawings in the D'155 patent depicting the claimed design in solid lines and depicting “material disclaimed from the invention” using dashed lines, Appellant’s Br. 24–25 (citing J.A. 37 (D'155 patent)); and (2) the '081 patent (and the Armaid1 as its commercial embodiment), which is cited as prior art by the D'155 patent and which RoM argues serves as “intrinsic evidence that provide[s] clear examples of alternative designs for the D'155 patent.” *Id.* at 25–28. We disagree with RoM’s contention that the intrinsic evidence unambiguously demonstrates that the shape of the arms is ornamental.

Contrary to RoM’s assertion, the D'155 patent drawings do not delineate the functional and ornamental aspects of the design. RoM effectively contends that all elements depicted by the solid lines are ornamental, and all elements depicted by the dotted lines are functional. Appellant’s Br. 24–25. RoM’s position that these lines show what aspects are functional and what aspects are ornamental suggests, however, that all design elements must be either completely ornamental or completely functional. Our case law does not support this proposition. *See, e.g., Ethicon*, 796 F.3d at 1333 (“[T]he claim was limited to the ornamental aspects of these functional elements.”). Indeed, RoM recognizes that the elements depicted in solid lines have at least some functional aspects. *See* Appellant’s Br. 17 (identifying “functional or utilitarian features” of the Rolflex, including “a base connected to the bottom of a hinge apparatus” and “two arms connected to the hinge apparatus”).

Moreover, as the district court correctly recognized, RoM’s proposed approach of treating the D'155 patent’s disclaimer of elements as dispositive of the functionality inquiry would have courts blindly accept that “every feature

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depicted in solid lines in design patents [is] *per se* ornamental.” *Order* at \*8; *see* Appellant’s Br. 24–28; J.A. 37; D’155 patent at Figs. 1–8. Accepting, without question, the demarcations depicted in a design patent would render meaningless the “helpful” practice of distinguishing between functional and ornamental aspects of the design. *Lanard Toys*, 958 F.3d at 1342. The *PHG* factors similarly would never be used if we treated the design patent drawings as unambiguously and dispositively determining functionality. *See PHG*, 469 F.3d at 1366–67. RoM’s position would also improperly suggest that courts are effectively bound by the examiner’s findings on functionality (as indicated by grant of the design patent). We thus reject RoM’s contention that the D’155 patent drawings unambiguously show that the shape of the arms is ornamental.

We reject RoM’s argument that the district court erred by not treating the existence of alternative designs as a dispositive factor that barred examination of the other *PHG* factors. Appellant’s Br. 15–16, 18; *see Order* at \*7–8. RoM’s position is based on a misreading of our case law. The case on which RoM primarily relies, *Ethicon*, does not support the existence of alternative designs as a threshold inquiry. *See* Appellant’s Br. 15. *Ethicon* merely explains that the existence of alternative designs is an important factor that *can* be dispositive of functionality, but that courts may also consider the other relevant *PHG* factors. *Ethicon*, 796 F.3d at 1329–30. Notably, the case that *Ethicon* discusses and relies upon for its proposition, *Berry Sterling*, states that the existence of alternative designs “join[s] the list of other appropriate considerations for assessing whether the patented design as a whole—its overall appearance—was dictated by functional considerations.” *Berry Sterling*, 122 F.3d at 1456.

In any event, we disagree with RoM’s assertion that the ’081 patent clearly serves as a feasible alternative design. *See* Appellant’s Br. 25–28. Notably, the ’081 patent is titled “Limb Massager” while the D’155 patent is titled “Body

Massaging Apparatus,” suggesting that the devices serve different purposes and have different functional capabilities. *Cf. Ethicon*, 796 F.3d at 1331 (“[T]o be considered an alternative, the alternative design must simply provide ‘the same or similar functional capabilities.’” (citation omitted)). We conclude that the intrinsic evidence does not unambiguously establish that the shape of the arms is solely ornamental, and that therefore the district court did not err by consulting the extrinsic evidence. *See Smartrend Mfg. Grp., Inc. v. Opti-Luxx Inc.*, 159 F.4th 1322, 1330–31 (Fed. Cir. 2025) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) (en banc)) (recognizing that for design patents, like for utility patents, district courts may consider extrinsic evidence when the intrinsic evidence is ambiguous). The district court did not commit reversible error with respect to its claim construction, including with respect to its determination that the shape of the arms is functional.

## B.

RoM contends that, even if the district court’s claim construction was correct, the designs of the D’155 patent and the Armaid2 are similar enough to withstand summary judgment of non-infringement. Appellant’s Br. 34–37; Oral Arg. 11:09–12:47, 30:30–30:57. We reject RoM’s argument as it is based on the application of an incorrect version of the ordinary observer test.

“Design patent infringement is a question of fact, which a patentee must prove by a preponderance of the evidence.” *Columbia Sportswear N. Am., Inc. v. Seirus Innovative Accessories, Inc.*, 942 F.3d 1119, 1129 (Fed. Cir. 2019). Courts analyze design patent infringement under the “ordinary observer” test, which provides: “If, 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

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other, the first one patented is infringed by the other.”<sup>3</sup> *Egyptian Goddess*, 543 F.3d at 670 (quoting *Gorham Co. v. White*, 81 U.S. 511, 528 (1871)) (cleaned up). “[T]he ‘ordinary observer’ test for design patent infringement requires the fact finder to ‘compar[e] similarities in overall designs, not similarities of ornamental features in isolation.’” *Lanard*, 958 F.3d at 1343 (second alteration in original) (quoting *Ethicon*, 796 F.3d at 1335). This test is performed from the perspective of a hypothetical ordinary observer who is familiar with the designs in the prior art. *Egyptian Goddess*, 543 F.3d at 676–78, 681; *Columbia Sportswear*, 942 F.3d at 1129. “Where the claimed and accused designs are ‘sufficiently distinct’ and ‘plainly dissimilar,’ the patentee fails to meet its burden of proving infringement as a matter of law.” *Ethicon*, 796 F.3d at 1335 (quoting *Egyptian Goddess*, 543 F.3d at 678). “If the claimed and accused designs are not plainly dissimilar, the inquiry may benefit from comparing the claimed and accused designs with prior art to identify differences that are not noticeable in the abstract but would be significant

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<sup>3</sup> As the dissent highlights, the ultimate question is whether the claimed and accused designs are substantially similar, with *Egyptian Goddess* merely recognizing that in some cases, the claimed and accused designs may be so clearly not similar (or “dissimilar”) as to remove the need to consider the prior art. Dissent at 3–6; see *Egyptian Goddess*, 543 F.3d at 678. However, the district court properly considered both the similarities and differences in assessing the overall similarity of the claimed and accused designs. See *Order* at \*7 (highlighting that “both have opposable, curved arms, roller cutouts and handles, with the arms attached to a hinge apparatus with multiple slots for size adjustment”); *Order* at \*9–11 (considering the broad similarities between the designs, although noting that many of them were related to function).

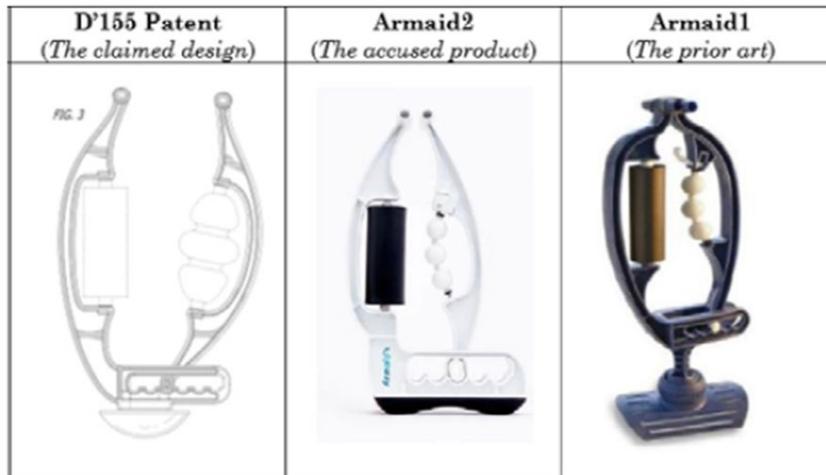
to the hypothetical ordinary observer familiar with the prior art.” *Id.* (citing *Egyptian Goddess*, 543 F.3d at 678).

RoM and the dissent advocate for an approach that fails to respect the limits on a design patent’s scope. Focusing primarily on the shapes of the arms, RoM argued that one need only lay the pictures of the two designs next to each other, or even overlaying one another, to conclude that there is “substantial evidence of infringement.” Oral Arg. at 12:20–12:47, 30:30–30:57 (citing J.A. 48). The dissent takes up this suggestion, comparing the “overall design[ ]” by briefly comparing two pictures. Dissent at 1–2, 7. Notably missing from this methodology, however, is any attempt to consider claim construction or otherwise separate out functional aspects. By failing to ensure that functional aspects of a design do not play a role in the infringement analysis, the test endorsed by RoM and the dissent improperly seeks “to extend the scope of the patent far beyond the statutorily protected ‘new, original and ornamental design.’” *Lanard Toys*, 958 F.3d at 1345 (quoting 35 U.S.C. § 171). The dissent and RoM would dramatically increase the scope of design patents by precluding summary judgment whenever functional considerations result in two designs sharing similarities. Contrary to our precedent, this approach would render pointless our requirement to construe the claim, including conducting the functional-versus-ornamental inquiry that enables the fact finder to “factor[ ] out the functional aspects of [the] design” when applying the ordinary observer test. *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293 (Fed. Cir. 2010). We reject the proposal to establish what amounts to an oversimplified version of the ordinary observer test that effectively eliminates the step of claim construction.

Here, the district court’s infringement analysis properly focused on the designs’ overall ornamental appearance and whether “the nonfunctional, ornamental aspects of the claimed and accused designs [were] plainly dissimilar.” *Ethicon*, 796 F.3d at 1337; see *OddzOn Prods.*,

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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.”). A helpful diagram from the district court’s opinion, comparing the designs of the D’155 patent, the Armaid2, and the Armaid1, is reproduced below.<sup>4</sup>



*Order* at \*6. The district court began by comparing the D’155 patent and the accused Armaid2 side-by-side, noting that they “share a ‘broad design concept’ and ‘at a conceptual level they look quite similar.’” *Order* at \*10 (citation omitted). The district court recognized, however, that most of the similarities between the designs were “likenesses [between] the . . . functional features” and correctly explained that these features were only to be considered “to the extent that they contribute to the overall ornamentation.” *Id.*; *see also id.* at \*11 n.11 (acknowledging that,

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<sup>4</sup> We reproduce this diagram for the benefit of both the plainly dissimilar and three-way comparison steps of the infringement analysis. This diagram is not meant to suggest that the first step of the infringement analysis involves comparing the claimed and accused designs with designs in the prior art. *See Ethicon*, 796 F.3d at 1335, 1337.

while the clamshell arms were functional, they should still be “consider[ed for] their ornamental aspects and the way they contribute to the overall design”); *Ethicon*, 796 F.3d at 1336 (“Similarity at this conceptual level, however, is not sufficient to demonstrate infringement of the claimed designs.”).

The district court then thoroughly explained the differences that would stand out to an ordinary observer familiar with the prior art. These differences include that (1) “the most noticeable feature” of the D’155 patent was the “fixed arm” while the “semi-rectangular hinge apparatus of the Armaid2 makes up proportionally more of the device and forms the entire base of the product;” (2) the Armaid2 design, unlike the D’155 patent design, had an “overall segmented appearance” because of “the separation of the hinge apparatus” and “the presence of raised interior partitions in the clamshell arms;” (3) “the size-selection slots in the Armaid2 are larger, both on their own and in proportion to the product as a whole;” and (4) “the blunter, less rounded end of the hinge apparatus in the Armaid2” was more eye-catching than “the subtler, rounder curves of the hinge apparatus in the D’155 patent.” *Order* at \*11. The district court concluded that, taken together, “[t]hese features contribute to the ‘stylized impression’ conveyed by the Armaid2 . . . in contrast to the ‘robust and workman-like’ impression conveyed by the D’155 patent.” *Id.* (citation omitted); *see Lanard*, 958 F.3d at 1343 (“Under the ‘ordinary observer’ test, a court must consider the ornamental features and analyze how they impact the overall design.”). We conclude that the district court did not commit reversible error in reaching its determination that the design of the Armaid2 and the narrow design protected by the D’155 patent are plainly dissimilar. *Order* at \*11; *see Ethicon*, 796 F.3d at 1335 (“Where the claimed and accused designs are ‘sufficiently distinct’ and ‘plainly dissimilar,’ the patentee fails to meet its burden of proving infringement as a matter of law.” (quoting *Egyptian Goddess*,

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543 F.3d at 678)). We affirm the district court’s judgment that the Armaid2 does not infringe the D’155 patent.

Because we agree that the district court did not reversibly err in reaching its plainly dissimilar conclusion, it did not need to reach the three-way comparison step of the infringement analysis. *See Ethicon*, 796 F.3d at 1337. Nonetheless, even if it needed to reach the three-way comparison step, we agree with the district court that a comparison of the D’155 patent and the Armaid2 designs with the Armaid1 design in the prior art further supports the conclusion that no reasonable jury could find that the designs at issue are substantially similar. *See Order* at \*11. After accounting for functional aspects, the district court found the most salient differences between the Armaid1 and Armaid2 to be (1) “the shape of the arms,” particularly with respect to “the areas just below the cylindrical handlebars” in the three images shown above in the reproduced diagram; and (2) “the manner in which the fixed arm connects to the hinge apparatus.” *Id.* Considering these features as part of its comparison of the overall similarity of the designs, the district court concluded that it would reach the same conclusion that no reasonable jury could find the claimed and accused designs substantially similar. *Id.* at \*11–12. This inquiry was proper under our case law. *See Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1303 (Fed. Cir. 2010) (“When the differences between the claimed and accused designs are viewed in light of the prior art, the attention of the hypothetical ordinary observer may be drawn to those aspects of the claimed design that differ from the prior art. If the claimed design is close to the prior art designs, small differences between the accused design and the claimed design assume more importance to the eye of the hypothetical ordinary observer . . . depending on the overall effect of those differences on the design.” (citing *Egyptian Goddess*, 543 F.3d at 681)). We conclude that the district court did not reversibly err in its analysis and would therefore also affirm the

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district court's grant of summary judgment of non-infringement on this alternative basis.

**IV. CONCLUSION**

We have considered RoM's remaining arguments and find them unpersuasive. We affirm the district court's judgment of non-infringement.

**AFFIRMED**

# United States Court of Appeals for the Federal Circuit

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**RANGE OF MOTION PRODUCTS, LLC,**  
*Plaintiff-Appellant*

v.

**ARMAID COMPANY INC.,**  
*Defendant-Appellee*

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2023-2427

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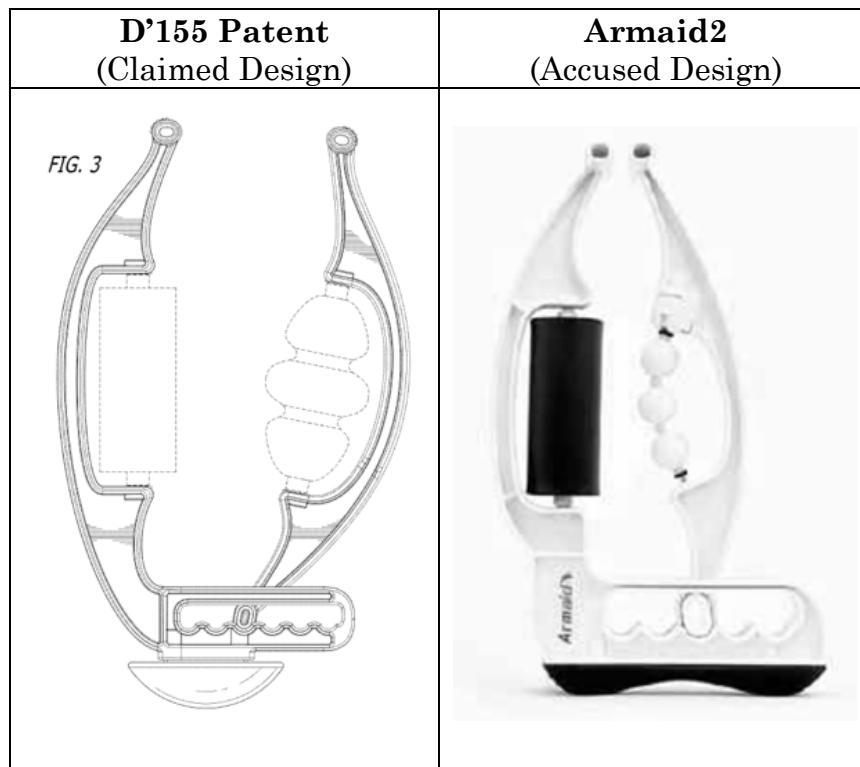
Appeal from the United States District Court for the District of Maine in No. 1:22-cv-00091-JDL, Chief Judge Jon D. Levy.

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MOORE, *Chief Judge*, dissenting.

I believe a reasonable jury could find that “in the eye of the ordinary observer, giving such attention as a purchaser usually gives, [the] two designs are substantially the same.” *Gorham Co. v. White*, 81 U.S. 511, 528 (1871). This is, of course, a fact question. I think the district court erred when it took this question away from the jury and granted summary judgement of noninfringement. Here are the two designs at issue:

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It is hard to imagine, looking at the two overall designs, that no reasonable purchaser of handheld massagers could ever find that the overall designs were substantially similar. This decision was not the product of a jury verdict; it was a summary judgment where the judge concluded that no reasonable juror could find that the designs were substantially similar. I confess that I considered ending the dissent here.

But alas, I have more to say. I believe there exists a small and easily solved problem in our design patent law that led the district court astray. A problem, which I confess, has infected several of our cases and which has been the subject of several amicus briefs to our court.

## DISCUSSION

### I. The Sufficiently Distinct/Plainly Dissimilar Test

In *Gorham*, the Supreme Court made clear the test for infringement is the substantial similarity of the overall designs, explaining “the effect of the whole design,” rather than individual features, controls the inquiry. 81 U.S. at 530. Our predecessor courts long recognized the substantial similarity test as the proper standard for assessing design patent infringement. See, e.g., *Blumcraft of Pittsburgh v. United States*, 372 F.2d 1014, 1016 (Ct. Cl. 1967); *In re Dubois*, 262 F.2d 88, 91 (CCPA 1958).

In *Litton Systems, Inc. v. Whirlpool Corporation*, 728 F.2d 1423 (Fed. Cir. 1984), this court began requiring plaintiffs to prove not only similarity under the ordinary observer test but also that the accused design appropriates the novelty of the claimed design. 728 F.2d at 1444 (“For a design patent to be infringed, however, no matter how similar two items look, the accused device must appropriate the novelty in the patented device which distinguishes it from the prior art.” (quotation omitted)). In *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665 (Fed. Cir. 2008) (en banc), we overruled the point of novelty test, recognizing the test proved difficult to administer and conflicted with the ordinary observer test laid out in *Gorham*. 543 F.3d at 670–72, 678. We explained the ordinary observer test is “the sole test” for determining infringement and should generally be conducted using the proper “frame of reference” by comparing the claimed and accused designs in light of the prior art. *Id.* at 677–78.

Without realizing it, in *Egyptian Goddess*, we meaningfully changed the substantial similarity test. We changed the frame of reference from whether two designs are substantially similar in overall appearance to whether two designs are “sufficiently distinct” or “plainly dissimilar.” *Egyptian Goddess*, 543 F.3d at 678. Recently, we have received a number of briefs that convincingly explain how

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this linguistic sleight of hand (substantially similar to plainly dissimilar) resulted in a significant change in the law. These briefs explained how there is a real-world difference between the paradigm shift from “substantially similar” to “plainly dissimilar/sufficiently distinct.” See *North Star Tech. Int'l Ltd. v. Latham Pool Prods., Inc.*, No. 23-2138, Dkt. 89 at 2–3, 8–12 (Pet. for Reh'g En Banc), Dkt. 100 at 1–4 (Inst. for Design Sci. & Pub. Pol'y Am. Br.), Dkt. 103 at 1, 3–4 (Oake Law Office, PLLC Am. Br.) (Fed. Cir. 2025). The former causes the fact finder to focus on the similarity of the overall designs whereas the latter forces the fact finder to focus on the differences.

Anyone who has ever done one of the childhood puzzles which asks you to circle the differences between two otherwise seemingly identical pictures can appreciate that focusing on differences makes those differences more significant and causes you to lose sight of the overall similarity.<sup>1</sup>



*Highlights for Children*, Oct. 2016, at 20, available at <https://fliphml5.com/fwspv/ktmi>.

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<sup>1</sup> Google AI states that one important benefit of such childhood find-the-differences games is that they train the brain to focus on and notice small details. Google AI prompt “childhood find the difference game” search performed by Chief Judge Moore on December 10, 2025.

There are a number of problems with our “plainly dissimilar/sufficiently distinct” test, including the reframing away from similarities and towards differences. *See North Star Tech. Int'l Ltd. v. Latham Pool Prods., Inc.*, No. 23-2138, Dkt. 100 at 1–4 (Inst. for Design Sci. & Pub. Pol'y Am. Br.) (Fed. Cir. 2025).<sup>2</sup> The results of a recent survey presented to this court demonstrate how impactful this paradigm shift can be. When shown designs from Supreme Court and Federal Circuit cases where infringement findings were upheld and asked whether they were plainly dissimilar, over 60% of ordinary observers polled answered in the affirmative. *Id.* at 3–4.

In the legal field, we have long recognized that the framing of questions matters. *See, e.g., FERC v. Elec. Power Supply Ass'n*, 577 U.S. 260, 297–98 (2016) (Scalia, J., dissenting) (“[A] proper framing of the inquiry is important . . . .”); *Madison v. Alabama*, 586 U.S. 265, 278 (2019) (noting that how the court “framed its test” was “most important”); *Urda v. Sokso*, 146 F.4th 311, 314–15 (3d Cir. 2025) (noting that how a court “framed the question of law” “is especially important” and, when framed incorrectly, it can lead to improper results); *Elhady v. Kable*, 993 F.3d 208, 220 (4th Cir. 2021) (noting that “framing” is “important”); *United States v. Hills*, 27 F.4th 1155, 1178 (6th Cir. 2022) (noting that a “question or matter” may turn “on how the pending ‘question’ or ‘matter’ is framed”).

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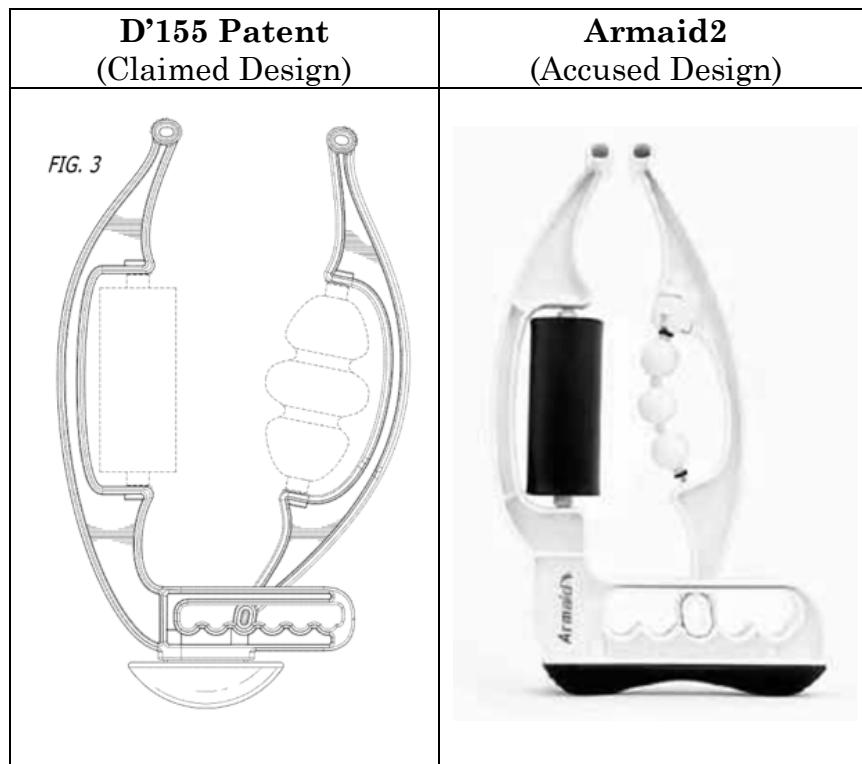
<sup>2</sup> Amici have also argued that our plainly dissimilar test lacks any standards or guidance making it entirely subjective. And it has resulted in strained summary judgment rulings which have taken this highly factual infringement question away from juries where they belong. *North Star Tech. Int'l Ltd. v. Latham Pool Prods., Inc.*, No. 23-2138, Dkt. 100 at 1–4 (Inst. for Design Sci. & Pub. Pol'y Am. Br.), Dkt. 103 at 1, 3 (Oake Law Office, PLLC Am. Br.) (Fed. Cir. 2025).

Psychological literature has likewise documented the impact such framing can have on outcome.<sup>3</sup> For example, “judges who engage in similarity testing selectively generate knowledge indicating that the target is similar to the standard, whereas judges who engage in dissimilarity testing selectively generate knowledge indicating dissimilarity.” Thomas Mussweiler, *Comparison Processes in Social Judgment: Mechanisms and Consequences*, 110 PSYCH. R. 472, 479 (2003). “The psychological principles that govern the perception of decision problems and the evaluation of probabilities and outcomes produce predictable shifts of preference when the same problem is framed in different ways.” Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453, 453 (Jan. 1981). In short, framing matters and can meaningfully impact outcome.

I will end this section where I began: Is it really the case that no reasonable juror could find the designs at issue substantially similar?

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<sup>3</sup> Bart Geurts, *Alternatives in Framing and Decision Making*, 28 MIND & LANGUAGE 1, 1 (Feb. 2013) (“There is a wealth of experimental data showing that the way a problem is framed may have an effect on people’s choices and decisions.”); Sonia Chopra, *The Psychology of Framing and Jury Decision-Making*, J. CONSUMER ATT’YS ASS’N. S. CAL. (Jan. 2020) (“‘Framing effect’ refers to the phenomenon that how a situation, problem, or choice is posed influences the way we perceive value, make choices, or behave – even when the alternatives are equivalent. Changing the frame can change the preferred outcome or choice.”); Amos Tversky et al., *The Causes of Preference Reversal*, 80 AM. ECON. REV. 204, 215 (1990) (“[A]lternative framings of the same options (for example, in terms of gains vs. losses, or in terms of survival vs. mortality) produce inconsistent preferences . . . ”).



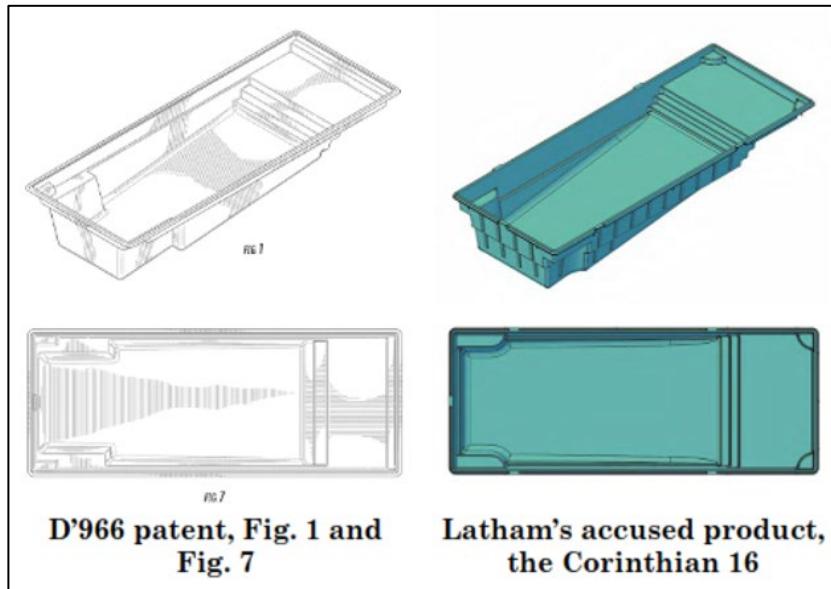
Perhaps the answer is no if the question is about the similarities but yes if the question is instead focused on the differences.

## II. Trend in Design Patent Cases

I am even more troubled by the fact that this is not an isolated incident but appears representative of a much broader trend.

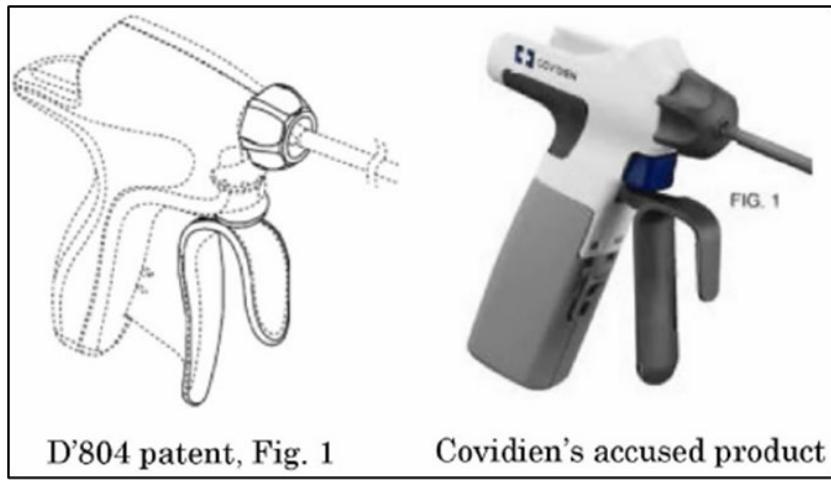
In *North Star*, we affirmed the district court's grant of summary judgment of noninfringement by holding the claimed and accused pool designs (reproduced below) are "plainly dissimilar" as a matter of law. *North Star Tech. Int'l Ltd. v. Latham Pool Prods., Inc.*, No. 23-2138, 2025 WL 1189919, at \*1–2 (Fed. Cir. Apr. 24, 2025).

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It is hard for me to look at the patented pool design and the accused product and agree that no reasonable juror could find that their overall appearance is substantially similar. Here too, could the framing “plainly dissimilar” rather than “substantially similar” have impacted the outcome?

In *Ethicon Endo-Surgery*, we affirmed another district court’s grant of summary judgment of noninfringement by holding the claimed and accused designs (reproduced below) “plainly dissimilar.” *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1334–37 (Fed. Cir. 2015). We acknowledged the designs were similar at a “general conceptual level” but held that, after excluding functional elements, the designs were “plainly dissimilar” focusing again on particular design differences. *Id.* at 1336–37.



D'804 patent, Fig. 1

Covidien's accused product

While I do not foreclose the possibility of a jury finding non-infringement on these facts, which I would affirm, I am surprised to learn that no reasonable person could find them so.

I am troubled that such issues are being decided by district courts at summary judgment. It is not just that I disagree with every one of these outcomes, which I do, but that I think there is a larger problem, of our creation. I think there is a meaningful difference between determining whether two things are substantially similar and determining whether they are plainly dissimilar/sufficiently distinct. And I cannot rule out the possibility that this paradigm shift in the law (which we created) may be responsible for these many outcomes which I find troubling.

I think we ought to correct our error in *Egyptian Goddess* and reaffirm that the substantially similar test, announced by the Supreme Court in *Gorham*, is “the sole test.” Accordingly, we would vacate and remand the present case for the district court to reconsider summary judgment, focusing on the overall similarities, as *Gorham* requires, rather than differences. With the proper focus, I find it difficult to conclude that no reasonable juror could find the claimed and accused designs substantially similar in overall design.

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### III. Application of the Plainly Dissimilar Test Drives the Result

The district court properly stated the *Gorham* substantially similar standard and found that even design elements which had a functional purpose, still had ornamental features (like the arms), and therefore must be considered in the infringement analysis. The district court went so far as to expressly find that “the D’155 patent and the Armaid2 share a ‘broad design concept’ and at a ‘conceptual level they look quite similar.’” *Range of Motion Prods. LLC v. Armaid Co. Inc.*, No. 1:22-CV-00091, 2023 WL 5530768, at \*10 (D. Me. Aug. 28, 2023) (“Decision”). After this acknowledgement, the district court finds (which it should not do at summary judgment): “when viewing the D’155 patent and the Armaid2 side-by-side, certain features stand out.” *Id.* at \*11. The entirety of the district court’s subsequent analysis, much like the children’s find-the-differences game, amounted to identification of minute differences in each element. *See id.* (identifying and discussing each small difference in the appearance of various elements). Finally, after focusing exclusively on these minute differences, the court *finds* (again not its job on summary judgment): “In sum, I **find** that the ornamental aspects of the two designs are plainly dissimilar.” *Id.*

That the district court is making fact findings cannot reasonably be denied. Nor can the fact that its entire analysis is guided by a focus on element-by-element differences. As the above demonstrates, this is not a one-off, and by this court endorsing the primacy of the sufficiently distinct/plainly dissimilar test and affirming this case decided on summary judgment: replication is certain. Our errant language in *Egyptian Goddess* has and will result in the near-complete removal of the jury from its fact-finding role in design patent infringement.

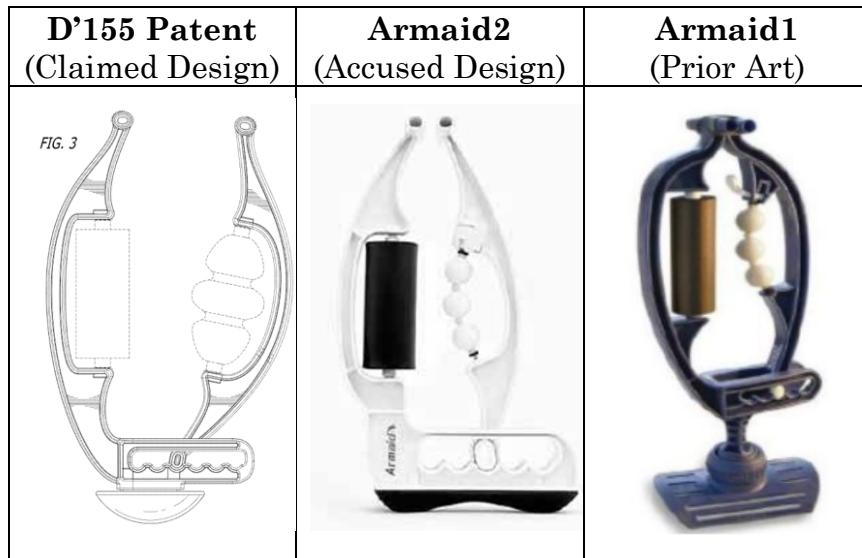
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The majority does not grapple with any of these concerns, which in fairness to the majority, are the result of a pattern of cases and a number of amicus briefs recently filed in our court.

The majority's only defense of the reframing from similarities to differences is that "*Egyptian Goddess* merely recognize[s] that in some cases, the claimed and accused designs may be so clearly not similar (or 'dissimilar') as to remove the need to consider the prior art." Maj. at 12 n.3. But this case is clearly not one of those where the designs are "so clearly not similar" that summary judgment of non-infringement was warranted. Nor was *North Star* or *Ethiccon Endo-Surgery*.

When performing the substantial similarity analysis required by *Gorham*, I think the court should always "compar[e] the claimed and accused designs in light of the prior art," *Egyptian Goddess*, 543 F.3d at 677, with no special exception for plainly dissimilar designs, which has proved unworkable. As we explained in *Egyptian Goddess*, "a comparison of the claimed and accused designs with the prior art" can benefit resolution of the substantial similarity test, *id.* at 678, and this case demonstrates precisely why. Here, the context provided by the prior art further establishes that the issue of infringement should not have been decided at summary judgment.

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Comparing the Armaid1 prior art to the D'155 patent, my eyes are drawn to the substantial difference in the base as well as the overall shape of the arms. This includes the curvature of the arms, the ridges in the arms, the thickness of the arms, and the vertical positioning of the rollers relative to the arms. These are ornamental features which the district court correctly indicated should not be excluded from consideration of the overall appearance. *Decision*, at \*8 (“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.”) The visually dominating base of the Armaid1 with its neck and platform is quite distinguishable from the small base structure of the Armaid2 or D'155 design.<sup>4</sup> To

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<sup>4</sup> There is some evidence that the inverted mushroom base of the D'155 design had a functional motivation (because it is rounded it can be used at any angle), J.A. 381, but there is no evidence that the substantiality of the base

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my consumer eyes, the D'155 design is "deceptively similar to the [Armaid2], even to an observer familiar with [the prior art Armaid1]." *Egyptian Goddess*, 543 F.3d at 677. I do not preclude the possibility that a jury could find otherwise. I do object, however, to taking the question from the fact finder. Just look at the pictures: reasonable minds can differ. If I were on this jury, I would find the Armaid2 is substantially similar in overall ornamental appearance to the D'155 patent taking into account the differences and similarities with the prior art.

#### CONCLUSION

The district court granted summary judgment concluding: "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." *Decision*, at \*11. While at times the court stated the law correctly, from its analysis and this clear fact finding, the court was focused on differences in individual features rather than similarities in the overall designs. I think the legal frame of reference is askew and believe it infected the analysis. I dissent.

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played any functional role. The Armaid1 base seems large and separate from the remainder of the apparatus unlike the D'155 patent and the Armaid2 design. Again, I do not preclude a jury from finding otherwise.