UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Graphic Packaging International, LLC,

Plaintiff,

v.

Inline Packaging, LLC,

Defendant.

File No. 15-cv-03476 (ECT/LIB)

OPINION AND ORDER

Barry Herman, Womble Bond Dickinson (US) LLP, Baltimore, MD; David R. Boaz, Womble Bond Dickinson (US) LLP, Raleigh, NC; James F. Vaughan and Christine H. Dupriest, Womble Bond Dickinson (US) LLP, Atlanta, GA; and Felicia J. Boyd, Barnes & Thornburg LLP, Minneapolis, MN, for Plaintiff Graphic Packaging International, LLC.

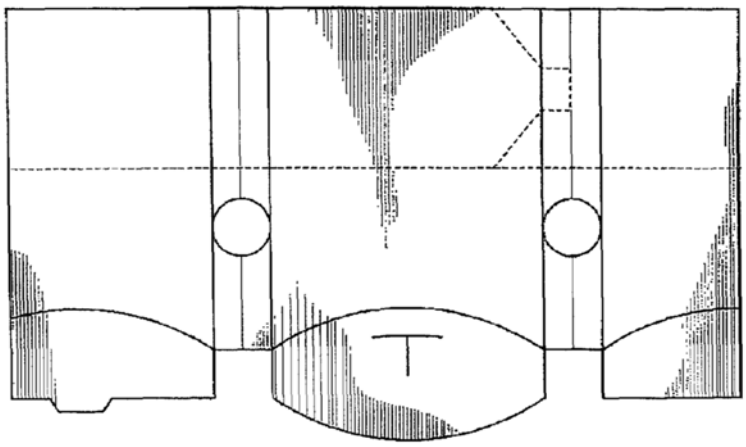
Kyle R. Kroll, Brent A. Lorentz, and Justice Ericson Lindell, Winthrop & Weinstine, P.A., Minneapolis, MN, for Defendant Inline Packaging, LLC.

Plaintiff Graphic Packaging International owns three design patents for microwave susceptor sleeves. These sleeves are used for heating and carrying food products including "Hot Pockets." In this case, Graphic accuses Defendant Inline Packaging of infringing the three design patents. The Parties seek claim construction pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390–91 (1996). Graphic asks that its patents be construed simply as the visual appearance of the susceptor sleeves as shown in the claim drawings. Contending that the susceptor sleeves' designs are primarily functional, Inline seeks a construction giving Graphic's patents no scope. The law seems to discourage no-scope constructions like the one Inline seeks, and the availability of alternative designs, among

other considerations, shows that the sleeves' patented designs are not primarily functional. Therefore, Graphic's proposed construction will be adopted.

I

Three design patents for microwaveable susceptor sleeves are at issue in this case: U.S. Patent Nos. D694,106 ("the '106 patent"), D694,124 ("the '124 patent"), and D727,145 ("the '145 patent"). Microwave susceptor sleeves are paperboard products with special properties that allow them to be used to heat food, including but not limited to "Hot Pockets." The '106 patent, entitled "Carton Blank," includes one figure and claims "the ornamental design for a carton blank, as shown and described." Joint App'x for Claim Const. ("JA") 859–61. That single figure appears as follows:



JA 859. The '124 patent, entitled "Carton," includes sixteen figures and similarly claims "[t]he ornamental design for a carton, as shown and described." JA 862–73. Two of those figures are included below, depicting the sleeve's assembled appearance:

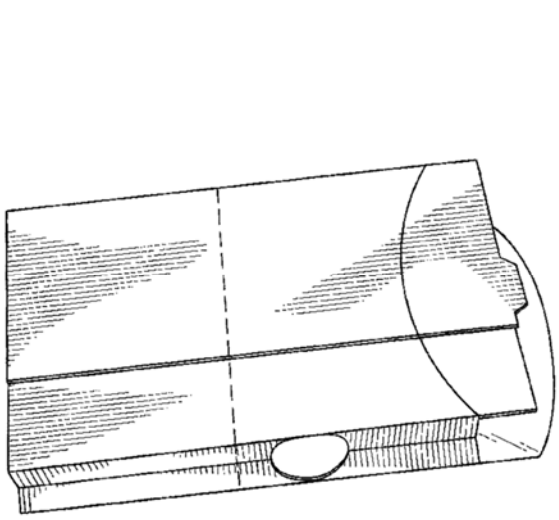


FIG. 2

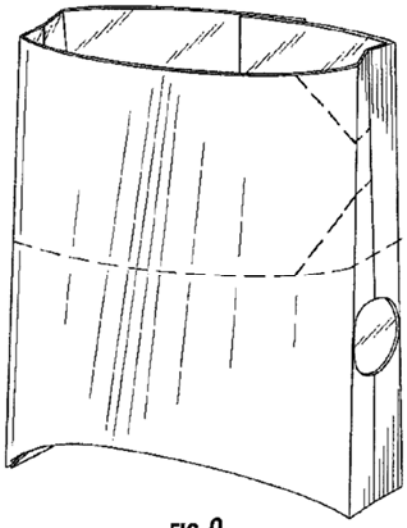
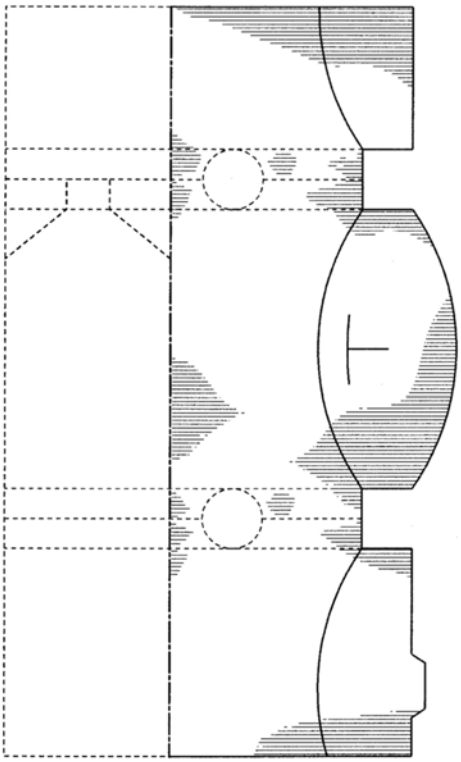


FIG. 9

JA 864, 869. The ‘145 patent, also entitled “Carton Blank,” includes one figure and again claims “[t]he ornamental design for a carton blank, as shown and described.” JA 874. That figure appears as follows:



JA 876. The term "blank" refers to the flat, not-put-together version of the "carton," which refers to the three-dimensional "sleeve." *Cf.* Inline Mem. at 27 [ECF No. 114] (discussing "when the sleeve blank is turned into the sleeve construct").

The Parties, particularly Inline, discuss several elements of Graphic's design patents at some length in their submissions. Though not all of these elements are discussed in this opinion and order, a brief description of each helps in understanding the design patents and the Parties' arguments about claim construction (and, though less important for claim construction, serves as a starting point for identifying and defining the design patents' elements going forward). Though these features are depicted in the design patents, these terms and descriptions are not.

> **Tear strip and cut-out**: Though claimed only in a utility patent, this feature allows approximately half of the sleeve to be removed during consumption. It is represented in the design patents by a broken (dotted) line that runs parallel to the top edge of the sleeve.
>
> **Gussets or minor panels**: This refers to the "side walls" of the sleeve and also could be described as the faces connecting the front and back major panels.
>
> **Apertures**: These are cut-outs along the minor panels. Here, the apertures are circular holes.
>
> **Main panels**: This refers to the comparatively larger front and back faces or panels of the sleeve.
>
> **Seam**: The seam is the place where the edges of the material in the two-dimensional "blank" come together and overlap to form the three-dimensional "carton."
>
> **End panels**: The two end panels are the pieces, connected to the major panels but not the minor panels, that come together to form the "bottom" of the sleeve that provides support for the food content when the product is in use.

> **Tab and slot**: These terms refer to the T-shaped slot along one end panel and the trapezoidal tab that fits into the T to bring the two end panels together to form the bottom of the sleeve.

In June 2015, Graphic filed this patent-infringement case against Inline in the District of Delaware. ECF No. 1. Graphic claimed that Inline infringed the three design patents described above and a related utility patent, U.S. Patent No. 8,872,078 ("the '078 patent"). Compl. ¶¶ 8–12; JA 821. (The next month, Inline filed a separate case against Graphic in the District of Minnesota, asserting trade-secret and antitrust claims. Those claims are not part of this case.) This case was ordered transferred from the District of Delaware to the District of Minnesota in September 2015. From April 2016 until July 2018, the case was stayed pending completion of *inter partes* review of the related utility patent. All fifty-three claims in the '078 utility patent were determined to be unpatentable as obvious, so only the '106, '124, and '145 design patents remain.

II

A

Whereas a utility patent claims "any new and useful process, machine, manufacture, or composition of matter," 35 U.S.C. § 101, a design patent claims the overall ornamental design of—essentially, the appearance of—an article of manufacture, 35 U.S.C. § 171. "[W]hereas a utility patent often includes a substantial textual specification culminating in various claims delineating the elements of the invention, a design patent is often little more than figures—various pictures of the entire article incorporating the [single] claimed design." *Safco Prods. Co. v. Welcom Prods., Inc.*, 799 F. Supp. 2d 967, 975 (D. Minn.

2011); *see* 37 C.F.R. § 1.153(a) ("No description, other than a reference to the drawing, is ordinarily required."); *id.* ("More than one claim is neither required nor permitted."). The claim in a design patent is limited to what is shown in the application drawings, and the Federal Circuit has said that "[d]esign patents have almost no scope." *In re Mann*, 861 F.2d 1581, 1582 (Fed. Cir. 1988).

"An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed"—that's claim construction. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996) (citation omitted). Claim construction, analogous to statutory interpretation, is "a matter of law exclusively for the court." *Id.* at 977. "The second step is comparing the properly construed claims to the [design] accused of infringing." *Id.* at 976 (citation omitted). With design patents, "the patented and accused designs are compared for overall visual similarity: '[I]f, in the eye of an ordinary observer . . . 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, the first one patented is infringed by the other.'" *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571, 1577 (Fed. Cir. 1995) (quoting *Gorham Co. v. White*, 81 U.S. 511, 528 (1871)). "It is the appearance of a design as a whole which is controlling in determining infringement. There can be no infringement based on the similarity of specific features if the overall appearance of the designs are dissimilar[.]" *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997).

"The intrinsic record in a patent case is the primary tool to supply the context for interpretation of disputed claim terms. *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1310 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576. 1582 (Fed. Cir. 1996). Such intrinsic evidence includes the drawings in the design patents themselves, as well as the "prosecution history," which consists of "the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314, 1317 (Fed. Cir. 2005). Courts may also rely on "extrinsic evidence"—that is, "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317 (citations omitted). It also includes evidence pertaining to related patents in the same family. *Microsoft Corp. v. Multi-Tech. Sys., Inc.*, 357 F.3d 1340, 349–50 (Fed. Cir. 2004). Extrinsic evidence "can shed useful light on the relevant art, but is less significant than the intrinsic record in determining the legally operative meaning of disputed claim language." *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004) (quotation marks and citation omitted); *see Phillips*, 415 F.3d at 1317. Extrinsic evidence is considered "less reliable" than intrinsic evidence and may not be used to contradict the intrinsic evidence. *Phillips*, 415 F.3d at 1318; *Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc.*, 152 F.3d 1368, 1373 (Fed. Cir. 1998). Expert testimony "generated at the time of and for the purpose of litigation . . . can suffer from bias that is not present in intrinsic evidence." *Phillips*, 415 F.3d at 1318. So while "expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that

the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art . . . conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court." *Id.* Courts should discount any expert testimony "that is clearly at odds with the claim construction mandated by the claims themselves . . . and the prosecution history[.]" *Key Pharms. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998). This evidence should be viewed from the perspective of one of ordinary skill in the art. *Phillips*, 415 F.3d at 1313. Here, the Parties agree this means a designer of ordinary skill in the art, and they seem to agree that is someone with three years' experience designing paperboard constructs with some qualifying education or experience. *See* Graphic Mem. at 6 [ECF No. 112]; Floros Decl. ¶ 34 [ECF No. 113]; Second Sand Decl. ¶ 3 [ECF No. 120].[1]

When construing a design claim, the Court may "translate . . . visual descriptions into words" that "evoke the visual image of the design." *Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 103 & n.2 (Fed. Cir. 1996). However, in *Egyptian Goddess, Inc. v. Swisa, Inc.*, the Federal Circuit recognized that although "trial courts have a duty to conduct claim construction in design patent cases," there is no "particular form that the claim construction must take." 543 F.3d 665, 679 (Fed. Cir. 2008). The court commented that "design patents 'typically are claimed as shown in drawings,' and that claim construction

[1] The Federal Circuit has said that "a district court properly construes design claims *through its own eyes* and need not refer to an ordinary observer or a skilled artisan." *Minka Lighting, Inc. v. Craftmade Int'l, Inc.*, 93 F. App'x 214, 216 (Fed. Cir. 2004) (emphasis added); *see also OddzOn*, 122 F.3d at 1405 (affirming claim construction that did not refer to the perspective of a designer of ordinary skill in the art).

'is adapted accordingly.'" *Id.* (quoting *Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.*, 501 F.3d 1314, 1319 (Fed. Cir. 2007)). In other words, a picture is worth a thousand words, and "a design is better represented by an illustration than it could be by any description." *Id.* (citation and internal quotation marks omitted) ("[T]he preferable course ordinarily will be for a district court not to attempt to 'construe' a design patent claim by providing a detailed verbal description of the claimed design."). How much detail to use in describing the claimed design is a matter for the Court's discretion, but *Egyptian Goddess* provided the following guidance:

> [I]t should be clear that the court is not obligated to issue a detailed verbal description of the design if it does not regard verbal elaboration as necessary or helpful. In addition, in deciding whether to attempt a verbal description of the claimed design, the court should recognize the risks entailed in such a description, such as the risk of placing undue emphasis on particular features of the design and the risk that a finder of fact will focus on each individual described feature in the verbal description rather than on the design as a whole.

Id. at 679–680.

"Of course, a design patent cannot claim a purely functional design—a design patent is invalid if its overall appearance is dictated by its function"; so long as "the design is not primarily functional, the design claim is not invalid, even if certain elements have functional purposes." *Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316, 1320 (Fed. Cir. 2016) (citation and internal quotation marks omitted). A design feature is functional "if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." *Amini Innovation Corp. v. Anthony California, Inc.*, 439 F.3d 1365, 1371 (Fed. Cir. 2006) (citation omitted). Functionality relates to "utilitarian" concerns, whereas

ornamentation gets at "aesthetic design choice[s]." *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1328 (Fed. Cir. 2015). Being ornamental is not the inverse of being functional, and the two are not mutually exclusive. Rather, the two characteristics can—and often do—coexist. *See L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (design patents protect an article of manufacture, which "necessarily serves a utilitarian purpose"). Whether a design is functional or ornamental (or both) is a fact question, but the Court may decide fact disputes pertaining to claim construction. *PHG Techs., LLC v. St. John Cos.*, 469 F.3d 1361, 1365 (Fed. Cir. 2006).

Increasingly, in the wake of *Egyptian Goddess*, courts recognize that it makes little sense to extract *aspects* of a design at claim construction when the ultimate inquiry is supposed to be about the *overall* design. Courts use the same five functionality factors deployed in the invalidity analysis at the claim-construction stage:

> 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, Inc., 820 F.3d at 1322 (quoting *PHG Techs.*, 469 F.3d at 1366. The most significant of these factors seems to be whether there are alternative designs. *Ethicon*, 796 F.3d at 1329 (calling this consideration "important—if not dispositive"); *Auto. Body Parts Ass'n v. Ford Glob. Techs., LLC*, 930 F.3d 1314, 1319 (Fed. Cir. 2019) (stating the Federal Circuit "ha[s] often emphasized the presence or absence of alternative designs" in the functionality inquiry).

B

There is no common ground between the Parties' proposed constructions, and neither Party asks the Court for an extensive verbal description of the claims. This is not unusual. *See, e.g.*, *Reddy v. Lowe's Cos., Inc.*, 60 F. Supp. 3d 249, 255 (D. Mass. 2014) ("As is common . . . the parties propose dramatically different claim constructions."); *Sofpool, LLC v. Intex Recreation Corp.*, 2007 WL 4522331, at *4 (E.D. Tex. Dec. 19, 2007) ("The parties' competing claim constructions are oceans apart."). Graphic essentially says the scope of each design patent is "everything," and Inline says the scope is "nothing." Specifically, Graphic's proposed construction for each patent is "[t]he overall ornamental appearance of the design for a carton [or carton blank] shown in [the] figure[s]." Joint Claim Constr. Statement, Ex. A [ECF No. 109-1]. Inline contends that the claims have "no scope because there are no non-functional aspects of the design." *Id.*

For two reasons, Inline's position appears to be inconsistent with the law. First, Inline at times appears to understand "ornamental" as the opposite of "functional." For example, Inline criticizes Graphic's answer to an interrogatory Inline served seeking a description of "all non-functional or ornamental features or aspects" of the design patents; Graphic responded, averring merely that "each of the elements, features, and aspects of the claimed designs contribute to the designs' overall ornamentation." Inline Mem. at 12. Inline argues, after identifying the various elements of the patented sleeve (described above at page 4) and their functions: "Every conceivable aspect of these elements is functional. Nothing is ornamental." *Id.* at 14. But the law is clear that "ornamental" and "functional" are not opposites; a design or its elements may serve a function and still possess protectable

ornamentation. *See Sport Dimension*, 820 F.3d at 1321 ("While we agreed that certain elements of the device were functional, their functionality did not preclude those elements from having protectable ornamentation."). Graphic might have made things easier by describing how its designs' functional features "contribute to the designs' overall ornamentation." Inline Mem. at 12. But if the law does not require this type of description as part of a district court's design-patent claim construction, then Graphic was not required to provide this description in support of its claims. Second, as Inline acknowledges, "few courts have construed design patents as having 'no scope.'" Inline Mem. at 38. And even that is something of an overstatement. Inline cites only to one unpublished case where a court construed a design patent has having no scope: *WCM Indus., Inc. v. IPS Corp.*, No. 2:13-cv-02019-JMP-tmp, 2014 WL 8508559 (W.D. Tenn. Nov. 10, 2014). Inline also acknowledges that the Federal Circuit in *Ethicon* reversed a district court's construction of design patents to have no scope because it "fail[ed] to account for the particular ornamentation of the claimed design[.]" 796 F.3d at 1334. If a "no scope" construction might be proper, then, it would seem to be proper only in a rare case.

Consideration of the Federal Circuit's five factors, particularly the presence of alternative designs, shows this is not one of those rare cases. Graphic identifies numerous alternative designs. As Graphic points out, Inline's expert witness, Dr. Claire Koelsch Sand, opined as part of the *inter partes* review regarding the '078 utility patent that the alternative designs would achieve the same or substantially the same functionality as the design patents at issue here. Graphic Resp. Mem. at 12 [ECF No. 121]. At the hearing, Inline argued that Dr. Sand's testimony is "entirely consistent" with Inline's position that

the susceptor sleeves' design features "are functional." Tr. 64 [ECF No. 129]. That may be so, but as just pointed out, concluding that a design or its features are functional does not mean that a design or its elements cannot possess protectable ornamentation. On this same issue, Inline also criticized Graphic for offering no extrinsic evidence about the ornamental aspects of the designs. The contention that Graphic offered "no evidence" is incorrect. The record includes several references to the ornamental or aesthetic impact of the susceptor sleeves' features. *See, e.g.*, JA 552 (Sand declaration that the location of the overlapping seam can "present issues associated with . . . aesthetics," such as a "lopsided package"); JA 727 (consumer-survey documents indicating Graphic was concerned whether "the [design] alternatives communicate different things about the product?"); JA 228 and 736 (references to how it might be desirable for the design to appear "simple" and "uncomplicated"); JA 650 (comparing benefits of alternative designs, including a "more contoured fit" or a "unique retail package"). It is true that other evidence shows that factors other than the susceptors' designs created ornamentation. *See* JA 650 (comparing alternative designs and listing "aesthetic change" as only a benefit of "enhanced printing"); JA 660 (asserting that the way to "[i]mprove aesthetic appearance [is] by utilizing new graphic designs and more colors"). But a design lacks ornamentation "if it is assessed only for functionality," *Auto Body Parts Ass'n*, 930 F.3d at 1321, and here there is evidence that the susceptor sleeves' configuration was not the result of functional considerations only. It also is worth mentioning that other district courts have addressed the ornamental aspects of elements present here—gussets and apertures, in particular—and these cases provide persuasive support for Graphic's proposed construction. *See Calphalon Corp. v. Meyer*

Corp., No. CIV. S-05-971 WBS DAD, 2006 WL 2474286, at *2 n.3, n.5 (E.D. Cal. Aug. 25, 2006) ("The holes are functional in that they serve the purpose of dissipating heat, but the position and shape of the holes is not 'dictated by' this function. Therefore, the court construes the shape and position of the holes in describing the overall appearance of the design. . . . As with the other holes on the handle, this hole is not part of the patent claim by virtue of its *presence* on the handle (it clearly has a functional purpose—it allows the pan to be hung from a hook). However, the functional purpose does not require a certain *shape* for the hole, and it is therefore an element of the design patent that the court must construe."); *Nordock Inc. v. Sys. Inc.*, 927 F. Supp. 2d 577, 589 (E.D. Wis. 2013) ("[T]here are many shapes of lugs, and lugs with gussets and partial gussets. The shape, spacing, pairing and the difference in shapes between the lugs attached to the header plate and the lip are also ornamental features of the '754 patent."); *Black & Decker (U.S.) Inc. v. Pro-Tech Power Inc.*, No. 97-1123-A, 1998 WL 633636, at *6 (E.D. Va. June 2, 1998) ("Must the aperture in the handle support be triangular, or would a circular (or square) aperture work?").[2]

This is a case where verbal elaboration construing the claimed designs is not necessary or helpful. *Egyptian Goddess*, 543 F.3d at 679. Neither Party has provided guidance regarding a verbal description, and that would mean any elaboration would occur essentially in the blind. Though Graphic identifies alternative designs, Graphic Resp.

[2] Neither Graphic nor Inline suggests that the result of the *inter partes* review has a meaningful impact on the proper claim construction, and neither Party has identified evidence showing whether advertising touts particular features of the designs as having specific utility.

Mem. at 16–24, it has not described how those alternative designs are different or reveal particular features of its designs that merit emphasis. That is not to suggest that observations are not possible. For example, one might say that some designs possess a more "curved" than "linear" appearance. *Cf. Ethicon*, 796 F.3d at 1336 (discussing "the overall contoured shape" of the claimed design versus "the overall linear shape" of the accused design); *Elmer*, 67 F.3d at 1577 (discussing the "ornamental feature" of a "protrusion"). Some designs appear relatively "simple" while others are more "complex," with accordion-fold gussets and multi-sided polygon shapes. It is to say that observations like these do not provide meaningfully helpful guidance regarding the scope of Graphic's design patents and, therefore, would do what the Federal Circuit has counseled against: "plac[e] undue emphasis on particular features of the design and . . . risk that a finder of fact will focus on each individual described feature in the verbal description rather than on the design as a whole." *Egyptian Goddess*, 543 F.3d at 680.

ORDER

Based on the foregoing, and all of the files, records, and proceedings herein, the Court adopts the following constructions of the three Patents in Suit:

1. The ‘106 patent claims “the overall ornamental appearance of the design for a carton blank shown in Figure 1.”

2. The ‘124 patent claims “the overall ornamental appearance of the design for a carton shown in Figures 1–16.”

3. The ‘145 patent claims “the overall ornamental appearance of the design for a carton blank shown in Figure 1.”

Dated: October 1, 2019

s/ Eric C. Tostrud
Eric C. Tostrud
United States District Court