

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SUPERIOR COMMUNICATIONS, INC.
Petitioner,

v.

SPECULATIVE PRODUCT DESIGN, LLC
Patent Owner.

Cases IPR2013-00626
Patent 8,204,561

Before LORA M. GREEN, BENJAMIN D. M. WOOD, and ADAM V. FLOYD,
Administrative Patent Judges.

WOOD, *Administrative Patent Judge.*

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

A. *Background*

Superior Communications, Inc. (“Superior”) filed a corrected petition (Paper 7, “Pet.”) to institute an *inter partes* review of claims 1-16 (the “challenged claims”) of U.S. Patent No. 8,204,561 (Ex. 1001, “the ’561 patent”). Speculative Product Design, LLC (“Speck”) filed a preliminary response (Paper 15, “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314.

Institution of an *inter partes* review is authorized by statute when “the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); *see also* 37 C.F.R. § 42.108. We determine that Superior has not shown a reasonable likelihood that it would prevail with respect to at least one of the claims of the ’561 patent claim. Accordingly, we deny Superior’s petition.

B. *Related Proceedings*

The parties report that the ’561 patent has been asserted against Superior in a district court action, *Speculative Product Design, LLC v. Superior Communications, Inc.*, case no. 3:12-cv-04997(N.D. Cal.), and in an investigation before the U.S. International Trade Commission (USITC), *In the Matter of Certain Cases for Portable Electronic Devices*, Inv. No. 337-TA-867/861 (consolidated). Pet. 1; Prelim. Resp. 3. Superior has been terminated from the USITC investigation. Prelim. Resp. 4. Additionally, the ’561 patent was the subject of *Fellowes, Inc. v. Speculative Design Products LLC*, IPR2013-00197, terminated on November 19, 2013.

C. The Claimed Subject Matter

The '561 patent is drawn to a one-piece protective case for mobile electronic devices. Ex. 1001, 1:17-19. The disclosure teaches that the case provides an improvement over existing cases because it combines a hard case with an elastomeric case in a single part. *Id.* at 1:59-62. The interior elastomeric portion provides shock protection to the device, as well as ensuring that the case fits snugly on the device. *Id.* at 2:9-12. The hard protective exterior shell, which mimics the finish of the mobile electronic device, has a low coefficient of friction, allowing the device to be slipped easily into and out of a pocket. *Id.* at 1:65-2:7. The exterior hard shell of the case wraps around the electronic device, but in order to allow it to be mounted on the device, the corners of the hard shell are cut open. *Id.* at 2:18-22. The elastomeric material fills in the gaps created in the hard shell, creating a one-piece case that wraps around the electronic device. *Id.* at 2:25-34.

D. Exemplary Claim

Claim 1 is the sole independent claim, and is reproduced below:

1. A one-piece case for enclosing a personal electronic device comprising:
 - a flexible inner layer co-molded with an exterior hard layer and permanently affixed together to form a co-molded one-piece assembly;
 - wherein the co-molded one-piece assembly is sufficiently flexible to accept insertion of the personal electronic device and sufficiently rigid to securely retain the inserted personal electronic device, wherein:
 - the flexible inner layer includes a bottom surface, side surfaces joined to the bottom surface and extending upward therefrom, and a fitted cavity configured to accept and retain the inserted personal electronic device such that the bottom surface covers at least a portion of a bottom surface of the inserted personal electronic device and the side surfaces cover at least a portion of a side surface of the inserted personal electronic device;

the exterior hard layer includes a bottom surface and side surfaces sized and shaped to substantially cover an exterior of the bottom and side surfaces of the flexible inner layer and a cut away portion that is permanently filled with a portion of the co-molded flexible inner layer.

E. Prior Art Relied Upon

Superior relies upon the following prior-art references:

Seo	WO 2008/032891	Mar. 20, 2008	Ex. 1002
Goros	US 2005/0139498 A1	Jun. 30, 2005	Ex. 1004
Bodkin	US 2007/0225031 A1	Sep. 27, 2007	Ex. 1005

Amazon.com web print-outs describing iPhone case provided by “Cozip” retrieved from Wayback Machine, <http://archive.org/web.php> (Nov. 7 and 11, 2007) (Ex. 1003) (“Cozip”)

F. Asserted Grounds of Unpatentability

Superior contends that the challenged claims are unpatentable under 35 U.S.C. §§ 102 and 103 based on the following specific grounds (Pet. 3-4):

Reference[s]	Basis	Claims Challenged
Seo	§ 102	1-3, 5, 8-13, and 16
Seo	§ 103	4, 6, 7, 14, and 15
Seo and Cozip	§ 103	4-6, 9, 14, and 15
Cozip and Seo	§ 103	1-16
Cozip, Seo, and Goros	§ 103	7, 9, and 11
Cozip, Seo, and Bodkin	§ 103	4-6, 15, and 16

II. ANALYSIS

A. Claim Construction

As a step in our analysis for determining whether to institute a trial, we determine the meaning of the claims. Consistent with the statute and the legislative history of the AIA, the Board will interpret claims using the broadest reasonable construction. 37 C.F.R. § 100(b). We presume that claim terms retain their ordinary and customary meaning as would be understood by one of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). That presumption may be rebutted if the patent specification defines the term “with reasonable clarity, deliberateness, and precision.” *In re Paulson*, 30 F.3d 1475, 1480 (Fed. Cir. 1994); see *In re Bigio*, 381 F.3d 1320, 1325-26 (Fed. Cir. 2004) (“Absent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.”).

Superior states that it “accepts an interpretation of ‘plain and ordinary meaning’ for all claim terms in the ’561 Patent.” Pet. 6. Speck does not address claim construction explicitly, but also does not dispute that the claim terms retain their plain and ordinary meaning as would be understood by one of ordinary skill in the art at the time of the invention. See *generally* Prelim. Resp. For the reasons discussed in sections II.B and II.C of this Decision, *infra*, it is only necessary that we construe the term *permanently affixed*.

Independent claim 1 recites “a flexible inner layer co-molded with an exterior hard layer and *permanently affixed* together to form a co-molded one-piece assembly.” Ex. 1001, 5:17-19 (emphasis added). Neither party proposes an express construction for *permanently affixed* as used in this limitation. Nor does

the written description define the term. In the absence of an express definition, it is reasonable to consult a general dictionary definition of the word for guidance in determining the ordinary and customary meaning of the claim term as viewed by a person of ordinary skill in the art. *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010).

“Permanent” is commonly understood to mean “continuing or enduring without fundamental or marked change; stable.” MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 922 (11th ed. 2005). To “affix” means “to attach physically.” *Id.* at 21. Based on these definitions, the ordinary meaning of the phrase *permanently affixed* would be “attached physically such that the attachment continues or endures without fundamental or marked change.” Thus, a flexible inner layer and an exterior hard layer are *permanently affixed* when they cannot be separated without “fundamental[ly] or marked[ly] chang[ing]” – i.e., damaging – the layers or the bond between the layers. For purposes of this decision, therefore, *permanently affixed*, in the context of claim 1, requires that the flexible inner layer and the outer hard layer cannot be separated without damaging the layers or the bond between the layers.¹

As noted above, the specification does not define *permanently affixed* expressly, but it does provide examples of methods of permanently attaching an interior elastomeric layer to an exterior hard shell layer. Specifically, referring to figure 1, the written description states:

The exterior hard shell layer 12 and the interior elastomeric layer 13 may be attached in several ways, such as glue, chemical bonding, heating, heat treated chemicals or any other means know[n] in the art

¹ Although the Administrative Law Judge presiding over the USITC investigation issued a pretrial order that construed a number of claim terms, he declined to define the term *permanently affixed*. See Ex. 1007 at 30.

which permanently attach the external hard shell layer 12 to the interior elastomeric layer 13.

Ex. 1001, 3:44-49. We do not find anything in this discussion that is inconsistent with our construction.

B. Anticipation and Obviousness Based on Seo

Superior contends that: (1) Seo anticipates claims 1-3, 5, 8-13, and 16 (Pet. 8-19); (2) Seo renders obvious claims 4, 6, 7, 14, and 15 (Pet. 19-26); and (3) Seo and Cozip render obvious claims 4-6, 9, 14, and 15 (Pet. 26-33). Each of these alleged grounds of unpatentability is based on the assertion that Seo teaches “a flexible inner layer co-molded with an exterior hard layer and *permanently affixed* together.” Pet. 9-10 (emphasis added).

Seo describes a mobile phone case having silicone parts. The invention is based on a “hard synthetic resin” case made by injection molding and shaped to conform to the outline of a mobile phone. Ex. 1002, 1:16-19. Seo states that “[i]t is impossible to apply [a] different material to the surface of the body base,” and thus proposes to “integrally arrange a soft silicone material . . . on at least one of inner and outer faces of the mobile phone case” via “double injection molding” when the case is molded. *Id.* at 2:7-25.

Figures 2 and 8 of Seo, reproduced below, depict a preferred embodiment of the invention:

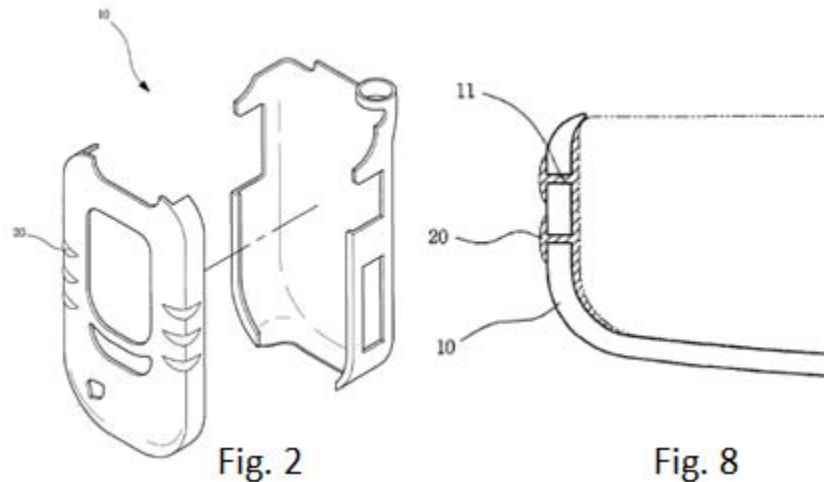


Figure 2 depicts a two-piece mobile phone case 10. Figure 8 shows a cross-sectional view of the part of case 10 that bears the silicone material.²

According to Seo, silicone parts 20 are “integrally attached to predetermined inner/outer face portions” of case 10. In particular, one or more dispensing portions 11 (which, in this embodiment, are through-holes) are formed in one or more “thickness dimension portions” of case 10. *Id.* at 5:9-11. Molding material for the silicone parts 20 is introduced through dispensing portions 11 so that the silicone parts 20 “minimally protrude” from the case. *Id.* at 5:11-24. The silicone parts 20 also may be arranged in the form of a thin sheet along the entire inner face of case 10. *Id.* at 6:24-7:1. Doing so helps “prevent external dust or other foreign materials from penetrating into the area between the mobile phone case 10 and mobile phone, as well as enhance[s] the holding force between the mobile phone case 10 and the mobile phone.” *Id.* at 7:4-8.

² Superior’s analysis is based entirely on this single part of Seo’s two-part case. For purposes of this Decision, we assume, without deciding, that this portion of Seo’s two-part case satisfies the limitation requiring a “one-piece case for enclosing a personal electronic device.”

Superior asserts that Seo teaches a one-piece case comprising, *inter alia*, “a flexible inner layer 20 co-molded with an exterior hard layer 10 and permanently affixed together to form a co-molded one-piece assembly 10, 20.” Pet. 9. In particular, Superior contends that Seo discloses a flexible inner layer in the form of “silicone parts 20, made of a soft material . . . arranged in the form of a thin sheet along the entire inner face of the mobile phone case 10.” *Id.* (quoting Ex. 1002, 6:20-7:1). Further, according to Superior, Seo’s flexible inner layer 20 is “permanently affixed” to exterior hard layer 10 because the soft silicone part is “selectively and integrally formed on a predetermined portion of inner and outer face of the case, wherein the soft silicone part is made via double injection molding when the case is injection molded.” Pet. 10 (quoting Ex. 1002, 3:9-14). Superior’s expert, Dr. Kazmer, similarly equates “integrally attached” as taught by Seo with “permanently affixed,” as required by the challenged claims. According to Dr. Kazmer:

Seo describes the soft silicone part to be “integrally attached” to the outer face of the case. Accordingly, Seo anticipates “a flexible inner layer co-molded with an exterior hard layer and permanently affixed together to form a co-molded one-piece assembly” as recited in claim 1 of the ’561 Patent.

Ex. 1008 ¶ 32.

Speck disputes, *inter alia*, that Seo discloses a flexible inner layer and an exterior hard layer that are “permanently affixed together.” Speck notes that Seo teaches that it is “impossible to apply a different material to the surface of the body base of the mobile phone case.” Prelim. Resp. 13 (quoting Ex. 1002, 2:7-12). According to Speck, Seo overcomes that obstacle by forming a “mechanical attachment between the silicone decorative elements and the polycarbonate case.” That is,

[The] silicone is attached by providing holes in the polycarbonate shell, placing the polycarbonate into a mold, and injecting silicone into the mold. . . . The silicone that passes through the [holes] connects the silicone on the inside and outside of the case forming what is effectively a rivet.

Id. at 13-14. Speck concludes that “[r]ather than teaching layers that are ‘permanently affixed’ by co-molding, Seo teaches that applying silicone features to the surface of the case will not form a permanent attachment and that a mechanical structure must be formed.” *Id.* at 14.

Based on the current record, we are not persuaded that Superior is reasonably likely to show that Seo teaches a flexible inner layer and an exterior hard layer *permanently affixed* together. As Speck points out, Seo teaches that it is “impossible” to apply a different material to the surface of the body base of the phone case. Ex. 1002, 2:7-9. Neither Superior nor Dr. Kazmer addresses this teaching or explains how it can be consistent with the notion that Seo teaches *permanently affixing* Seo’s soft silicone layer to the hard resin layer. On the contrary, this teaching suggests that a soft silicone layer would not adhere or bond to a hard resin layer, and thus must be attached to the hard layer in the mechanical manner that Seo teaches.

Moreover, we are not persuaded that Seo’s mechanical attachment method is “permanently affixed,” such that the hard and soft layers cannot be separated without damaging the layers or the rivets that connect the layers. Superior relies on Seo’s teaching that the layers are “integrally formed” or “integrally attached” to support this contention. Pet. 10. But there is insufficient evidence in the record to persuade us that “integrally” attached necessarily means “permanently” attached. Moreover, the combination of the softness and flexibility of Seo’s inner silicone layer with the “impossibility” of applying that layer to the surface of Seo’s hard

outer layer leaves open the possibility that the layers may be separated without damaging the layers or the rivets that connect the layers. Thus, we are not persuaded on the present record that Superior is reasonably likely to prevail in showing that any of the challenged claims is anticipated by Seo, would have been obvious over Seo, or would have been obvious over Seo and Cozip.

C. Other Grounds

The remaining alleged grounds of unpatentability are based on Cozip as the primary reference. See Pet. 33-49 (alleging that claims 1-16 would have been obvious over Cozip and Seo); Pet. 49-52 (alleging that claims 7, 9, and 11 would have been obvious over Cozip, Seo, and Goros); Pet. 52-60 (alleging that claims 4, 5, 6, 15 and 16 would have been obvious over Cozip, Seo, and Bodkin). According to Superior, Cozip refers to “Amazon.com web print-outs referring to an iPhone case provided by ‘Cozip’ retrieved from the Wayback Machine (<http://archive.org/web/web.php>).” Pet. 4. The print-outs bear publication dates of November 7, 2007 (Ex. 1003 at 1-6), and November 11, 2007 (*Id.* at 8-12). Cozip contains images of an “Apple iPhone Soft Polycarbonate Slim fit Case – Black (Cozip Brand).”³ *Id.* at 1.

³ Apparently, Superior relies on Cozip’s “soft” polycarbonate case to correspond to the claimed exterior “hard” layer (Pet. 37), but does not provide evidence or argument in support of this reliance.

A perspective view and a front view of the Cozip case are depicted below:



The above images depict perspective and front views of the Cozip case.
Ex. 1003 at 8, 10.

Superior asserts that Cozip discloses a case with “an exterior hard layer ha[ving] four corner joints with cut-away portions.” Pet. 28. Superior argues that “it would have been obvious to one of ordinary skill in the art to fill the shell and corners of Cozip . . . with the flexible layer of Seo.” *Id.* at 33. Superior, therefore, is proposing that a person of ordinary skill would attach Seo’s soft silicone layer to Cozip’s polycarbonate case, with Cozip’s cut-away portions serving as the “dispensing portions” as taught by Seo. Superior reasons that it would be obvious to fill permanently the cut away portion of Cozip with the flexible inner layer 20 of Seo to attach tightly and integrally the inner layer 20 to Cozip’s outer layer as taught by Seo. Pet. 39 (citing Ex. 1002, 5:9-16). But Superior does not explain how attaching Seo’s inner silicone layer to Cozip’s case would result in “permanently affix[ing]” the two layers together, given that Seo teaches that it is “impossible to apply different material to the surface of the body case.” Ex. 1002, 2:7-9. Accordingly, as with the grounds based on Seo as the primary reference, we are not persuaded that Superior is reasonably likely to show that a person of ordinary skill in the art at the time of the invention would “permanently affix” Seo’s soft silicone layer to Cozip’s polycarbonate case. Therefore, we do not

institute an *inter partes* review on any of the grounds based on Cozip as the primary reference.

III. CONCLUSION

We decline to institute an *inter partes* review of any of the challenged claims.

IV. ORDER

For the reasons given, it is

ORDERED that the Petition is denied as to all of the challenged claims of the '561 patent.

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