UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Shenzhen Torras Technology Co., Ltd.

Shenzhen Lechuang Tiancheng Technology Co., Ltd.

Shenzhen Ruixin Digital Technology Co, Ltd.

and

Shanghai Kuke Network Technology Co., Ltd.

Petitioners

v.

Rokform IP, LLC

Patent Owner.

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IPR2027-00003

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PETITION FOR INTER PARTES REVIEW OF

U.S. Patent 11,775,019

Table of Contents

Exhibit List v

Table Of Abbreviations vii

I. INTRODUCTION 1

II. MANDATORY NOTICES 1

A. Real Parties in Interest. 1

B. Related Matters. 2

C. Lead and Backup Counsel and Service Information. 2

III. REQUIREMENTS FOR INTER PARTES REVIEW. 2

A. Grounds For Standing. 2

B. Identification Of Challenged Claims. 3

IV. OVERVIEW OF THE '019 PATENT AND ITS PROSECUTION HISTORY. 4

A. Specification. 4

B. The Prosecution History. 5

C. Level Of Ordinary Skill In The Art. 7

D. Claim Construction For The '019 Patent. 7

V. CLAIMS 9, 10, AND 11 OF THE '019 PATENT ARE UNPATENTABLE. 8

A. Ground 1: Claim 9 is unpatentable as anticipated under 35 U.S.C. § 102 By Whitten584. 8

1. Claim 9 is not entitled to claim priority to the '220 application and therefore, the published patent application corresponding to the '220 application is prior art. 9

2. The published patent application corresponding to the '220 application discloses all the limitations of claim 9. 15

B. Ground 2: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum857. 18

1. Overview Of Rothbaum857. 20

2. Preamble. 23

3. Case Connectable to Handheld Electronic Device. 27

4. Case with Rear Wall and Sidewall. 30

5. Rear Wall and Sidewall Are a Unitary Structure. 31

6. Exterior-Facing Member. 33

7. Indentation with Magnet 37

8. Indentation Facing Rear Wall of Case 39

9. Rear Wall and Exterior Facing Member Fully Enclose Magnet 41
C. Ground 3: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum609. 43
1. Overview Of Rothbaum609. 43
2. Preamble. 45
3. Case Connectable to Handheld Electronic Device. 46
4. Case with Rear Wall and Sidewall. 48
5. Rear Wall and Sidewall Are a Unitary Structure. 50
6. Exterior-Facing Member. 52
7. Indentation with Magnet 56
8. Indentation Facing Rear Wall of Case 59
9. Rear Wall and Exterior Facing Member Fully Enclose Magnet 60
D. Ground 4: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over the combination of Rothbaum857 and Rothbaum609. 61
1. The Obvious Rothbaum857 and Rothbaum609 Combination 61
2. Preamble 64
3. All Other Limitations 65
E. Ground 5: Claims 10 and 11 are unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum857, either alone or in combination with Rothbaum609. 65
1. Non-slip Member Of Claim 10 65
2. Frictional Gripping Exterior Surface Of Claim 11 66
F. Ground 6: Claims 9, 10, and 11 are unpatentable as obvious under 35 U.S.C. § 103 over Byun In view Of Curti. 66
1. Overview Of Byun. 66
2. Overview Of Curti. 68
3. The Obvious Combination Of Byun and Curti. 69
4. Preamble. 70
5. Case Connectable to Handheld Electronic Device. 72
6. Case with Rear Wall and Sidewall. 75
7. Rear Wall and Sidewall Are a Unitary Structure. 78
8. Exterior-Facing Member. 80
9. Indentation with Magnet 83
10. Indentation Facing Rear Wall of Case 86
11. Rear Wall and Exterior Facing Member Fully Enclose Magnet 88

12. Non-slip Member Of Claim 10.....92

13. Frictional Gripping Exterior Surface Of Claim 11.....92

VI. THE BOARD SHOULD NOT EXERCISE ITS DISCRETION AND DENY INSTITUTION......93

VII. CONCLUSION......94

Exhibit List

EX1001: U.S. Patent No. 11,775,019 to Whitten, Jeff et al. ("the '019 patent)"

EX1002: Patent Prosecution History of U.S. Patent 11,775,019.

EX1003: Expert Declaration of Dr. Randall King.

EX1004: U.S. Pub. No. 2011/0192857 to Rothbaum et al. ("Rothbaum857"), which was published on August 11, 2011, and is the publication of an application filed on January 13, 2011.

EX1005: U.S. Pub. No. 2011/0252609 to Rothbaum et al. ("Rothbaum609"), which was published on October 20, 2011, and is the publication of an application filed on October 20, 2010.

EX1006: English translation of Korea Pub. No. KR101020434B1 to Byun et al. ("Byun"), which was published on March 9, 2011.

EX1007: English translation of France Pub. No. FR2901085A1 to Curti et al. ("Curti"), which was published on November 16, 2007.

EX1008: Curriculum Vitae of Dr. Randall King

EX1009: U.S. Non-provisional patent application no. 13/593,220 (filed Aug. 23, 2012).

EX1010: U.S. Patent Publication No. 2013/0181584, published July 18, 2013 (corresponding to non-provisional patent application no. 13/593,220).

EX1011: District Court Judge Gilstrap Trial Docket Calendar for March, 2028, Eastern District of Texas.

EX1012: Amended Docket Control Order, *Rokform, LLC and Rokform IP LLC,* Plaintiffs *v. Shenzhen Torras Technology Co., LTD. and Shenzhen Ruixin Digital Technology Co., LTD,* Defendants, *Shenzhen Torras Technology Co., LTD. and Shenzhen Ruixin Digital Technology Co., LTD,* Counterclaim Plaintiffs,

v. *Rokform, LLC and Rokform IP LLC,* Counterclaim Defendants, Civil Action Nos. 2:26-cv-00052-JRG (lead case), 2:26-cv-0050-JRG, filed June 18, 2026.

EX1013: Ex. A, Consolidated Amended Complaint For Patent Infringement and Jury Demand, *Rokform, LLC and Rokform IP LLC,* Plaintiffs *v. Shenzhen Torras Technology Co., LTD. and Shenzhen Ruixin Digital Technology Co., LTD,* Defendants, *Shenzhen Torras Technology Co., LTD. and Shenzhen Ruixin Digital Technology Co., LTD,* Counterclaim Plaintiffs, v. *Rokform, LLC and Rokform IP LLC,* Counterclaim Defendants, Civil Action Nos. 2:26-cv-00052-JRG (lead case), 2:26-cv-0050-JRG, filed June 18, 2026.

EX1014: Korea Pub. No. KR101020434B1 to Byun et al. ("Byun"), which was published on March 9, 2011.

EX1015: Certification of the English translation of Korea Pub. No. KR101020434B1 (Byun).

EX1016: France Pub. No. FR2901085A1 to Curti et al. ("Curti"), which was published on November 16, 2007.

EX1017: Certification of the English translation of France Pub. No. FR2901085A1 (Curti).

EX1018: Patent Prosecution History of U.S. Patent Application No. 15/838,933.

EX1019: Provisional Application No. 61/653,618

EX1020: Provisional Application No. 61/585,933

EX1021: Declaration of Dr. Gregory J. Gonsalves

Table Of Abbreviations

Parties

Petitioners	Shenzhen Torras Technology Co., Ltd.; Shenzhen Lechuang Tiancheng Technology Co., Ltd.; Shenzhen Ruixin Digital Technology Co, Ltd.; and Shanghai Kuke Network Technology Co., Ltd.
Patent Owner, Rokform	Rokform IP LLC
US PTO	United States Patent & Trademark Office

Citations

MPEP	Manual of Patent Examining Procedure

Terms

’019 Patent	United States Patent No. 11,775,019
Whitten584	U.S. Pub. No. 2013/0181584 to Whitten et al.
Rothbaum857	U.S. Pub. No. 2011/0192857 to Rothbaum et al.
Rothbaum609	U.S. Pub. No. 2011/0252609 to Rothbaum et al.
Byun	Korea Pub. No. KR101020434B1 to Byun et al.
Curti	France Pub. No. FR2901085A1 to Curti et al.
Board, PTAB	Patent Trial and Appeal Board
POSITA	person of ordinary skill in the art

I. INTRODUCTION

Petitioners submit this Petition for Inter Partes Review of claims 9-11 ("the Challenged Claims") of U.S. Patent No. 11,775,019 ("the '019 Patent"). Petitioners respectfully submit that claim 9 is not entitled to claim priority to U.S. Patent application no. 13/593,220 ("the '220 application"), which was filed on Aug. 23, 2012, because that application does not provide written description support for that claim. Claim 9 is anticipated under 35 U.S.C. § 102 by the publication of the '220 application: U.S. Patent publication 2013-0181584, which was published on July 18, 2013.

The Challenged Claims are also unpatentable on additional grounds under 35 U.S.C. §103 as obvious over additional prior art published well before the filing date of any application to which the '019 patent claims priority. Accordingly, Petitioners respectfully request that the Board institute an inter partes review of the '019 Patent.

II. MANDATORY NOTICES

A. Real Parties in Interest.

The real parties in interest for this Petition are: Shenzhen Lanhe Technologies Co., Ltd., Shenzhen Torras Technology Co., Ltd., Shenzhen Lechuang Tiancheng Technology Co., Ltd., Shenzhen Ruixin Digital Technology Co, Ltd., Shanghai Kuke Network Technology Co., Ltd, Casekoo Inc., Torras

Inc., Shenzhen Explore with Curiosity Technology Co., Ltd., Shenzhen Lanhe Investment Co., Ltd., Shenzhen Lantian Management Consulting Partnership (Limited Partnership), Lechuang Tiancheng Inc., Shenzhen Lechuang Future Technology Co., Ltd., Shenzhen Ansi Small Household Appliances Co., Ltd., and Shenzhen Chengyue Technology Co., Ltd.

B. Related Matters.

The '019 Patent is currently involved in the following actions:

Rokform LLC, et al v. Shenzhen Torras Technology Co., Ltd. et al, Civil Action Nos. 2:26-cv-00052-JRG (lead case), 2:26-cv-0050-JRG, filed January 22, 2026.

C. Lead and Backup Counsel and Service Information.

Lead Counsel	Backup Counsel
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Petitioners consent to electronic service at the email addresses shown above.

III. REQUIREMENTS FOR INTER PARTES REVIEW.

A. Grounds For Standing.

Petitioners certify that the '019 Patent is available for inter partes review. Petitioners are not barred or estopped from requesting an inter partes review challenging the claims on the identified grounds herein. Petitioners have not filed

a civil action challenging the validity of a claim of the ’019 Patent. This petition is being filed no more than one year after the date on which Petitioners were served with a complaint alleging infringement of the ’019 Patent. 37 C.F.R. §1.510(b)(2).

B. Identification Of Challenged Claims.

Petitioners contend that claims 9, 10, and 11 of ’019 Patent are unpatentable over the following publications that are prior art to the '019 patent:

EX1010: U.S. Pub. No. 2013-0181584 to Whitten et al (“Whitten584”), which was published on July 18, 2013, and is the publication of an application filed on Aug. 23, 2012.

EX1004: U.S. Pub. No. 2011/0192857 to Rothbaum et al. (“Rothbaum857”), which was published on August 11, 2011, and is the publication of an application filed on January 13, 2011.

EX1005: U.S. Pub. No. 2011/0252609 to Rothbaum et al. (“Rothbaum609”), which was published on October 20, 2011, and is the publication of an application filed on October 20, 2010.

EX1015: Korea Pub. No. KR101020434B1 to Byun et al. (“Byun”), which was published on March 9, 2011 (English translation: EX1006).

EX1016: France Pub. No. FR2901085A1 to Curti et al. (“Curti”), which was published on November 16, 2007 (English translation: EX1007).

In particular, Petitioners contend that claims 9, 10, and 11 of the ’019 patent are unpatentable on the following grounds.

Ground 1: Claim 9 is unpatentable as anticipated under 35 U.S.C. §102 by Whitten584.

Ground 2: Claim 9 is unpatentable as obvious under 35 U.S.C. §103 over Rothbaum857.

Ground 3: Claim 9 is unpatentable as obvious under 35 U.S.C. §103 over Rothbaum609.

Ground 4: Claim 9 is unpatentable as obvious under 35 U.S.C. §103 over the combination of Rothbaum857 and Rothbaum609.

Ground 5: Claims 10 and 11 are unpatentable as obvious under 35 U.S.C. §103 over Rothbaum857 either alone or in combination with Rothbaum609.

Ground 6: Claims 9, 10, and 11 are unpatentable as obvious under 35 U.S.C. §103 over Byun in view of Curti.

IV. OVERVIEW OF THE '019 PATENT AND ITS PROSECUTION HISTORY.

The '019 patent claims priority to a series of patent applications including the '220 application, filed on Aug. 23, 2012, Provisional application No. 61/653,618, filed on May 31, 2012, and Provisional application No. 61/585,933, filed on Jan. 12, 2012. EX1001, cover.

A. Specification.

The '019 patent is directed at a protective case for a handheld electronic device. Figure 1 of the '019 patent shows an exemplary embodiment.

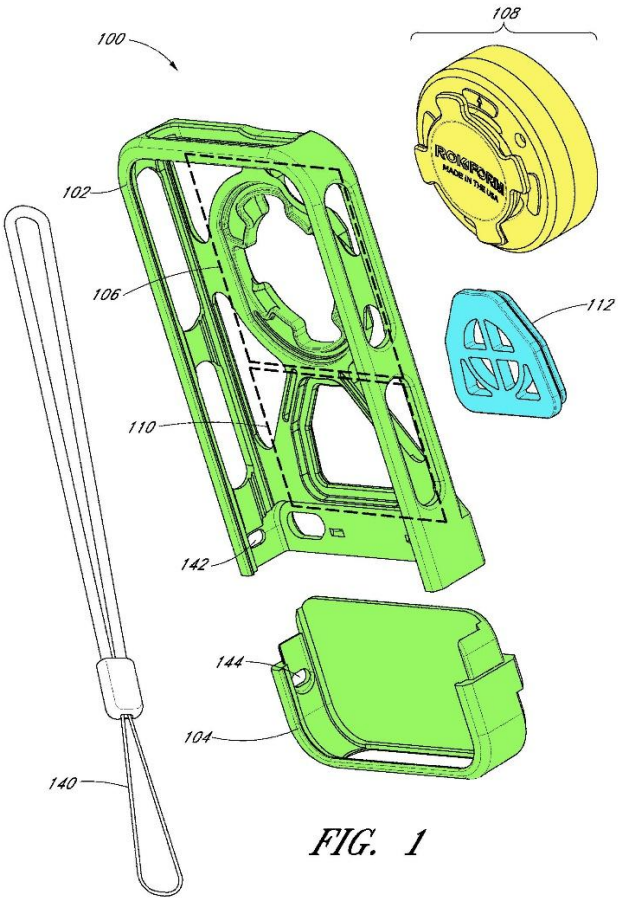


FIG. 1

EX1001, Fig. 1.[1]

As shown in Figure 1, a protection system 100 includes a body (green) composed of an upper shell piece 102 and a lower shell piece 104. EX1001, 5:31-34. Upper shell piece 102 includes an attachment region 106 that allows for the engagement of mounting member 108 (yellow). *Id.*, 5:50-55. Protection system 100 also includes a non-slip region 110, into which non-slip member 112 (blue) may be inserted. *Id.*, 5:61-6:2; FIG. 8C.

B. The Prosecution History.

[1] All coloring and annotations added in the figures, unless otherwise noted.

None of the prior art forming the basis for Petitioners' proposed grounds of unpatentability were considered during the prosecution of the application that ultimately issued as the '019 patent. *See* EX1001, cover.

Claim 9, corresponding to application claim 34, was added during prosecution. EX1002, 140-145. The Examiner rejected the claim as being anticipated by U.S. Pub. No. 2008/0023580 to Harchol ("Harchol"). EX1002, 97-106. In response, the applicant amended application claim 34 (issued claim 9) to add two features, specifically "wherein the rear wall and the sidewall are a unitary structure" and "wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet." EX1002, 140-145. The applicant argued that Harchol fails to teach or suggest the newly added features. EX1002, 86-93.

The Examiner next rejected application claim 34 (issued claim 9) as being anticipated by U.S. Pub. No. 2006/0229740 to Kreisel. EX1002, 61-67.

In response, the applicant amended application claim 34 to replace the limitation "an indentation configured to receive at least one magnet" with the limitation "an indentation and at least one magnet received within the indentation." EX1002, 51-55.

The Examiner then allowed the claims. EX1002, 19-20.

C. Level Of Ordinary Skill In The Art.

A person of ordinary skill in the art ("POSITA") "would at the time of the alleged invention of the '019 patent have had a bachelor's level degree in Mechanical Engineering, Industrial Design, or a similar field and one year experience in designing mechanical products. Additional work or research experience can substitute for less or different education, and vice-versa." EX1003, ¶38. Dr. King bases this conclusion upon his knowledge of the field and after properly setting forth the factors that inform this inquiry. *Id.*, ¶37.

D. Claim Construction For The '019 Patent.

Pursuant to 37 C.F.R. § 42.104(b)(3), Petitioners propose a single claim construction issue: The preamble of claim 9 is not limiting.

The preamble of claim 9 is not limiting; it instead merely sets forth an intended use for the apparatus that is fully recited in the body of the claim. A claim preamble is limiting only if it is necessary to "give life, meaning, and vitality" to the claim. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999); *see Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (identifying characteristics that make a preamble limiting).

Here, the preamble of the '019 patent does not recite any characteristics that would make it limiting. It does not recite essential structure; the only antecedent basis provided by the preamble is an "electronic device," that is not

part of the claimed invention; the preamble is not essential to understand any limitations in the body of the claim; and the preamble was not relied upon during prosecution.

Rather, the body of claim 9 is structurally complete and the preamble states only a purpose or intended use of the invention. In such circumstances, the preamble is not limiting. *Arctic Cat Inc. v. GEP Power Products, Inc.*, 919 F.3d 1320, 1328 (Fed. Cir. 2019).

For all terms in the body of claims 9, 10, and 11, Petitioners propose that the terms be afforded their "ordinary and customary meaning" under the claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2015) (en banc).

V. CLAIMS 9, 10, AND 11 OF THE '019 PATENT ARE UNPATENTABLE.

A. Ground 1: Claim 9 is unpatentable as anticipated under 35 U.S.C. § 102 By Whitten584.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). "When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001).

1. Claim 9 is not entitled to claim priority to the ’220 application and therefore, the published patent application corresponding to the ’220 application is prior art.

The ’019 patent, which was filed on December 10, 2020, claims priority through a series of continuations dating back to Application 13/593,220 filed on August 23, 2012, as well as two provisional applications filed on May 31, 2012 (Provisional App. 61/653,618) and January 12, 2012 (Provisional App. 61/585,933). As detailed below, however, claim 9 is not entitled to the filing date of these earlier applications. As a result, claim 9 is anticipated by intervening prior art, including the published patent application corresponding to the ’220 application: U.S. Patent Publication 2013-0181584 to Whitten et al. (“Whitten584”), which was published on July 18, 2013, well over one year before the filing of the application resulting in the ’019 patent. EX1010.

For a claim in a later-filed application to be entitled to the filing date of an earlier application under 35 U.S.C. § 120, “the earlier application must comply with the written description requirement of 35 U.S.C. § 112, p 1 (1994).” *See Lockwood v. American Airlines, Inc*., 107 F.3d 1565, 1571, (Fed.Cir.1997). “To meet this requirement, the disclosure of the earlier application, the parent, must reasonably convey to one of skill in the art that the inventor possessed the later-claimed subject matter at the time the parent application was filed.” *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998) (internal citations omitted). .

Here, the ’220 application does not reasonably convey that the inventor possessed the scope of the subject matter in claim 9 of the ’019 patent.

Claim 9 is directed to a mountable case for a handheld electronic device having, among other things, a case and an “exterior-facing member” removably received in the rear wall of the case. This claim is not entitled to the filing date of the ’220 application because, as explained below, the ’220 application does not provide sufficient support for a mounting case having merely any generic kind of “exterior-facing member.”

The ’220 application describes a protective case for a handheld electronic device having a magnet-retaining member: “a ***non-slip member***,” as illustrated below. EX1009, Abstract.[2]

[2] All emphasis added throughout unless otherwise noted.

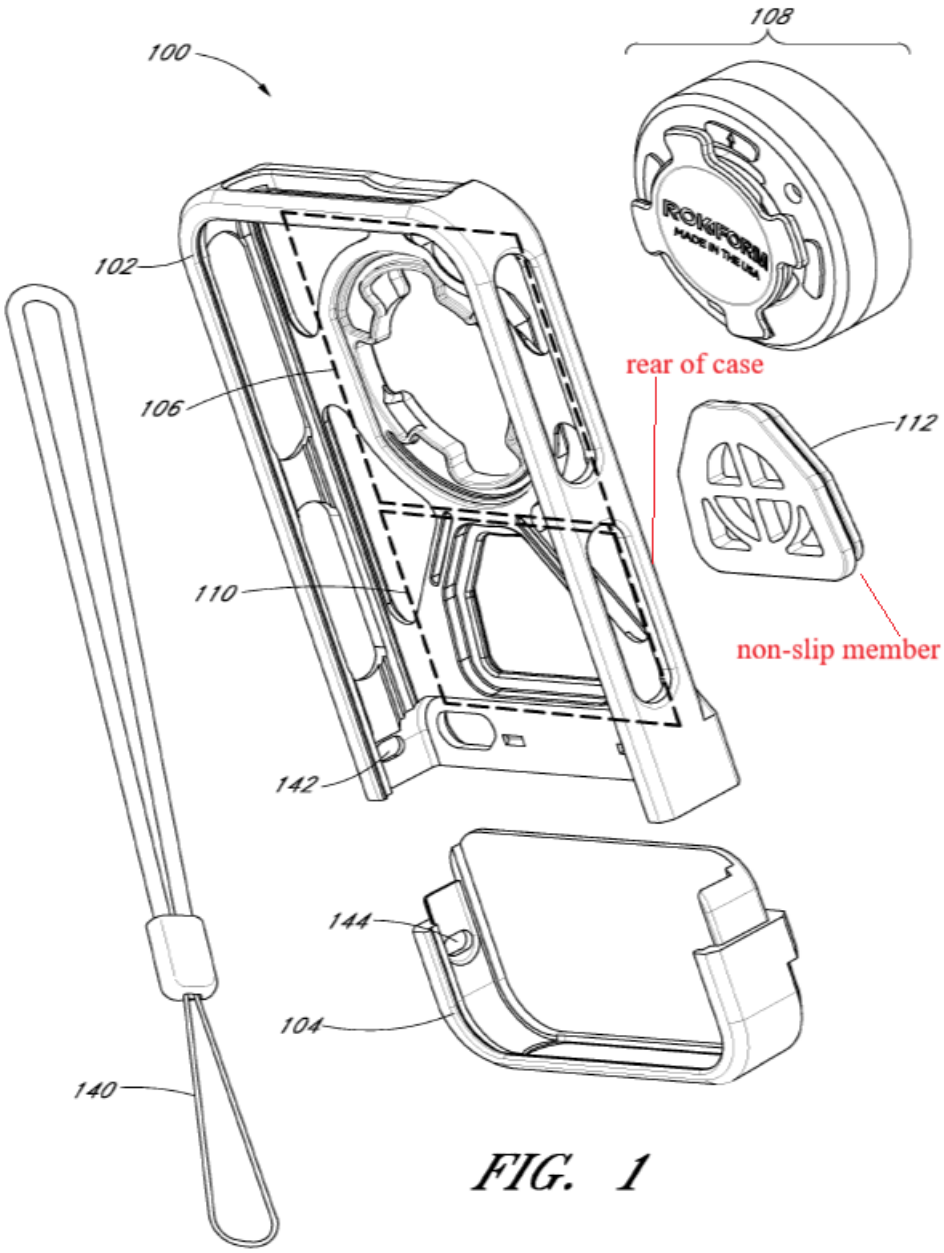


FIG. 1

EX1009, FIG.1. Every reference to element 112 in the '220 Application describes this component as a "non-slip member." *See* EX1009 generally. That is because, as stated in the Abstract, the purpose of the non-slip member was to "***prevent the device from slipping on a surface***." EX1009, Abstract.

The ’220 specification repeatedly touts the importance and benefits of this component’s non-slip function. The ’220 specification explains that the “***non-slip member comprises a non-slip material*** shaped to fit within the second open space.” EX1009, ¶[0013]. It explains that the non-slip member “includes ***a non-slip arrangement that enhances frictional engagement*** of protection system 100 with a surface on which the protection system 100 may be placed.” EX1009, ¶[0043]. The ’220 specification also explains that, when other elements are added, it should be done in a manner that does not undermine the non-slip functionality of the non-slip member. EX1009, ¶[0054] (“magnet 802 is positioned or embedded within non-slip member 112…***without impacting the non-slip benefits provided by non-slip member 112***”). The claims filed with the ’220 application likewise recited a “non-slip member.” EX1009, 19.

The ’220 application thus unquestionably discloses element 112 only as a non-slip member that is used to prevent the device from slipping on a surface. Nothing in the ’220 application teaches or discloses the use of any other type of component. *See also* EX1003, ¶¶198-206 (declaration of Dr. King, explaining that, in his opinion as a POSITA, the ’220 application discloses only a non-slip member, and does not generically disclose the use of any type of an exterior facing component).

Nor is there any evidence supporting an inherent disclosure of other types of exterior facing members. In order for a disclosure to be inherent, the missing descriptive matter must necessarily be present in the parent application's specification such that one skilled in the art would recognize such a disclosure. *See Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed.Cir.1991). Nothing in the ’220 application suggests that the disclosure necessarily includes any kind of exterior facing member other than a non-slip member. EX1003 ¶¶198-206. Indeed, as discussed above, the ’220 application clearly indicates the contrary by highlighting the advantages of the non-slip member.

Because the disclosure of the ’220 application does not reasonably convey to one of skill in the art that the inventor possessed the later-claimed subject matter at the time the ’220 application was filed, claim 9 is not entitled to the priority date of the ’220 application. *See, e.g., Tronzo*, 156 F.3d at 1158 (claims not entitled to priority date of parent patent when the parent disclosed only a single species of cup—a conical cup—but the claims at issue generically encompassed an entire genus of cups).

The provisional applications that the ’019 cites for priority and incorporates by reference are similarly lacking in this regard. Provisional App. 61/653,618 provides a similar disclosure to the ’220 application in that it only

describes a "non-slip" member (EX1019, 18), and Provisional App. 61/585,933 likewise identifies the relevant component as a "non-slip/magnet kit." EX1020, 8. Thus, like the '220 application, the provisional applications do not provide written description support for using merely any generic "exterior-facing component."

The first application in which the patentee even suggested the use of a member that was not "non-slip" was in parent application 15/838,933, filed on December 12, 2017, more than five years after the '220 application. EX1018, 130-138. In the '933 application, the patentee submitted a new claim 8, which for the first time recited a "***flexible member***" instead of a "non-slip member." EX1018, 158. When doing so, the patentee acknowledged that "[t]he claims of the present application ***are different and possibly broader in scope than the claims pursued in the parent application(s)***" and so suggested that the "references previously considered in the parent application(s) may need to be re-visited." EX1018, 172.

To be clear, Petitioner submits that the disclosure of a "flexible member" in the '933 application (filed Dec. 12, 2017) is still insufficient to provide written description support for claims that generically encompass a broad category that includes any kind of "exterior-facing member." Indeed, none of the parent applications to which the '019 claims priority, when filed, referred to a generic

"exterior-facing member." Petitioner therefore submits that the priority date of claim 9 is December 10, 2020, the filing date of the '019 patent. However, regardless of whether the Challenged Claims are entitled to a filing date of December 10, 2020 or December 12, 2017, the same conclusion applies: the publication of the '220 application (Whitten584) is prior art to claim 9 under 35 U.S.C. § 102(a)(1) because it was published on July 18, 2013 (EX1010), well over one year before the priority date of claim 9.

2. The published patent application corresponding to the '220 application discloses all the limitations of claim 9.

Claims of a challenged patent are routinely found to be "anticipated by the publication of an earlier patent application to which the patent claims priority." *Reckitt Benckiser LLC v. Ansel Healthcare Prods.*, IPR2017-00066, Paper 35 (P.T.A.B. January 30, 2018). Indeed, as the Federal Circuit has explained, while a patent's claim for a genus might not be enabled by a prior parent's disclosure of a single species, the parent's enablement of the species can still anticipate the later claim for the genus. *Chester v. Miller,* 906 F.2d 1574, 1577 (Fed. Cir. 1990). That is the case here, in which claim 9 is anticipated by the publication of the '220 application (Whitten584), as shown by the claim chart below.

Claim 9	Whitten584 (EX1010)
A mountable case for a handheld electronic device, comprising:	A "protective case for a handheld electronic device is provided." Abstract.

a case configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use,	"the present application relates to a protective system for a handheld electronic device" ¶[0008]; "The protection system comprises a shell comprised of a rear wall, a plurality of wall surfaces arranged to enclose a plurality of peripheral edges of a handheld electronic device." ¶[0009]; "the assembled upper shell piece 102 and lower shell piece 104 of the protection system 100 together define an interior region or space in which a handheld electronic device may be enclosed." ¶[0047]; FIG. 1 (102, 104).
the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use,	"The protection system comprises a shell comprised of a rear wall, a plurality of wall surfaces arranged to enclose a plurality of peripheral edges of a handheld electronic device, and an outer surface." ¶[0009]; "Each of the upper shell piece 102 and the lower shell piece 104 has a rear wall portion 200 that defines an interior rear surface 202 positioned adjacent the back surface of an electronic device placed in the protection system 100…. the enclosing edges are defined by a sidewall portion 150 that extends from the rear wall portion 200." ¶[0047]; FIG. 1 (102, 104).
wherein the rear wall and the sidewall are a unitary structure;	"the upper shell piece 102 and lower shell piece 104 could be … portions of a unitary or single-piece shell in which installation of the electronic

	device is accomplished" ¶[0044]; FIG. 1 (102, 104).
an exterior-facing member configured to be removably received in the rear wall of the case,	"The non-slip region comprises a second open space and a recessed surface formed by the disposition of a small diameter opening within a larger diameter opening. The non-slip member comprises a non-slip material shaped to fit within the second open space, the non-slip member having a circumferential groove dividing the non-slip member into a gripping surface and an interior surface." ¶[0009]; FIGs. 1, 8A, 8B, 8C (112).
the exterior facing member having an indentation and at least one magnet received within the indentation, the indentation facing the rear wall of the case	"The non-slip member further comprises an indentation on the interior surface designed to incorporate a magnet." ¶[0009]; "The inclusion of rare-earth magnet 802 into non-slip member 112 is shown in FIG. 8C. This figure illustrates that the rare-earth magnet is preferably inserted into the indentation 192 on the interior surface of non-slip member 112." ¶[0059]; FIG. 8C (112, 192, 802).
wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet.	"The non-slip member 112 also preferably contains a magnetic member, such as a rare-earth magnet 802, as further described below in regards to FIG. 8C. The magnet 802 is positioned or embedded within non-slip member 112." ¶[0056]; FIGs 1, 8C (802).

EX1003, ¶208.

B. Ground 2: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum857.

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a). "The ultimate judgment of obviousness is a legal determination." *KSR Intern. Co. v. Teleflex Inc.,* 550 U.S. 398, 427 (2007). Factual findings related to obviousness include (1) "the scope and content of the prior art," (2) "differences between the prior art and the claims at issue," (3) "the level of ordinary skill in the pertinent art." *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966).

"When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." *KSR Intern. Co.,* 550 U.S. at 401, 421.

In *KSR*, the Court recognized several criteria that can be used to reject a patent claim for obviousness:

- Combining prior art elements according to known methods to yield predictable results
- Simple substitution of one known element for another to obtain predictable results
- Use of known technique to improve similar devices (methods, or products) in the same way
- "Obvious to try" – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success
- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art.

KSR, 550 U.S. at 401, 427.

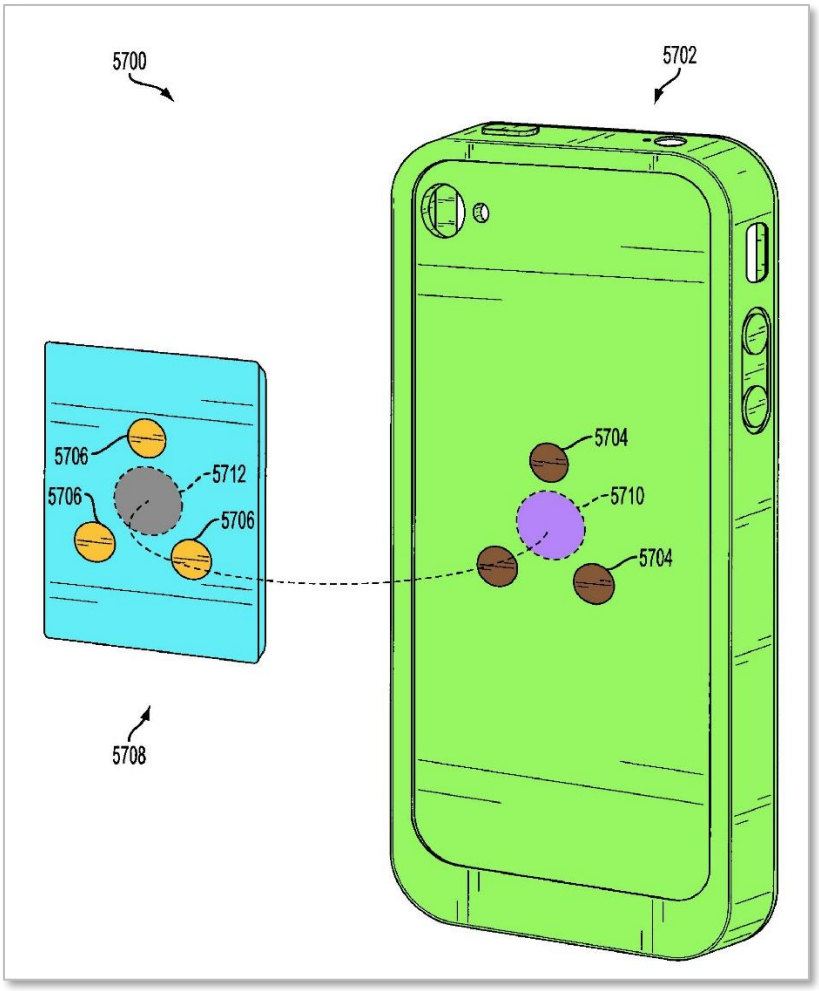
A "motivation to combine may be found explicitly or implicitly in market forces; design incentives; the 'interrelated teachings of multiple patents'; 'any need or problem known in the field of endeavor at the time of invention and addressed by the patent'; and the background knowledge, creativity, and common sense of the person of ordinary skill." *Zup v. Nash Mfg.,* 896 F.3d 1365, 1371 (Fed. Cir. 2018) (quoting *Plantronics, Inc. v. Aliph, Inc.,* 724 F.3d 1343, 1354 (Fed. Cir. 2013) (citing *Perfect Web Techs., Inc. v. InfoUSA, Inc.,* 587 F.3d 1324, 1328 (Fed. Cir. 2009) (quoting *KSR,* 550 U.S. at 418-21)).

1. Overview Of Rothbaum857.

U.S. Pub. No. 2011/0192857 to Rothbaum et al. ("Rothbaum857") was published on August 11, 2011, and is the publication of an application filed on January 13, 2011. EX1004. Accordingly, Rothbaum857 is available as prior art to the '019 patent under pre-AIA 35 U.S.C. § 102(a) and (e).

Rothbaum857 is directed at a "mobile electronic device accessory system." EX1004 at Abstract. Rothbaum857 observed that many people use portable electronic devices and carry them frequently. EX1004, ¶[0004]. Further, Rothbaum857 observed that people also carry accessories such as wallets, flashlights, and notepads. *Id.* According to Rothbaum857, "[a]s the number of accessories that a person carries increase, the more difficult it becomes to find a convenient carrying place for each item" and "when a user carries multiple individual accessories, there is a greater likelihood that they will lose or misplace one of the items." *Id.* Rothbaum857 proposed a solution of a system whereby a user of portable electronic devices could removably attach accessories to a case for that electronic device. *Id.*

One such embodiment is shown in Figure 57 of Rothbaum857.



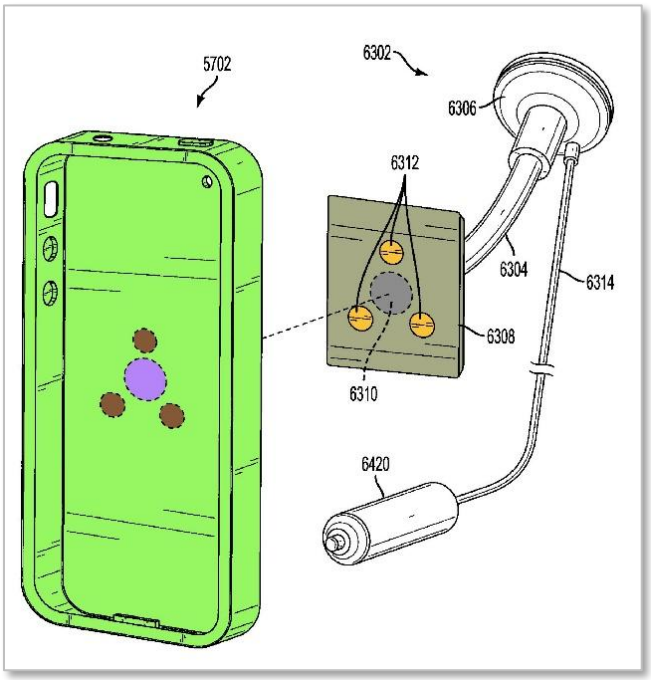
EX1004, Fig. 57.

As shown above, case 5702 (green) includes a set of magnetic attachment elements 5704 (brown) and an electrical interface 5710 (purple). EX1004, ¶[0248]. These aspects permit an accessory to be removably attached to the case 5702 (green). For example, object 5708 (blue)—which may be, for example, a charger, spare battery, or speaker—includes magnetic attachment elements 5706 (orange) and electrical interface 5712 (gray). *Id.,* ¶¶[0248], [0262]. Through the

connection of the corresponding magnetic attachment elements, object 5708 (blue) may be removably attached to case 5702 (green).

Separately, Rothbaum857 observed that many interactive features are being included on mobile electronic devices such as GPS navigation programs. *Id.*, ¶[0006]. Rothbaum857 saw an opportunity to address this issue in conjunction with providing a means of securing accessories to a case: "[T]he same systems and methods that allow a user to removably attach an accessory (such as a notebook or a flashlight) to a mobile electronic device case could be adapted to create accessories that mount or support mobile electronic device cases in convenient positions, locations, and orientations." *Id.*

An example of such mount is depicted in Figure 63 of Rothbaum857.



EX1004, Fig. 63.

As shown above, a vehicle mount 6302 may include a case mounting head 6308 (olive) with magnetic attachment elements 6312 and electrical interface 6310 (gray). *Id.,* ¶[0267]. This arrangement is similar to that disclosed in connection with object 5708. Thus, the case 5702 (green) can both receive accessories such as object 5708 (blue) or be mounted to a vehicle mount by way of the magnetic attachment elements 5704 (brown) of the case.

2. Preamble.

The preamble of claim 9 is "[a] mountable case for a handheld electronic device." As discussed in Section IV.D, the preamble is not limiting and therefore should not be given any patentable weight.

Alternatively, Rothbaum857 discloses a mobile electronic device case, such as the one illustrated in Fig. 1A (reproduced below). EX1004, Rothbaum857, ¶[0138] ("The components of the system may include a case 102 for a mobile electronic device, where the case 102 has a surface 104 and a first attachment mechanism 106. The system may also include an accessory 108 with a second attachment mechanism 110. The accessory 108 can be removably connected with the surface 104 of the case 102."). The case is configured to "fit over a mobile electronic device." EX1004, ¶[0140].

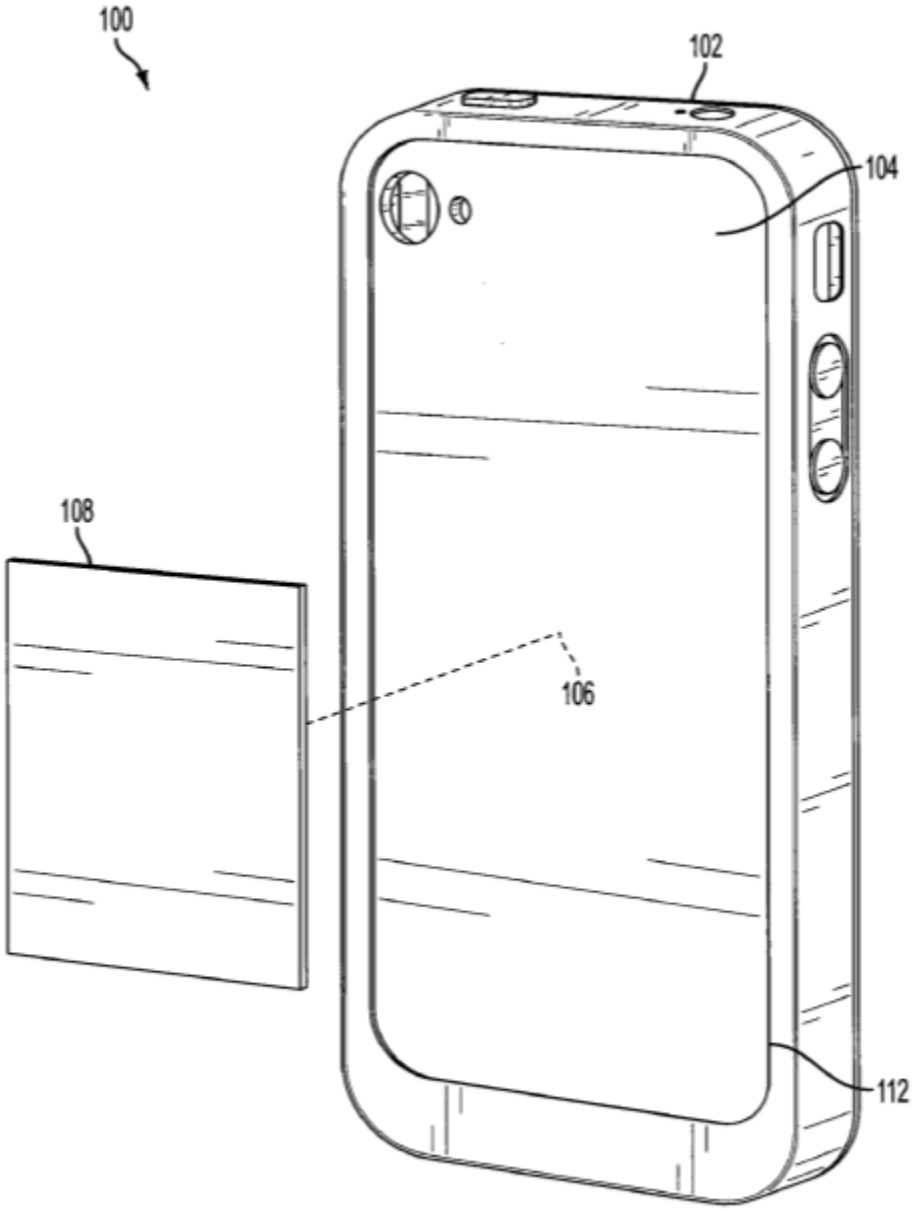
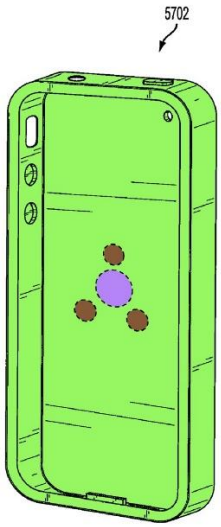


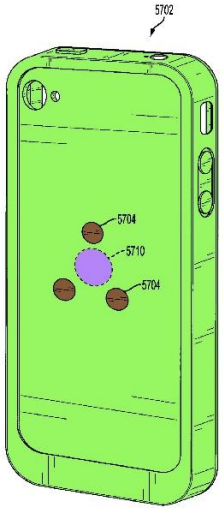
FIG. 1A

EX1004, Rothbaum857, FIG. 1A.

Another such mobile electronic device case 5702 is depicted in Figs. 64A and 57 reproduced below.



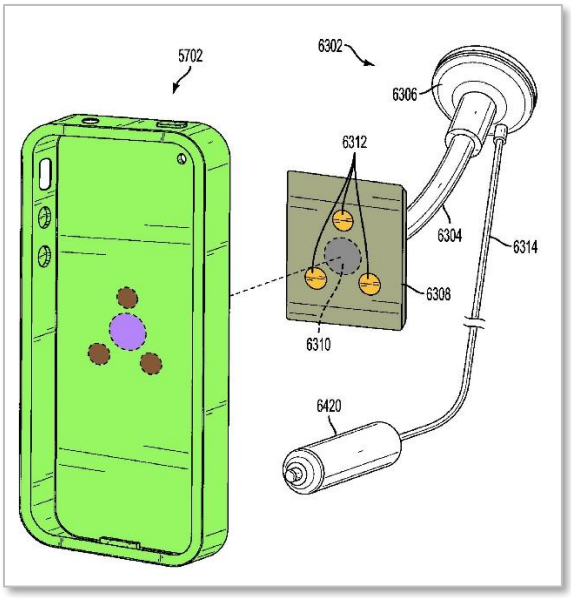
EX1004, Fig. 64A (partial)



EX1004, Fig. 57 (partial)

Shown above left is a front view of case 5702 (green). Shown above right is a back view of case 5702. The back of case 5702 includes a first set of magnetic attachment elements 5704 (brown). EX1004, ¶[0248]. Case 5702 also includes a first electrical interface 5710 (purple). *Id.*

Case 5702 is "mountable." As shown below, case 5702 (green) is configured to be mounted to vehicle mount 6302.



EX1004, Fig. 63. This is accomplished by a second set of magnetic attachment elements 6312 (orange) and a second electrical interface 6310 (gray). EX1004, ¶[0267]. These connect with the corresponding components of case 5702 (green), specifically first set of magnetic components 5704 (brown) and first electrical interface 5710 (purple), respectively.

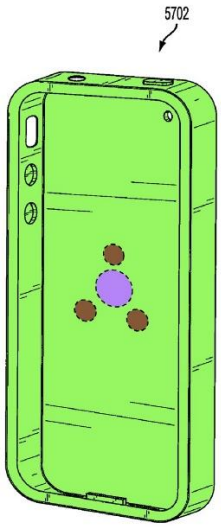
Case 5702 is also "for a handheld electronic device." Rothbaum857 identifies case 5702 as a "mobile electronic device case." EX1004, ¶[0259]. "Further, a POSITA would have understood that case 5702 is structurally similar to case 102 of Rothbaum857, which is described to 'fit over a mobile electronic device.'" EX1003, ¶60, *quoting* EX1004, ¶[0140]. "A POSITA would have understood that the 'mobile electronic device' referenced in Rothbaum857 is able to be held by a user's hand, i.e., is 'handheld.'" *Id*.

Accordingly, Rothbaum857 would have taught "[a] mountable case [mobile electronic device case 5702] for a handheld electronic device."

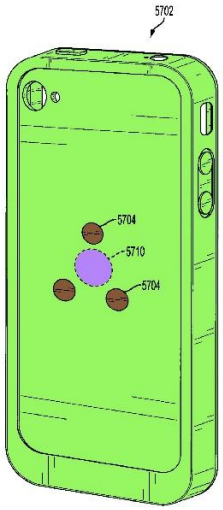
3. Case Connectable to Handheld Electronic Device.

Claim 9 of the '019 patent recites "a case configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use." Rothbaum857 discloses this limitation.

Specifically, mobile electronic device case 5702 corresponds to the "case" recited in the claim.



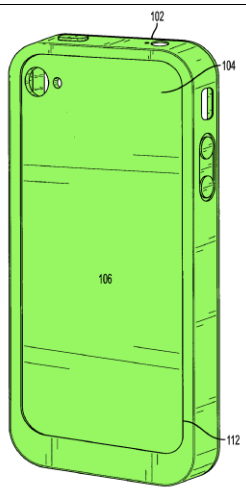
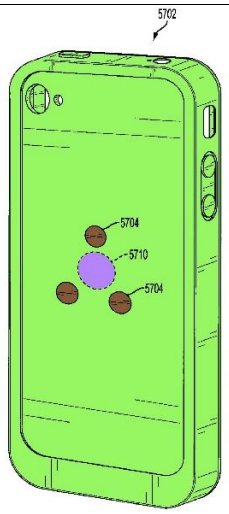
EX1004, Fig. 64A (partial)



EX1004, Fig. 57 (partial)

Case 5702 is configured to be connectable to a handheld electronic device. As explained in the preceding section, Rothbaum857 discloses that case 102 is configured to "fit over a mobile electronic device" (EX1004, ¶[0140]), and "a

POSITA would have understood that case 5702 is structurally similar to case 102." EX1003, ¶64.

	
EX1004, Fig. 1A (partial)	EX1004, Fig. 57 (partial)

As shown above, case 5702 (right) is distinguishable from case 102 (left) only by the addition of first set of magnetic attachment elements 5704 (brown) and first electrical interface 5710 (purple). Also, as described in the preceding section, a POSITA would have understood that users hold the "mobile electronic device[s]" referenced in Rothbaum857 in their hands and thus such devices are "handheld."

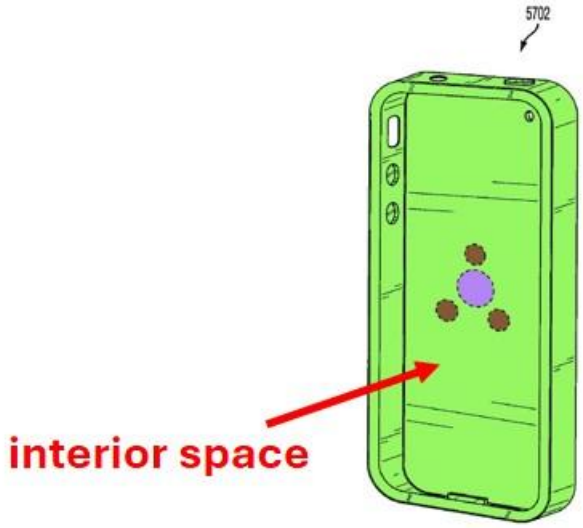
Case 5702 is configured to be "selectively" connectable to a handheld electronic device. Rothbaum857 discloses a case that is configured to fit with mobile electronic devices of specific dimensions and is thus connected to a user's selected device:

> In some embodiments, the case 102 is configured to fit over a mobile electronic device case that is approximately 4.5 inches tall, 2.31 inches

wide, and 0.37 inches thick. Accordingly, a case 102 designed for a device of these dimensions will have a surface 104 of similar height and width, accounting for the slight increase in the size of the case 102 necessary due to the material of the case.

EX1004, ¶[0140]. "Although that discussion was in connection with case 102, a POSITA would have understood that it applied to all cases discussed in Rothbaum857, including case 5702." EX1003, ¶67.

Case 5702 includes an interior space that retains the electronic device. This is illustrated below.

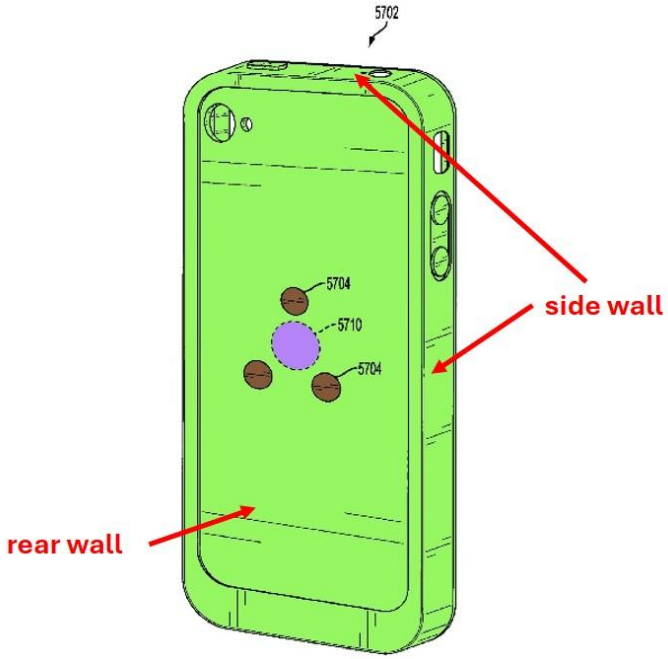


EX1004, Fig. 63 (partial). "A POSITA would have understood that what is labeled 'interior space' in the figure above is the location where the mobile electronic device is retained." EX1003, ¶68. Further, the discussion in Rothbaum857 regarding the case being configured to "fit over" a mobile electronic device, EX1004, ¶[0140] "means that the electronic device is retained within an interior space of the case." EX1003,¶68.

Accordingly, Rothbaum857 discloses "a case [mobile electronic device case 5702] configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case [mobile electronic device case 5702] in use."

4. Case with Rear Wall and Sidewall.

Claim 9 recites "the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use." Rothbaum857 discloses this limitation. This is depicted in the figure below.



EX1004, Fig. 57 (partial).

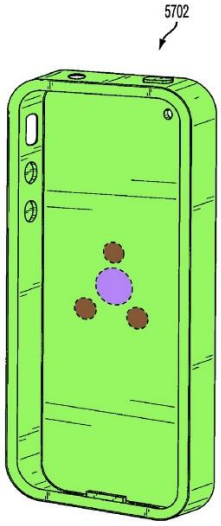
Rothbaum857 discloses that case 5702 includes a "back," which corresponds to the "rear wall" of the claim. EX1004, ¶[0248]; EX1003, ¶71. Further, Rothbaum857 discloses that all surfaces of a mobile electronic device except for the front are covered by the case. Specifically, Rothbaum857 discloses that "[i]n some embodiments, the case at least partially surrounds 5 sides of a mobile electronic device. In some embodiments, only a front screen surface of a mobile electronic device is substantially un-covered by the case." EX1004, ¶[0151]. "By disclosing that only the front screen surface is uncovered, Rothbaum857 discloses that the '5 sides' of the device that are covered by the case are (1) the rear surface, (2) the top side, (3) the bottom side, (4) the left side, and (5) the right side." EX1003, ¶71.

Accordingly, Rothbaum857 discloses "the case [case 5702] comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use."

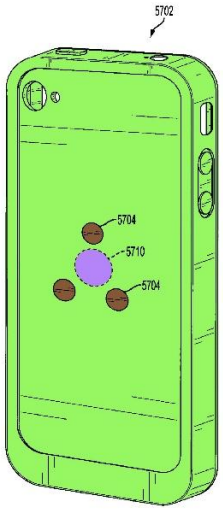
5. Rear Wall and Sidewall Are a Unitary Structure.

Claim 9 recites "wherein the rear wall and the sidewall are a unitary structure." This limitation is disclosed by Rothbaum857; alternatively, it would have been obvious.

Rothbaum857 depicts case 5702 as being a single entity with a back (or rear wall) and sidewall.



EX1004, Fig. 64A (partial)



EX1004, Fig. 57 (partial)

As shown above, Rothbaum857 uses the single reference number "5702" to refer to the structure in its entirety, and illustrates the rear wall and sidewall as a single component. "In view of this disclosure, a POSITA would have understood that case 5702 is a single (i.e., "unitary") structure." EX1003, ¶75.

"In the alternative, it would have been obvious to a POSITA to manufacture case 5702 as or into a unitary structure. By forming case 5702 as a unitary structure, assembly costs may be reduced and structural reliability are improved, relative to the alternative of providing a case as multiple, discrete pieces." EX1003, ¶76. "Indeed, mobile electronic device cases having a unitary structure were well-known to POSITAs at the time of the invention of the '019

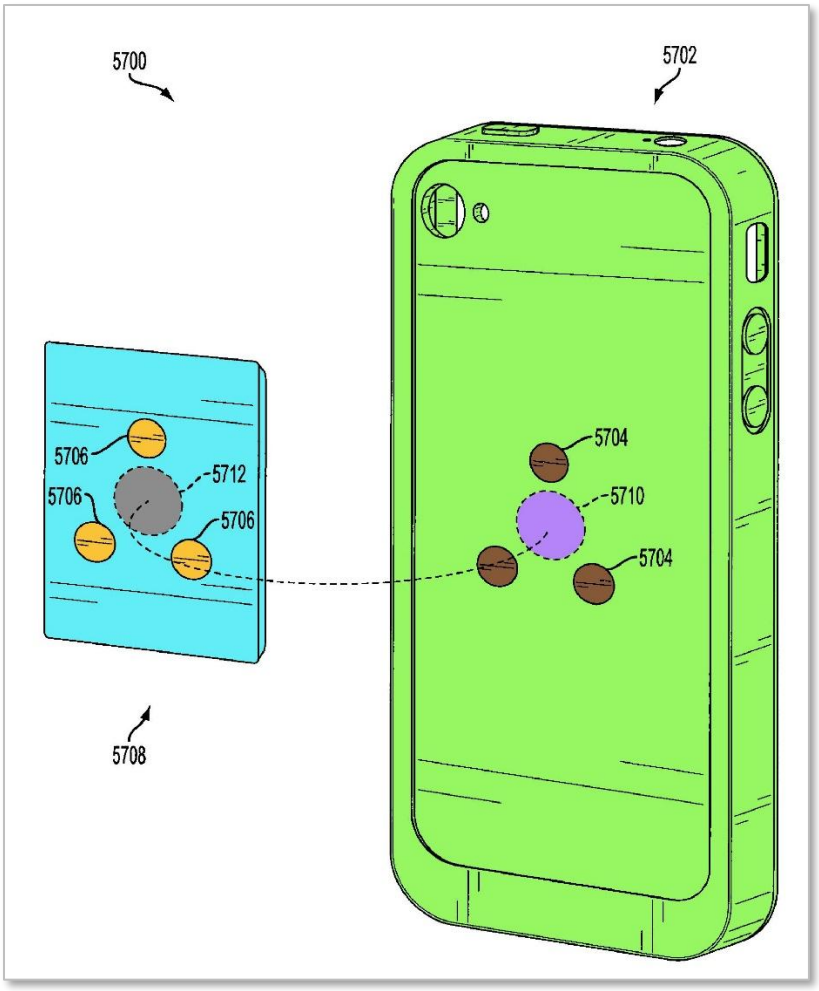
patent." *Id.* *See KSR*, 550 U.S. at 401, 427 (obvious to use known techniques to improve similar devices in the same way).

Accordingly, Rothbaum857 discloses or renders obvious "wherein the rear wall and the sidewall are a unitary structure."

6. Exterior-Facing Member.

Claim 9 recites "an exterior-facing member configured to be removably received in the rear wall of the case." Rothbaum857 discloses this limitation.

Rothbaum857 includes multiple embodiments with components that qualify as an "exterior-facing member." One such embodiment is that depicted in Figure 57.



EX1004, Fig. 57.

As shown above, object 5708 (blue) is configured to be attached to the exterior of case 5702 (green). This is accomplished through correspondence between the first set of magnetic attachment elements 5704 (brown) and a second set of magnetic attachment elements 5706 (orange). EX1004, ¶[0248].

"Object 5708 (blue) may be attached to the exterior of case 5702 and is thus 'exterior-facing.'" EX1003, ¶81.

Further, object 5708 (blue) is "removably received" in the rear wall of case 5702 (green). Rothbaum857 discloses that "[t]he magnetic attachment elements 5704 are configured to ***removably*** attach the case 5702 to a corresponding set of second magnetic attachment elements 5706 attached to an object 5708 external to the case." EX1004, ¶[0248]. Further, object 5708 (blue) may be a charger, spare battery, or speaker, for example. EX1004, ¶¶[0250], [0259], [0262]. "A POSITA would have understood that such objects are not intended to be permanently affixed to case 5702 but instead to be attached only as needed." EX1003, ¶81.

Object 5708 (blue) is also removably received "in" the rear wall of the case 5702 (green). As shown above, case 5702 includes a raised edge around the perimeter of its back side, resulting in an interior recess at the location of attachment to object 5708 (blue). Thus, when object 5708 is received by the case it is at least partially "in" the rear wall of the case. Indeed, Rothbaum857 discloses that in some embodiments accessories are thinner or the same thickness as the recess between the back surface of the case and the raised edge.

> ***In some embodiments, the accessory 108 is configured to fit substantially within an area defined by the surface 104. In some embodiments, the accessory 108 can be configured to fit completely within the surface 104.***

EX1004, ¶[0139]. Rothbaum857 continues its discussion of embodiments where the accessory does not protrude any further than the outer surface of the case.

> "In some embodiments, the accessory 108 is used with a mobile electronic device case where the back surface 104 of the case has a recessed portion defined by a shoulder or raised edge 112 … ***In some embodiments, the accessory 108 is thinner than, or the same thickness as, the recess between the back surface 104 and the raised edge 112. Thus, when the accessory 108 is attached to the back surface 104 of the case 102, the accessory 108 does not protrude any further than the outer surfaces of the case 102.***

Rothbaum857, ¶[0141].

"Although the foregoing discussions were provided with specific reference to Figure 57 of Rothbaum857, a POSITA would have understood that it was generally applicable to the other embodiments of Rothbaum857, including the embodiments depicted in Figures 37 and 38. At a minimum, a POSITA would have been prompted by this disclosure to arrange object 5708 (for example, when it is a multi-tool) such that it does not protrude beyond the rear surface of case 5702." EX1003, ¶84 (demonstrating that the embodiments depicted in Figures 37 and 38 include all the limitations of claim 9 of the '019 patent).

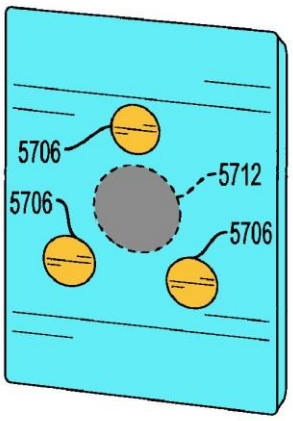
Accordingly, Rothbaum857 discloses "an exterior-facing member [object 5708] configured to be removably received in the rear wall of the case [case 5702]."

In addition to object 5708, other "exterior-facing members" include charger 5902 (depicted in Figures 59A and 59B) and charger 6202 (depicted in Figures 62A and 62B). EX1004, Rothbaum857, ¶[0251] ("The charger includes … a second set of magnetic attachment elements … In some embodiments, they are inside the housing … and reside behind the mounting surface."); *id.* at ¶[0263] ("[T]he charger [] includes a second set of magnetic attachment elements."). These embodiments likewise disclose an "exterior-facing member configured to be removably received in the rear wall of the case."

7. Indentation with Magnet

Claim 9 recites "the exterior facing member having an indentation and at least one magnet received within the indentation." Rothbaum857 discloses this limitation.

Object 5708 of Rothbaum857, which corresponds to the claimed "exterior-facing member," is depicted below.



EX1004, Fig. 57 (partial).

Rothbaum857 discloses that object 5708 includes magnets: "The magnetic attachment elements 5704 are configured to removably attach the case 5702 to a corresponding set of second ***magnetic attachment elements 5706*** attached to an object 5708 external to the case." EX1004, ¶[0248]. "A POSITA would have understood that 'magnetic attachment elements 5706,' at least in some embodiments, are magnets." EX1003, ¶89. This is because Rothbaum857 discusses that "magnetic attachment elements" may be, for example, "cylindrical magnets, disc-shaped magnets, cuboid-shaped magnets, and the like." EX1004, ¶[0144]; *see also id.*, ¶¶[0257]-[0258] (discussing "magnets" as examples of "magnetic attachment elements" discussed in prior paragraphs).

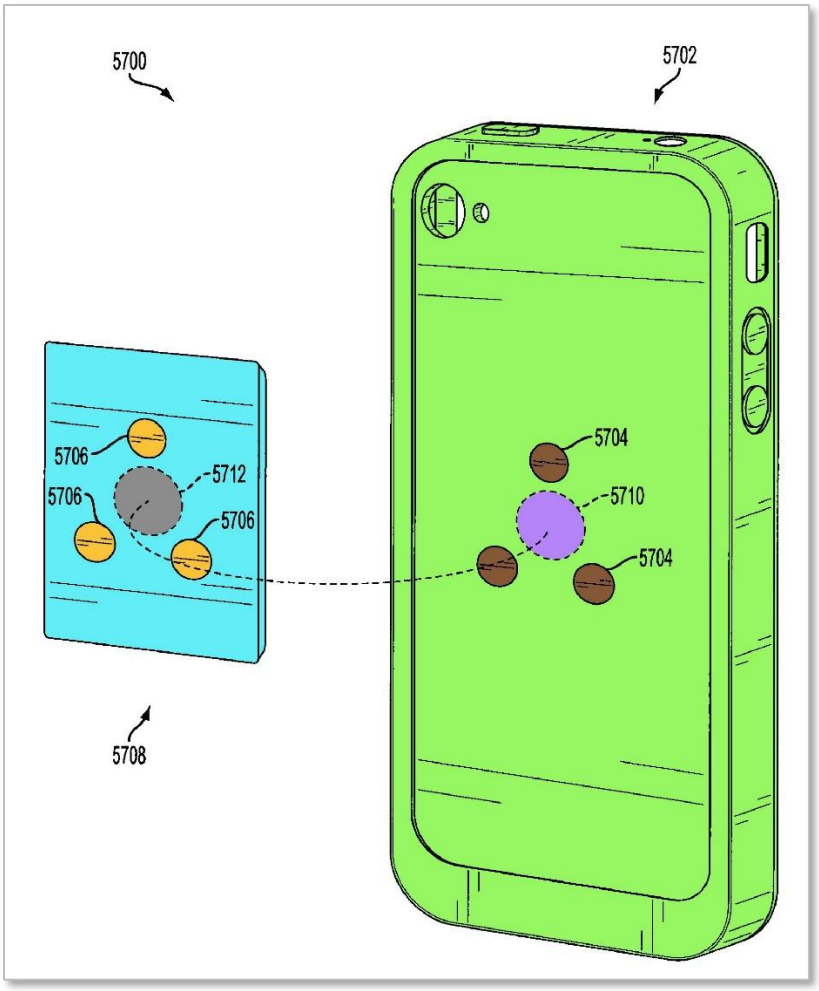
It is evident from the figures and detailed description of Rothbaum857 that object 5708 has indentations to receive the magnetic attachment elements 5706. As shown in Figure 57 (reproduced above), the top surfaces of the magnetic attachment elements 5706 are flush with the surface of the object 5708. "Accordingly, a POSITA would have understood that object 5708 includes indentations to receive the magnetic attachment elements 5706." EX1003, ¶90. Also, Rothbaum857 discloses that "[t]he second set of magnetic attachment elements 5706 and the second electrical interface 5710 (described in detail above) are adjacent to the mounting surface 5906. In some embodiments, they are inside the housing 5904, and reside behind the mounting surface 5906." EX1004,

¶[0251]. "A POSITA would have understood from this disclosure, especially when coupled with Figure 57 of Rothbaum857, that the magnetic attachment elements residing 'behind the mounting surface' means that they are disposed within the object 5708 such that their most exterior surface is coplanar with the exterior surface of the object 5708." EX1003, ¶90.

Accordingly, Rothbaum857 discloses "the exterior facing member [object 5708] having an indentation and at least one magnet [second magnetic attachment elements 5706] received within the indentation."

8. Indentation Facing Rear Wall of Case

Claim 9 recites "the indentation facing the rear wall of the case." Rothbaum857 discloses this limitation.



EX1004, Fig. 57.

When the object 5708 (blue) is attached to the case 5702, the indentations would "face", i.e., be open to the rear wall of the case 5702 (green). This is made clear by the dashed line that extends between electrical interfaces 5710 (purple) and 5712 (gray). That line depicts the orientation in which object 5708 (blue) attaches to case 5702 (green). This is consistent with the detailed description of Rothbaum857, which discloses that "The magnetic attachment elements 5704 are configured to removably attach the case 5702 to a corresponding set of

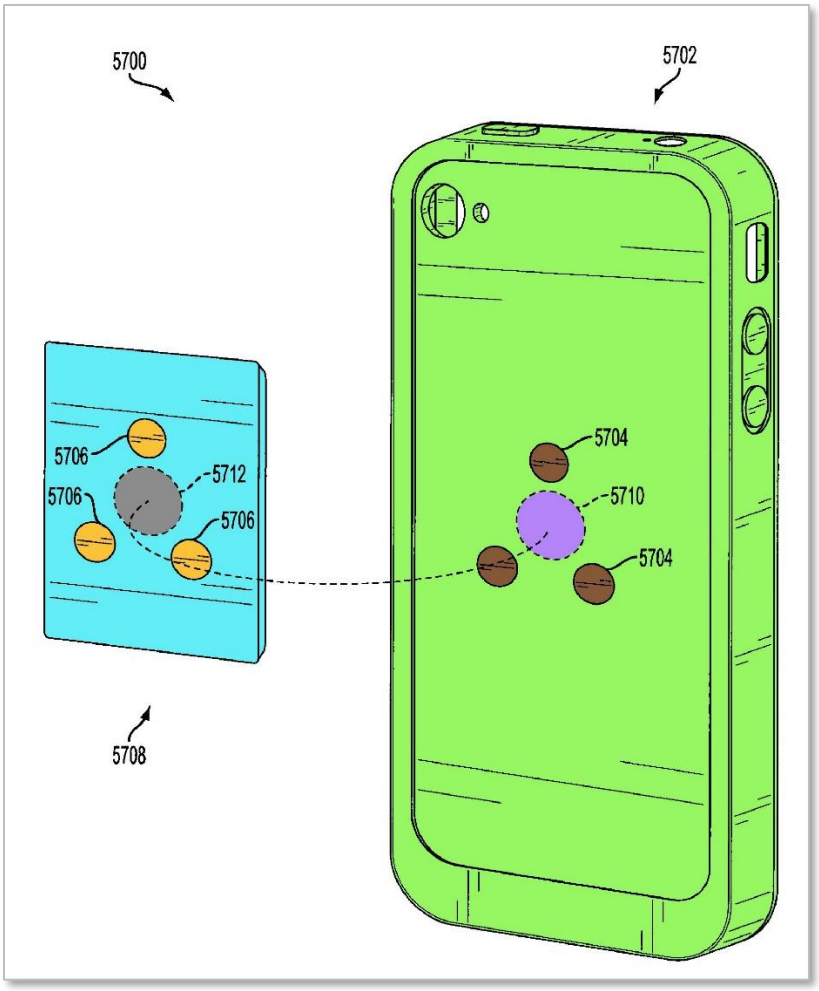
second magnetic attachment elements 5706 attached to an object 5708 external to the case." EX1004, ¶[0248]. "Thus, object 5708 (blue) is received by case 5702 (green) when it is rotated 180° along the vertical axis of Figure 57. In such an orientation, the indentations of object 5708 (blue) face the back (or rear wall) of case 5702 (green). EX1003, ¶93.

Accordingly, Rothbaum857 discloses "the indentation facing the rear wall of the case [case 5702]."

9. Rear Wall and Exterior Facing Member Fully Enclose Magnet

Claim 9 recites "wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet." Rothbaum857 discloses this limitation.

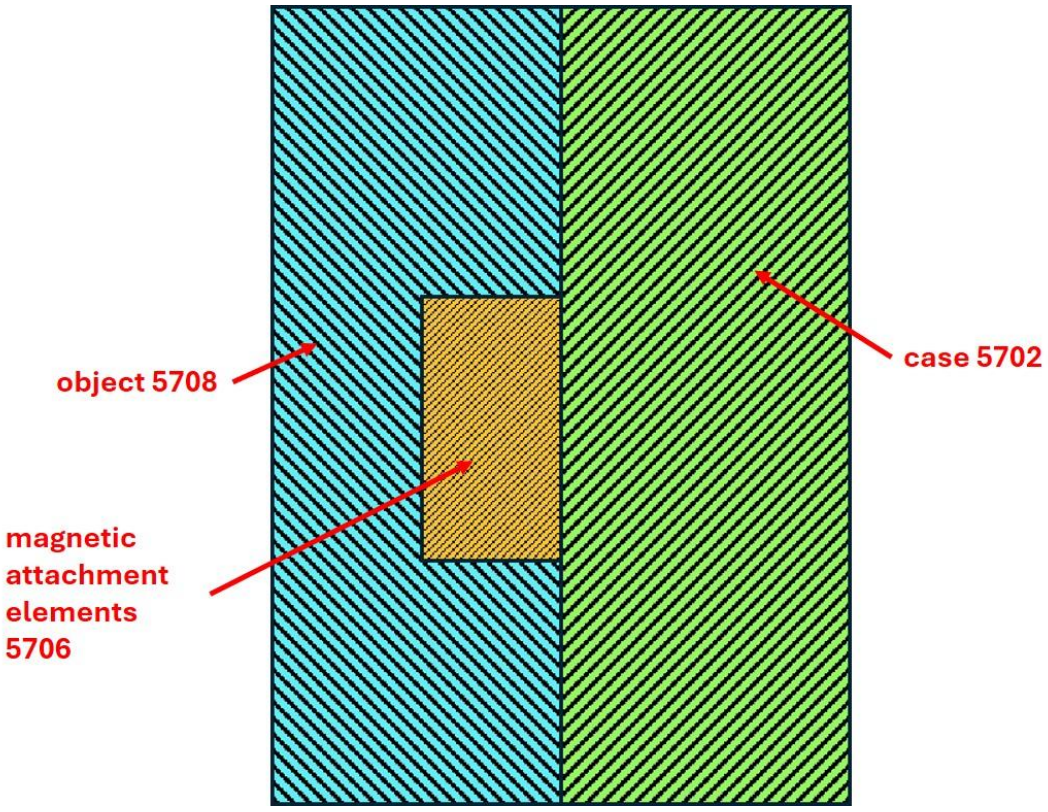
As discussed above in section V.B.7, a POSITA would have understood from Figure 57 (reproduced below) and the accompanying detailed description, that the top surfaces of the magnetic attachment elements 5706 are flush with the surface of the object 5708.



EX1004, Fig. 57.

Thus, when object 5708 (blue) is attached to case 5702 (green), magnetic attachment elements 5706 (orange) would be fully enclosed by the back of case 5702 (green) and object 5708 (blue). EX1004, ¶[0251] ("The second set of magnetic attachment elements 5706 and the second electrical interface 5710 … are adjacent to the mounting surface 5906. In some embodiments, they are inside the housing 5904, and reside behind the mounting surface 5906."). Consistent

with this disclosure, Dr. King explains how a cross-section of that arrangement reveals the presence of this limitation:



EX1003, ¶97.

Accordingly, Rothbaum857 discloses or renders obvious "wherein the rear wall [back] of the case [case 5702] and the exterior facing member [object 5708] fully enclose the at least one magnet [magnetic attachment elements 5706]."

C. Ground 3: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum609.

1. Overview Of Rothbaum609.

U.S. Pub. No. 2011/0252609 to Rothbaum et al. ("Rothbaum609") was published on October 20, 2011, and is the publication of an application filed on

October 20, 2010. Accordingly, Rothbaum609 is available as prior art to the '019 patent under pre-AIA 35 U.S.C. § 102(a) and (e).

Rothbaum609 is directed at a cord management system. EX1005, Abstract. Rothbaum609 observed that many users of portable electronic devices use wired headphones to listen to audio output from such devices. EX1005, ¶[0004]. According to Rothbaum609, wired headphones "can become easily tangled when the portable electronic device is not being used. Rothbaum609 proposed a cord management system that includes a strap to address the issue. EX1005, ¶[0008]. One embodiment is depicted in Figures 31A and 31B.

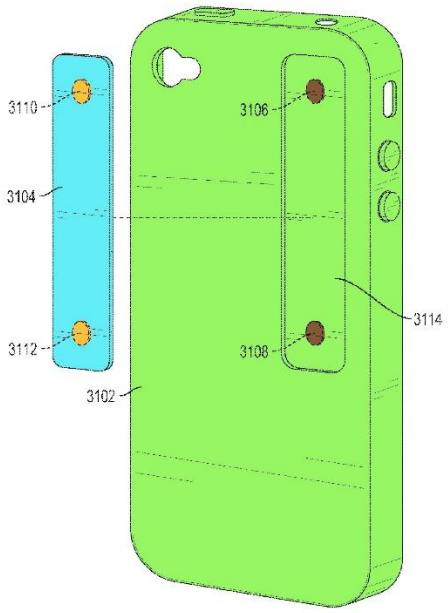


FIG. 31A

EX1005, Fig. 31A

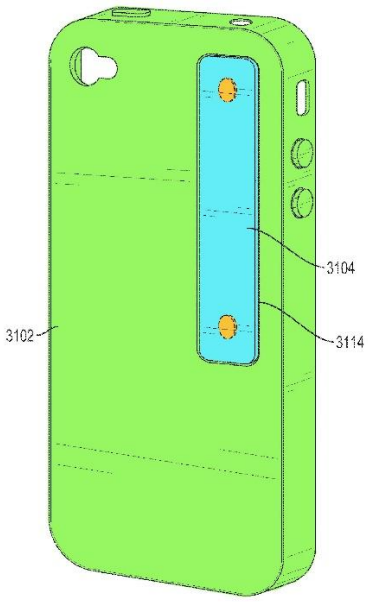


FIG. 31B

EX1005, Fig. 31B

As shown above, a case 3102 (green) includes a magnet 3106 and a magnet or magnetic material 3108. EX1005, ¶¶[0399]-[0400]. A strap 3104 (blue) includes a magnet/magnetic material 3110 and magnet/magnetic material 3112.

Id. Strap 3104 (blue) attaches to case 3102 (green) through the magnetic forces exerted between magnets 3106 and 3108 (brown) and magnets/magnetic materials 3110 and 3112 (orange), respectively. *Id.* In this configuration, a user is able to wrap a cord, for example of wired headphones, around case 3102 (green) and strap 3104 (blue) and then fold strap 3104 (blue) such that magnet 3112 (orange) connects with magnet 3110 (orange) thereby securing the cord. FIG. 31A does not illustrate this configuration, but Figure 33F illustrates a similar configuration of a similar embodiment.

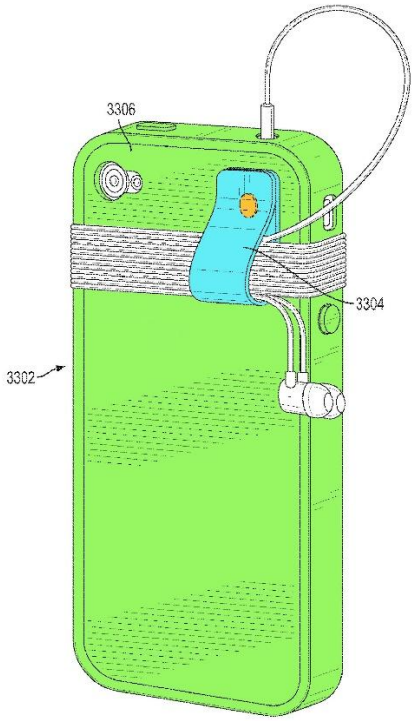


FIG. 33F

EX1005, Fig 33F.

2. Preamble.

The preamble of claim 9 is "[a] mountable case for a handheld electronic device." As discussed in Section IV.D, the preamble is not limiting and therefore should not be given any patentable weight. But if the PTAB were to find that the preamble is limiting, an obvious combination of Rothbaum609 and Rothbaum857 would have taught the preamble and rendered obvious claim 9. *Supra*, § V.B.2.

3. Case Connectable to Handheld Electronic Device.

Claim 9 of the '019 patent recites "a case configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use." Rothbaum609 discloses this limitation.

Specifically, case 3102 corresponds to the "case" recited in the claim.

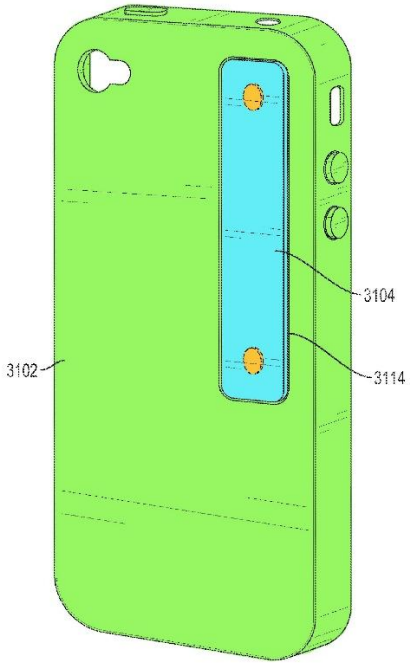


FIG. 31B

EX1005, Fig. 31B.

Case 3102 is configured to be connectable to a handheld electronic device. Rothbaum609 begins its detailed description by noting that "[m]any ***portable electronic devices*** (e.g., as mobile phones, audio players, video players, etc.) generate audio output" and is directed at a system to manage headphone cords attached to such devices. EX1005, ¶[0004]. A POSITA would have understood that users hold portable electronic devices such as mobile phones and audio players in their hands and thus such devices are "handheld."

Case 3102 is configured to be "selectively" connectable to a handheld electronic device. "Case 3102 is shaped so that some devices, e.g., some particular phone models are able to be securely received in it, but other models would not be. This is evident from the figures of Rothbaum609 and its disclosure. In particular, a POSITA would have understood from the figures that case 3102 is not universally able to connect with all handheld electronic devices. A user would thus select to use an appropriate model of device for use with the case." EX1003, ¶105.

"Case 3102 includes an interior space that retains the electronic device. Although the figures of case 3102 in Rothbaum609 depict only its rear side, a POSITA would have understood that an open space exists on the opposite side for receipt of a mobile electronic device." EX1003, ¶106.

Accordingly, Rothbaum609 discloses "a case [case 3102] configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case [case 3102] in use."

4. Case with Rear Wall and Sidewall.

Claim 9 recites "the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use." Rothbaum609 satisfies this limitation. This is depicted in the figure below.

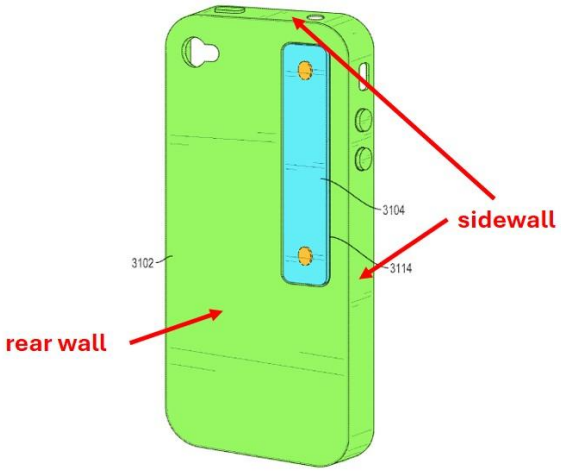


FIG. 31B

EX1005, Fig. 31B. "A POSITA would have understood that what is labeled 'rear wall' in the image above is positioned along a rear surface of the electronic device and that what is labeled 'sidewall' is positioned adjacent to the top, bottom, left, and right sides of the electronic device. Not only is that the customary way in which cases provide protection to such devices, case 3102 includes button covers

and holes for accessing switches and ports in the electronic device." EX1003, ¶109.

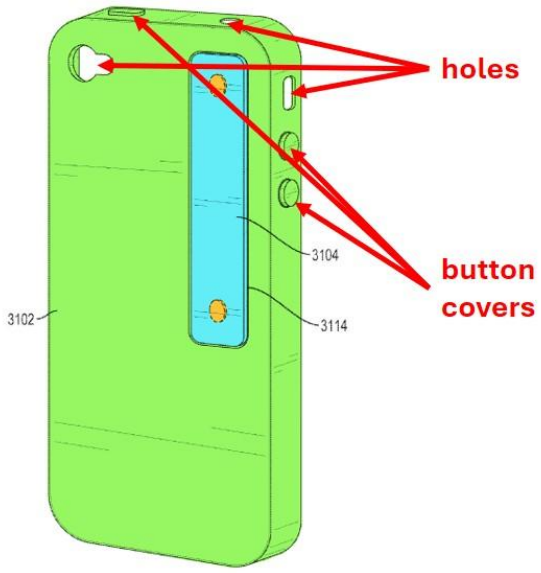


FIG. 31B

EX1005, Fig. 31B. "Such features are described in greater detail in connection with the embodiment of Rothbaum609 depicted in Figures 29F and 29G, and a POSITA would have understood that such disclosure applies to the Figure 31 embodiments as well. A POSITA would have understood that such aspects of cover 3102 are most useful when the electronic device within the cover is adjacent to those aspects of the sidewall of cover 3102. For example, pressing the button cover will most effectively depress the corresponding button on the electronic device when the electronic device is adjacent the sidewall of cover 3102." EX1003, ¶110.

Accordingly, Rothbaum609 discloses "the case [case 3102] comprising a rear wall that is configured to be positioned along a rear surface of the electronic

device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use."

5. Rear Wall and Sidewall Are a Unitary Structure.

Claim 9 recites "wherein the rear wall and the sidewall are a unitary structure." This limitation is disclosed by Rothbaum609; alternatively, it would have been obvious.

Rothbaum609 depicts case 3102 as being a single entity with a back (or rear wall) and sidewall.

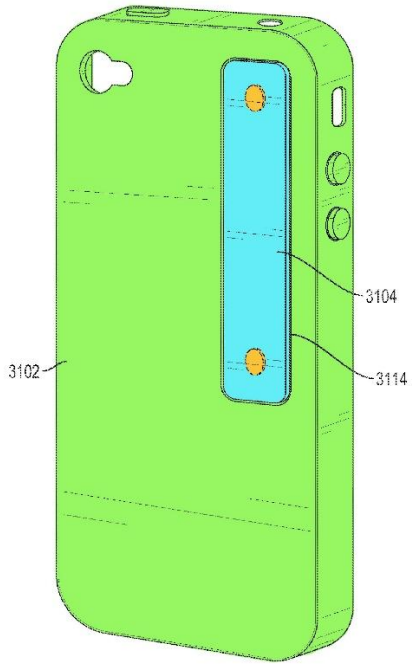


FIG. 31B

EX1005, Fig. 31B. The entirety of the case is labeled with one reference number, "3102", and is illustrated as a single structure.

Rothbaum609 also includes discussions in its detailed description that reveal that its cases are made of a unitary structure. In explaining the manufacturing processes of its cases, Rothbaum609 discloses as follows:

> The elastic polymers embodiments of the case and strap may be manufactured by processes such as ***injection molding***, casting, compression molding, and die cutting (as discussed above with respect to FIGS. 6A-6C).

Rothbaum609, ¶[0389]. "A POSITA would have understood that injection molding results in a single unitary structure. For example, a 'two-shot injection molding process' is a method of molding two different materials (or colors) into a single part. Further, although the foregoing discussion was presented in connection with the Figure 29 embodiments of Rothbaum609, a POSITA would have understood that it applies equally to the Figure 31 embodiments." EX1003, ¶115; EX1005, ¶[0398] ("FIGS. 31A-31J illustrate an embodiment of a case ***similar to*** FIGS. 29A-29I above except that in these embodiments the strap is semi-permanently, rather than permanently attached to the case.").

"In view of the foregoing disclosures, coupled with the knowledge of a POSITA that mobile electronic device covers are commonly made of a unitary structure, a POSITA would have understood that case 3102—including its rear wall and sidewall—is a single (i.e., 'unitary') structure." EX1003, ¶116.

In the alternative, it would have been obvious to a POSITA to manufacture case 3102 as or into a unitary structure. Similar to the discussion in section V.B.5 *supra*, "by forming case 3102 as a unitary structure, assembly costs may be reduced and structural reliability are improved, relative to the alternative of providing a case as multiple, discrete pieces." EX1003, ¶117. Indeed, mobile electronic device cases having a unitary structure were well-known to POSITAs at the time of the invention of the '019 patent. *See e.g.*, *supra*, § V.B.5; *KSR*, 550 U.S. at 401, 427 (obvious to use known techniques to improve similar devices in the same way).

Accordingly, Rothbaum609 discloses or renders obvious "wherein the rear wall and the sidewall are a unitary structure."

6. Exterior-Facing Member.

Claim 9 recites "an exterior-facing member configured to be removably received in the rear wall of the case." Rothbaum609 discloses this limitation.

Specifically, Rothbaum609 discloses a strap 3104, which corresponds to the claimed "exterior-facing member." Figure 31B of Rothbaum609 depicts the relevant embodiment.

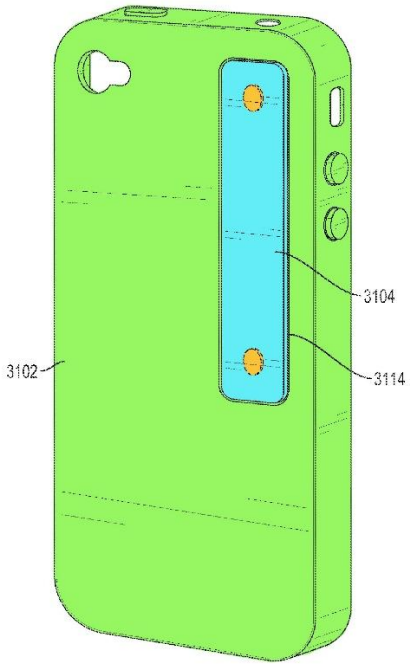


FIG. 31B

EX1005, Fig. 31B.

As shown above, strap 3104 (blue) is configured to be attached to the exterior of case 3102 (green). As such, strap 3104 (blue) is "exterior-facing." With reference to Figure 31A (below), this is accomplished through correspondence between case magnets 3106 and 3108 (brown) and strap magnet/magnetic material 3110 and 3112 (orange), respectively. EX1005, ¶¶[0399]-[0400].

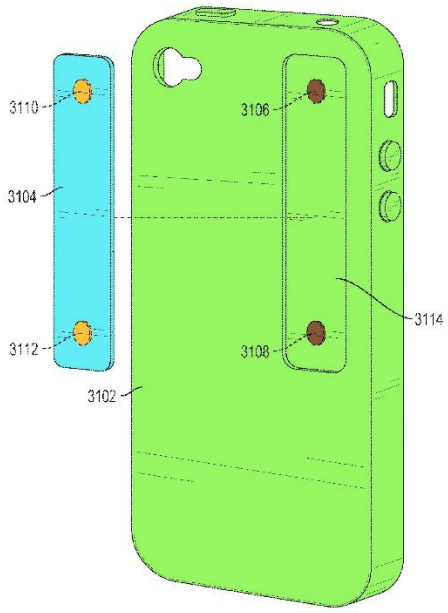


FIG. 31A

EX1005, Fig. 31A.

Strap 3104 (blue) is "removably" received in case 3102 (green). Rothbaum609 discloses that "FIGS. 31A-31J illustrate an embodiment of a case similar to FIGS. 29A-29I above except that in these embodiments the strap is ***semi-permanently***, rather than permanently attached to the case." EX1005, ¶[0398]. A POSITA would have understood that by "semi-permanently" Rothbaum609 satisfies the claim requirement of "removably." Indeed, Rothbaum609 proceeds to explain that the user may detach the entire strap 3104 (blue) from case 3102 (green):

> "[T]he stronger case magnet 3106 is strong enough that a much greater force must be exerted to detach strap magnet/magnetic material 3110 from stronger case magnet 3106, thus making the strap 3104 unlikely to become detached from the case 3102 ***unless the user specifically detaches it***."

EX1005, ¶[0400].

Strap 3104 (blue) is also removably received "in" the rear wall of the case 3102 (green). As shown above, case 3102 includes a cavity 3114 to receive the strap 3104 (blue). Rothbaum609 explicitly discloses that the cavity 3114 has a depth equal to the thickness of the strap 3104 (blue):

> FIG. 31B shows a strap, held in a case 3102 having a cavity 3114, which is the depth of the strap 3104 (such that the strap 3104 in an unfolded flat position lies ***flush*** with the exterior surface of the case 3102).

EX1005, ¶[0401].

This "flush" arrangement is shown in Figure 31B (below, right):

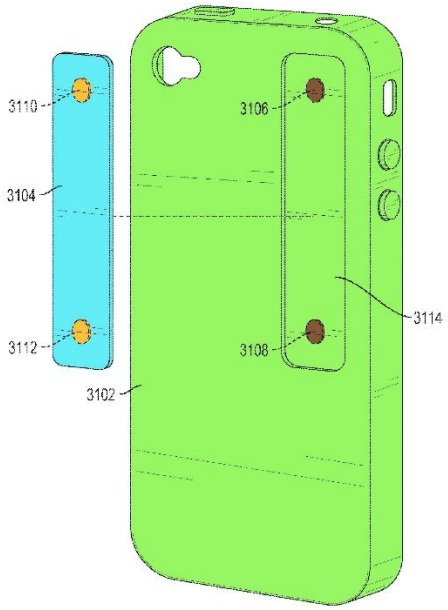


FIG. 31A

EX1005, Fig. 31A

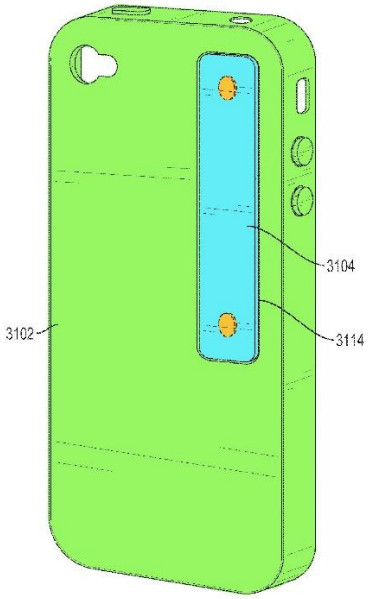


FIG. 31B

EX1005, Fig. 31B

Accordingly, Rothbaum609 discloses "an exterior-facing member [strap 3104] configured to be removably received in the rear wall of the case [case 3102]."

7. Indentation with Magnet

Claim 9 recites "the exterior facing member having an indentation and at least one magnet received within the indentation." Rothbaum609 discloses this limitation.

Rothbaum609 discloses one example of a magnetic strap in Figure 8D:

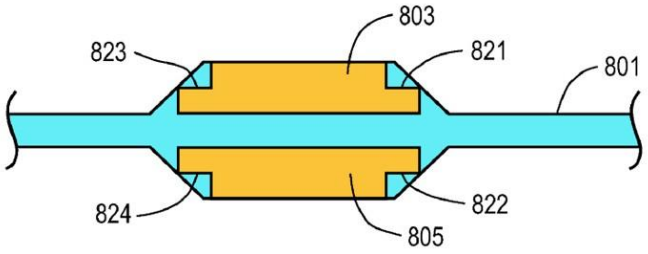


FIG. 8D

EX1005, Fig. 8D.

As shown above, magnets 803 (orange) are disposed within strap 801 (blue). Specifically, Rothbaum609 discloses that the base of magnets 803 and 805 have protrusions 821, 822, 823, and 824 and that "[t]he protrusions of the magnets 802, 803, 804, and 805 may be inserted into corresponding holes (or pockets) in the material so that the magnets 802, 803, 804, and 805 are secured to the magnetic strap 801." EX1005, ¶[0297]. The "holes (or pockets)" referenced by Rothbaum609 correspond to the "indentation" of the claims.

"A POSITA would have understood that strap 3104 could have the same arrangement as the strap 801. Specifically, a POSITA would have understood that the relatively detailed discussion of the straps in the embodiments shown in Figures 6-9 could be implemented as appropriate to the remaining embodiments, which do not include as detailed a description of the straps." EX1003, ¶128. Indeed, Rothbaum609 discloses, "Note that any combination of the features of the magnetic straps described above with respect to FIGS. 6-9 may be used in a particular implementation of a magnetic strap." EX1005, ¶[0312].

"In the alternative, it would have been obvious to a POSITA to employ an arrangement similar to that in Figure 8D in the strap 3104. If the PTAB were to interpret Rothbaum609 as not providing implementation details regarding how magnets/magnetic materials 3110 and 3112 are secured in strap 3104, a POSITA would have been prompted to use the teachings from Figure 8D. The protrusions at the base of the magnets and corresponding holes (or pockets) within the strap provide a secure means of attachment and avoid the use of adhesives, which over time can deteriorate causing the magnets to become dislodged." EX1003, ¶129.

Further, the arrangement of Figure 8D, in which the face of the magnets are flush with the exterior of the strap, results in a reduced need for stronger magnets as compared to arrangements in which the magnets are completely covered by the strap, such as in the embodiment of Figures 6 and 7. Rothbaum609 discloses

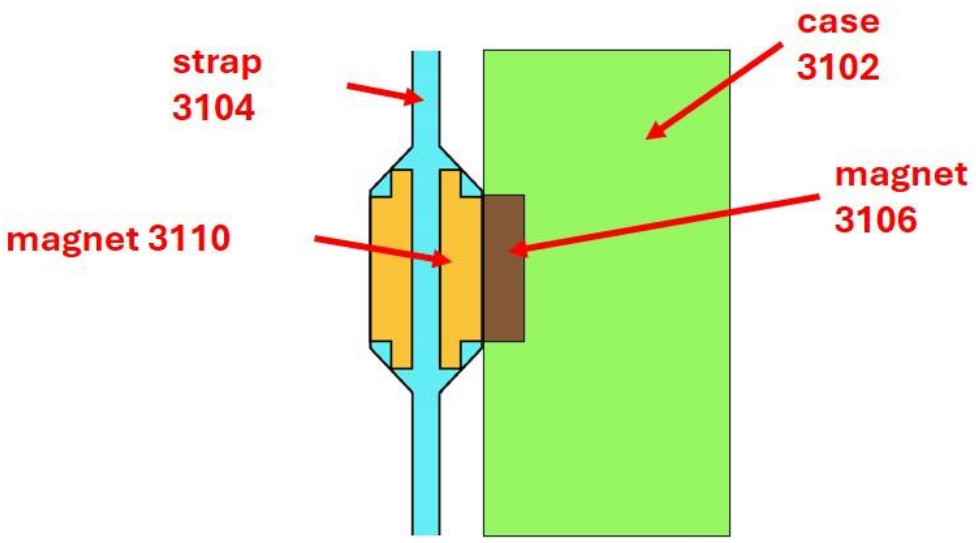
that, all other things being equal, the closer magnets are to each other, the stronger the magnetic force between them. EX1005, ¶[0275]. "Stated differently, the same magnetic force can be achieved by using (i) stronger magnets completely covered by the straps (e.g., as shown in Figures 6 and 7) or (ii) weaker magnets (at least partially) uncoverd by the strap. All other things being equal, a weaker magnet is cheaper. Accordingly, a POSITA, desiring to reduce cost would employ the arrangement of Figure 8D for strap 3104." EX1003, ¶130.

"Still further, a POSITA would have understood the benefit of employing a strap with magnets on both sides of the strap, as in the Figure 8D embodiment. This is because it is desirable both (1) for the strap to be attracted to the case magnet 3106 and magnet/magnetic material 3108 when in the position shown in Figure 31B ***and*** (2) for the two ends of the strap to be attracted to each other when the strap is securing a cord." EX1003, ¶131; *see generally* EX1005, Fig. 33F. In the first situation, a strong magnetic force prevents the strap from having either end detached, which would result in a loose strap or both ends detached, potentially resulting in a lost strap. Similarly, in the second situation, a strong magnetic force ensures the strap performs its function of securing the cord." EX1003, ¶131.

Accordingly, Rothbaum609 discloses "the exterior facing member [strap 3104] having an indentation and at least one magnet [magnets/magnetic materials 3110 and 3112] received within the indentation."

8. Indentation Facing Rear Wall of Case

Claim 9 recites "the indentation facing the rear wall of the case." Rothbaum609 discloses this limitation. When the arrangement of Figure 8D is employed in strap 3104, two magnets face case 3102 when the strap is in the position shown in Figure 31B. A representation of that arrangement is depicted below.



EX1003, ¶133.

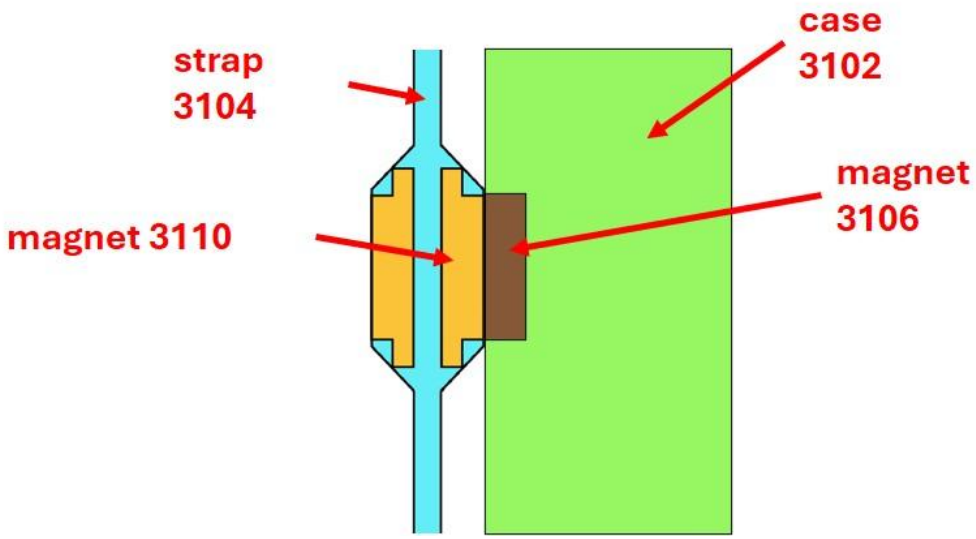
"In this situation, the hole (or pocket) of strap 3104 that houses magnet 3110 is open to or faces the back side of case 3102." *Id.*, ¶134.

Accordingly, Rothbaum609 discloses or renders obvious the limitation "the indentation facing the rear wall of the case [case 3102]."

9. Rear Wall and Exterior Facing Member Fully Enclose Magnet

Claim 9 recites "wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet." Rothbaum609 discloses or renders obvious this limitation.

As discussed above in the preceding section, a POSITA would have understood that Rothbaum609 discloses, or makes obvious, the following arrangement.



"In that circumstance, both magnet 3110 and magnet 3106 are enclosed by strap 104 on one side and the back of case 3102 on the other side. As such, a POSITA would understand magnet 3110 to be fully enclosed by the exterior-facing member and the rear wall of the case." EX1003, ¶138; *see e.g.*, *supra*, § V.B.9; *KSR*, 550 U.S. at 401, 427 (obvious to use known techniques to improve similar devices in the same way).

Accordingly, Rothbaum609 discloses or renders obvious "wherein the rear wall [back] of the case [case 3102] and the exterior facing member [strap 3104] fully enclose the at least one magnet [magnet/magnetic material 3110]."

D. Ground 4: Claim 9 is unpatentable as obvious under 35 U.S.C. § 103 over the combination of Rothbaum857 and Rothbaum609.

If the PTAB were to conclude that the preamble of claim 9 is limiting and that the term "mountable" requires that the case include structure that is especially adapted to permit the mounting of the case on another structure, then an obvious combination of Rothbaum857 and Rothbaum609 meets all limitations of claim 9.

1. The Obvious Rothbaum857 and Rothbaum609 Combination

The combination begins with the features of the Rothbaum609 embodiment discussed in section V.C above. "Specifically, the combination has the case 3102 as depicted in Figures 31A and 31B of Rothbaum609, with strap 3104 implemented with the details of strap 801 depicted in Figure 8D. To this is added the magnetic attachment elements 5704 and electrical interface 5710 of Rothbaum857 shown in, for example, Figure 57 of Rothbaum857." EX1003, ¶143. A representation of that combination is as follows:

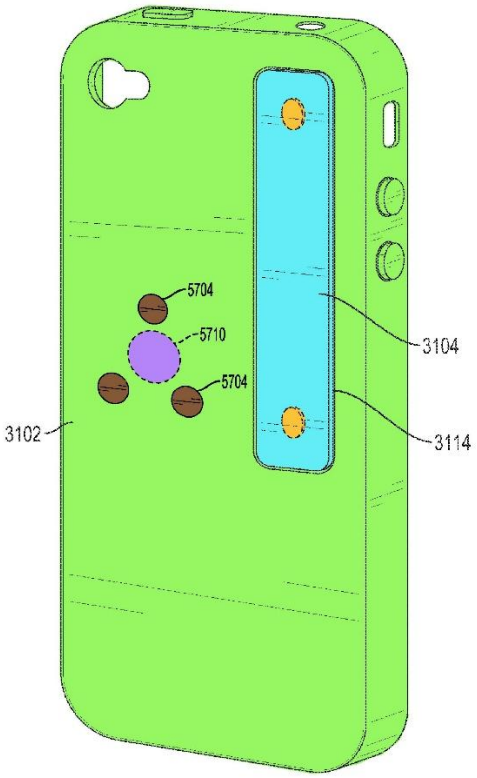


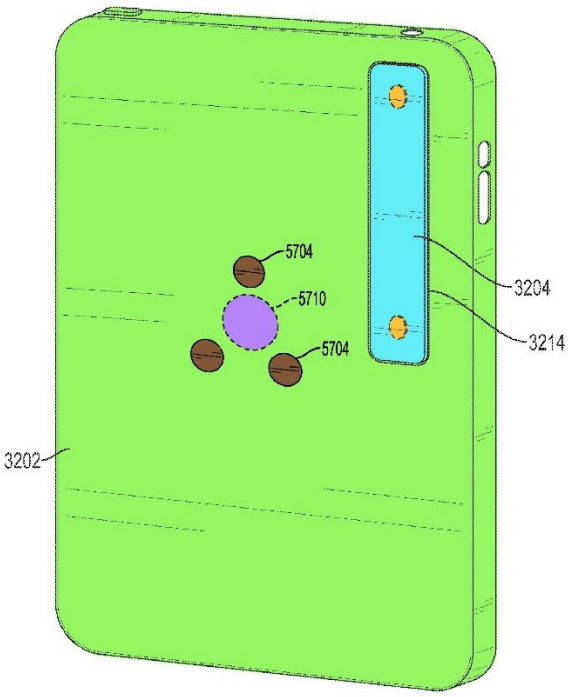
FIG. 31B

Id.

This combination would have been obvious for the following reasons. Rothbaum609 and Rothbaum857 each provide individualized solutions to individualized problems. The former provides a strap 3104 to manage a cord, e.g., a headphone cord that "can become easily tangled when the portable electronic device is not being used." EX1005, ¶[0004]. The latter provides an arrangement of magnets and electrical interfaces to permit securing of accessories to a mobile device case and to permit the mobile device case to be mounted onto other structures (e.g., a vehicle mount). EX1004, ¶¶[0005], [0007]. "Combining these individual solutions would yield a case that addressed all of the problems

addressed by the two references individually. Further, there is no incompatibility in the respective solutions of Rothbaum609 and Rothbaum857. A designer would need to choose the proper dimensioning of the strap and arrangement of magnets to prevent direct overlap. This simple exercise would have been within the skill of a POSITA." EX1003, ¶144.

Such an exercise would be even easier when the profile of case 3202 is used. *See* EX1005, Fig. 32B. Rothbaum609 discloses that the only difference between case 3202 and 3102 is the size: "FIGS. 32A-32J illustrate embodiments of a case similar to FIGS. 31A-31J, with the exception that the object for which the case is made has different dimensions than the object shown in FIGS. 31A-31J." EX1005, ¶[0405]. Accordingly, the disclosure relied upon in sections V.B and V.C above is equally applicable to a combination of Rothbaum609 and Rothbaum857 depicted as follows:



EX1003, ¶145. "Moreover, it would have been obvious to a POSITA to vary the positions of the different attachments (*e.g.*, strap 3204, magnetic attachment elements 5704, electrical interface 5710), particularly for a larger case such as case 3202." *Id*.

2. Preamble

The preamble of claim 9 is "[a] mountable case for a handheld electronic device." The obvious combination of Rothbaum857 and Rothbaum609 satisfies this preamble. Specifically, the case of the combination is "mountable" due to the presence of the magnetic attachment elements 5704 (brown). *See* section V.B.2 above.

3. All Other Limitations

All other limitations of claim 9 are satisfied by the obvious combination of Rothbaum857 and Rothbaum609 due to the features of Rothbaum609 that are retained in the combination. *See supra*, §§ V.B.3-V.B.9 and V.C.3-V.C.9.

E. Ground 5: Claims 10 and 11 are unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum857, either alone or in combination with Rothbaum609.

1. Non-slip Member Of Claim 10

The limitation that "the exterior-facing member is a non-slip member" is discloses or rendered obvious by Rothbaum857, as illustrated by FIG. 62B, reproduced below.

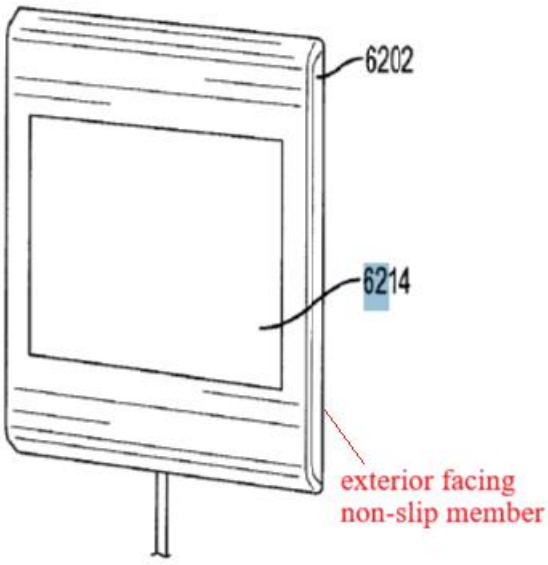


FIG. 62B

EX1004, FIG. 62B; ¶[0264] ("[T]he charger 6202 includes an additional attachment mechanism 6214 for connecting the charger 6202 to another surface … [such as] the side of a computer monitor. The attachment mechanism 6214 can

be any of a variety of attachment mechanisms, including …***Velcro***, ***adhesives***."). As explained by Dr. King, "[a] POSITA would have understood that the attachment mechanism 6214 of FIG. 62B could have been substituted for the vehicle mount of FIG. 63 of Rothbaum '857 to attach the case to an external surface." EX1003, ¶149; *KSR*, 550 US at 401, 427 (obvious to simply substitute one known element for another to obtain predictable results).

2. Frictional Gripping Exterior Surface Of Claim 11

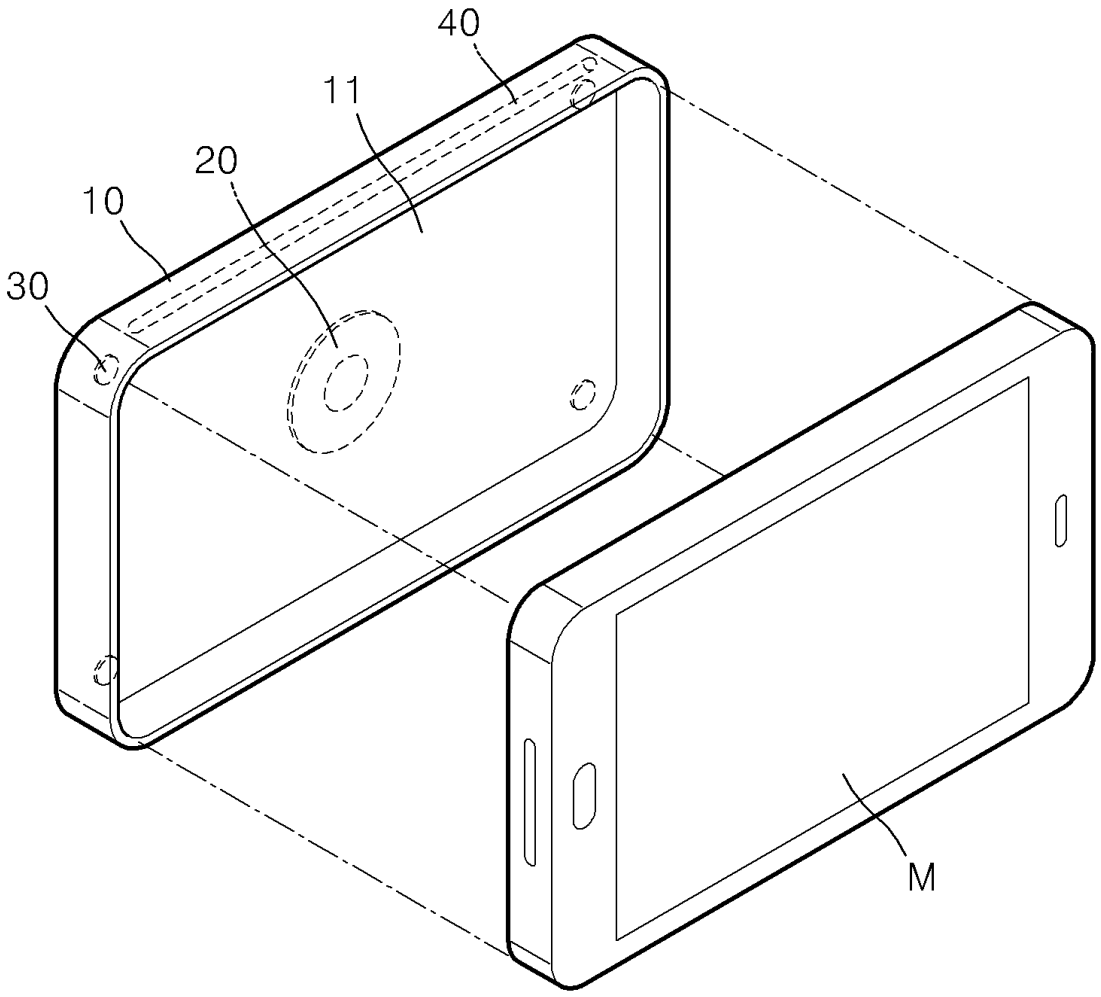
For similar reasons as discussed for claim 10, the limitation of claim 11 requiring the "non-slip member [to] comprise[] a frictional gripping exterior surface that enhances frictional engagement of the case with a surface" is likewise disclosed or rendered obvious by Rothbaum857's disclosure that its "attachment mechanism 6214 for connecting the charger 6202 to another surface … [such as] the side of a computer monitor … can be … ***Velcro***, ***adhesives***." EX1003, ¶150*;* EX1005, ¶[0273] ("In some embodiments, one surface of the magnetic straps 601, 701, 801, and 901 have a ***high-friction*** coating to help hold the wrapped cord in the strap and one surface of the magnetic straps 601, 701, 801, and 901 have a low-friction coating to ease removal of the strap from an object."); EX1003, ¶¶151-152.

F. Ground 6: Claims 9, 10, and 11 are unpatentable as obvious under 35 U.S.C. § 103 over Byun In view Of Curti.

1. Overview Of Byun.

Korea Pub. No. KR101020434B1 to Byun et al. ("Byun") was published on March 9, 2011. Accordingly, Byun is available as prior art to the '019 patent under pre-AIA 35 U.S.C. § 102(a).

Byun is directed "to a mounting unit for a mobile communication terminal." EX1006, Byun, Abstract. One embodiment is depicted in FIG. 1, which is reproduced below.



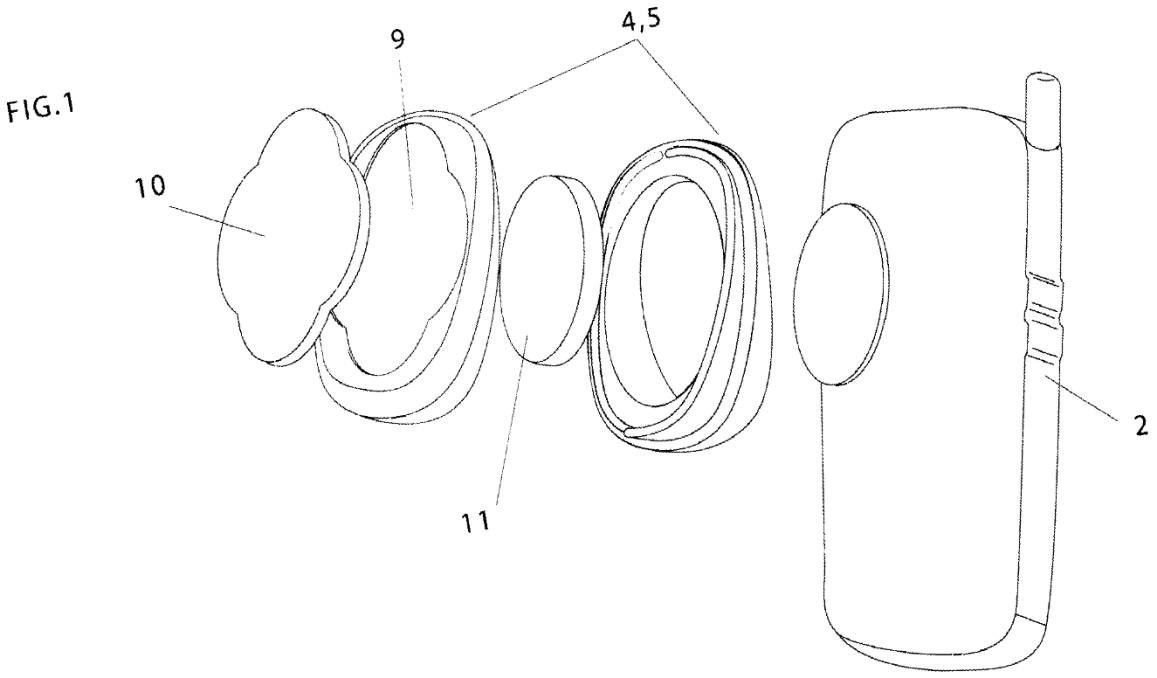
As shown above, the device includes "a cover part (10) formed with a coupling groove (11) into which a mobile communication terminal (M), for example, a mobile phone, a smartphone, or a tablet PC," may be held. EX1006,

Byun, ¶[0017]. The device further includes "a cover attachment part (20) embedded in a center of a rear surface of the cover part (10); and a plurality of sub magnets (30) installed at corner portions of the rear surface of the cover part (10)." *Id*. "[T]he cover attaching portion 20 is implemented as a magnet" and "the sub magnets (30) are illustrated as being installed in four pieces at the corner portions of the rear surface of the cover part (10)." *Id.*

2. Overview Of Curti.

France Pub. No. FR2901085A1 to Curti et al. ("Curti") was published on November 16, 2007. Accordingly, Curti is available as prior art to the '019 patent under pre-AIA 35 U.S.C. § 102(a).

Curti is directed to a "support assembly for a device, in particular a mobile telephone, on any receiving surface, in particular a substantially vertical surface, such as the dashboard of a vehicle." EX1007, Curti, 1. One embodiment is depicted in FIG. 1, which is reproduced below.



EX1007, Curti, FIG. 1. Curti's assembly "comprises a housing 1 … arranged so as to be able to be fixed to a surface … and support a device, such as a mobile telephone 2." *Id.*, 4:1-3. "The housing 1 is made up of two half-shells 4 and 5," which "can be fixed to one another by a system of grooves … and tabs." *Id.*, 4:4-7. "[T]he assembly [] comprises a miniature permanent magnet 11 housed … in the inside of the housing 1 after assembly of the half-shells 4 and 5." *Id.*, 4:14-15**.**

3. The Obvious Combination Of Byun and Curti.

Each of Byun and Curti are analogous art to the invention recited in claim 9 of the '019 patent. *In re Bigio*, 381 F.3d 1320, 1325, (Fed. Cir. 2004) (A reference is analogous art to the claimed invention if: (1) the reference is from the same field of endeavor as the claimed invention ***or*** (2) the reference is reasonably pertinent to the problem faced by the inventor). Claim 9 recites a "mountable case

for a handheld electronic device" and each of Byun and Curti also relate to a case for a handheld electronic device (*e.g.*, a mobile phone) and to the problem of mounting the case to a structure. EX1006, Byun, ¶¶[0001]-[0003]; EX1007, Curti, 1. That is, each of Byun and Curti are both from the same field of endeavor of the '019 patent, and are reasonably pertinent to the problem faced by the inventor of the '019 patent.

Moreover, there is a motivation to combine the teachings of Byun and Curti because both address a "need or problem known in the field of endeavor" of mounting a handheld electronic device, and both evidence "the background and knowledge … of the person of ordinary skill." *Zup v. Nash Mfg.,* 896 F.3d 1365, 1371 (Fed. Cir. 2018). The mountable cases taught by Byun and Curti have many of the same well-known components such as a case, recesses or indentations within the cover, magnets disposed within the recesses for mounting the case to a structure, *etc*. *Supra*, §§ V.B.3-V.B.9. Arranging these prior art components according to known methods such as those taught by Byun and Curti, simply substituting one of these components for another, and/or using these known techniques to improve these devices would have yielded the predictable result of claim 9 of the '019 patent. *KSR,* 550 U.S. at 401, 427.

4. Preamble.

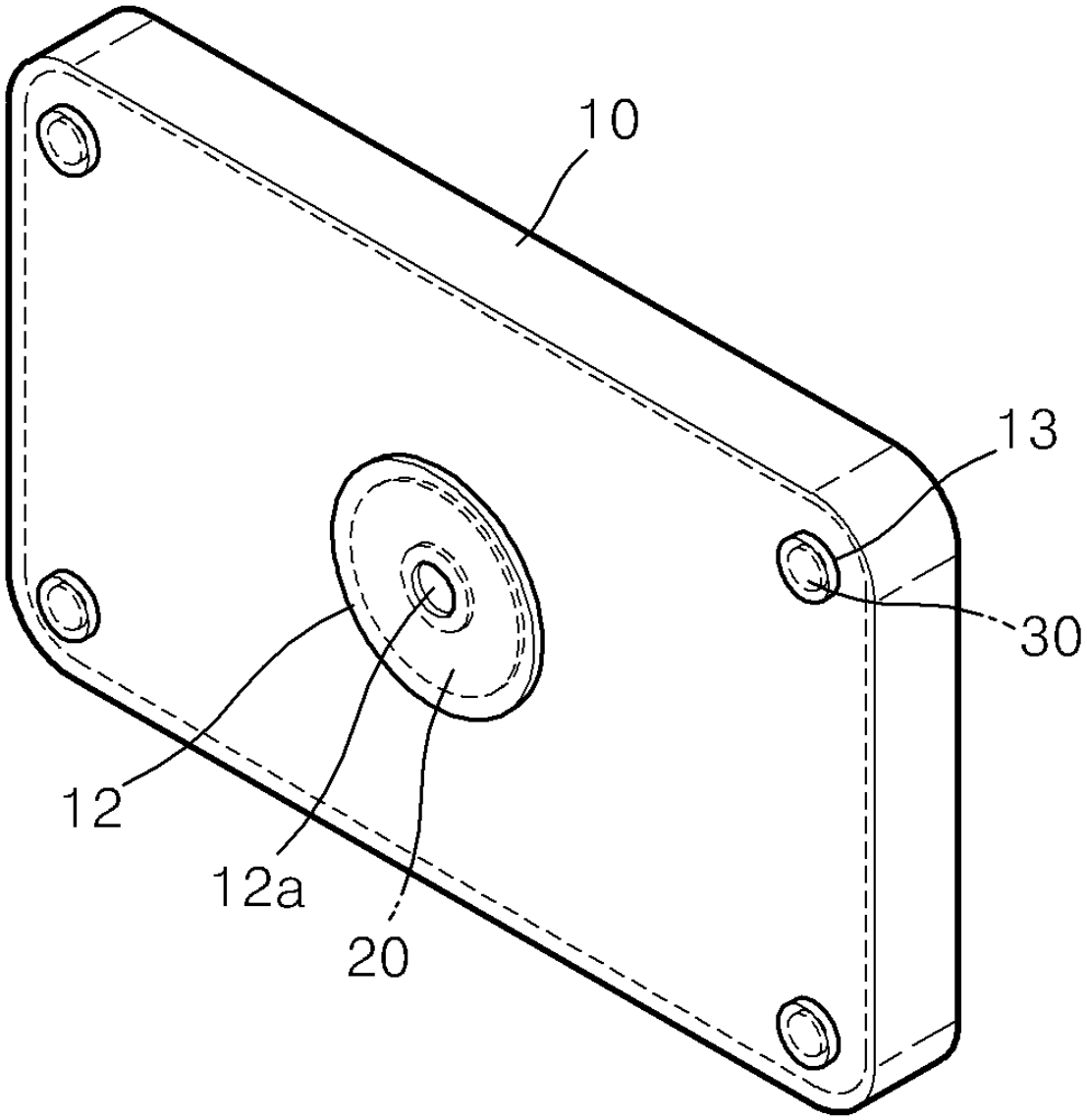
The preamble of claim 9 is "[a] mountable case for a handheld electronic device." As discussed *supra* § IV.D, the preamble is not limiting and therefore

should not be given any patentable weight. But if the PTAB were to find that the preamble is limiting, Byun would have taught the preamble to a POSITA at the time of the invention of the ’019 patent.

In particular, FIG. 2 of Byun (reproduced below) illustrates a mountable case (*i.e.*, cover unit) for a handheld electronic device:

> As shown, the mounting unit for a mobile communication terminal according to the present invention comprises: a ***cover part*** (10) formed with a coupling groove (11) into which ***a mobile communication terminal*** (M), for example, a mobile phone, a smartphone, or a tablet PC, ***is inserted*** and coupled.

EX1006, Byun, ¶[0017].



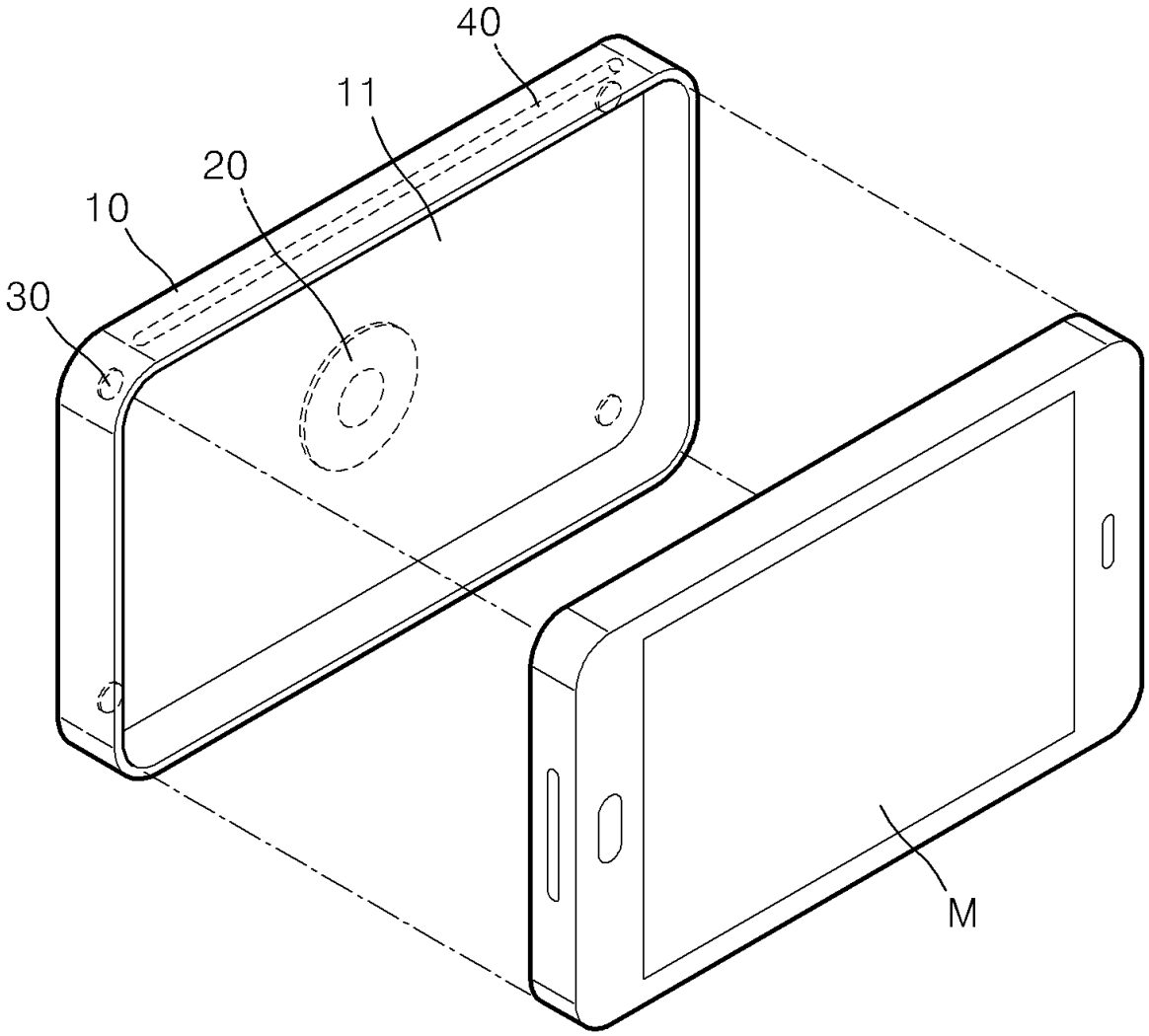
5. Case Connectable to Handheld Electronic Device.

Claim 9 of the ’019 patent recites “a case configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use.” The obvious combination of Byun and Curti would have taught this limitation.

Specifically, the cover unit illustrated in FIG. 1 (reproduced below) and FIG. 2 of Byun (reproduced above) corresponds to the "case" recited in the claim. This case is configured to be connectable to a handheld electronic device:

> As shown, the mounting unit for a mobile communication terminal according to the present invention comprises: a ***cover part*** (10) formed with a coupling groove (11) into which a ***mobile communication terminal*** (M), for example, a mobile phone, a smartphone, or a tablet PC, is ***inserted*** and coupled.

EX1006, Byun, ¶[0017]. "A POSITA would have understood that users hold mobile communication terminals such as smartphones in their hands and thus such devices are 'handheld.'" EX1003, ¶160.



EX1006, Byun, FIG. 1.

The case illustrated in FIGs. 1 and 2 of Byun is configured to be "selectively" connectable to a handheld electronic device (M). "The case of FIG. 2 is shaped so that some devices, e.g., smartphones are able to be securely received in it but other devices would not be. This is evident from the figures of Byun and its disclosure. In particular, a POSITA would have understood from FIGs. 1 and 2 that the illustrated case is not universally able to connect with all

handheld electronic devices. A user would thus select to use an appropriated model of device for use with the case." EX1003, ¶161.

In addition, the cover part of Byun is configured to retain the electronic device within an interior space of the case in use, as shown by the handheld electronic device (M) retained within the cover unit 10 in FIG. 1 above:

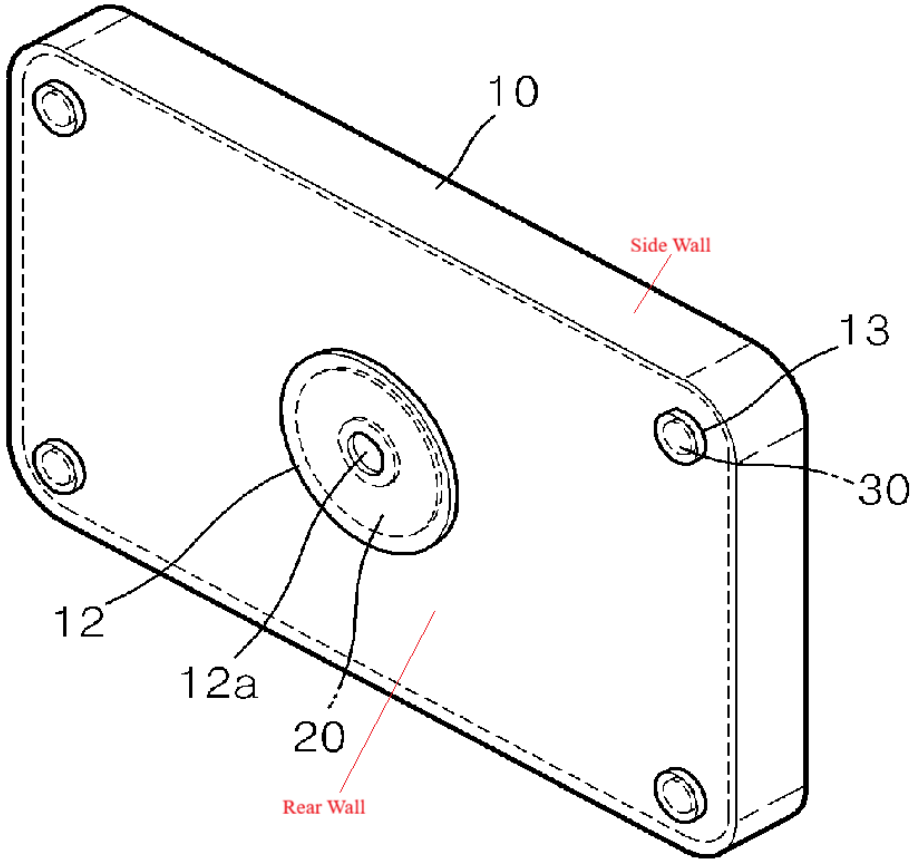
> The cover part (10) has a structure ***surrounding the rear surface and side surfaces of the mobile communication terminal*** (M), and is made of a flexible material

EX1006, Byun, ¶[0019].

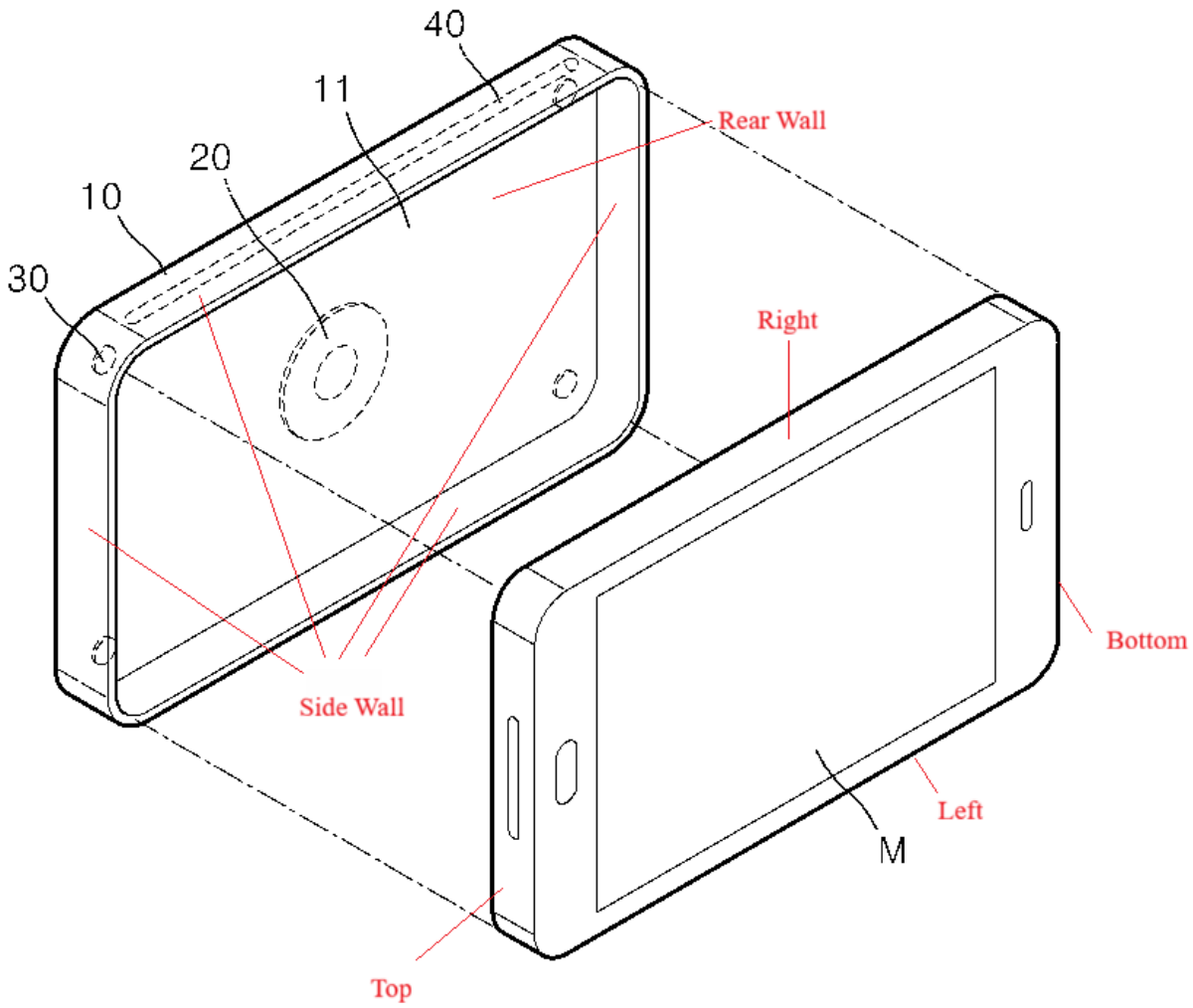
Accordingly, Byun would have taught "a case [cover part 10] configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use."

6. Case with Rear Wall and Sidewall.

Claim 9 recites "the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use." Byun would have taught this limitation. This is depicted in FIGs. 1 and 2 of Byun below.



EX1006, Byun, FIG. 2.



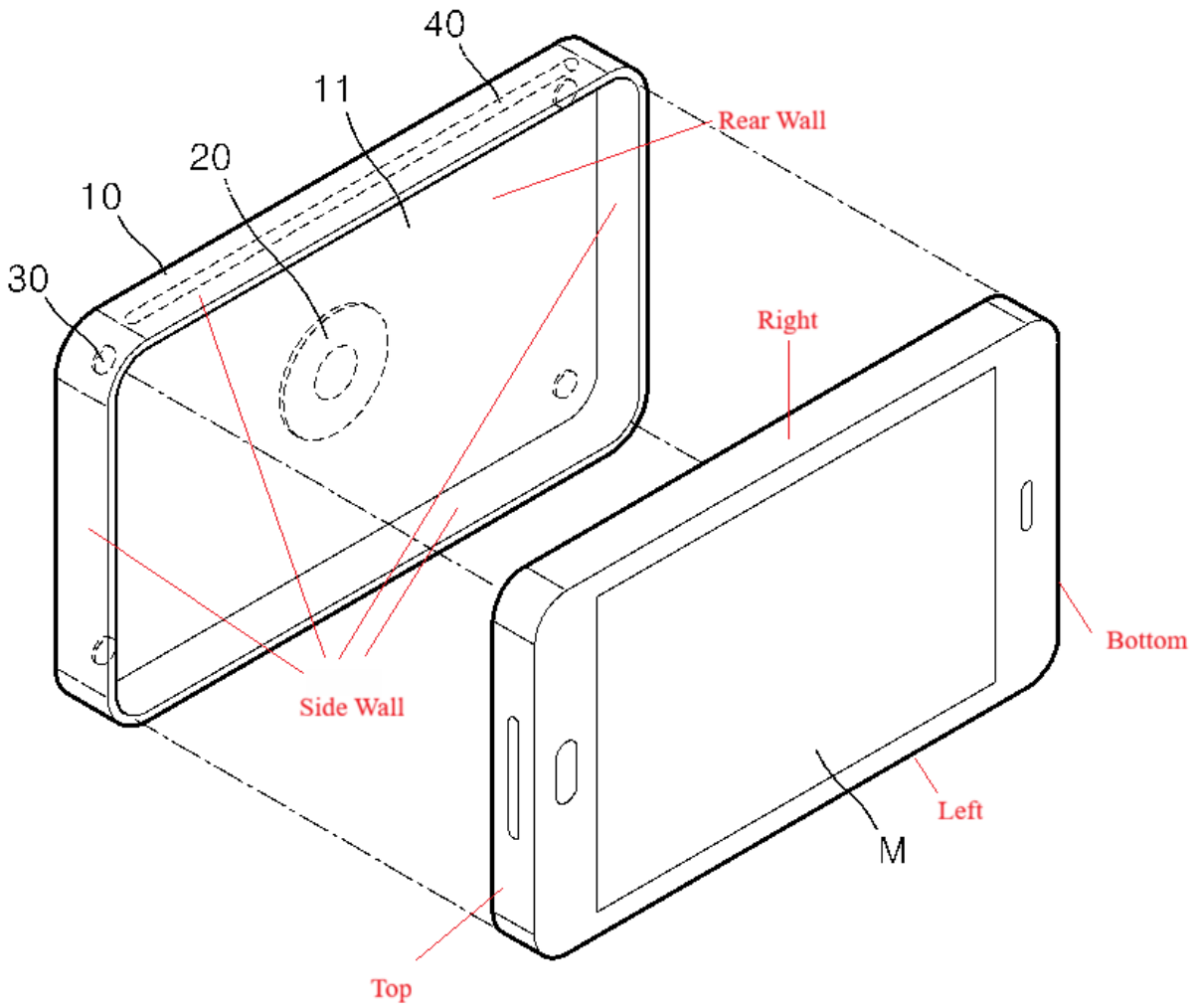
EX1006, Byun, FIG. 1. "A POSITA would have understood that what is labeled 'rear wall' in FIGs. 1 and 2 shown above is positioned along a rear surface of the electronic device (M) and that what is labeled 'sidewall' in FIGs. 1 and 2 is positioned adjacent to the top, bottom, left, and right sides of the electronic device. EX1003, ¶166. "The cover part (10) has a structure surrounding the rear surface and side surfaces of the mobile communication terminal (M)." EX1006, Byun, ¶[0019].

Accordingly, Byun would have taught "the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use."

7. Rear Wall and Sidewall Are a Unitary Structure.

Claim 9 recites "wherein the rear wall and the sidewall are a unitary structure." This limitation is satisfied by Byun; alternatively, it would have been obvious.

"Byun depicts its case (i.e., cover part 10) as being a single entity with a rear wall and sidewall, as it indicates by labeling the entirety of the case by a single reference number: '10.'" EX1003, ¶169. This is shown in FIG. 1 below.



EX1006, FIG. 1.

Byun also includes discussions in its detailed description that reveal that its cases are made of a unitary structure:

> The cover part (10) has a structure ***surrounding the rear surface and side surfaces*** of the mobile communication terminal (M), and is made of a flexible material such as silicone rubber or synthetic rubber, or is implemented with a plastic or leather material.

EX1006, Byun, ¶[0019].

"In view of the foregoing disclosures, coupled with the knowledge of a POSITA that mobile electronic device covers are commonly made of a unitary structure, a POSITA would have understood that the case of Byun (cover part 10)—including its rear wall and sidewall—is a single (i.e., 'unitary') structure." EX1003, ¶171.

"In the alternative, it would have been obvious to a person of ordinary skill in the art to manufacture the case as or into a unitary structure. By forming cover part 10 as a unitary structure, molding and assembly costs may be reduced and structural reliability are improved, relative to the alternative of providing a case as multiple, discrete pieces." EX1003, ¶172.

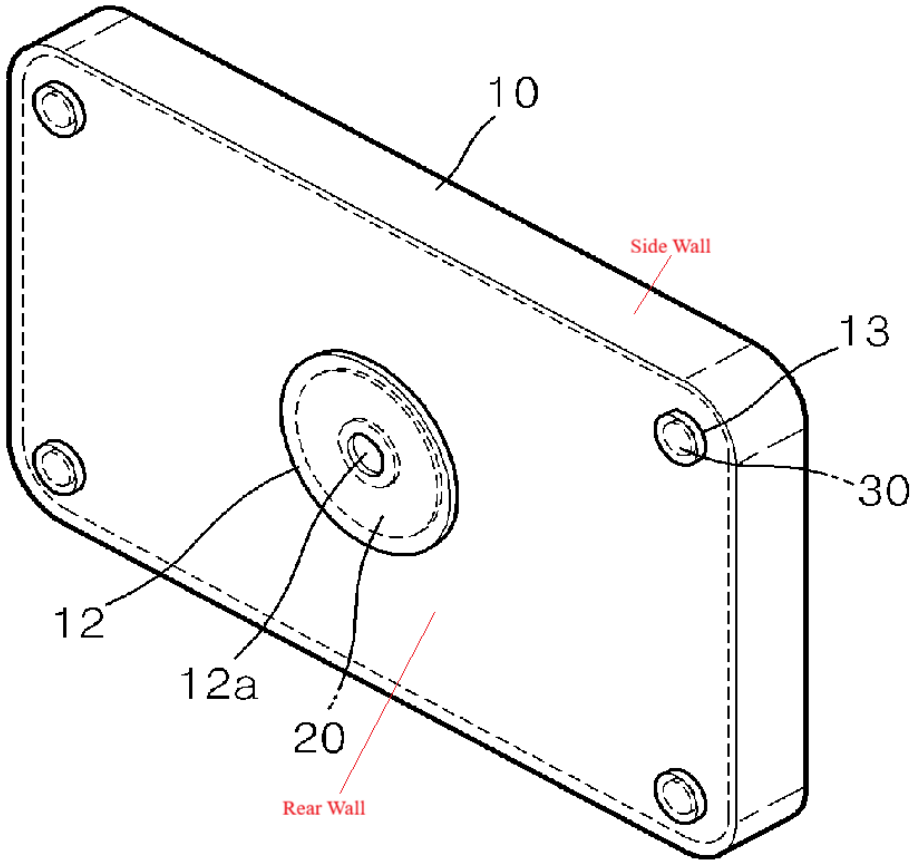
Accordingly, Byun would have taught or rendered obvious this limitation.

8. Exterior-Facing Member.

Claim 9 recites "an exterior-facing member configured to be removably received in the rear wall of the case." The obvious combination of Byun and Curti would have taught this limitation.

As shown in FIG. 2 of Byun (reproduced below), "the rear surface of the cover part (10) is formed with a main protrusion (12) . . . and a sub protrusion (13)." EX1006, Byun, ¶[0020]. "Each of the main protrusion 12 and the sub-protrusion 13 corresponds to the claimed 'exterior-facing member' as each face the exterior of Byun's case (*i.e.*, cover part 10) and each is on the rear wall (*i.e.*,

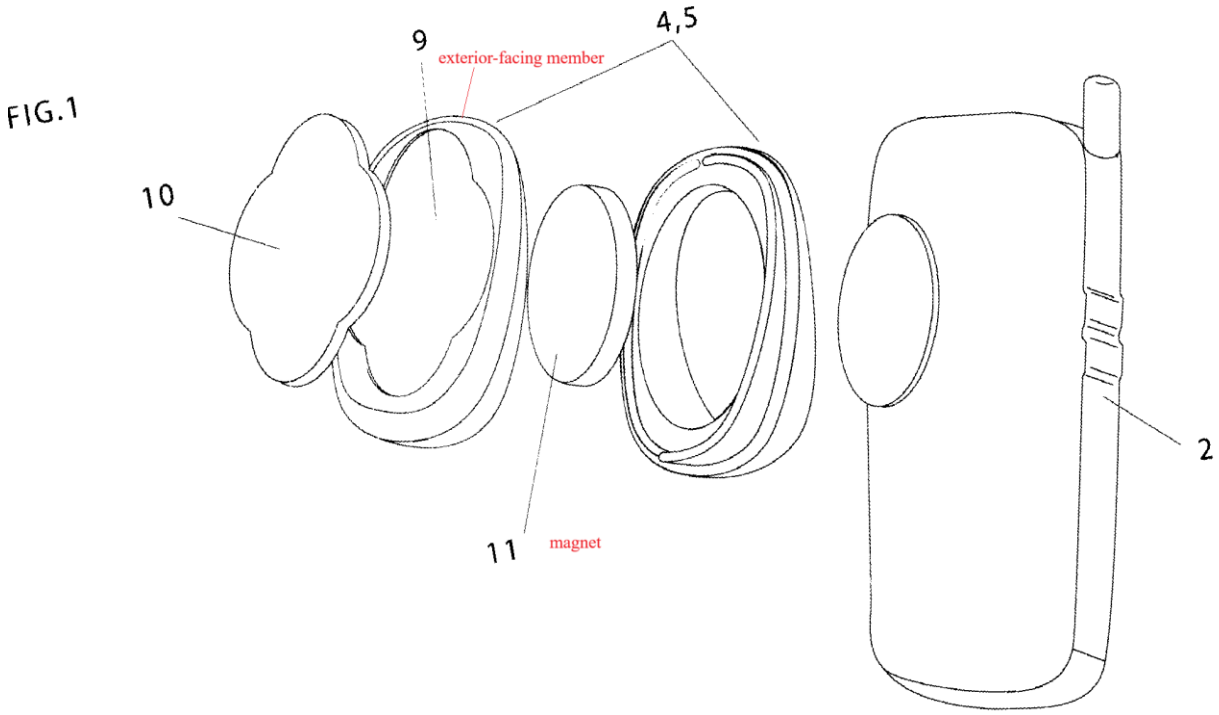
back surface) of the case." EX1003, ¶175; *see e.g.*, EX1006, Byun, FIG. 2, ¶[0020].



EX1006, Byun, FIG. 2.

"A POSITA would have known that the main protrusion 12 and the sub-protrusion 13 could have been 'configured to be removably received in the rear wall of the case,' as recited in claim 9. Indeed, Curti taught an 'exterior-facing member' that is so configured." EX1003, ¶176. In particular, Curti teaches "a temporary support assembly for … a mobile telephone" that "can be fixed to a surface" for the purpose of "support[ing] … a device, such as a mobile

telephone." EX1007, Curti, 1, 4:2-4. It has a housing assembly 1 comprising "two half-shells 4 and 5" and a "piece 10" forming the exterior, rear wall of the housing 1. EX1007, Curti, 4:4-11. Half-shell 4 is configured to be attached to the exterior of the housing assembly depicted in FIG. 1 (reproduced below). In particular, "half-shells 4 and 5 … may be fixed to one another by a system of grooves … and of tabs." EX1007, Curti, 4:4-7. "Half-shell 4 is 'exterior-facing,' as recited in claim 9 of the '019 patent because it is shown in FIG. 1 as facing the exterior of the housing assembly 1." EX1003, ¶176.



EX1007, Curti, FIG. 1.

The exterior-facing half-shell 4 is "removably received in the rear wall of the case" (as recited in claim 9 of the '019 patent) as shown in FIG. 1 above because it is connected to half-shell 5 "by a system of grooves … and of tabs"

(EX1007, Curti, 4:4-7) and "therefore, can be removed from the case by simply reversing the connecting procedure." EX1003, ¶177.

As explained by Dr. King, "[i]t would have been obvious to a POSITA at the time of the invention of the '019 patent to modify Byun's exterior-facing main protrusion 12 and sub-protrusion 13 to be removable, like the removable exterior-facing member (*e.g.*, half-shell 4) of Curti." EX1003, ¶178; *KSR*, 550 U.S. at 421 ("When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.").

As further explained by Dr. King, "[v]arious types of connections like the grooves and tabs of Curti were well known to POSITAs and could have been easily used to modify Byun's protrusions to be removable." EX1003, ¶178. "A POSITA would have been motivated to modify Byun's protrusions to be removable to access components stored within them from the rear of the case (*e.g.*, magnets)." *Id*.

Accordingly, the obvious combination of Byun and Curti would have taught this limitation.

9. Indentation with Magnet

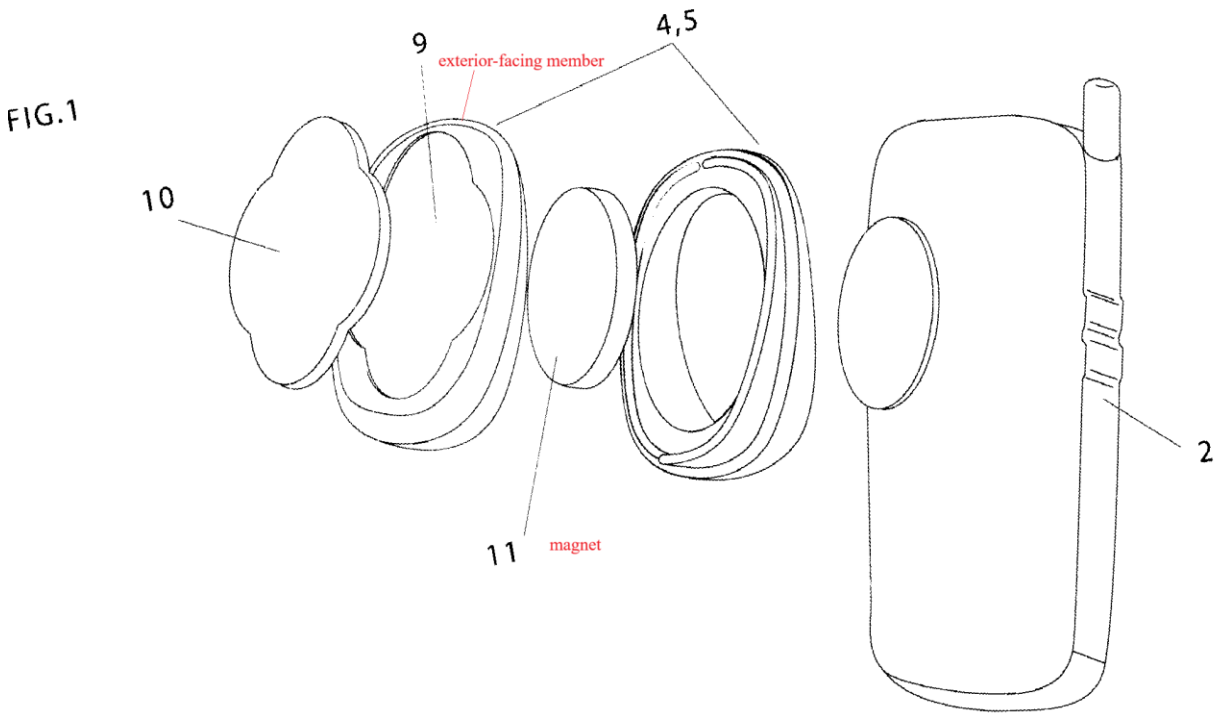
Claim 9 recites "the exterior facing member having an indentation and at least one magnet received within the indentation." The obvious combination of Byun and Curti would have taught this limitation.

Each of the exterior facing main protrusion 12 and sub-protrusion 13 shown in FIG. 1 of Byun reproduced above has an indentation with an embedded magnet:

> the mounting unit … comprises: … a cover attachment part (20) embedded in a center of a rear surface of the cover part (10); and a plurality of ***sub magnets*** (30) installed at corner portions of the rear surface of the cover part (10) … the ***cover attachment part*** (20) is ***implemented as a magnet*** or a steel piece. In addition, the ***sub magnets*** (30) are illustrated as being installed in four pieces at the corner portions of the rear surface of the cover part (10). (EX1006, Byun, ¶[0017]);
>
> With this structure, the ***cover part (10) is attached to and supported by a predetermined steel member***, for example, a steel member such as a wall surface of a refrigerator or an air conditioner, ***by the magnetic force of the sub magnets*** (30) … when ***the cover attachment part (20) is made of a magnet, the cover part (10) can be more firmly attached to a steel member*** such as a wall surface of a refrigerator. (*id.* at ¶[0018]);
>
> Since the main protrusion (12) and the sub protrusion (13) are thicker than the rear surface of the cover part (10), ***the cover***

attachment part (20) and the sub magnets (30) having a predetermined thickness can be ***completely embedded*** therein. *Id.* at ¶[0021].

"Indeed, exterior-facing members having an indentation to receive a magnet were well known to a POSITA by the time of invention of the '019 patent, as demonstrated by Curti." EX1003, ¶182. As shown in FIG. 1 of Curti (reproduced below), the exterior facing half-shell 4 has a recess 9 and a magnet 11 received within the recess 9:



EX1007, Curti, FIG. 1. "The 'recess' 9 of Curti corresponds to the 'indentation' of claim 9." EX1003, ¶183. Accordingly, Curti would also have taught "the

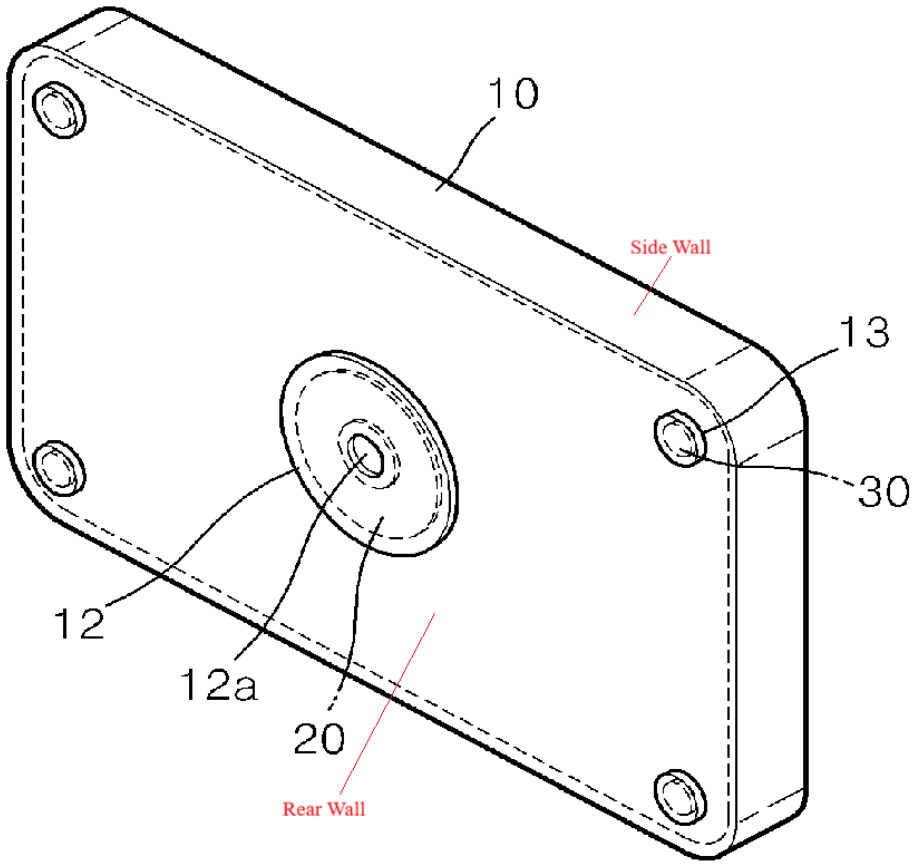
exterior facing member [half shell 4] having an indentation [recess 9] and at least one magnet [magnet 11] received within the indentation [recess 9]."

Thus, the obvious combination of Byun and Curti would have taught this limitation. *KSR*, 550 U.S. at 421.

10. Indentation Facing Rear Wall of Case

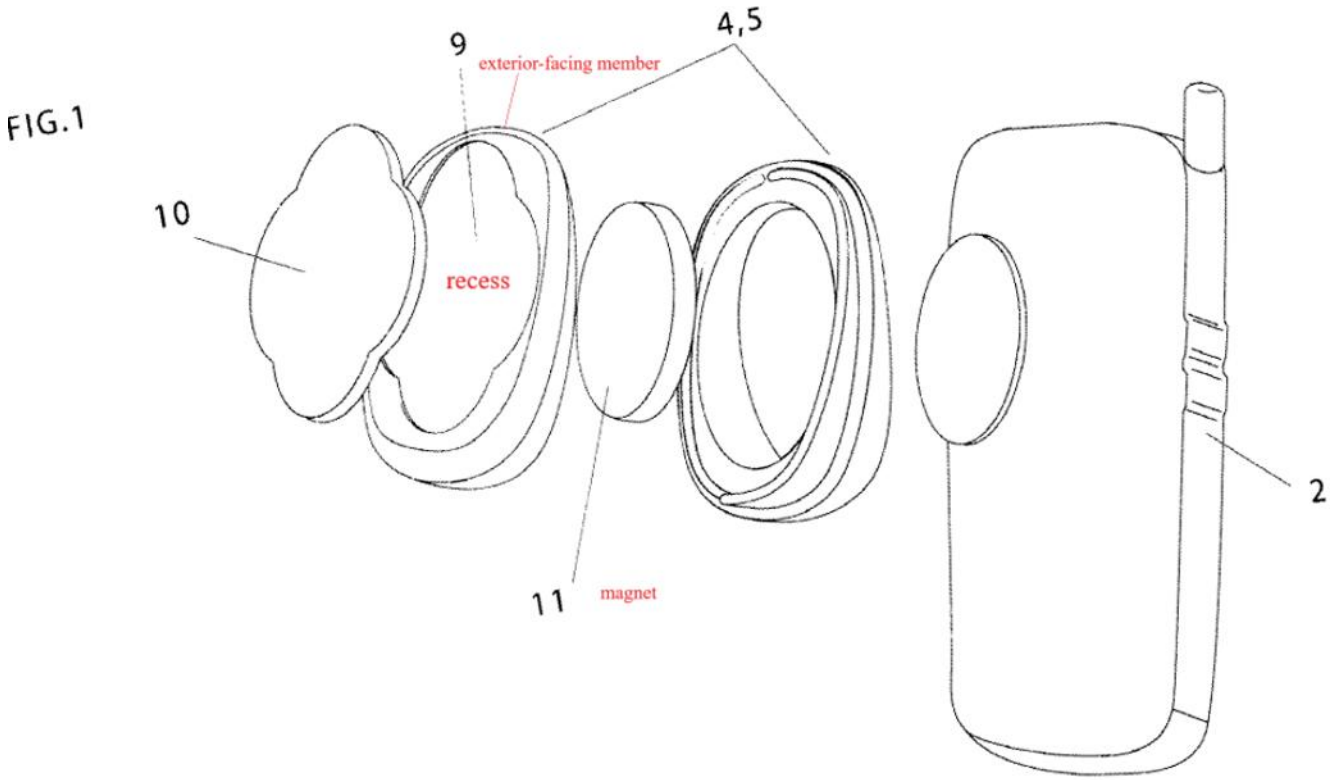
Claim 9 recites "the indentation facing the rear wall of the case." Byun and Curti, either alone or in combination would have taught this limitation.

The area within protrusion 12 and sub-protrusion 13 contains magnets 20 and 30 respectively. EX1003, ¶186. As explained *supra*, § V.F.9, these areas within the exterior-facing protrusions 12, 13 on the rear wall of the case of Byun correspond to the "indentation" recited in claim 9 of the '019 patent. "These open areas (i.e., indentations) within protrusions 12, 13 of Byun face the rear wall of the case" (EX1003, ¶186), as shown by FIG. 2, reproduced below.



EX1006, Byun, FIG. 2. "As shown by this figure, the open areas (e.g., indentations) of the protrusions 12 and 13 are positioned on the rear exterior wall of the case and thus, the indentations face the rear wall of the case." EX1003, ¶186.

Moreover, the recess 9 in Curti also faces the rear wall of the housing assembly 1 as shown in FIG. 1 (reproduced below).



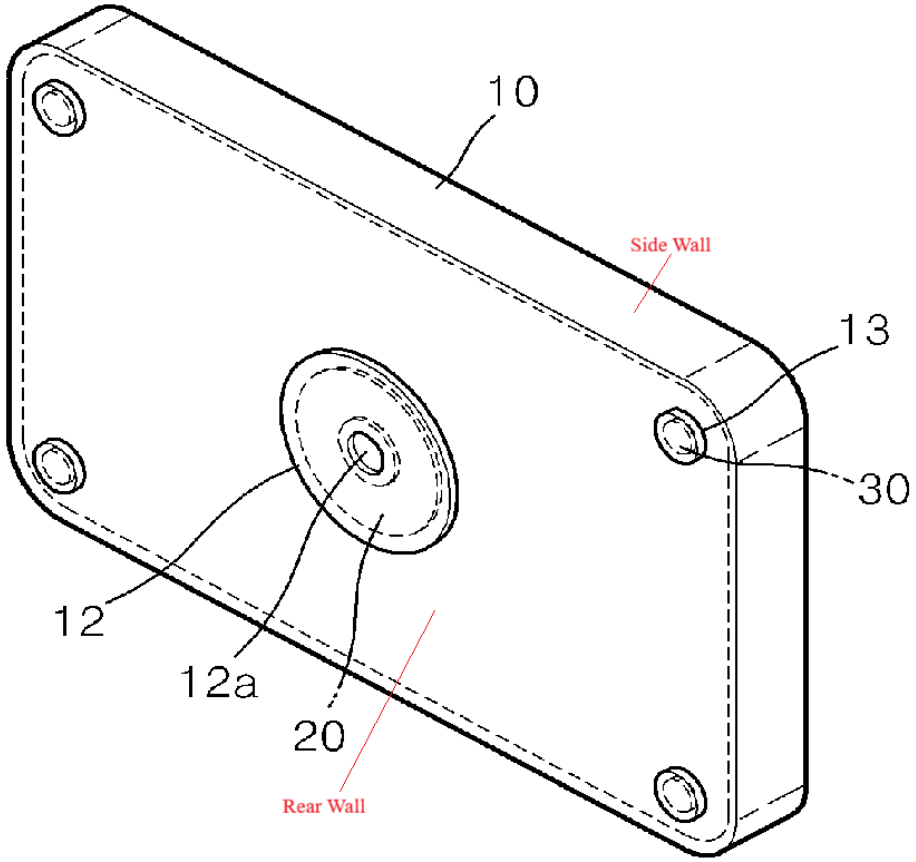
EX1007, Curti, FIG. 1. "The recess 9 (corresponding to the claimed 'indentation') of the half shell 4 is facing the rear wall (component 10) of the housing assembly 1 (corresponding to the claimed 'case'). The direction from the recess (*e.g.*, indentation) to the left in FIG. 1 is toward the rear wall 10 and thus, the indentation of Curti faces the rear wall of the case." EX1003, ¶188.

Accordingly, Byun and Curti, alone and in combination, would have taught the claimed "indentation facing the rear wall of the case."

11. Rear Wall and Exterior Facing Member Fully Enclose Magnet

Claim 9 recites "wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet." Byun and Curti, either alone or in combination, would have taught this claim limitation.

In Byun, each of the magnet 20 and sub-magnets 30 are enclosed with the area between the rear wall of the base (*i.e.*, cover part 10) and protrusion 12 and sub-protrusion 13 respectively in FIG. 2 (reproduced below).

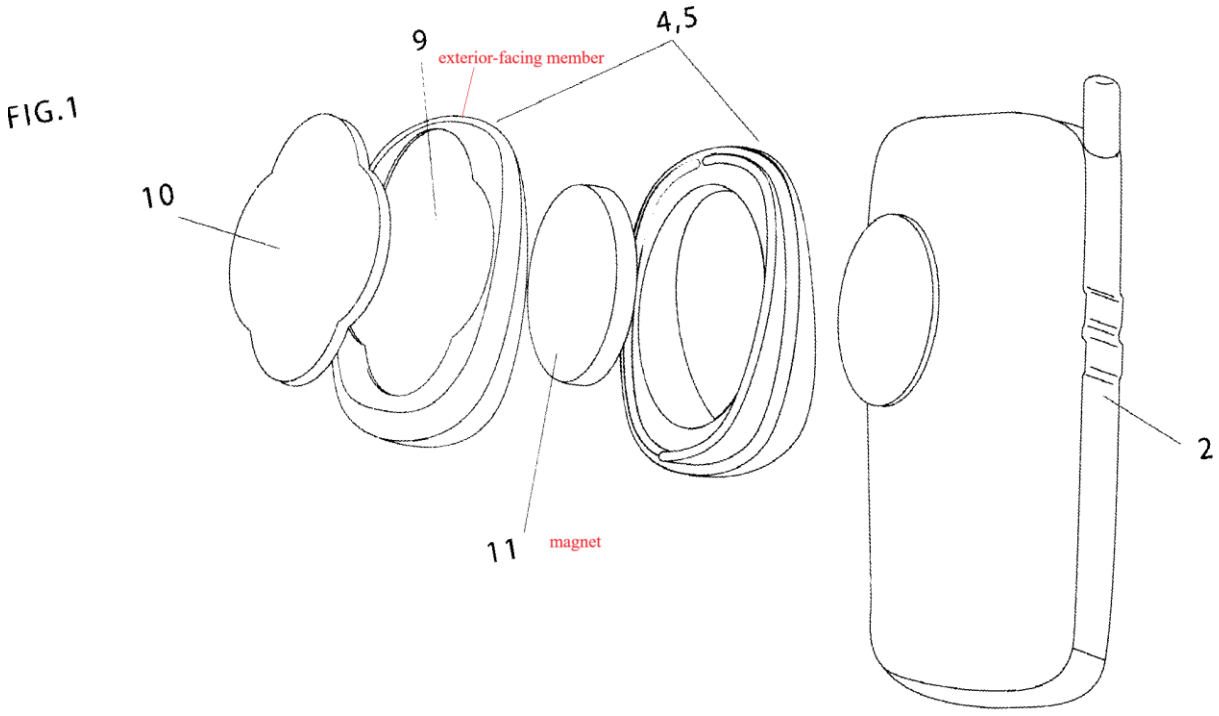


EX1006, Byun, FIG. 2.

The "***cover attachment part*** (20) [is] ***embedded in a center of a rear surface of the cover part*** (10)" (*id.*, ¶[0005]) and "the rear surface of the cover part (10) is formed with a ***main protrusion*** (12) protruding from the rear surface at a portion ***where the cover attachment part (20) is embedded***, such that ***the***

cover attachment part (20) and the sub magnets (30) are embedded therein. *Id.*, ¶[0007].

"Curti also satisfies this limitation. In Curti, the magnet 11 is enclosed within the rear wall (component 10) of the case (housing assembly 1) and the exterior facing member (half shell 4)." EX1003, ¶193. This is illustrated in FIG. 1 (reproduced below).



EX1007, Curti, FIG. 1. "[T]he assembly comprises a miniature permanent ***magnet 11 housed inside*** the housing 1." EX1007, Curti, 4:14-15.

"The magnet 11 is 'fully enclosed' (as recited in claim 9); it cannot even be seen from any outside view of the housing 1." EX1003, ¶194. This is shown by FIGs. 10-14 (reproduced below).

FIG.10

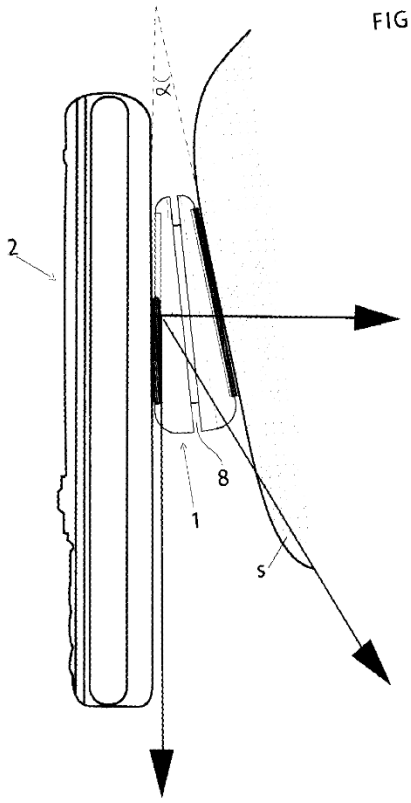


FIG.11

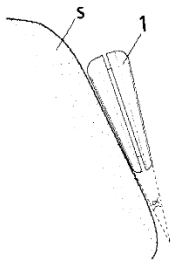


FIG.12

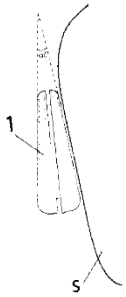


FIG.13

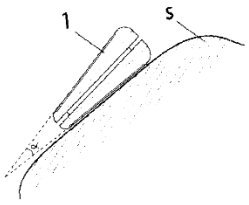
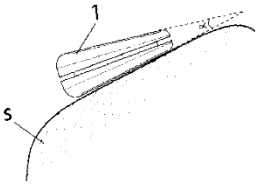


FIG.14



EX1007, Curti, FIGs. 10-14.

Accordingly, Byun and Curti, either alone or in combination, would have taught "wherein the rear wall [component 10] of the case [housing assembly 1] and the exterior facing member [half shell 4] fully enclose the at least one magnet [11]."

12. Non-slip Member Of Claim 10

The limitation that "the exterior-facing member is a non-slip member" is satisfied by the combination of Byun and Curti because as explained by Dr. King, it would have been obvious to modify the protrusions 12 and 13 corresponding to the claimed 'exterior-facing member' on Byun's case to have a non-slip surface, like the adhesive piece 10 of Curti." EX1003, ¶196, *quoting* EX1007, 2:22-23 ("The assembly according to the invention is easy to mount, the housing being adhered to the receiving surface by adhering the free face of the adhesive piece."); *KSR*, 550 US at 401, 427 (obvious to use a known technique to improve a similar device in the same way).

13. Frictional Gripping Exterior Surface Of Claim 11

The limitation of claim 11 requiring the "non-slip member [to] comprise[] a frictional gripping exterior surface that enhances frictional engagement of the case with a surface" is met by the combination of Byun and Curti because as

explained in the immediately preceding section, "the exterior surface of the piece 10 at the rear of Curti's assembly is adhesive (e.g., gripping)." EX1003, ¶197.

VI. THE BOARD SHOULD NOT EXERCISE ITS DISCRETION AND DENY INSTITUTION.

Denial under § 325(d) is not warranted because the challenges presented in this Petition are neither cumulative nor redundant to the prosecution of the '019 Patent (or related patents), as none of Rothbaum957, Rothbaum609, Byun, nor Curti were cited or considered by the Examiner during prosecution of the '019 Patent. *See* EX1001, cover. Discretionary denial under *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15, 12 (May 13, 2020) (informative) ("Fintiv") is not warranted because, *inter alia*, the investment by the parties to date in the related litigation has been relatively minimal, there will not be any overlapping issues because Petitioners will offer a Sotera stipulation that if the Board institutes a trial, they will not raise in district court litigation any grounds that it raised in this IPR petition or reasonably could have raised in the petition, all the defendants in the related litigation are Petitioners in this IPR petition, and the obviousness grounds are very strong.

Petitioners will provide a full explanation of why denial under 325(d) or discretionary denial is not warranted if Patent Owner were to file a request for such a denial.

VII. CONCLUSION.

For the reasons set forth above, claims 9-11 of the ’019 patent are unpatentable.

Respectfully submitted,

/s/ Gregory J. Gonsalves

Dated: October 2, 2026

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CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the type-volume limitations of 37 C.F.R. § 42.24, because it contains 13,975 words (as determined by the Microsoft Word word-processing system used to prepare the brief), excluding the parts of the brief exempted by 37 C.F.R. § 42.24.

Dated: October 2, 2026

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this 2nd day of October, 2026, I caused to be served a true and correct copy of the foregoing and any accompanying exhibits by priority mail on the following:

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A courtesy copy of this Petition and supporting material was also served on litigation counsel for Patent Owner via email:

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CLAIM LISTING

9. A mountable case for a handheld electronic device, comprising:

a case configured to be selectively connectable to the handheld electronic device and retain the electronic device within an interior space of the case in use,

the case comprising a rear wall that is configured to be positioned along a rear surface of the electronic device in use and a sidewall extending from the rear wall and being configured to be positioned adjacent at least a portion of a top, bottom, left and right sides of the electronic device in use,

wherein the rear wall and the sidewall are a unitary structure;

an exterior-facing member configured to be removably received in the rear wall of the case,

the exterior facing member having an indentation and at least one magnet received within the indentation,

the indentation facing the rear wall of the case,

wherein the rear wall of the case and the exterior facing member fully enclose the at least one magnet.

10. The case of claim 9, wherein the exterior-facing member is a non-slip member.

11. The case of claim 10, wherein the non-slip member comprises a frictional gripping exterior surface that enhances frictional engagement of the case with a surface on which the case is placed.