

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Shenzhen Torras Technology Co., Ltd.

Shenzhen Lechuang Tiancheng Technology Co., Ltd.

Shenzhen Ruixin Digital Technology Co, Ltd.

and

Shanghai Kuke Network Technology Co., Ltd.

U.S. Patent No. 12,656,835

DECLARATION OF DR. RANDALL KING
UNDER 37 C.F.R. § 1.68 IN SUPPORT OF
PETITION FOR INTER PARTES REVIEW AND
PETITION FOR POST GRANT REVIEW

Exhibit 1003

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I. Introduction and Qualifications

1. I have been retained by Shenzhen Lanhe Technologies Co., Ltd. to provide my opinion concerning the validity of U.S. Patent No. 12,656,835 (“the ’835 patent”).

2. I have also been asked to provide my opinions as to how one of ordinary skill in the art would understand certain claim terms appearing in certain claims of the ’835 patent, considering the intrinsic record, extrinsic evidence and the knowledge of a person of ordinary skill in the art. I have also been asked to provide my understanding of the level of ordinary skill in the art related to the Asserted Patents, as well as to explain the technical background of the art where relevant.

3. I am being compensated as an independent consultant in this matter at the rate of \$650 per hour. This compensation is not dependent on my opinions or testimony, or the outcome of this litigation.

II. Qualifications and Background

4. I am the President and Principal Engineer of King Professional Engineering, Inc., a forensic mechanical engineering firm in Dallas, Texas. I provide consulting expertise in the areas of failure investigations of mechanical systems; evaluations involving mechanical design issues, operation and maintenance questions, stress/deflection analysis, material failure, metal fatigue, lubrication, heat treat issues, and product liability concerns; products liability

matters evaluating and testifying on issues such as design defects, manufacturing defects, unreasonably dangerous products, and safer alternative designs for plaintiff and defense clients, involving a variety of devices and equipment; patent cases, including infringement, validity, and inventorship analyses and testimony, for matters including court testimony, IPR's, and PGR's for a variety of devices and equipment; and commercial vehicle accidents, including heavy truck collisions with issues related to the design or failure/operational condition of vehicle systems, such as brakes, steering, tires, suspensions, and safety equipment.

5. I earned a Ph.D., Mechanical Engineering from Oklahoma State University, a Master of Engineering, Mechanical Engineering from Oklahoma State University, a Bachelor of Science, Mechanical Engineering from Oklahoma State University, and I completed two years of a three-year program for a Master of Business Administration, from Oklahoma State University

6. A copy of my curriculum vitae is included with this declaration (Exhibit 1008).

7. I am licensed as a professional engineer (PE) in Oklahoma, Texas and Arkansas, having been licensed as a PE since 1987.

8. I served as an R&D and frac pump design engineer for Halliburton Energy Services from 1984 to 1994, designing, developing, and testing high-

pressure frac pumps and equipment for servicing oil and gas wells. This work included mechanical design, stress, deflection, and performance analysis, material selection, lab and field testing, and manufacturability studies related to frac pumps and mobile oilfield equipment.

9. I served as an R&D and mechanical design engineer for NTN Corporation (a large Japanese bearing and automotive components manufacturer) in Ann Arbor, Michigan from 1995 to 2002, designing, developing, and testing automotive components and roller bearings, where I earned 12 U.S. patents. I developed innovative automotive components and oversaw validation testing for “Big Three” automobile manufacturers of an alternator pulley with an integral overrunning clutch and performed design and testing of a tailored compliance outer race to increase the fatigue life of tapered roller bearings.

10. From 2002 to 2010, I served as a forensic engineer at Bison Engineering where I investigated oilfield, industrial, agricultural and personal injury accidents, and conducted failure analyses and testing of a variety of mechanical equipment and systems.

11. From 2011 until the present, I have served as the Principal Engineer and President of King Professional Engineering, Inc. My work includes failure analyses, investigations of oilfield, industrial, agricultural and personal injury

accidents, testing of equipment and systems, patent evaluations, and product liability evaluations, involving a variety of mechanical equipment.

12. I have testified at 11 trials and 59 depositions, for state and federal courts, the U.S. Patent Trial & Appeal Board, and the American Tribunal of the American Arbitration Association.

13. I have been awarded 15 U.S. patents and six international patents for my inventive contributions to the mechanical arts.

14. I have authored and presented several technical papers at international conferences regarding material failure, hydraulic pumps and components, and noise control.

15. In summary, I have worked for over a half century as a design engineer, technical consultant, and/or technical manager where I designed, developed, and managed the development of various mechanical devices for various applications.

III. Summary Of Information and Materials Reviewed And Considered

16. The opinions contained in this Declaration are based on the documents that I reviewed, my knowledge, and professional judgment. In forming the opinions expressed in this Declaration, while drawing on my experience in the field of mechanical engineering, I reviewed the following documents:

EX1001: U.S. Patent No. 12,656,835 to Whitten, Jeff et al. (“the ’835 patent)”

EX1002: Patent Prosecution History of U.S. Patent 12,656,835.

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

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 (“Whitten584,” corresponding to non-provisional patent application no. 13/593,220).

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

EX1016: Patent Prosecution History of U.S. Patent Application No. 15/838,933.

EX1017: Provisional Application No. 61/653,618

EX1018: Provisional Application No. 61/585,933

17. I have relied also on my own personal knowledge relating to the technology at issue, including my education, work experience, and training in this field of art. I have also relied on my understanding of the training, knowledge and skill level of a person of ordinary skill in the art at the time of the invention of the '835 Patent.

18. My opinions are additionally guided by my appreciation of how a person of ordinary skill in the art ("POSITA") would have understood the claims of the '835 patent at the time of the alleged invention, which I have been asked to assume to be January 12, 2012, the filing date of provisional application No. 61/585,933 to which the '835 patent claims priority.

IV. Understanding of Legal Standards

19. I am not an attorney, and in this Declaration, I do not opine on matters of law. For the purposes of this Declaration, I have been informed about certain aspects of the law that are relevant to my analysis and opinions. My

understanding of these principles is set forth below. In this section, I summarize these legal aspects as they have been explained to me. I reserve the right to change or formulate new opinions in the event there is a change in the law concerning my opinions provided in this report.

20. I have been informed by Counsel that the validity analysis is a two-step process. First, the patent claims are construed to ascertain their proper scope. Second, the construed claims are compared to the identified prior art to determine if the claims are valid over the prior art.

a. Claim Construction

21. I have been informed by Counsel that the claims of a patent define the limits of the patentee's exclusive rights. I have been informed by Counsel that to determine the scope of the claimed invention, courts typically construe claim terms, the meaning of which the parties may dispute. I have been informed by Counsel that claim terms should generally be given their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of filing of the patent application, after reading the patent and its prosecution history. I also have been informed by Counsel that a basic tenet of claim construction presumes that different words in a claim have different meanings, unless there is evidence to the contrary.

22. I understand that the claim construction exercise begins with the language of the claims themselves, and that the general rule is that claim terms are given their plain and ordinary meaning to a person of ordinary skill in the art, in view of the specification of the patent, at the time of the invention. I also understand that the intrinsic evidence (i.e., the claims, the written description including the figures, and prosecution history) are the primary sources used in interpreting claim language.

23. I understand that if disputed claim language is clear on its face, the intrinsic evidence should be consulted to determine whether some deviation from the ordinary meaning of the claim language is warranted

24. I have been informed by Counsel that claims must be construed in light of, and consistent with, the intrinsic evidence. In this context, I have been informed by Counsel that intrinsic evidence includes the claims themselves, the written disclosure in the specification, and the patent's prosecution history, including the prior art that was considered by the United States Patent and Trademark Office ("USPTO"). I have been informed by Counsel that the specification is always highly relevant to the claim construction analysis and often is the single best guide to the meaning of a disputed term. I have been informed by Counsel that extrinsic evidence may also be considered when

construing claims and may include, for example, technical dictionaries, technical publications and books, treatises, and expert testimony.

b. Anticipation

25. I have been informed by Counsel that 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. I understand that the identical invention must be shown in as complete detail as is contained in the ... claim and that the elements must be arranged as required by the claim. The prior art reference—in order to anticipate—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim. Thus, it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention. Rather, the prior art reference must clearly and unequivocally disclose the claimed invention or direct those skilled in the art to the invention without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference. Importantly, a court must, while looking at the reference as a whole, conclude whether or not that reference discloses all elements of the claimed invention arranged as in the claim.

c. Obviousness

26. I have been informed by Counsel that patent claims can be deemed invalid if the differences between the claimed subject matter 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 pertinent art. While such conclusions are often based on more than one piece of prior art, only one is required. I have been informed by Counsel that obviousness cannot be based on the hindsight combination of components selectively culled from the prior art.

27. I have been informed by Counsel that a person having ordinary skill in the art (*i.e.*, a POSITA) is a hypothetical person who is presumed to have known the relevant art at the time the invention was made. I have been informed by Counsel that the condition “at the time the invention was made” is imposed to rule out impermissible hindsight. I also have been informed by Counsel that an expert is to analyze the prior art from the perspective of a person of ordinary skill in the art at the time the invention was made, and not simply to provide his/her own personal conclusions.

28. I also have been informed by Counsel that an obviousness determination includes several factual inquiries, including (1) determining the scope and content of the prior art; (2) ascertaining the differences between the claimed invention and the prior art; (3) resolving the level of ordinary skill in the

pertinent art; and (4) taking into consideration any objective indicia of nonobviousness.

29. I have been informed by Counsel that obviousness must be determined as of the date of the invention (i.e., the effective filing date or priority date of the patent). Thus, in considering the reason or motivation to combine references, it is essential to avoid using hindsight. For example, the problem examined when considering obviousness is the general problem that confronted the inventor before the invention was made, not the specific problem solved by the invention. Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness. Further, an overly narrow statement of the problem can represent a form of hindsight, because often the inventive contribution lies in defining the problem in a new revelatory way.

30. I have been informed by Counsel that an assessment of basic knowledge and common sense as a replacement for documentary evidence for core factual findings does not constitute sufficient evidence of obviousness.

31. I have been informed by Counsel that a motivation to solve a problem (or issue) is not the same as a motivation to have combined references. I have been informed by Counsel that whether a skilled artisan would be motivated

to make a combination includes whether he/she would select particular references in order to combine their elements.

32. I have been informed by Counsel that the analysis of the motivation to combine should be explicit. Additionally, it must include articulated reasoning with rational underpinnings to support the conclusion of obviousness. Providing a full explanation of the motivation to combine the references and the reasonable expectation of success is a necessary component of the obviousness inquiry, as inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known. However, conclusory statements fail to adequately explain why a person of ordinary skill would have a motivation to combine the potential prior art references.

33. I have been informed by Counsel that common sense, common wisdom, and common knowledge may be used to support a motivation to combine, so long as the use of common sense in the analysis is explained with sufficient reasoning. But common sense can only be used to supply a limitation missing from the prior art where the technology is unusually simple and straightforward.

34. I also have been informed by Counsel that evidence suggesting reasons to combine cannot be viewed apart from evidence suggesting reasons not

to combine. In analyzing motivation, both advantages and disadvantages must be considered. Teaching away, for example, is a statement in the prior art that either (i) discourages one from following the path of the claimed invention, or (ii) encourages one to follow a path that diverges from the path of the claimed invention. The concept of teaching away bears directly on whether there was a reason to combine prior art. Known disadvantages in prior art technology or devices which would naturally discourage a search for new inventions may also be taken into account in determining obviousness.

35. I also have been informed by counsel that when analyzing whether a POSITA would have been motivated to arrive at the claimed invention, the decision maker must assess the prior art as a whole. The Patent Office must consider all disclosures of the prior art to the extent that the references are in analogous fields of endeavor and thus would have been considered by a person of ordinary skill in the field of the invention. In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention. Evidence that supports, rather than negates, patentability must be fairly considered.

36. I have been informed by counsel that several criteria 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.

V. Level of Ordinary Skill in the Art

37. I understand that a person of ordinary skill in the art is considered to have the normal skills and knowledge of a person in a certain technical field, as of the time of the invention at issue. I understand that factors that may be considered in determining the level of ordinary skill in the art include: (1) the education level of the inventor; (2) the types of problems encountered in the art; (3) the prior art solutions to those problems; (4) the rapidity with which innovations are made; (5) the sophistication of the technology; and (6) the education level of active workers in the field.

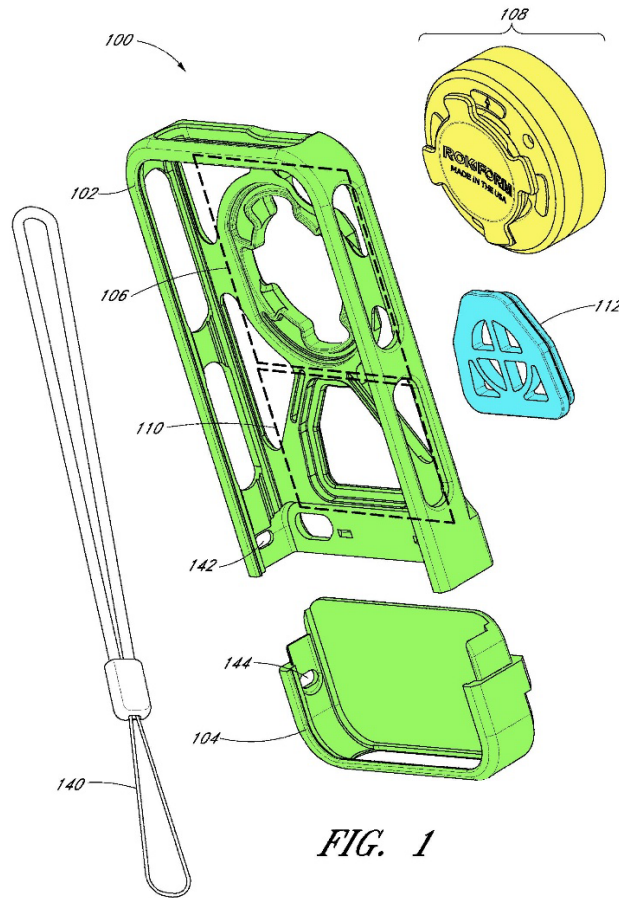
38. With respect to the '835 Patent, a person of ordinary skill in the art (POSITA) would at the time of the alleged invention of the '835 patent have had a bachelor's level degree in Mechanical Engineering, Industrial Design, or a similar field and one year experience in designing mechanical products. Additional work or research experience can substitute for less or different education, and vice-versa.

39. I have over a half century of experience as a design engineer, technical consultant, and/or technical manager, where I developed and managed the development of various mechanical devices for various applications. Therefore, I certainly understand how a person of ordinary skill in the art would interpret or understand the claims of the '835 Patent in light of the specification and file history of the '835 Patent.

40. Unless otherwise stated, my opinions in this Declaration reflect the understanding of a POSITA at the time of the invention, which I have been asked to assume to be January 12, 2012.

VI. Overview of the '835 patent

The '835 patent is directed at a protective case for a handheld electronic device. Figure 1 of the '835 patent shows an exemplary embodiment.



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, 5:1-4. Upper shell piece 102 includes an attachment region 106 that allows for the engagement of mounting member 108 (yellow). *Id.*, 5:20-25. Protection system 100 also

¹ All coloring and annotations added in the figures unless otherwise noted. The figures are meant to depict and identify particular components of structures in the prior art references corresponding to certain claim limitations, and therefore, may not include all possible components in those structures.

includes a non-slip region 110, into which non-slip member 112 (blue) may be inserted. *Id.*, 5:31-39.

VII. Claim construction

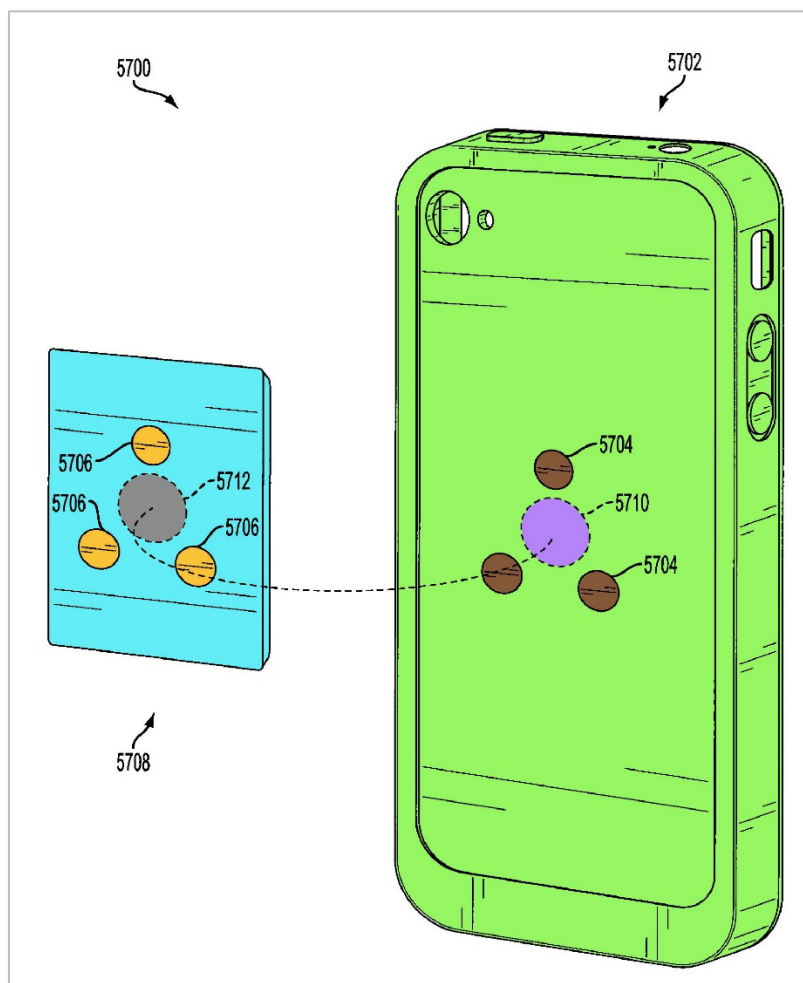
41. For the purposes of this declaration, I have applied the ordinary and customary meaning of the claim terms, as would have been understood by a POSITA at the time of the alleged invention.

VIII. Discussion of Cited References

a. Rothbaum857 (U.S. Pub. No. 2011/0192857 to Rothbaum et al.)

42. 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 increases, 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.*

43. One such embodiment is shown in Figure 57 of Rothbaum857.



EX1004, Fig. 57 (colored).

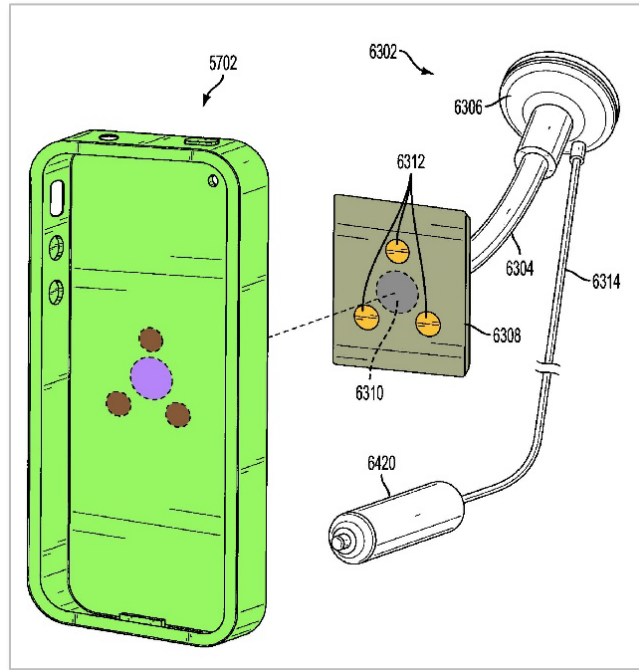
44. As shown above, case 5702 (green) includes a set of magnetic attachment elements 5704 (brown) and an electrical interface 5710 (purple).

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.* Through the

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

45. 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.*

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



EX1004, Fig. 63 (colored).

47. 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). 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.

b. Rothbaum609 (U.S. Pub. No. 2011/0252609 to Rothbaum et al.)

48. 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.

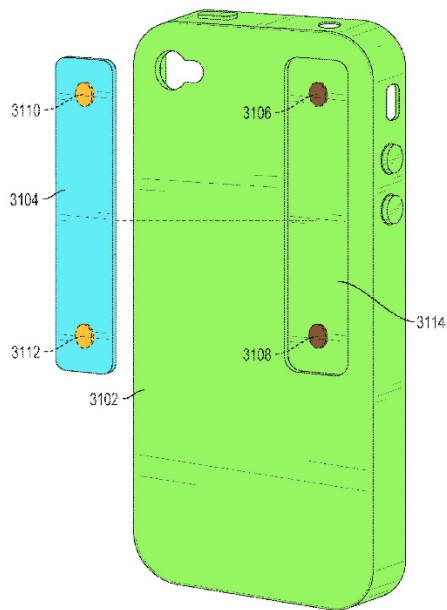


FIG. 31A

EX1005, Fig. 31A (colored)

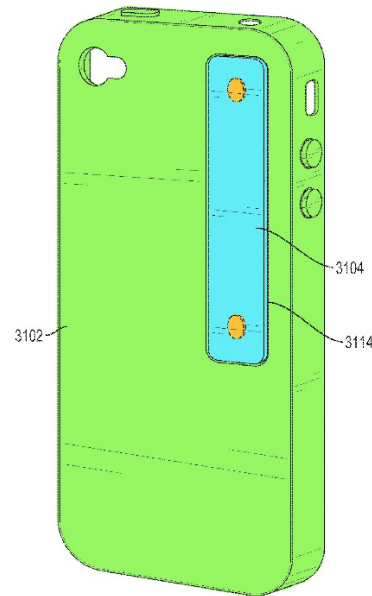


FIG. 31B

EX1005, Fig. 31B (colored)

49. 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.

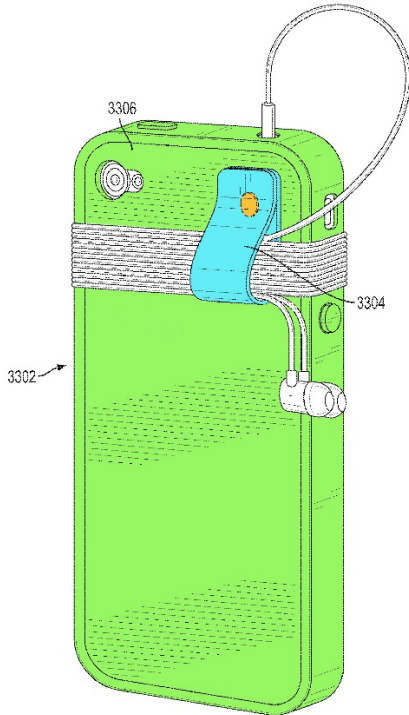
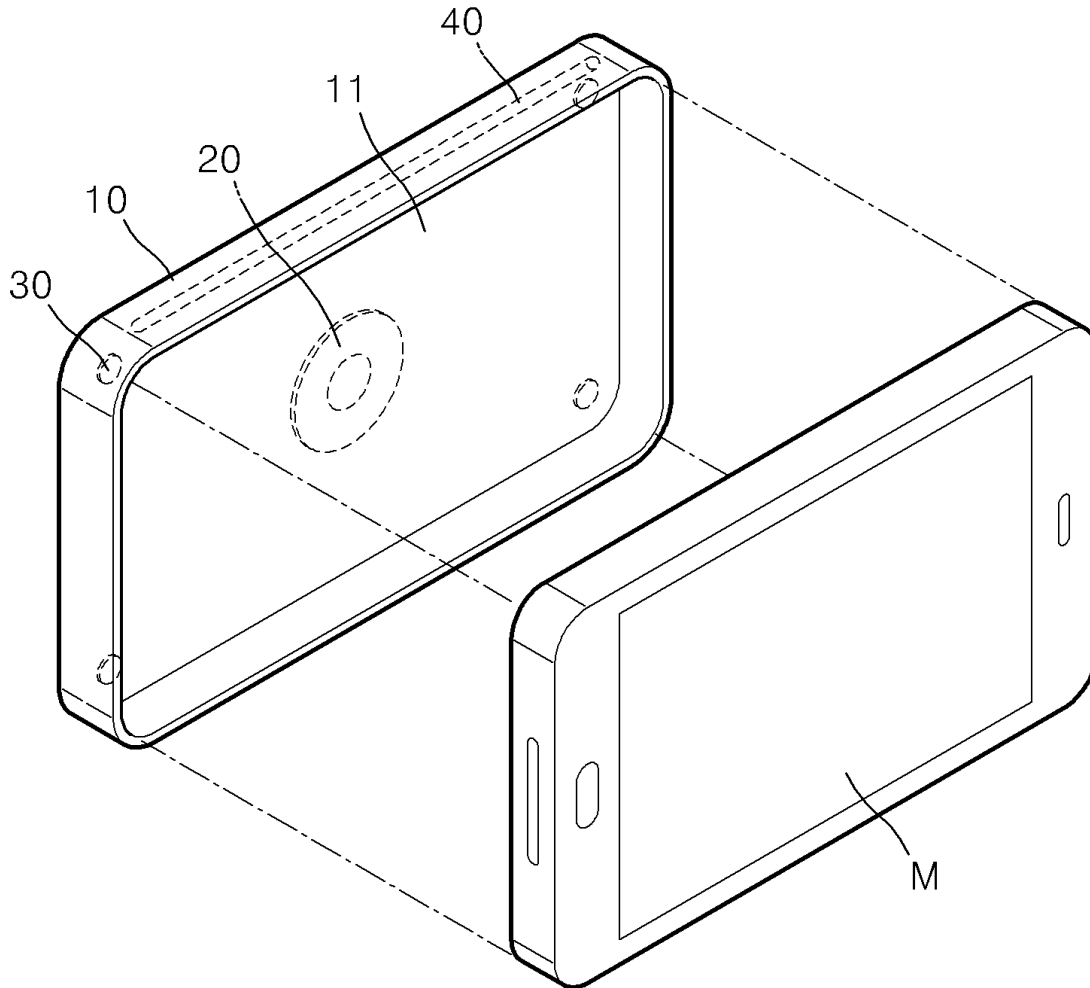


FIG. 33F

EX1005, Fig 33F (colored).

c. Byun (Korea Pub. No. KR101020434B1 to Byun et al.)

50. 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.



51. 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 smart phone, 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 part (20) is implemented as a magnet” and

“[t]he 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.*

IX. Ground 1: Claims 1–39 are obvious under 35 U.S.C. § 103 over Rothbaum857.

52. It is my opinion that Rothbaum857 would have rendered claims 1-39 obvious. All the limitations of Rothbaum857 would have been taught as explained in detail below.

53.

1. Independent Claim 1

[1pre]: “[a] mountable case for a handheld electronic device.”

Rothbaum857 discloses a handheld electronic device case, such as the one illustrated in Fig. 1A (reproduced below). EX1004, ¶[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].

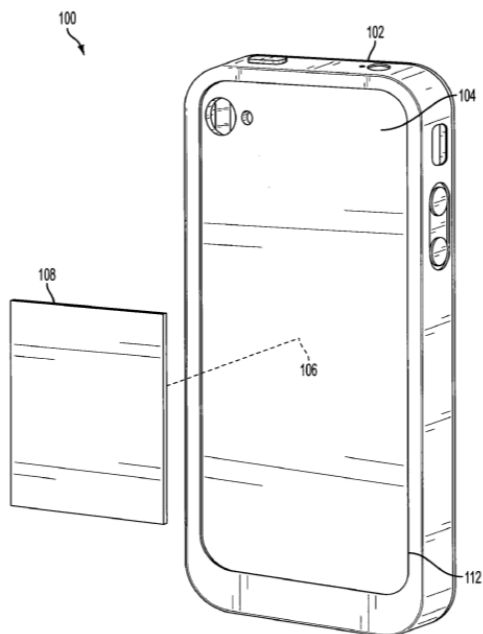
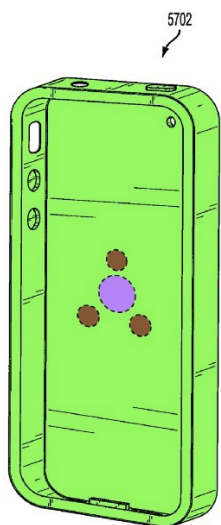


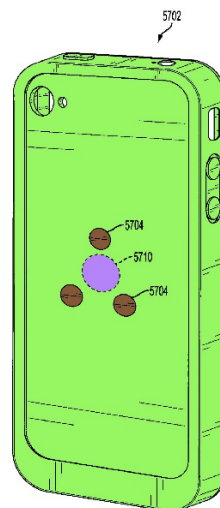
FIG. 1A

EX1004, FIG. 1A.

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



EX1004, Fig. 64A (partial)

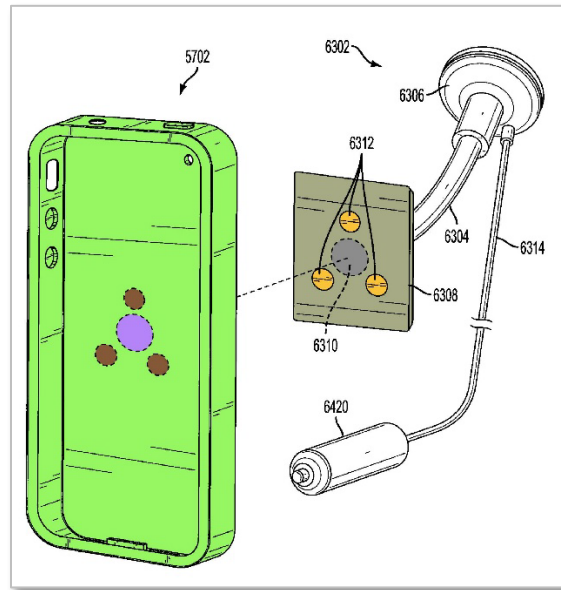


EX1004, Fig. 57 (partial)

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.*

55. It is my opinion that case 5702 is “mountable.” As shown below, case 5702 (green) is configured to be mounted to vehicle mount 6302.



EX1004, Fig. 63.

56. 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.

57. It is my opinion that case 5702 is also “for a handheld electronic device.” Rothbaum857 identifies case 5702 as a “mobile electronic device case.”

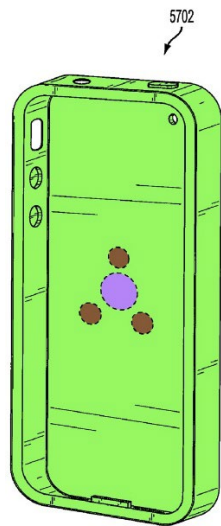
EX1004, ¶[0259]. Further, a POSITA would have understood that case 5702 is structurally similar to case 102 of Rothbaum857, which is described to “fit over a mobile electronic device.” EX1004, ¶[0140]. A POSITA would have understood that the “mobile electronic device” referenced in Rothbaum857 is able to be held by a user’s hand, i.e., is “handheld.”

58. Accordingly, it is my opinion that Rothbaum857 would have taught “[a] mountable case [mobile electronic device case 5702] for a handheld electronic device.”

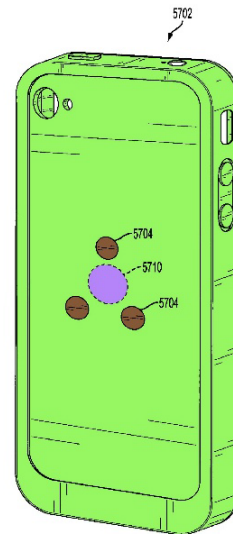
59.

[1b]: “a body portion configured to retain the handheld electronic device within an interior space of the body portion”

As shown in FIGS. 64 and 57 of Rothbaum857 below, case 5702 includes a shell as the body portion of the case.

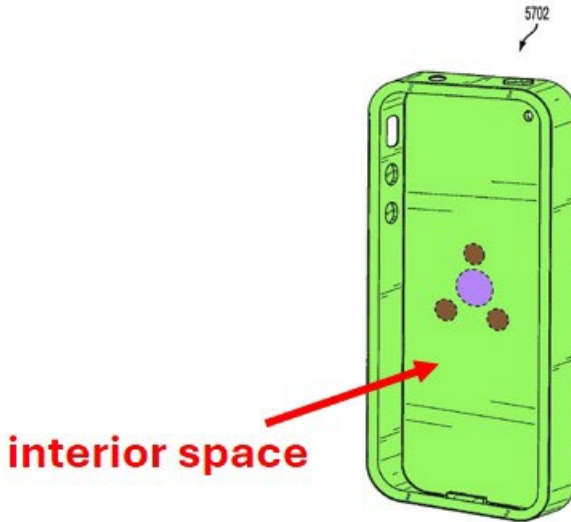


EX1004, Fig. 64A (partial)



EX1004, Fig. 57 (partial)

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

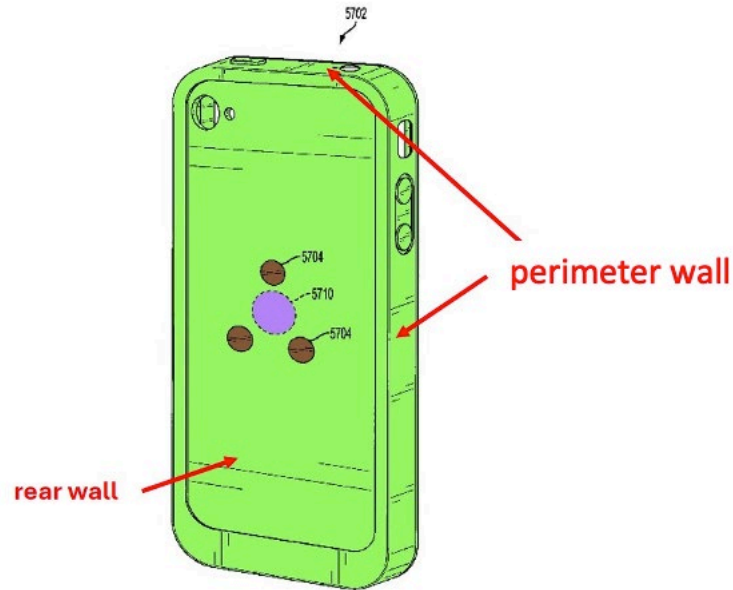


EX1004, Fig. 63 (partial).

60. It is my opinion that a POSITA would have understood that what is labeled “interior space” in the annotated figure above is the location where the mobile electronic device is retained. 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.

61.

[1c]: “the body portion comprising: a rear wall; a perimeter wall”



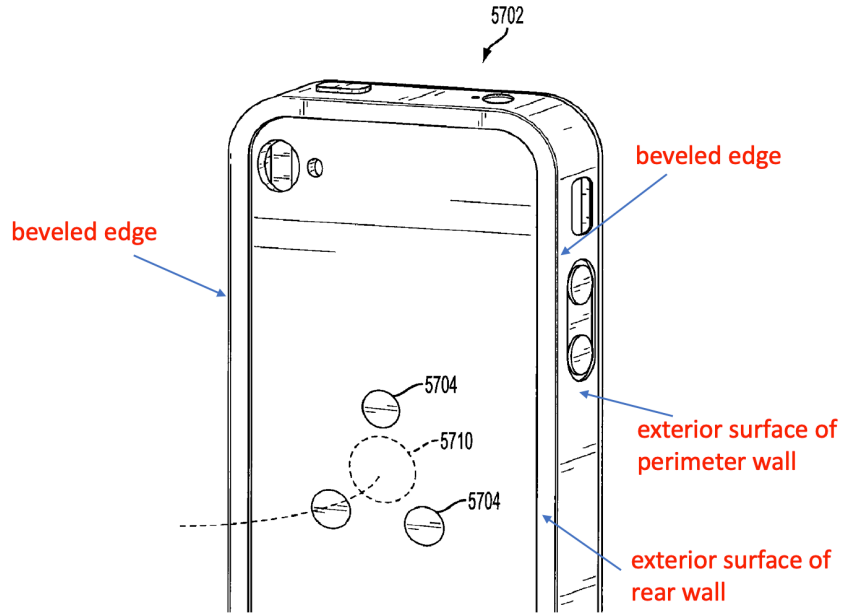
EX1004, Fig. 57 (partial).

62. As depicted in the annotated figure above, Rothbaum857 discloses that case 5702 includes a “back,” which corresponds to the “rear wall” of the claim. EX1004, ¶[0248]. 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 wall, (2) the perimeter wall including four sides.

63.

[1d]: “a beveled surface that defines a transition between an exterior surface of the perimeter wall and an exterior surface of the rear wall”

FIG. 57 of Rothbaum857 discloses a beveled surface. A POSITA, viewing FIG. 57 (reproduced below) in the context of the associated text in the specification, would have understood that the top surface of the case 5702 is in a first horizontal plane and an upper boundary of the rear wall is in a second horizontal plane substantially parallel to and below the first horizontal plane. Because the top surface of the case 5702 is shown as being above the upper boundary of the rear wall in FIG. 57, a POSITA would have understood that the surface extending from the top surface of the perimeter wall of the case 5702 to the upper boundary of the rear wall is beveled. A POSITA would have understood that creating beveled rather than rigid edges is common in the industry and prevents an injury that a consumer may experience from handling a mobile phone case with sharp, straight edges.

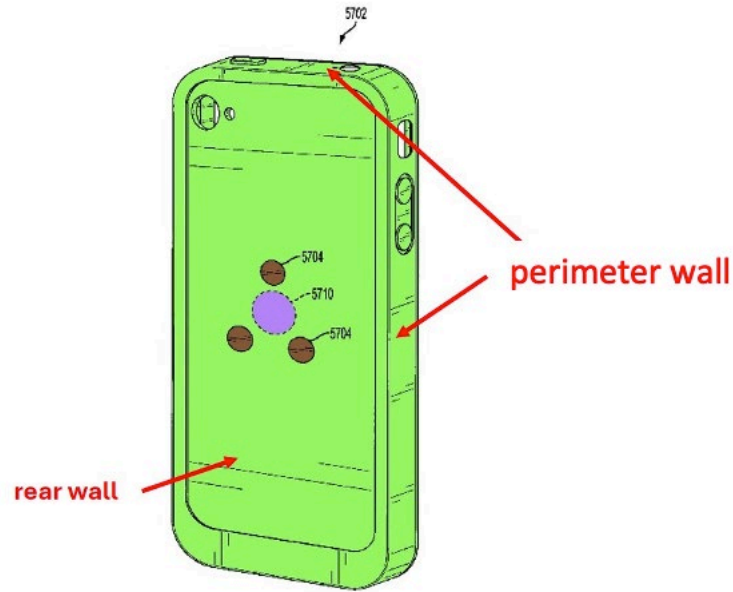


EX1004, Fig. 57 (partial).

64.

[1e]: “wherein the rear wall is configured to be aligned with at least a portion of a rear surface of the handheld electronic device, and wherein the perimeter wall extends from an outer perimeter of the rear wall and is positioned proximate to at least portions of side surfaces of the handheld electronic device”

As shown in the annotated FIG. 57 (below), Rothbaum857 discloses the
“the perimeter wall [of the case 5702] extends from an outer perimeter of the rear wall.”



65.EX1004, Fig. 57 (partial).

66. Rothbaum857 further discloses that “[a] case as used and described herein can be configured to hold a mobile electronic device in many different configurations. In 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]).

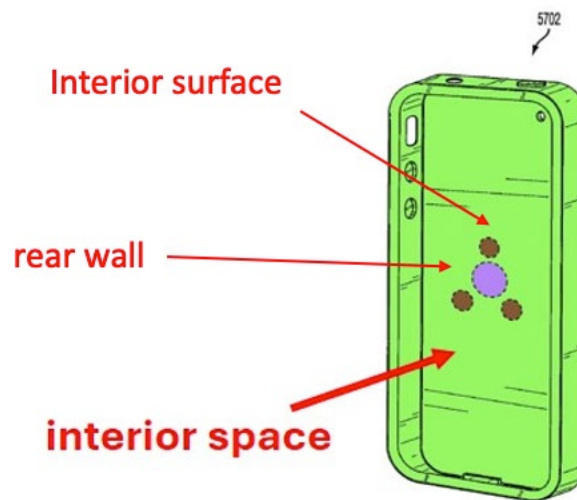
67. In the configuration described in Rothbaum857, a POSITA would have understood that, when the handheld electronic device is held in the case with only the front screen un-covered by the case, both the sides and rear surface of the handheld electronic device are enclosed by the case, resulting in “*the rear wall is ... aligned with a rear surface of the handheld electronic device*” and “*the*

perimeter wall ... is positioned proximate to at least portions of side surfaces of the handheld electronic device.”

68.

[1f]: “wherein the rear wall comprises an interior surface configured to face towards the rear surface of the handheld electronic device”

As shown in the annotated Fig. 63 (reproduced below), Rothbaum857 discloses that the rear wall of the case includes an interior surface to receive the handheld electronic device.



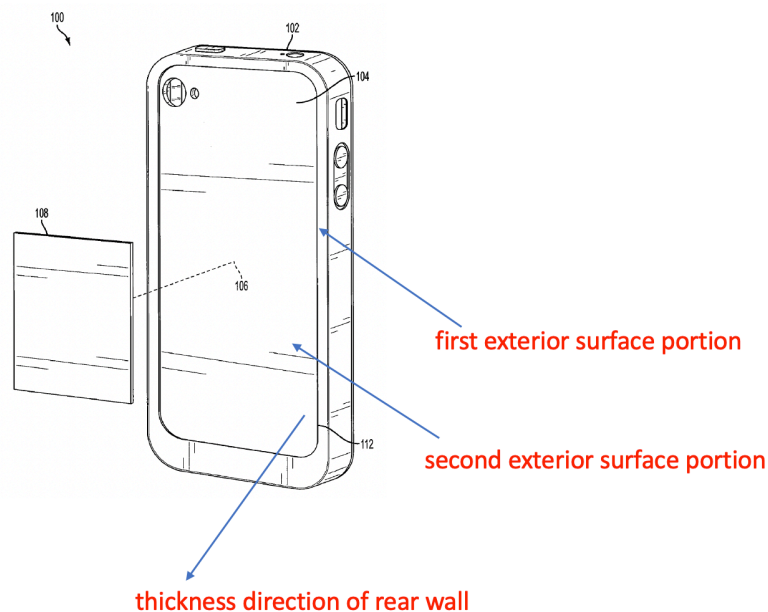
EX1004, Fig. 63 (partial).

69. A POSITA would have understood that when the handheld electronic device is enclosed in the case, the “*interior surfaces face[s] [to the opening of the case] towards the rear surface of the handheld electronic device.*”

70.

[1g]: “wherein the exterior surface of the rear wall comprises a first exterior surface portion and a second exterior surface portion offset from one another in a thickness direction of the rear wall”

Rothbaum857 discloses a raised edge that forms a recess in the rear wall of the case, where the rear wall is divided into two surface portions. For example, Rothbaum857 discloses “[i]n 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. As shown in FIG. 1, the main portion of the back surface 104 of the case 102 is recessed with respect to the raised edge 112.” (EX1004, ¶[0141] and Fig. 1A reproduced below.)



EX1004, Fig. 1A.

71. As shown above, the raised edge 112 divides the exterior surface into the first exterior surface portion and the second exterior surface portion and

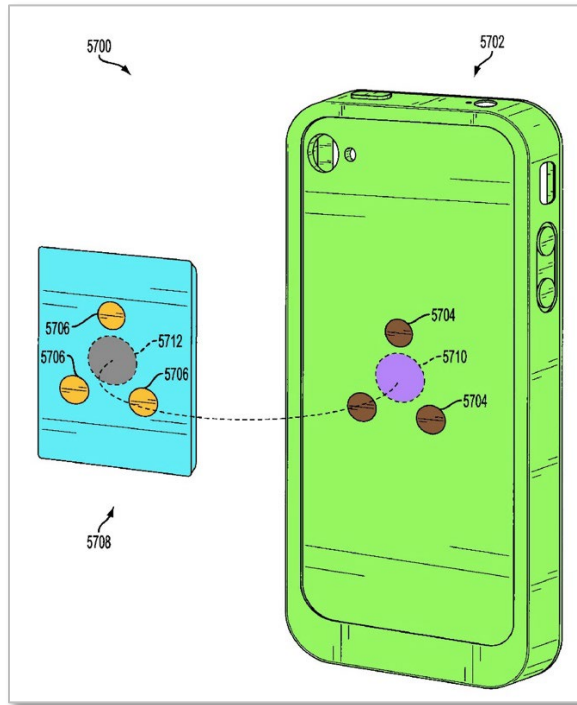
forms a recess in the back surface 104 of the case 102. A POSITA would also have understood that the raised edge is raised in the thickness direction of the rear wall. In other words, the back surface 104 and the raised edge “*offset from one another in the thickness direction of the rear wall.*”

72. Although the raised edge 112 and the recess in the back of the case are described with specific reference to Figures 1 and 2 of Rothbaum857, a POSITA would have understood that it was generally applicable to the other embodiments of Rothbaum857, including the embodiment depicted in Figure 57.

73.

[1h]: “an exterior-facing component having at least a portion thereof removably received in a receiving space defined by the rear wall of the body portion”

Rothbaum857 includes multiple embodiments with components that qualify as an “exterior-facing member.” One such embodiment is that depicted in Figure 57 (reproduced below).



EX1004, Fig. 57.

74. 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].

75. Object 5708 (blue) may be attached to the exterior of case 5702 and is thus “exterior-facing.”

76. Further, object 5708 (blue) is “removably received in a receiving space defined by 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].

77. Further, object 5708 (blue) may be a charger, spare battery, or speaker, for example. EX1004, ¶¶[0250], [0259], [0262].

78. A POSITA would have understood that such objects are not intended to be permanently affixed to case 5702 but instead to be removable and attached only as needed.

79. Rothbaum857 also states:

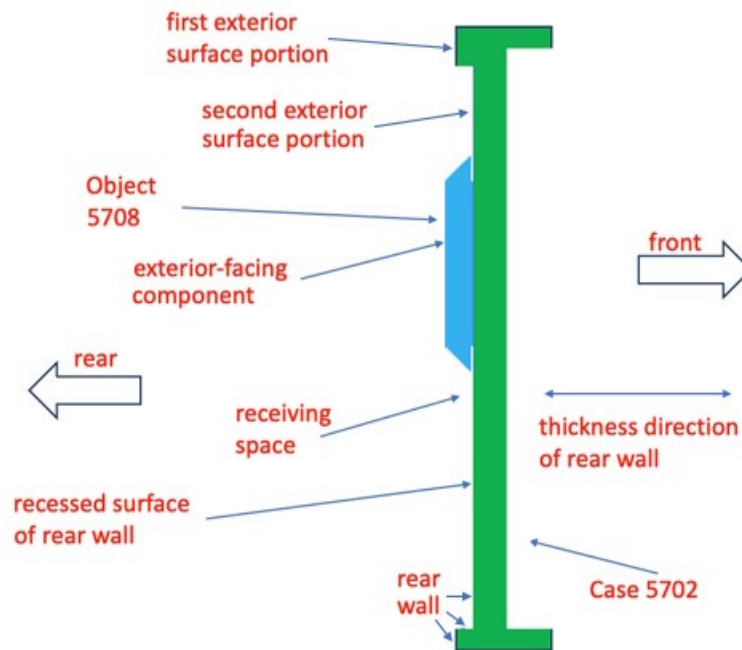
“In some embodiments, the accessory 108 is used with a mobile electronic device case where the back surface 104 of the case has a recessed portion defined by a shoulder or raised edge 112. As shown in FIG. 1, the main portion of the back surface 104 of the case 102 is recessed with respect to the raised edge 112.

Rothbaum857, ¶[0141].

80. Although the foregoing discussions were provided with specific reference to Figures 1 and 2 of Rothbaum857, a POSITA would have understood that it was generally applicable to the other embodiments of Rothbaum857, including the embodiment depicted in Figure 57.

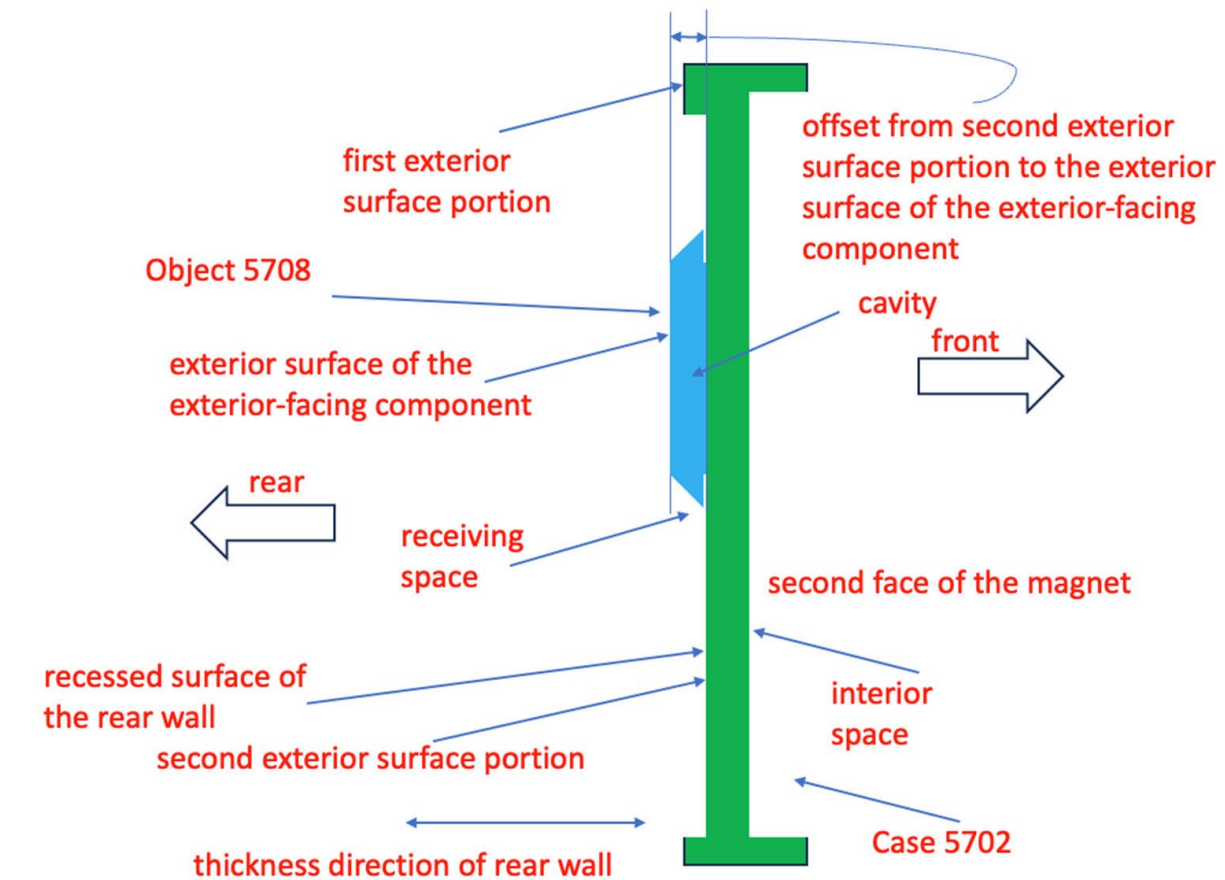
81. A cross-section side view of the case 5702 for the handheld electronic device, illustrates the features of Fig. 57 of Rothbaum857, as shown

below. It shows the rear wall of the case having a recessed surface created by the second exterior surface portion being offset from the first exterior surface portion in the thickness direction (that is, being recessed), as discussed above. The rear wall of the case thus consists of the first exterior surface portion, the second exterior surface portion (recessed surface) and the surface connecting these two portions, as shown.



Cross-section side view of case 5702
(based on Rothbaum857, Fig. 57)

Rothbaum857 uses the space created by recessing the second exterior surface portion as a “receiving space defined by the rear wall of the body portion” to “removably receive” the exterior-facing component.

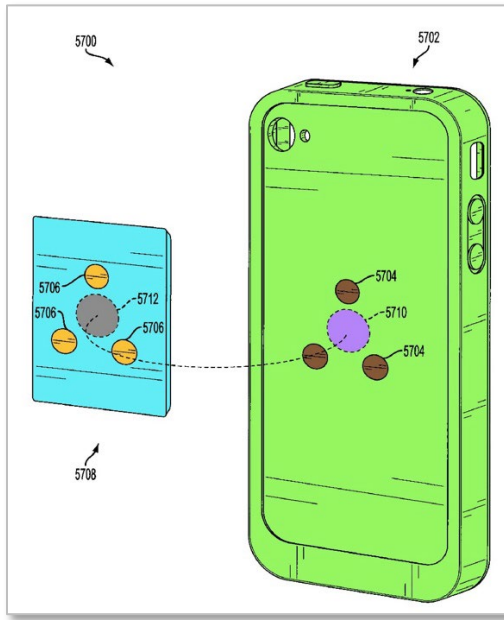


The figure clearly shows “*an exterior-facing component [object 5708] having at least a portion thereof removably received in a receiving space defined by [the first exterior surface portion and the second exterior surface portion of] the rear wall of the body portion.*”

82.

[1i]: “the exterior-facing component having a cavity”

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



EX1004, Fig. 57.

83. Rothbaum857 discloses that object 5708 includes “second *magnetic attachment elements 5706* attached to an object 5708 external to the case.”

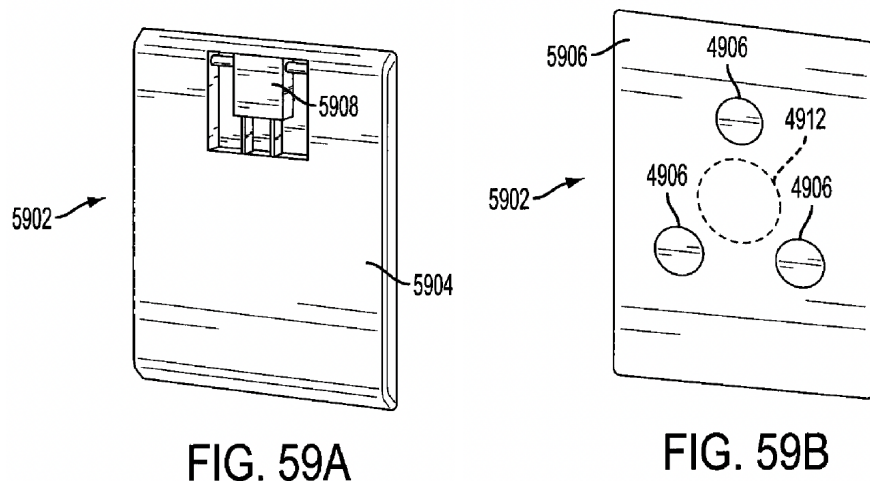
EX1004, ¶[0248]. A POSITA would have understood that “magnetic attachment elements 5706,” are magnets having a thickness. This is because Rothbaum857 discusses that “magnetic attachment elements” may be, for example, “cylindrical magnets,” “disc-shaped magnets,” “cuboid-shaped magnets, and the like.”

EX1004, ¶[0144]; *see also id.*, ¶¶[0257]-[0258] (discussing “magnets” as examples of “magnetic attachment elements” discussed in prior paragraphs).

84. It is evident from the figures and detailed description of Rothbaum857 that object 5708 has cavities, each receiving a magnetic attachment element 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. Because the magnetic attachment elements have a thickness, a POSITA would have understood that object 5708 must include a cavity to receive the magnetic attachment elements 5706. 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.**”

Rothbaum857, ¶[0251] and Figs. 59A–59B, reproduced below.



EX1004, Figs. 59A and 59B.

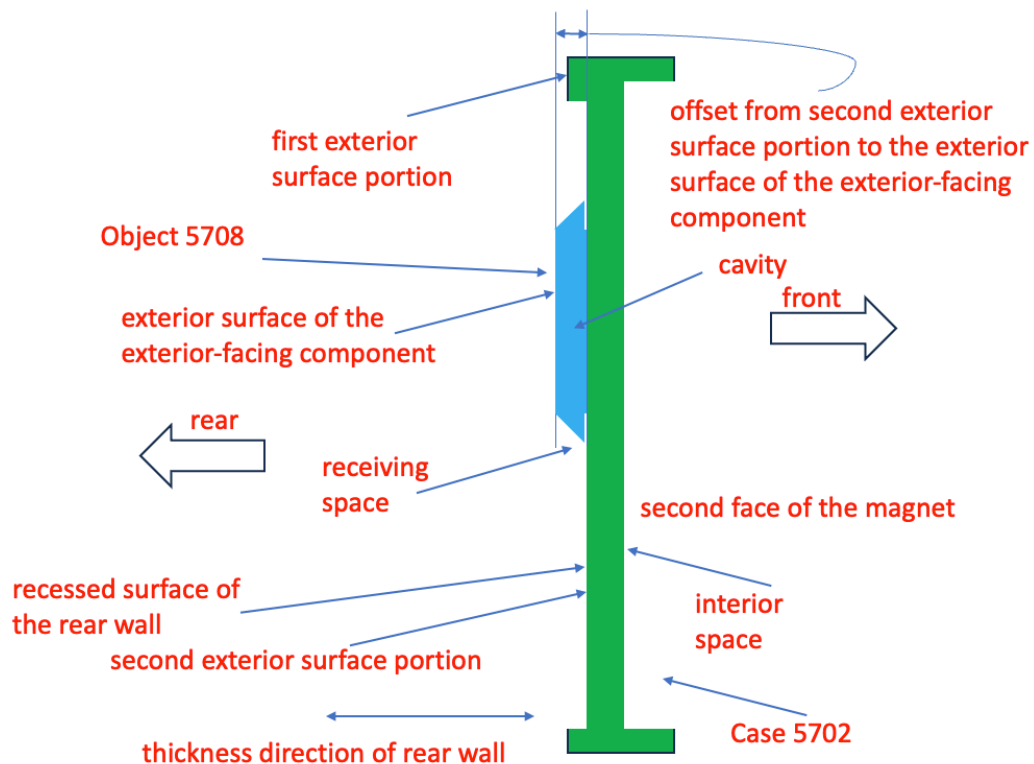
85. A POSITA would have understood from this disclosure, especially when coupled with Figure 57 of Rothbaum857, that the magnetic attachment elements residing “behind the mounting surface” means that they are disposed within the object 5708.

86. Accordingly, it is my opinion that Rothbaum857 discloses “*the exterior facing component [object 5708 in Fig. 57, object 5902 in Figs. 59A and 59B] having a cavity.*”

87.

[1j]: “wherein an exterior surface of the exterior-facing component is offset from at least one of the first exterior surface portion and the second exterior surface portion”

As discussed above, Rothbaum857 discloses a recess (cavity) in the rear wall of the case that results in the first exterior surface portion and the second exterior surface portion. They are illustrated in a cross-section side view of the case 5702 based on Fig. 57 on Rothbaum857. The cross-section side view is reproduced below. The cavity in this view is the space containing the object 5708.



Cross-section side view of case 5702
(based on Rothbaum857, Fig. 57)

88. As shown, because the object 5708 itself has a thickness, and when object 5708 attached to the recessed surface of the rear wall of the case, there is at least an “offset from the second exterior surface portion [recessed surface of the rear wall] to the exterior surface of the exterior-facing component [rear-most surface of the object 5708].”

89.

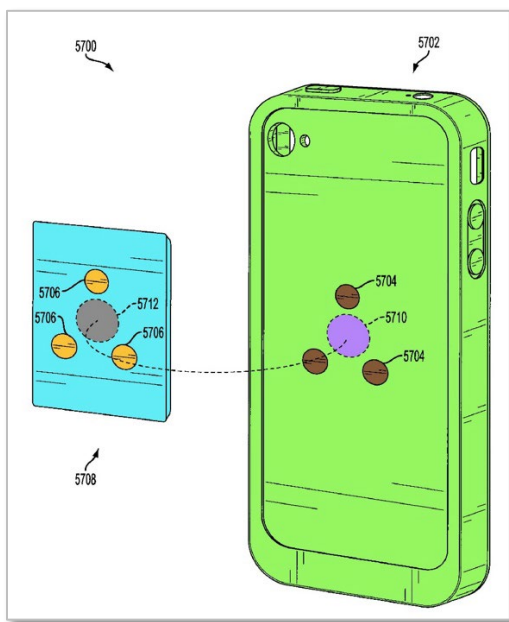
[1k]: “wherein the receiving space is defined at least in part by a recessed surface of the rear wall, and wherein the recessed surface faces away from the interior space of the body portion”

As shown above in the preceding section in the cross-section side view of the case 5702 based on Fig. 57 of Rothbaum857, a recessed surface of the rear wall is coplanar with the second exterior surface portion that defines the recess (the receiving space). In this showing, the interior space of the shell of the case is facing the front of the case, and the recessed surface of the rear wall is facing the rear of the case, facing away from the interior space of the body portion.

90.

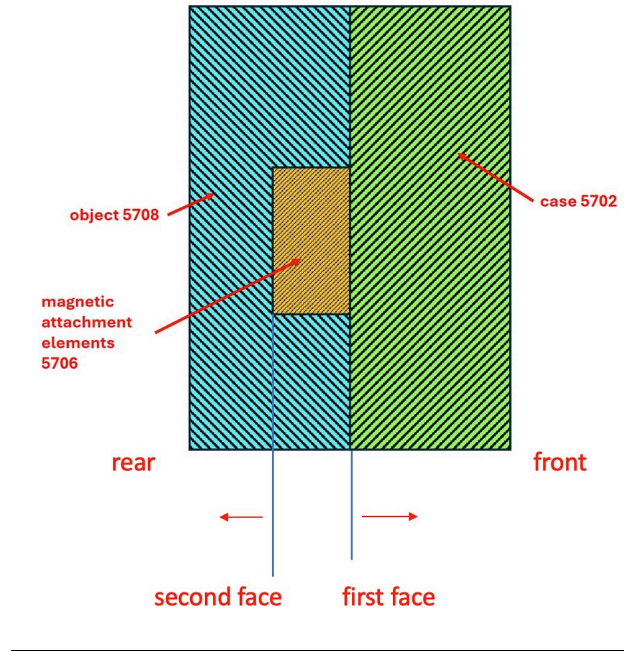
[1L]: “at least one magnet retained within the cavity, the at least one magnet having a first face and a second face, wherein, with the exterior-facing component received in the receiving space, the first face of the at least one magnet faces the interior space of the body portion and the second face of the at least one magnet faces the exterior-facing component”

In view of the discussion above, Rothbaum857 discloses an exterior-facing component (e.g., object 5708 shown in Fig. 57, reproduced below) having a cavity to retain a magnet (e.g., 5706). In other words, “*at least one magnet (magnet 5706) [is] retained within the cavity.*”



EX1004, Fig. 57.

91. Below is an enlarged cross-section view of the case 5702 based on Fig. 57 of Rothbaum857.



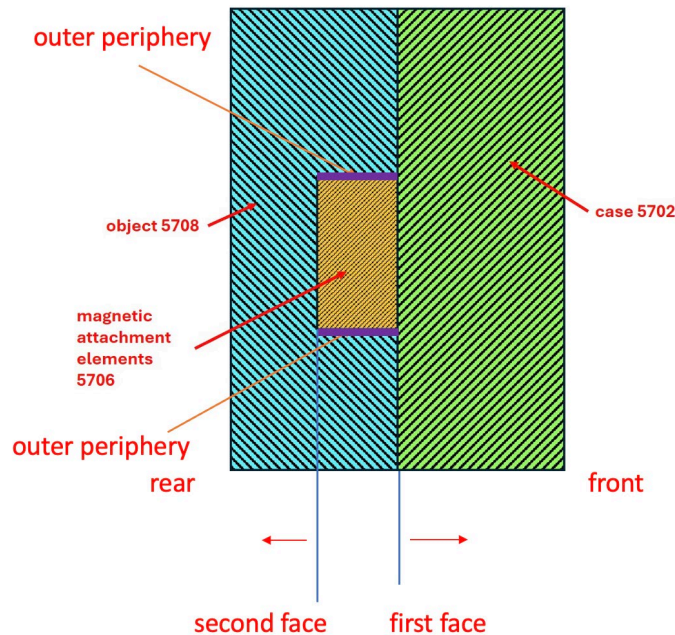
92. When concurrently viewed in combination of the cross-section view of the case 5702 shown above, the presence of the claim limitations is clearly revealed. As shown, when object 5708 is received in the rear wall of case 5702, the first face of the magnet 5706 faces the front (interior space) of the case, and the second face of the magnet faces at least a portion of object 5708 in the rear. Accordingly, it is my opinion that Rothbaum857 discloses “the first face of the at least one magnet [5706] faces the interior space of the body portion and the second face of the at least one magnet faces the exterior-facing component.”

93.

[1m]: “wherein the at least one magnet defines an outer periphery that extends in a thickness direction of the at least one magnet between the first face and the second face”

Rothbaum857 further discloses that the magnet may include various shapes: “[i]n some embodiments, the magnets are solid magnets. In some embodiments, the magnets are selected from the group consisting of donut (ring) magnets, horseshoe-shaped (U-shaped) magnets, cylindrical magnets, disc-shaped magnets, cuboid-shaped magnets, and the like.” EX1004, ¶[0144]. Thus, the magnetic attachment elements 5706 in Rothbaum857 would have a 3D shape (e.g., cylindrical magnets, disc-shaped magnets, cuboid-shaped magnets) that has a thickness between the first face and the second face, which accommodates an outer periphery extending in the thickness direction.

94. Below is a further annotated cross-section view of the case 5702, based on Fig. 57 of Rothbaum857.

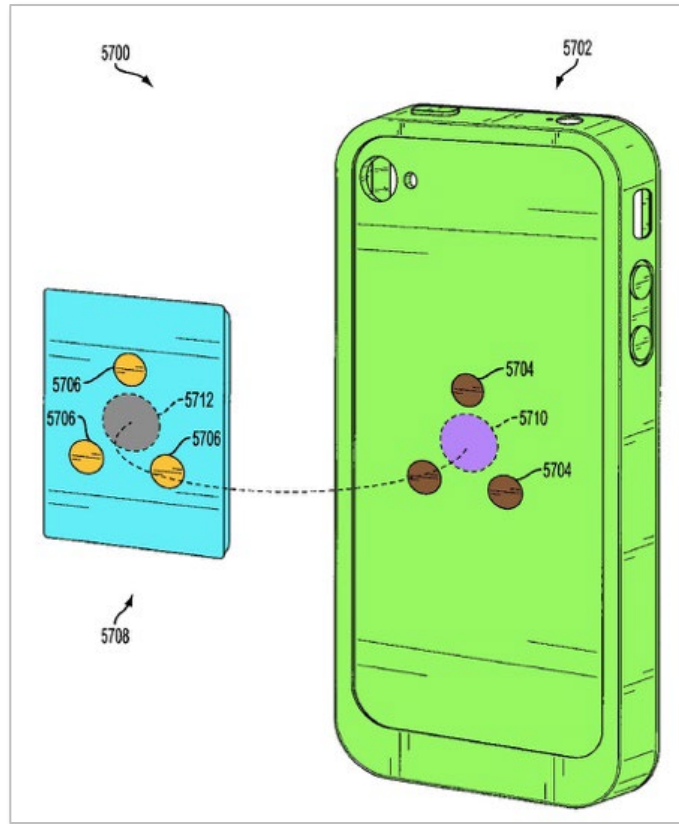


95. It is my opinion that an outer periphery (purple) “extends in a thickness direction of the at least one magnet between the first face and the second face.”

96.

[1n]: “wherein the cavity of the exterior-facing component is formed at least in part by a curved outer wall, and wherein the outer periphery of the at least one magnet is adjacent to at least a portion of the curved outer wall”

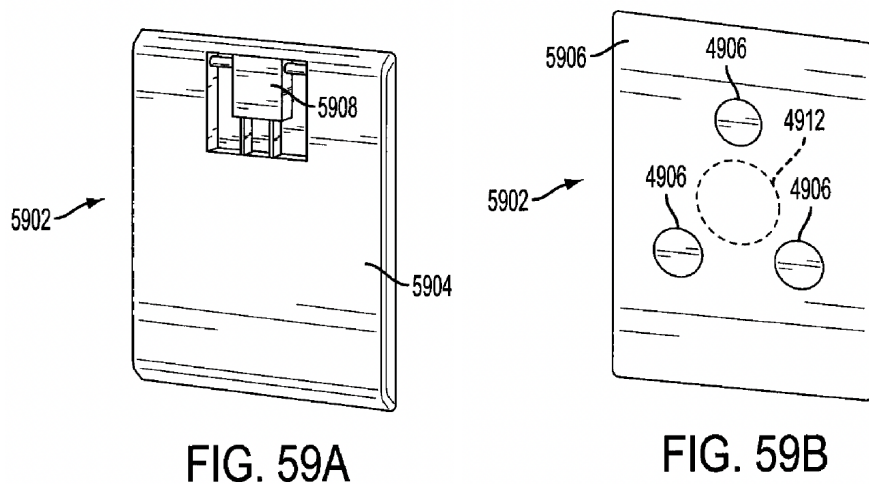
As discussed above, Rothbaum857 discloses that the magnet may include various shapes. Specifically, Figure 57 of Rothbaum857 (reproduced below) shows that at least one magnet (e.g., 5706) has a circular shape. In other words, the outer periphery defined by the magnet would have a curved shape.



EX1004, Fig. 57.

97. Rothbaum857 continues to disclose, with the combination of Figures. 59A and 59B (reproduced below), that “[t]he second set of magnetic attachment elements 5706 and the second electrical interface 5710 (described in detail above) ... are **embedded** in the material of the mounting surface 5906.”

EX1004, ¶[0251].



EX1004, Figs. 59A and 59B.

98. A POSITA would have understood that a magnet being “embedded in the materials” means that the materials forming the mounting surface 5906 (and thus the exterior-facing object 5902, as similar to object 5702 in Fig. 57) would form around the magnet, resulting in: (i) the cavity of the exterior-facing component (object 5902) is formed at least in part by a curved outer wall; and (2) the outer periphery of magnet is adjacent to at least a portion of the curved outer wall, thereby the magnet is embedded in the material of the surface 5906.

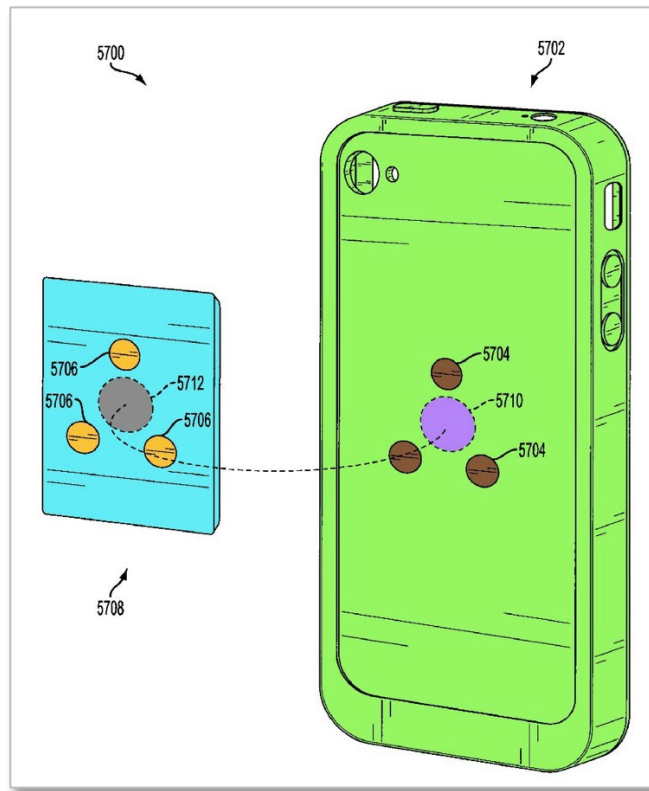
99.

[10]: “wherein with the exterior-facing component received in the receiving space, the cavity faces the interior space of the body portion”

A POSITA would have aligned the direction of facing to the opening of the cavity.

100. Rothbaum857 discloses an open cavity with the direction of the opening facing the interior space of the body portion. As shown in FIG. 57 (reproduced below), Rothbaum857 discloses that the magnets 5706 are exposed from the back view of the object 5708. This is also consistent with the specification of Rothbaum857: “[i]n some embodiments, the sets of magnetic attachment elements 5704, 5706 are configured to correspond to each other, so that when the first set of magnetic attachment elements 5704 is **magnetically attached** to the second set of magnetic attachment elements 5706, the first and second electrical interfaces 5710, 5712 are brought into electrical and/or inductive communication.” EX. 1004, ¶[0255].

101. Because the magnetic attachment elements 5706 are to correspond with magnetic attachment elements 5704 on the rear wall of the case, a POSITA would have understood that there is no intervening layers between magnetic elements 5706 and magnetic elements 5704, leaving the cavity open.

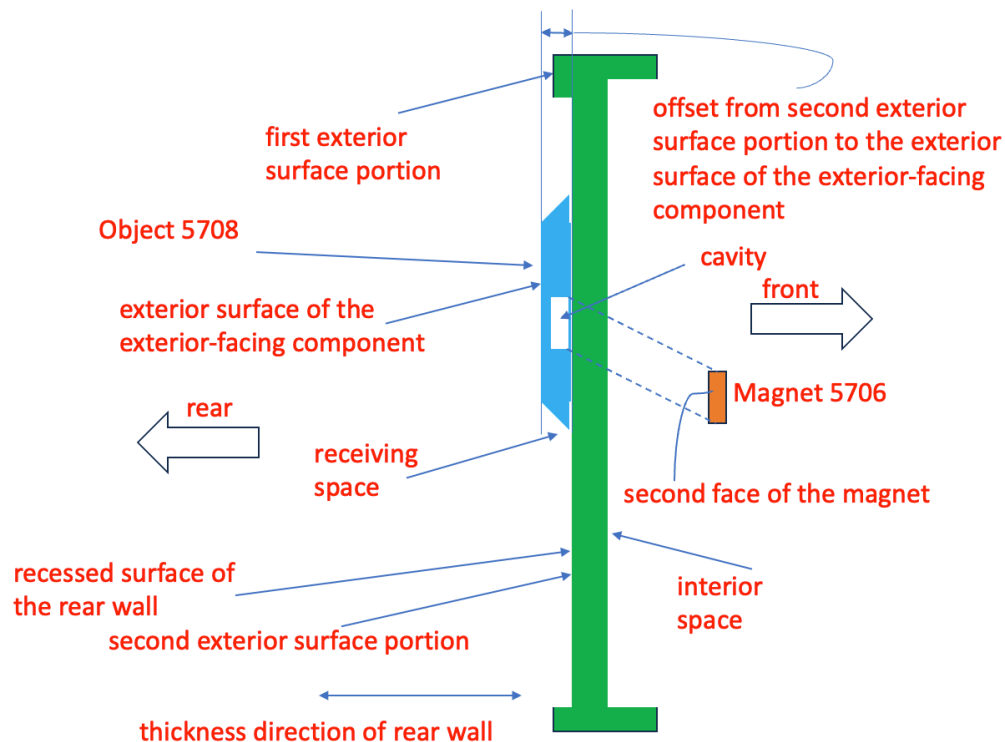


EX1004, Fig. 57.

102. When the object 5708 (blue) is attached to the case 5702, the cavity 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 cavity of object 5708 (blue) for retaining the magnetic elements 5706 (orange) faces the back (or rear wall) of case 5702 (green). *Id.*

103. The cavity is further illustrated in the cross-section side view of the case 5702 based on Fig. 57 of Rothbaum857, as annotated below.

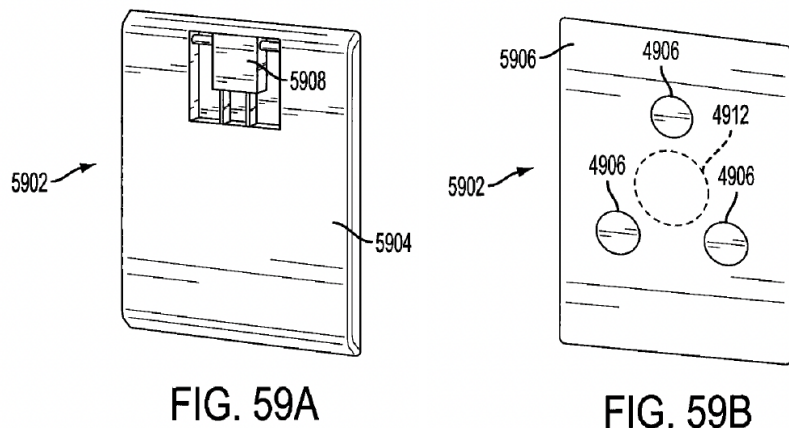


104. As clearly shown, when “the exterior-facing component [object 5708] received in the receiving space, the cavity faces the interior space of the body portion (shell of the case 5702).”

105.

[1p]: “wherein the exterior-facing component covers the second face of the at least one magnet”

Rothbaum857 discloses: “[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]. FIGS. 59A–59B of Rothbaum857 (reproduced below) further show a back and front side of the object 5902. Comparing FIG. 59B (in which the magnet 4906 is shown) to FIG. 59A (in which the magnet 4906² is not shown), a POSITA would have understood that the magnet 4906 is covered by object 5902 at least partially.

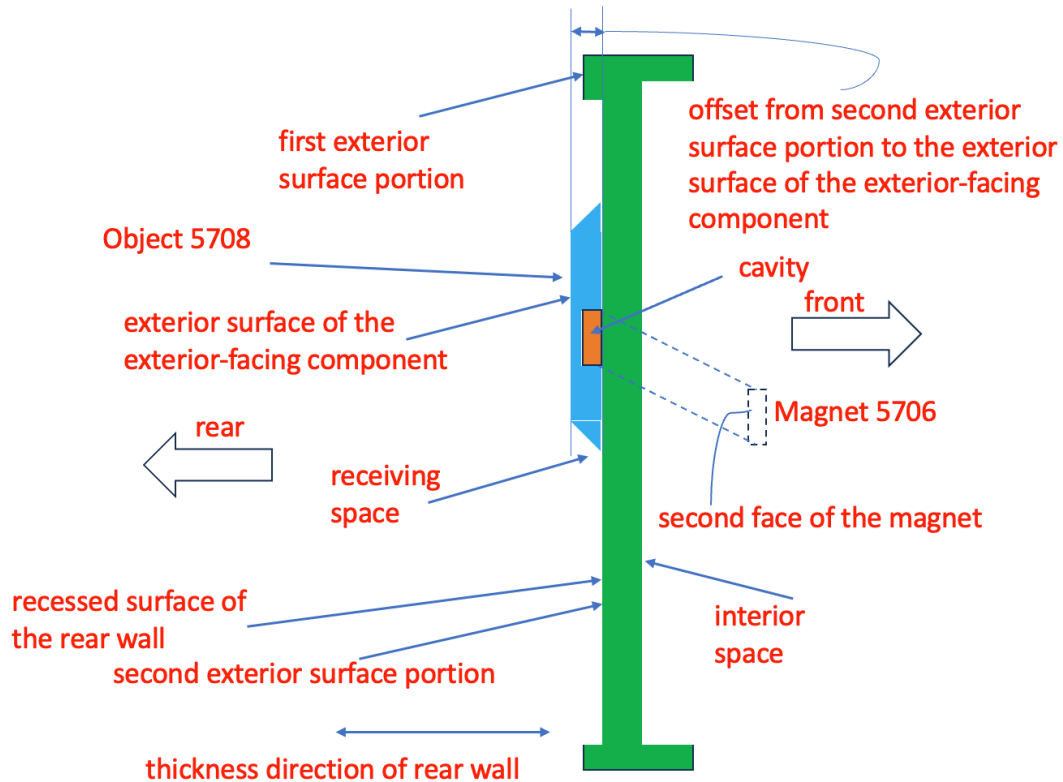


EX1004, Figs. 59A and 59B.

106. The cross-section side view of the case 5702 based on Fig. 57 (shown below) of Rothbaum857 shows the magnet (brown) retained in the cavity,

² Reference numeral 4906 is intended to be 5706. See paragraphs [0251]-[0252] making references to FIGS. 59.

and thus, “the exterior-facing component [object 5708] covers the second face of of the at least one magnet [5706].”



107.

[1q]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure”

Rothbaum857 discloses attaching the case to a variety of structures, such as a vehicle accessory shown in FIGS. 62A–62B (reproduced below). In FIGS. 62A–62B, Rothbaum857 discloses an accessory that is a charger, where “[s]imilar to the charger discussed in relation to FIG. 59, the charger 6202 can be designed for use in conjunction with the case 5702.” EX1004, ¶[0263].

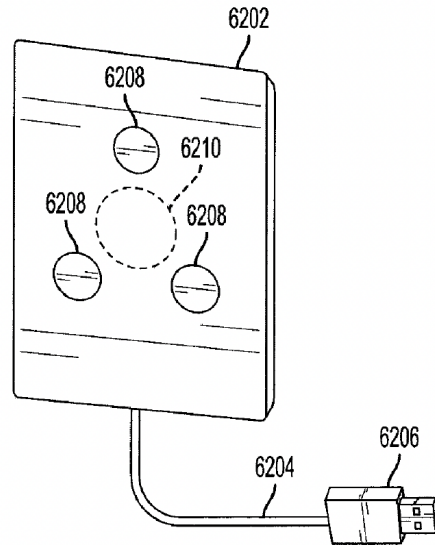


FIG. 62A

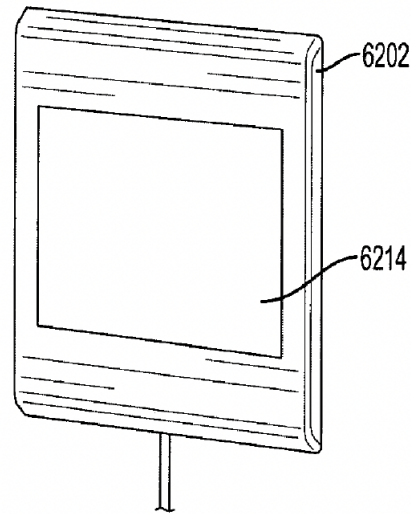


FIG. 62B

EX1004, Figs. 62A and 62B.

108. As shown, the charger 6202 is attached to the case using the magnetic elements 6208, where “a mobile electronic device case that has a magnetic material component (such as a metal back) can be attached to the charger 6202 by means of a magnetic attraction between the second set of magnetic attachment elements 6208 (or an alternative magnetic attachment mechanism) and the magnetic material component.” EX1004, ¶[0265].

109. Rothbaum857 further discloses that “the charger 6202 includes an additional attachment mechanism 6214 for connecting the charger 6202 to another surface. For instance, attachment mechanism 6214 can attach the charger 6202 to the side of a computer monitor. The attachment mechanism 6214 can be any of a variety of attachment mechanisms, including snaps, hook and loop mechanisms, Velcro, adhesives, magnets and/or magnetic materials, suction

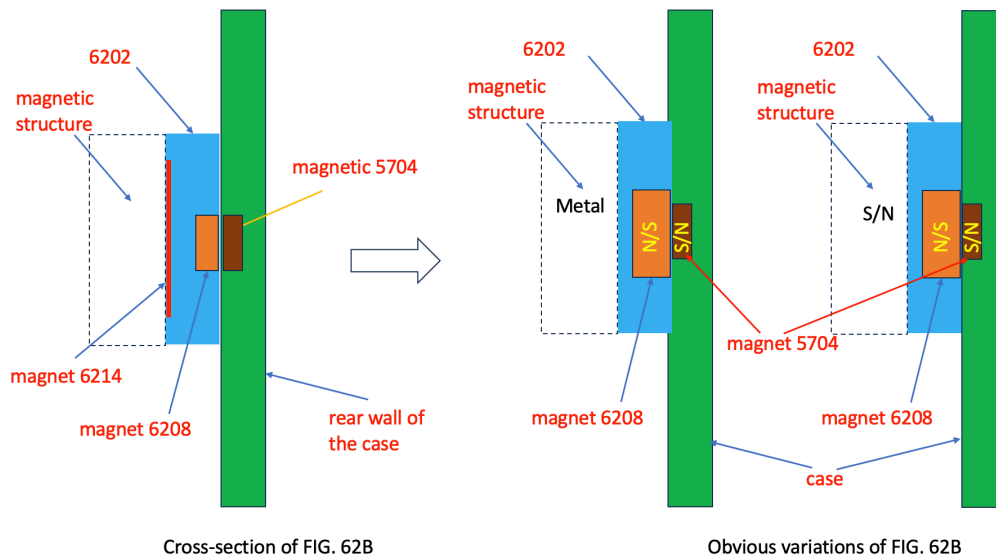
devices, van der Waals force attachment mechanisms, buckles, sleeves that insert into slots, pegs that are inserted into holes, hinges, and/or snaps.” EX1004, ¶[0264].

110. In the example above, attachment 6214 can be a magnet configured to attach to another surface. A POSITA would have understood that when the attachment 6214 is a magnet, the other surface can be a magnetic structure, such as a metal rack. In other words, Rothbaum857 discloses attaching a handheld electronic device case to a magnetic structure via attachments 6214 and 6208.

111. In FIGs. 62A and 62B of Rothbaum857 reproduced above, magnets 6208 of the exterior facing member 6202 function to attach one side of the exterior facing member to the case of the mobile device and the attachment mechanism 6214 (*e.g.*, another magnet) functions to attach the other side of the exterior facing member to an external magnetic surface. Thus, magnets 6208 function to, at least in part, “*attach the case to a magnetic structure.*” Although attachment 6214 is shown separate from attachment 6208, because attachments 6214 and 6208 can both be a magnet, it would have been obvious to combine attachments 6214 and 6208, such as replacing attachment 6214 with a stronger magnet 6208 that can function to both attach one side of the exterior facing member to the rear wall of the case (using the attachment method shown in FIG. 57) and also attach the other side of the exterior facing member to an external

magnetic surface (using the attachment method shown in FIG. 62B). A POSITA would have been motivated to make this modification to form a simpler structure, requiring less magnetic material.

112. There are at least two ways of combining magnetic elements 6214 and 6208 as shown in the figure below. For example, a POSITA would have combined the attachments 6214 and 6208 by using only magnet 6208 (in the exterior-facing component) and 5704 (in the rear wall) that are of opposite polarity with each other (e.g., N or S), where the magnetic structure attachable to magnetic 6208 can be a metal. In another variation, the magnetic structure can have opposite polarity of that of 6208.



Modification of FIG. 62B

113. In both modifications, the magnet 6208 can attach the mountable case to a magnetic structure, and therefore, the claim limitations “wherein the at

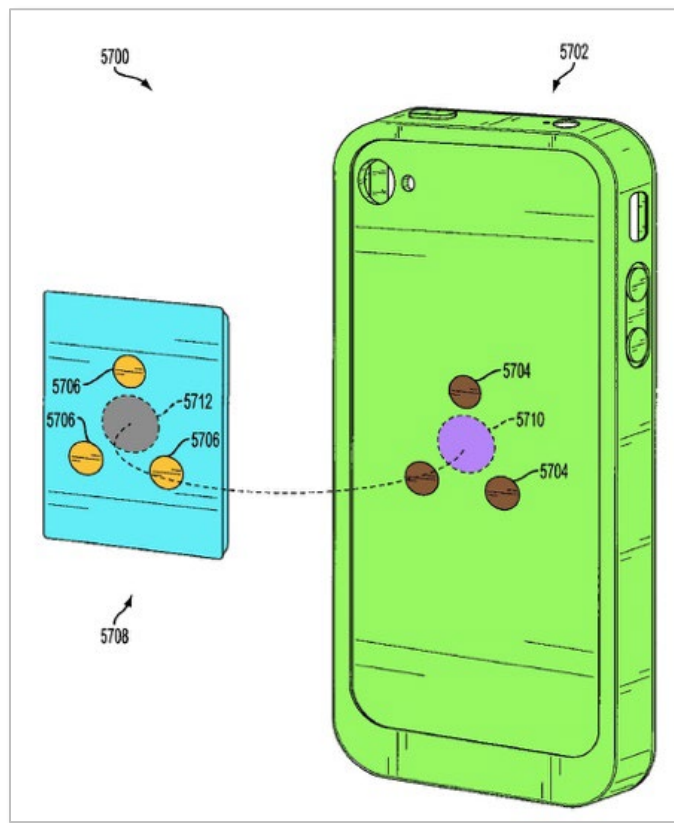
least one magnet is configured to attach the mountable case to a magnetic structure” would have been obvious in view of Rothbaum857.

114.

2. Claim 2

[2]: “wherein the outer periphery of the at least one magnet defines a shape that is different than a shape defined by an outer periphery of the exterior-facing component.”

To the extent the term “outer periphery” of the at least one magnet defines a circular shape as discussed above (see Section n with respect to claim 1, from which claim 2 depends), Rothbaum857 discloses this limitation.



EX1004, FIG. 57.

115. FIG. 57 of Rothbaum857 above discloses that the outer periphery of the at least one magnet (e.g., 5706) is a circular shape, and it is different from a shape defined by the outer periphery of the exterior-facing component (e.g., attachment 5708), which is a rectangular shape.

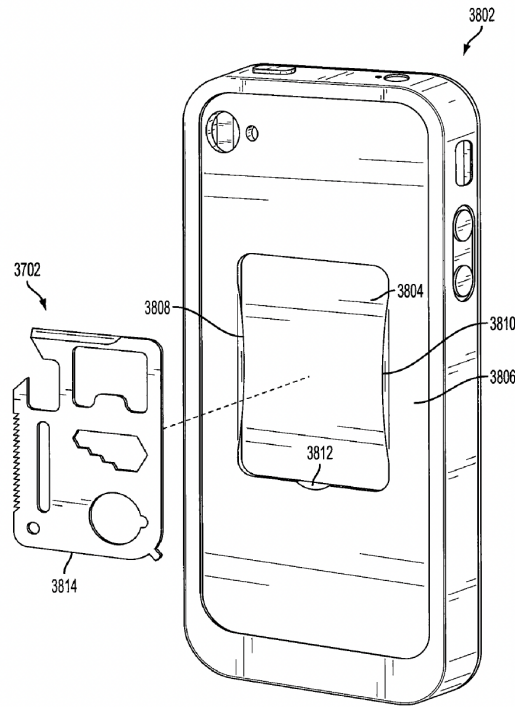
116.

3. Claim 3

[3]: “wherein the exterior-facing component and the receiving space have complementary shapes.”

117. Rothbaum857 discloses that: “[t]he case has a back, where the back has a recessed portion defined by a shoulder. The recessed portion is **sized** and configured to receive an accessory therein.” EX1004, ¶[0013].

118. Fig. 38A of Rothbaum857 (reproduced below) further provides an example of a multi-tool accessory removably attached to the back of the case.



EX1004, FIG. 38A.

119. Rothbaum857 also describes that: “[a]s shown, the mobile electronic device case 3802 has a recess 3804 on the back of the case 3802 that is configured to receive the multi-tool 3702 therein. The recess is configured to be **substantially the same size and shape** as the periphery of the multi-tool.”

EX1004, ¶[0211].

120. Rothbaum857 continues to disclose that: “[f]or instance, in some embodiments, the multi-tool 3702 can be held in the recess 3804 by the attachment mechanisms described above with reference to FIG. 1. For example, in some embodiments, the multi-tool 3702 and the case 3802 include a magnetic attachment mechanism as described above with reference to FIG. 1. Thus, when

the multi-tool 3702 is inserted into the recess 3804 of the case, the multi-tool is held in place by the magnetic attachment mechanisms.” EX1004, ¶[0215].

121. Thus, it is my opinion that the multi-tool 3702 (the exterior-facing component) and the recess 3804 have complementary shapes in order for the multi-tool 3702 to be inserted into the recess 3804 of the case. A POSITA would have known of different ways to attach an exterior facing member to the mobile phone case (e.g., attaching multi-tool component 3702 to a recess having a complementary shape in a case as shown in FIG. 38A, magnetically attaching component 5708 to a case as shown in FIG. 57, etc.). Thus, although the discussions with respect to claim 1, from which claim 3 depends, are made with examples in embodiments of Fig. 57 in Rothbaum857, a POSITA would have understood that the features in Fig. 38A in Rothbaum857 can also be applied to the embodiments in Fig. 57. In other words, a POSITA would have understood that the features disclosed in Figs. 38A and 57 of Rothbaum857 could have been combined to render claim 3 obvious.

122. Indeed, following the descriptions of Fig. 38A, Rothbaum857 describes embodiments of a case 5702 and further describes that: “[d]epending on certain specific design choices, it is possible to use different arrangements of magnets to ensure that the first and second electrical interfaces are correctly aligned with respect to one another when the mobile electronic device case is

attached to the external object. ... Also, some embodiments use other alignment mechanisms in addition to or instead of specific orientations of magnetic attachment elements. These could include combinations of recesses and protrusions on the case and the accessory, or a recess in the back of the case, both of which are described in more detail above,” EX1004, ¶[0253] (suggesting that the features in Fig. 38A can also be applied to embodiments in Fig. 57).

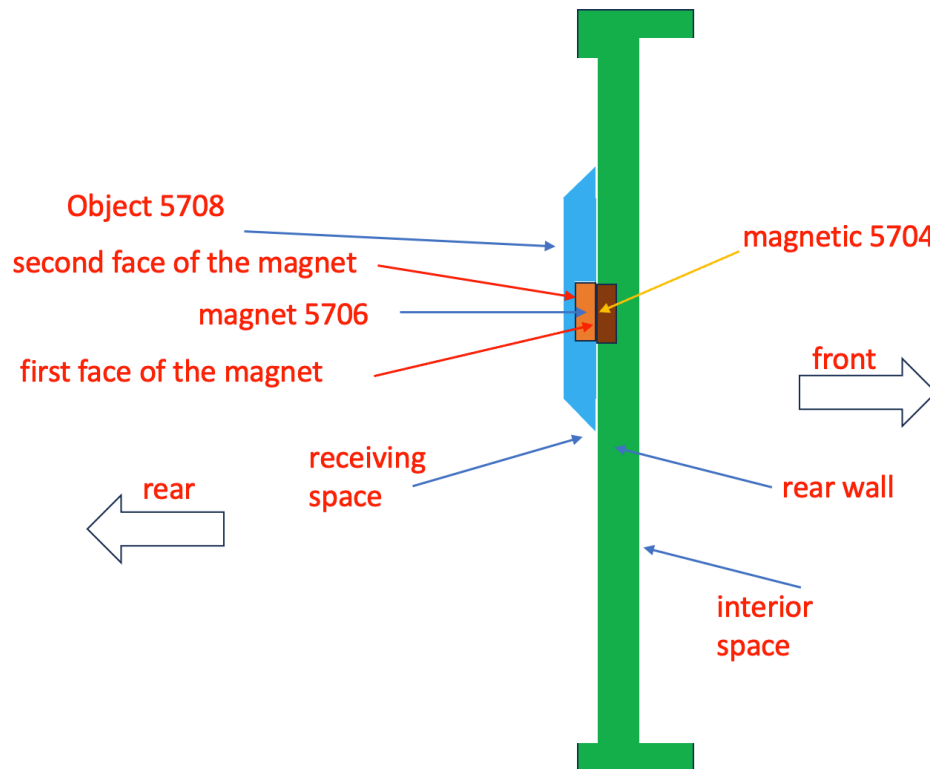
123. Accordingly, it is my opinion that Rothbaum857 discloses “wherein the exterior-facing component [multi-tool 3702] and the receiving space [recess 3804] have complementary shapes.”

124.

4. Claim 4

[5]: “wherein at least one intervening layer is disposed between the first face of the at least one magnet and the interior space of the body portion.”

See my discussion of limitation [1p]. In the annotated cross-section view (below) of the case based on Fig. 57 of Rothbaum857, the structure between the magnet 5706 and the interior space includes at least one intervening layer, that is at least a portion of the rear wall. More particularly, the rear wall of the case is positioned between the magnet 5706 and the interior space of the body portion of the case, and thus, is an intervening layer.



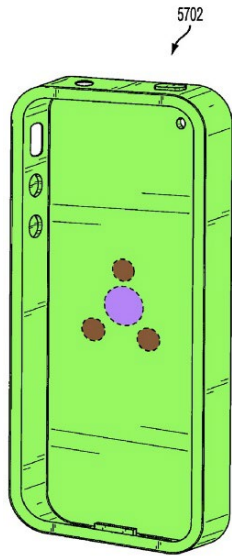
125. Accordingly, it is my opinion that Rothbaum857 discloses “at least one intervening layer [rear wall] is disposed between the first face of the at least one magnet [5706] and the interior space [space for retaining the handheld electronic device] of the body portion.”

126.

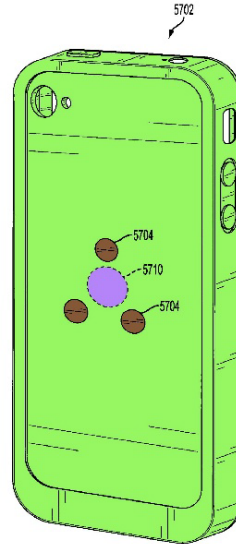
5. Claim 5

[5]: “wherein the rear wall and the perimeter wall are integrally formed as 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)

127. As shown above, Rothbaum857 uses the single reference number “5702” to refer to the structure in its entirety. In view of this disclosure, a POSITA would have understood that case 5702 is a single (i.e., “unitary”) structure.

128. 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, molding and assembly costs may be reduced and structural reliability are improved, relative to the alternative of providing a case comprising multiple, discrete pieces. Indeed, mobile electronic device cases having a unitary structure were well-known to persons of ordinary skill in the art at the time of the invention of the ’835 patent.

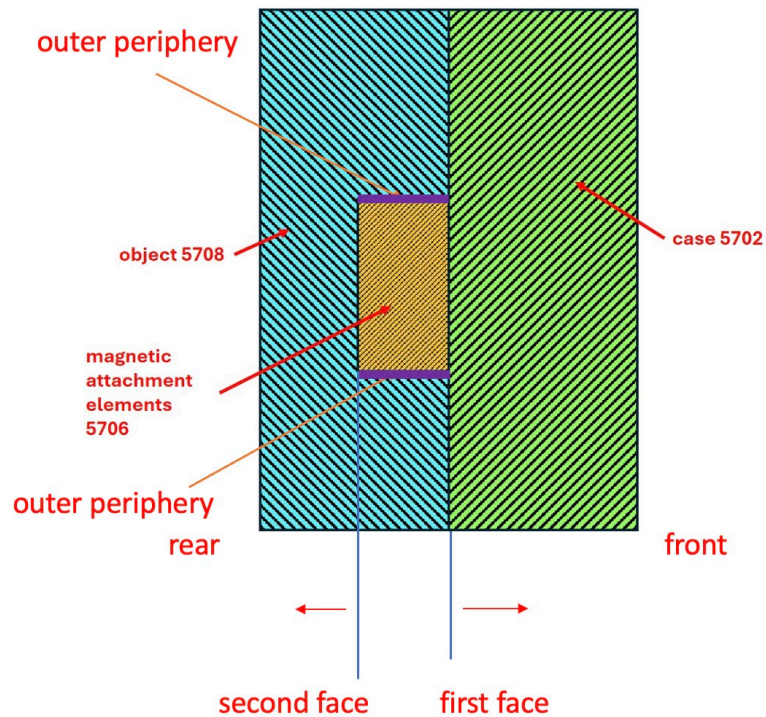
129. Accordingly, it is my opinion that Rothbaum857 discloses or renders obvious “*wherein the rear wall and the perimeter wall are integrally formed as a unitary structure.*”

130.

6. Claim 6

[6]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

It is my opinion that this limitation would have been obvious in view of Rothbaum857. As discussed above with respect to claim 1, and as illustrated in the drawing below, the magnet is enclosed by the exterior-facing component, where the second face of the magnet is in contact with the exterior-facing component.



131. A POSITA would have understood that it would be obvious to make the magnet be in direct contact with the surface of the exterior-facing component without an intervening layer, as no portion of Rothbaum857 requires an intervening layer between the second face of the magnet (e.g., 5706) and the exterior-facing component (e.g., object 5708). For example, the magnet 5706 may be embedded to be in direct contact with the surface of the object 5708, e.g., via glue on the perimeter wall of the magnet 5706; or interlocking the perimeter wall of the magnet 5706 with the side wall of the cavity, as commonly practiced in the industry.

132.

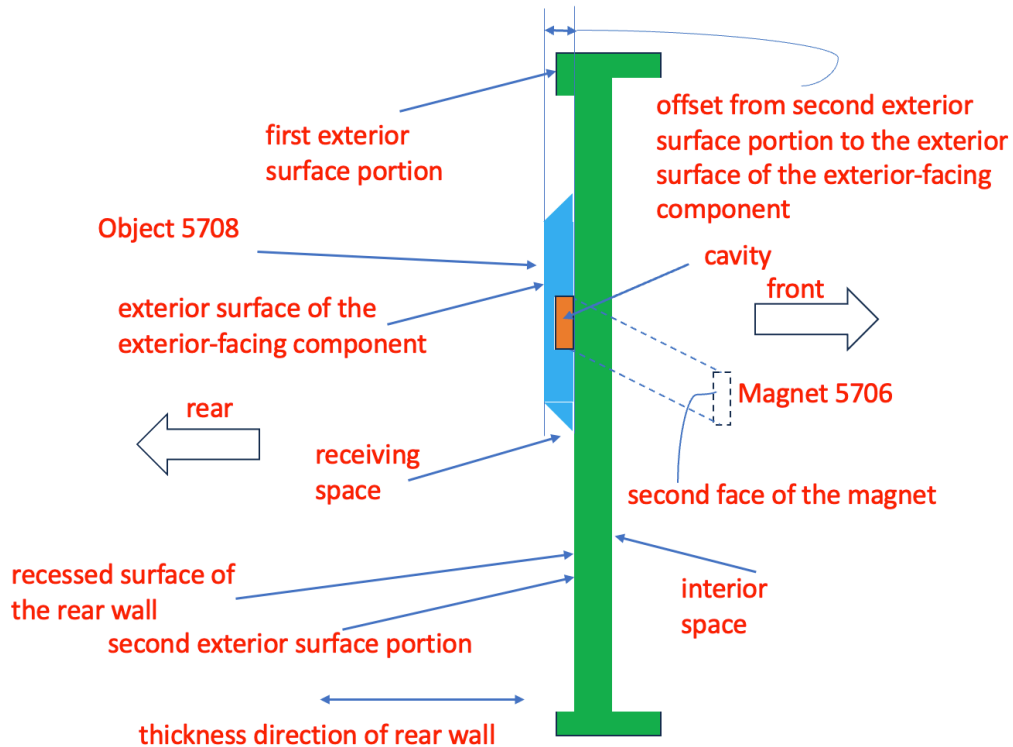
7. Independent Claim 7

All of the limitations in claim 7 substantially correspond to limitations in claim 1, as shown in the table below listing only the differences.

Claim 7	Corresponding limitations in claim 1
[7pre]	[1pre]
[7b]	[1b]
[7c]	[1c]
[7d]	[1e]
[7e]	[1f]
[7f]	[1h]
[7g]	[1i]
[7h]	[1k]
[7i]	[1L]
[7j]	[1m]
[7k]	[1n]
[7L]	[1o]
[7m]: “wherein the exterior-facing component extends along the second face of the at least one magnet;”	[1p]: “wherein the exterior-facing component covers the second face of the at least one magnet;”
[7n]	[1q]

As such, for the reasons set forth above regarding the unpatentability of claim 1, it is my opinion that claim 7 is likewise unpatentable.

133. Below is a cross-section side view of case 5702 based on Rothbaum857, Fig. 57.



134. As shown, because the object 5708 covers the second face of the magnet 5706, it extends along the entire second face of the magnet 5706.

135.

8. Claim 8

[8]: “wherein the outer periphery of the at least one magnet defines a shape that is different than a shape defined by an outer periphery of the exterior-facing component.”

See discussion for claim 2 above.

136.

9. Claim 9

[9]: “wherein the exterior-facing component and the receiving space have complementary shapes.”

See discussion of claim 3 above.

137.

10. Claim 10

[10]: “wherein at least one intervening layer is disposed between the first face of the at least one magnet and the interior space of the body portion.”

See discussion of claim 4 above.

138.

11. Claim 11

[11]: “wherein the rear wall and the perimeter wall are integrally formed as a unitary structure.”

See discussion of claim 5 above.

139.

12. Claim 12

[12]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

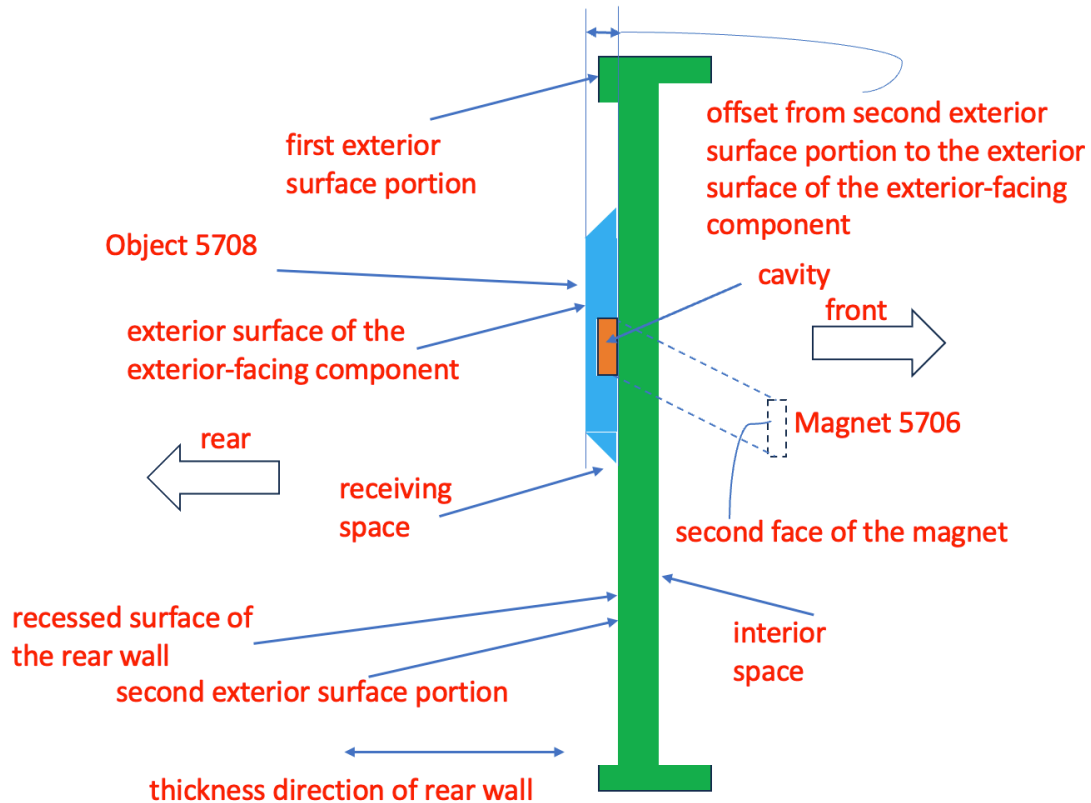
See discussion of claim 6 above.

140.

13. Claim 13

[13]: “wherein an exterior surface of the exterior-facing component and at least a portion of an exterior surface of the rear wall are offset from one another in a thickness direction of the rear wall.”

See discussion for limitation [1p] above. Also, below is a cross-section side view of case 5702 based on Rothbaum857, Fig. 57.



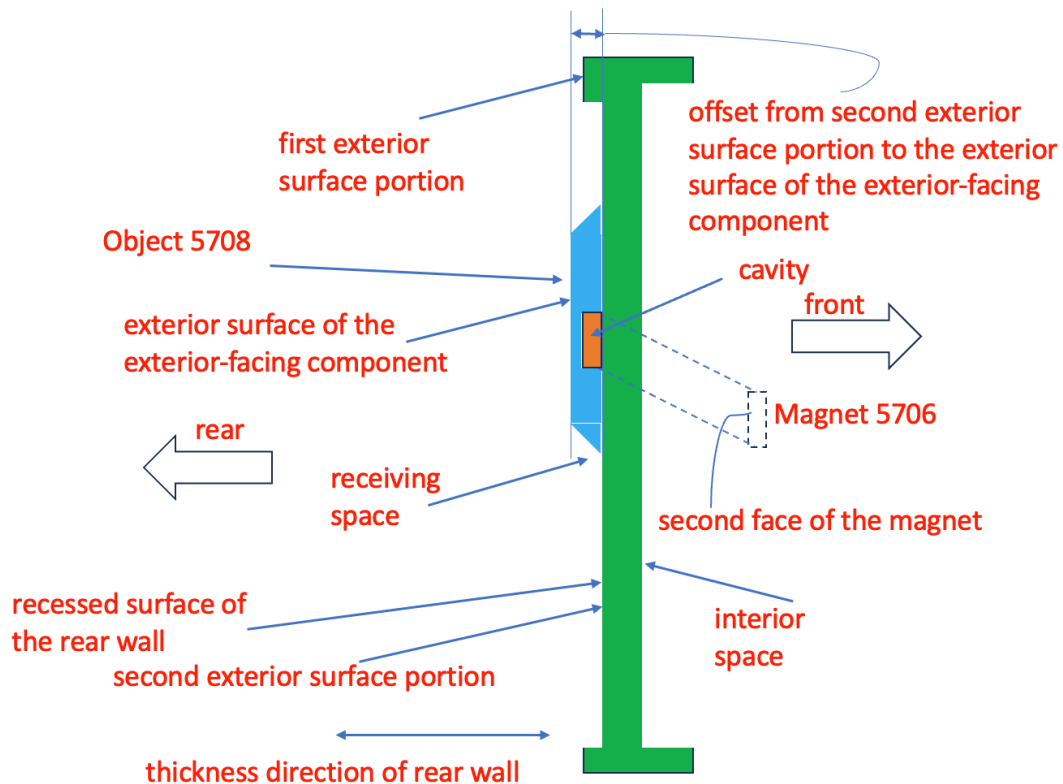
141. As shown, it is my opinion that Rothbaum857 discloses “an exterior surface [the face that is furthest away from the rear wall of the case] of the exterior-facing component [object 5708] and at least a portion of an exterior surface [recessed surface] of the rear wall are offset from one another in a thickness direction of the rear wall.” This offset is shown as the thickness of object 5708.

142.

14. Claim 14

[14]: “wherein the exterior-facing component covers an entirety of the second face of the at least one magnet.”

See discussion for limitation [1p] above. As shown by the illustration below, the object 5708 “covers an **entirety** of the second face of the [magnet 5706].”



143.

15. Claim 15

[15]: “wherein an exterior surface of the rear wall comprises a first exterior surface portion and a second exterior surface portion offset from one another in a thickness direction of the rear wall.”

See discussion of limitation[1g] above.

144.

16. Claim 16

[16]: “a beveled surface that defines a transition between an exterior surface of the perimeter wall and an exterior surface of the rear wall.”

See discussion of limitation 1d above.

145.

17. Independent Claim 17

All of the limitations in claim 17 substantially correspond to limitations in independent claim 7, as shown in the table below.

Claim 17	Corresponding limitations in claim 7
[17pre]	[7pre]
[17b]	[7b]
[17c]	[7c]
[17d]	[7d]
[17e]	[7e]
[17f]	[7f]
[17g]: “the exterior-facing component having a recess”	[7g]: “the exterior-facing component having a cavity;”
[17h]	[7i]
[17i]	[7j]
[17j]	[7L]
[17k]	[7m]

As such, for the reasons set forth above regarding the unpatentability of claim 7, claim 17 is likewise unpatentable. Also, a POSITA would have understood that the term “recess” can be interpreted as “cavity” in its ordinary and customary meaning. Indeed, the ‘835 patent does not distinguish between a recess and a cavity. In particular, the specification of the ‘835 patent uses only the term “indentation” for the relevant feature being disclosed, and does not even recite “cavity” or “recess.” See EX1001, Fig. 8A (reference numeral 192), and 10:23–30.

146.

18. Claim 18

[18]: “wherein an exterior surface of the exterior-facing component and at least a portion of an exterior surface of the rear wall are offset from one another in a thickness direction of the rear wall.”

See discussion of claim 13 above.

147.

19. Claim 19

[19]: “wherein the recess of the exterior-facing component is formed at least in part by a curved outer wall.”

See discussion of limitation [1n] above.

148.

20. Claim 20

[20]: “The mountable case for a handheld electronic device of claim 19, wherein the outer periphery of the at least one magnet is adjacent to at least a portion of the curved outer wall.”

See discussion of limitation [1n] above.

149.

21. Claim 21

[21]: “wherein the outer periphery of the at least one magnet defines a shape that is different than a shape defined by an outer periphery of the exterior-facing component.”

See discussion of claim 2 above.

150.

22. Claim 22

[22]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure.”

See discussion of limitation [1q] above.

151.

23. Claim 23

[23]: “wherein the rear wall and the perimeter wall are integrally formed as a unitary structure.”

See discussion of claim 5 above.

152.

24. Claim 24

[24]: “wherein an exterior surface of the rear wall comprises a first exterior surface portion and a second exterior surface portion offset from one another in a thickness direction of the rear wall.”

See discussion of limitation [1g] above.

153.

25. Independent Claim 25

Limitations in independent claim 25 substantially correspond to limitations in independent claim 1, as shown in the table below.

Claim 25	Corresponding limitations in claim 1
[25pre]	[1pre]
[25b]	[1b]
[25c]: “the body portion comprising: a rear wall defining an interior surface, an exterior surface, an interior plane at an interior-most surface portion of the interior surface of the rear wall, and an exterior plane at an exterior-most surface portion of the exterior surface of the rear wall ; a perimeter wall”	[1c]: the body portion comprising: a rear wall; a perimeter wall;
[25d]: “wherein the rear wall is configured to be aligned with at least a portion of a rear surface of the handheld electronic device, wherein the perimeter wall extends from a perimeter of the rear wall and is positioned proximate to at least portions of side surfaces of the handheld electronic device”	[1e]: “wherein the rear wall is configured to be aligned with at least a portion of a rear surface of the handheld electronic device, and wherein the perimeter wall extends from an outer perimeter of the rear wall and is positioned proximate to at least portions of side surfaces of the handheld electronic device, and”
[25e]	[1f]
[25f]	[1L]+[1m]
[25g]	[1h]
[25h]: “wherein, with the exterior-facing component received in the receiving space, the at least one magnet is positioned between the interior plane and the exterior plane”	See below

[25i]	[1L]
[25j]: “ wherein with the exterior-facing component received in the receiving space , the exterior-facing component extends along the second face of the at least one magnet”	[1p]: “wherein the exterior-facing component covers the second face of the at least one magnet;”

Because the limitations in claim 25 substantially correspond to the limitations in claim 1, my arguments for claim 1 above also apply to claim 25. It is my opinion that the limitations that differ from claim 1 would also have been obvious as set forth below.

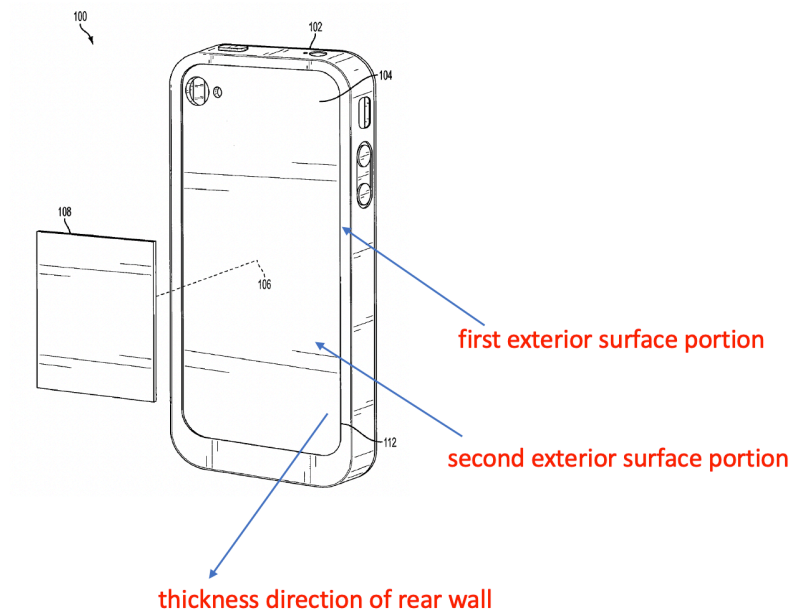
154.

[25c]

[25c] recites additional limitations of the rear wall: “*a rear wall defining an interior surface, an exterior surface, an interior plane at an interior-most surface portion of the interior surface of the rear wall, and an exterior plane at an exterior-most surface portion of the exterior surface of the rear wall.*”

155. Fig. 1A of Rothbaum857 discloses a raised edge that forms a recess in the rear wall of the case, dividing into two surface portions. For example, Rothbaum857 discloses “[i]n 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. As shown in FIG. 1,

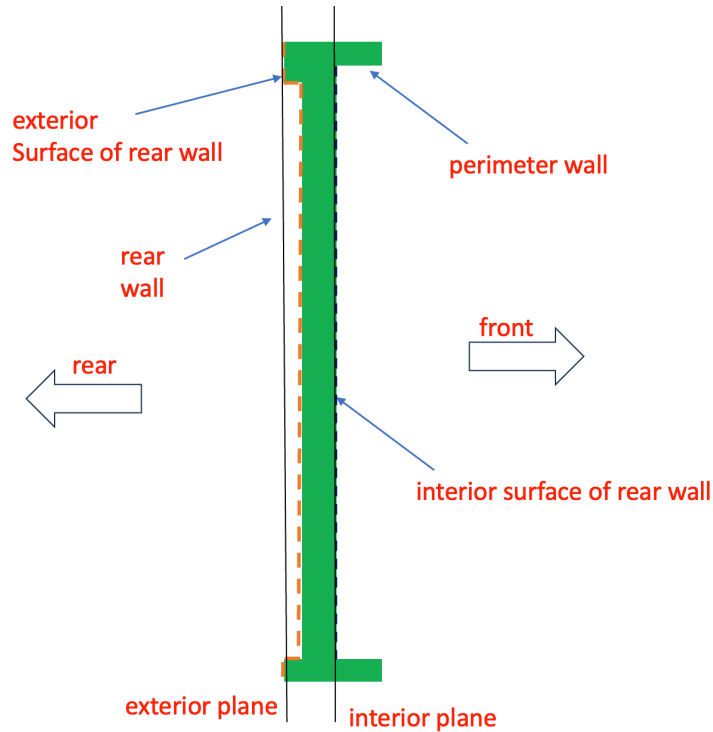
the main portion of the back surface 104 of the case 102 is recessed with respect to the raised edge 112.” EX1004, ¶[0141].



EX1004, Fig. 1A.

156. Although the raised edge 112 and the recess in the back of the case are described with specific reference to Figures 1–2 of Rothbaum857, a POSITA would have understood that it was generally applicable to the other embodiments of Rothbaum857, including the embodiment depicted in Figure 57.

157. The various surfaces of the rear wall in the claim in a cross-section view of the case disclosed in Rothbaum857 (Fig. 57), are shown below.



158. As shown, it is my opinion that Rothbaum857 discloses that the “rear wall defin[es] an interior surface [facing front]...an exterior surface [facing rear]...an interior plane...and an exterior plane.”

159.

[25d]

[25d] recites “perimeter” whereas [1e] recites “outer perimeter.” Since “outer perimeter” is also a “perimeter,” Rothbaum857 discloses [25d] for the same reasons that I explained for limitation [1e] above.

160.

[25h]

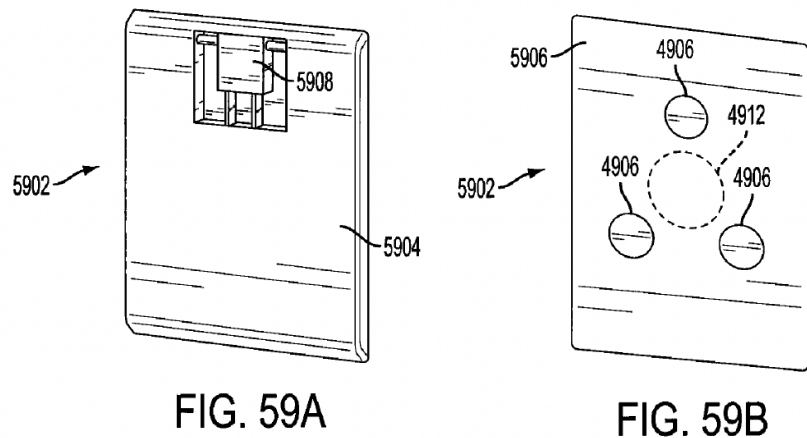
[25h] recites “wherein, with the exterior-facing component received in the receiving space, the at least one magnet is positioned between the interior plane and the exterior plane.”

161. Rothbaum857 discloses “[i]n 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, ¶[0138]. For example, “[i]n 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.** In some embodiments, the accessory 108 is thicker than the recess. In some embodiments, the accessory 108 protrudes further than the outer surfaces of the case 102 by only half as much as the recess.” EX1004, ¶[0141].

162. A POSITA would have understood that the foregoing discussions with specific reference to Figures 1–2 are generally applicable to the other embodiments of Rothbaum857, including the embodiment depicted in Fig. 57. For example, the embodiments of accessory 108 (in Figs. 1–2) can be applied to the object 5708 in Fig. 57, in that the accessory [5708] does not protrude any

further than the outer surfaces of the case [5702] as is the case for accessory 108 and case 102 shown in Figs. 1A–1B.

163. Rothbaum857 further discloses that a magnet is enclosed by the accessory 5702. See EX1004, ¶[0251]: “[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.” FIGS. 59A–59B of Rothbaum857 (reproduced below) further show a back and front side of the object 5902. Comparing FIG. 59B (in which the magnet 4906³ is shown) to FIG. 59A (in which the magnet 4906 is not shown), a POSITA would have understood that the magnet 4906 is enclosed by object 5902.

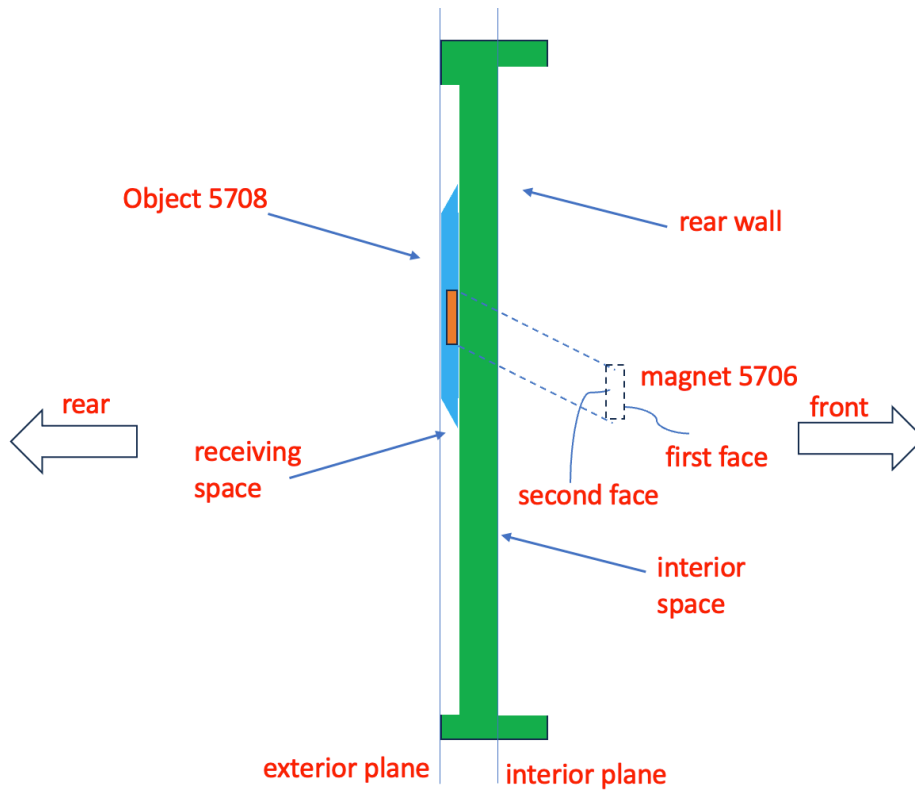


EX1004, Figs. 59A and 59B

³ Reference numeral 4906 is intended to be 5706. See paragraphs [0251]-[0252] making references to FIGS. 59.

164. Although the magnet is described as being enclosed by the accessory with reference to Figs. 59A–59B, a POSITA would have understood that it was generally applicable to the other embodiments of Rothbaum857, including the embodiment depicted in Figure 57. For example, a POSITA would have understood that magnet 5706 in Fig. 57 of Rothbaum857 could be enclosed by object 5708.

165. In the case where “the accessory [5708] does not protrude any further than the outer surfaces of the case [5702],” the modified cross-section illustration of Fig. 57 below shows the placement of the magnet 5706 with the first face and the second face.



166. As the object 5708 fits completely within the depth of the receiving space, the exterior-facing component 5708 is positioned between the exterior plane and the interior plane. Because the magnet 5706 could be enclosed by object 5708, it follows that the magnet 5706 is also positioned entirely in the receiving space—at least between the exterior plane and the interior plane.

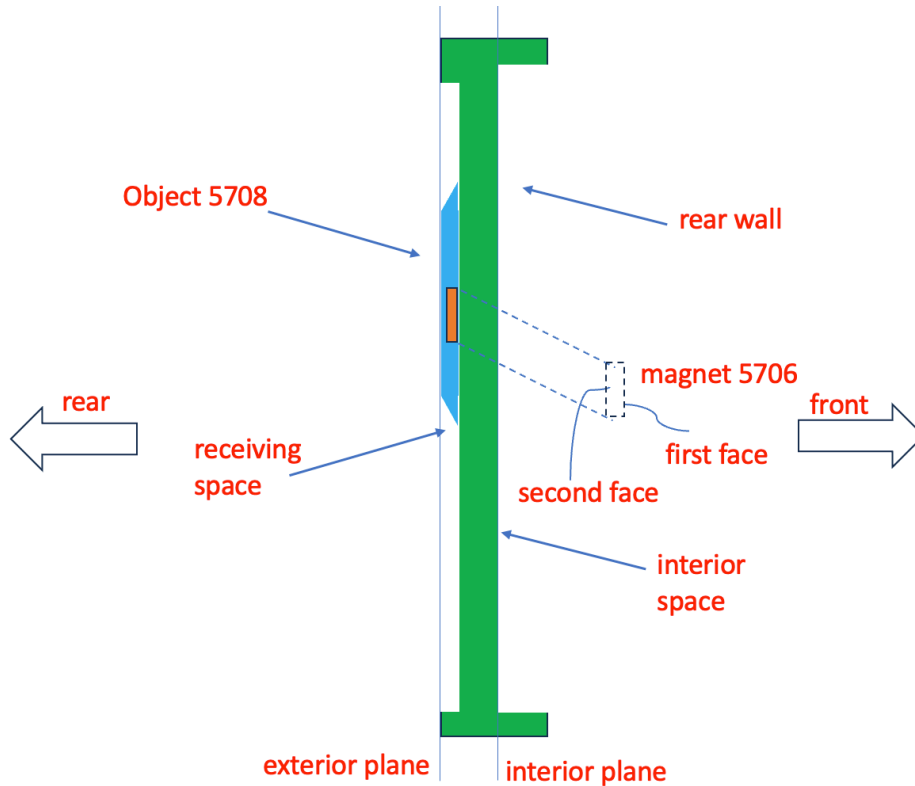
167. Accordingly, it is my opinion that Rothbaum⁸⁵⁷ discloses “the exterior-facing component [5708] received in the receiving space, the at least one magnet [5706] is positioned between the interior plane and the exterior plane.”

168.

[25j]

[25j] recites limitation [1p] with the condition of: “**wherein with the exterior-facing component received in the receiving space.**”

My discussion of limitation [1p] also applies for limitation [25j]. As shown by the illustration in my discussion above of [1p] (reproduced below), object 5708 is indeed shown to be positioned as “received in the receiving space.”



169.

26.Claim 26

[26]: “wherein the receiving space is defined at least in part by a recessed surface of the rear wall.”

See my discussion of limitation [1k] above.

170.

27. Claim 27

[27]: “The mountable case for a handheld electronic device of claim 26, wherein at least a portion of the recessed surface faces away from the interior space of the body portion.”

See my discussion of limitation [1k] above.

171.

28. Claim 28

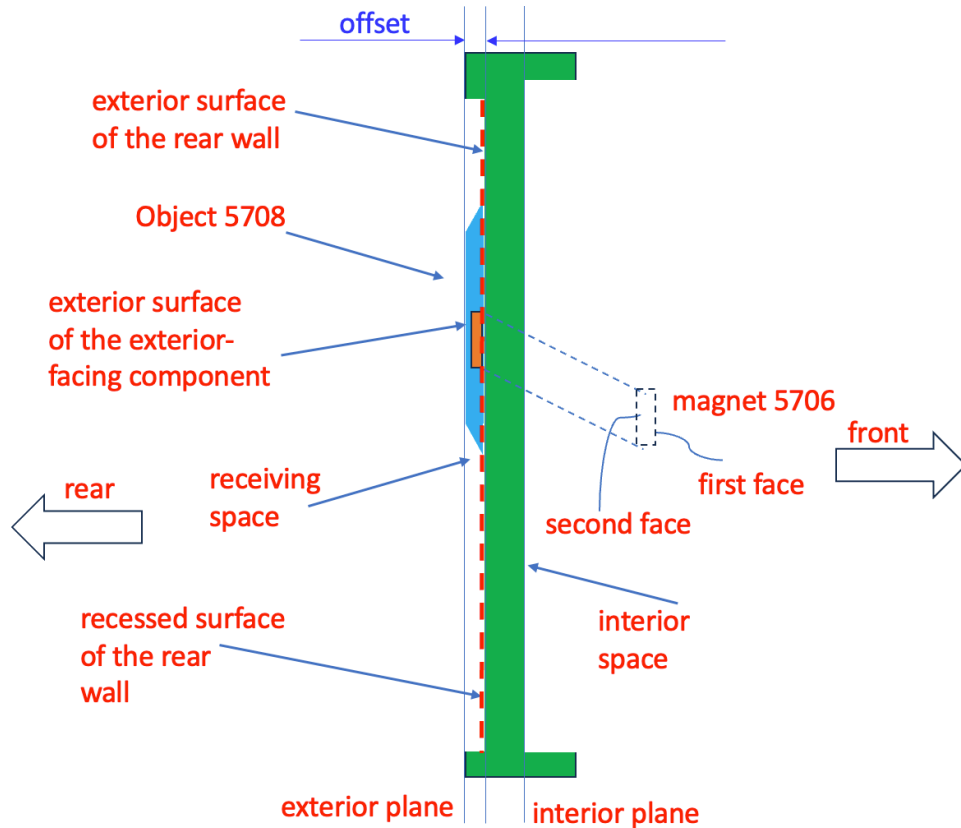
[28]: “wherein an exterior surface of the exterior-facing component is offset outwardly from an exterior surface of the rear wall, such that the exterior-facing component extends beyond the exterior surface of the rear wall.”

Rothbaum857 discloses these limitations: “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. As shown in FIG. 1, the main portion of the back surface 104 of the case 102 is recessed with respect to the raised edge 112. ... In some embodiments, the accessory 108 is thicker than the recess. In some embodiments, the accessory 108 **protrudes further than the outer surfaces of the case 102** by only half as much as the recess.” EX1004, ¶[0141].

172.

29. Claim 29

[29]: “an exterior surface of the exterior-facing component and at least a portion of an exterior surface of the rear wall are offset from one another in a thickness direction of the rear wall.”



My illustration in [25h] is reproduced above with added labels for exterior surface of the object 5708 and exterior surface of the rear wall. As shown in the annotated figure above, the offset between the exterior surface of object 5708 and the recessed surface of the rear wall (shown in blue) is in the direction of the thickness of the rear wall.

173.

30. Claim 30

[30]: “wherein the outer periphery of the at least one magnet defines a shape that is different than a shape defined by an outer periphery of the exterior-facing component.”

See my discussion of claim 2 above.

174.

31. Claim 31

[31]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure.”

See my discussion of limitation [1q] above.

175.

32. Claim 32

[32]: “wherein the exterior-facing component and the receiving space have complementary shapes.”

See my discussion of claim [3] above.

176.

33. Claim 33

[33]: “wherein the exterior-facing component covers an entirety of the second face of the at least one magnet.”

See my discussions of limitations [1p] and [14] above.

177.

34. Claim 34

[34]: “wherein at least one intervening layer is disposed between the first face of the at least one magnet and the interior space of the body portion.”

See my discussion of claim 4 above.

178.

35. Claim 35

[35]: “wherein the rear wall and the perimeter wall are integrally formed as a unitary structure.”

See my discussion of claim 5 above.

179.

36. Claim 36

[36]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

See my discussion of claim 6 above.

180.

37. Claim 37

[37]: “wherein an exterior surface of the rear wall comprises a first exterior surface portion and a second exterior surface portion offset from one another in a thickness direction of the rear wall.”

See my discussion of limitation [1g] above.

181.

38. Claim 38

[38]: “further comprising a beveled surface that defines a transition between an exterior surface of the perimeter wall and an exterior surface of the rear wall.”

See my discussion of limitation [1d] above.

182.

39. Claim 39

[39]: “wherein the exterior-facing component comprises a groove.”

Rothbaum857 discloses various examples of accessory 108, one of which is a key holder shown in FIGs. 8B and 8C (reproduced below).

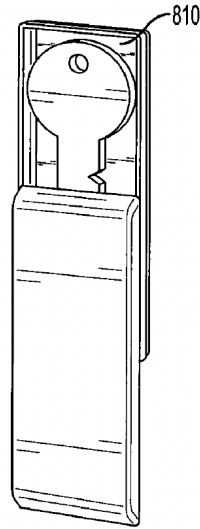


FIG. 8B

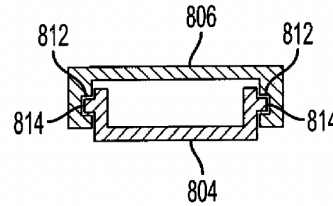


FIG. 8C

EX1004, FIGS. 8B–8C.

183. Rothbaum⁸⁵⁷ further describes: “the key holder 802 includes a base 804, a lid 806, and an attachment mechanism 808. The lid 806 is configured to move with respect to the base 804 in order to expose an internal chamber 810 for receiving a key. In some embodiments, as shown in FIG. 8C the lid has two channels 812 that are positioned to receive two guide tracks 814 on the base 804.” EX1004, ¶[0161].

184. Although the discussion above with respect to claim 25, from which claim 39 depends, are made with examples in embodiments of Fig. 57 in Rothbaum⁸⁵⁷, a POSITA would have understood that the key holder 802 as disclosed in FIGS. 8B–8C can also be applied to the embodiments in Fig. 57. In other words, a POSITA would have understood that the features disclosed in Figs. 8B–8C and 57 of Rothbaum⁸⁵⁷ could be combined to render claim 39

obvious. For example, the attachment 5708 in FIG. 57 could have been replaced by key holder shown in FIGS. 8B–8C. Indeed, as discussed above with respect to claim 25, from which claim 39 depends, object 5708 in Fig. 57 of Rothbaum857 is “removably received” in the rear wall of case 5702, and meant to include a variety of objects, such as a charger, spare battery, or speaker, for example. EX1004, ¶¶[0250], [0259], [0262].

185. When the object 5708 is replaced by a key holder such as shown in FIGS. 8B–8C, the object 5708 would have two grooves like guide tracks 814 to be received in two channels 812. As such, it is my opinion that Rothbaum857 discloses “wherein the exterior-facing component [object 5708] comprises a groove [guide tracks 814].”

X. Ground 2: Claims 1, 7, 19, 20, 22, and 31 Are Unpatentable As Obvious Under § 103 Over Rothbaum857 In View Of Byun.

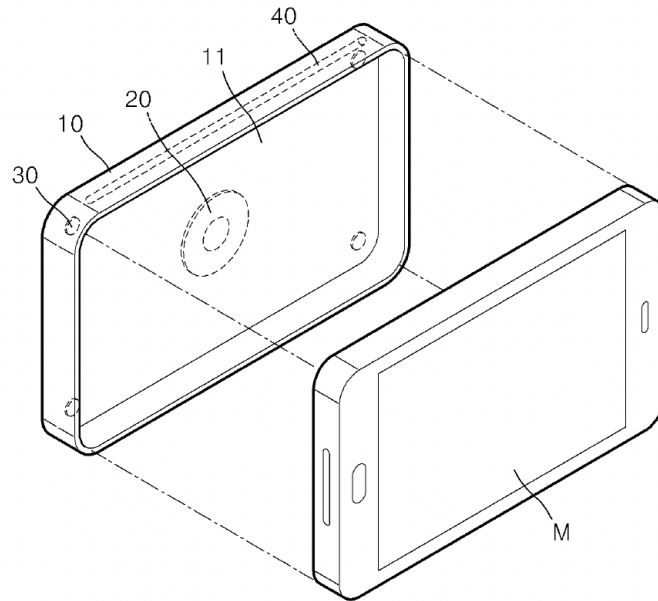
1. Independent Claim 1.

186.

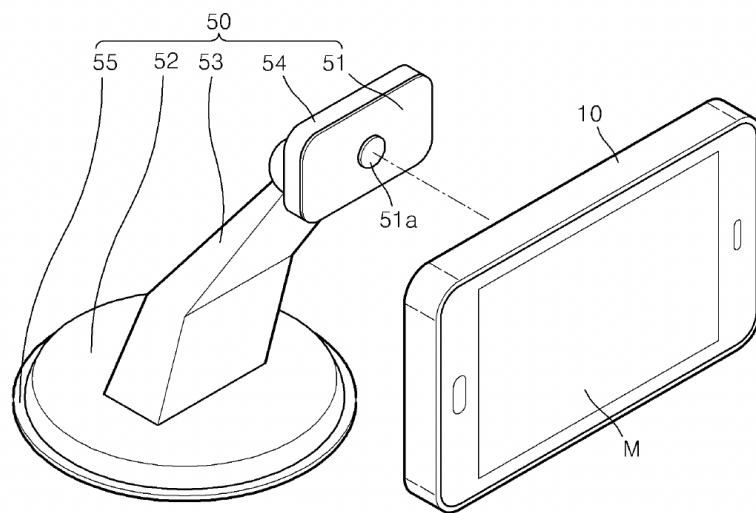
[1q]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure”

Claim 1 would have been obvious over Rothbaum857 in view of Byun because Byun discloses these limitations.

187. Figs. 2 and 4 of Byun (reproduced below) show that the magnet in a cover attachment part (20) of a case (10) is configured to attach the case (10) to a magnetic structure (51).



EX1006, Fig. 2.

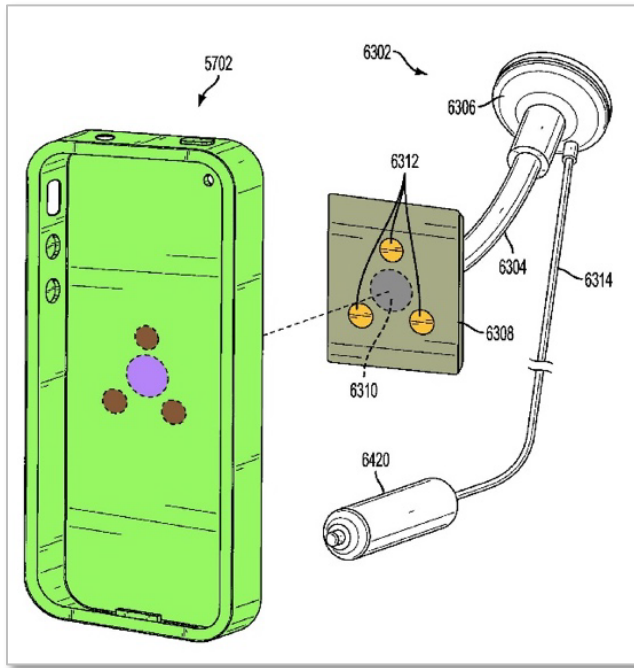


EX1006, Fig. 4

188. Specifically, Byun discloses: “the mounting unit further comprises a cradle (50) provided with a cradle attachment part (51) to which the cover attachment part (20) is attached.” EX1006, ¶[0010], and “[w]hen the cover attachment part (20) is implemented as a magnet, the cradle attachment part (51) is made of a steel piece, and when the cover attachment part (20) is made of a steel piece, the cradle attachment part is made of a magnet. Accordingly, the cover part (10) can be attached to and detached from the cradle attachment part (51) by means of the cover attachment part (20).” EX1006, ¶0027.

189. As disclosed, the mountable case 10 is attached to the magnetic structure (51) via the magnet (20) in the rear wall of the case.

190. Rothbaum '857 and Byun both disclose mounting a case to an accessory. Compare Fig. 63 of Rothbaum '857, reproduced below, in which attachment 6306 is attached to a structure 6302, to Fig. 4 of Byun, shown above, in which magnet 20 is attached to a magnetic structure (cradle attachment 51).



EX1004, Fig. 63

191. As such, it would have been obvious to modify the exterior-facing component 6308 in Rothbaum '857 with the cover attachment part (20) in Byun. The structure of the cover attachment 20 in Byun is similar to magnetic attachment 6312 of attachment 6308 in Rothbaum857, which would allow the cover attachment part 20 in Byun to be attached to the back of the case, for example, using the attachment method for attaching the attachment 6308 to the back of the case as disclosed in Rothbaum857. For example, cover attachment part (20) in Byun, which can be implemented as a magnet, can also be magnetically (removably) attached to the rear wall of the case as magnet 6312 is. In this modified configuration to Rothbaum857, the magnet 20 (from Byun) will attach the mountable case 5702 to the magnetic structure, such as the cradle

attachment part (51) in Byun. A POSITA would have been motivated to so modify the mountable case 5702 of Rothbaum857 to more readily facilitate connection to components such as the cradle attachment part (51) and cradle (50) of Byun.

192. Accordingly, it is my opinion that the claim limitations “*wherein the at least one magnet is configured to attach the mountable case to a magnetic structure*” would have been obvious in view of Rothbaum857 and Byun.

193.

2. Independent Claim 7.

See my explanation of claim 7 for Ground 1 above.

[7k]: “wherein the cavity of the exterior-facing component is formed at least in part by a curved outer wall, and wherein the outer periphery of the at least one magnet is adjacent to at least a portion of the curved outer wall”

194. Claim 7 would have been obvious in view of Rothbaum857 combined with Byun. See my explanation for limitation [1n] above.

195.

[7n]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure”

Claim 7 would have been obvious in view of Rothbaum857 combined with Byun. See my discussion for limitation [1q] above.

196.

3. Claim 19

[19]: “wherein the recess of the exterior-facing component is formed at least in part by a curved outer wall.”

These limitations would have been obvious in view of Rothbaum⁸⁵⁷ combined with Byun for the reasons I explained for limitation [1n] above.

197.

4. Claim 20

[20]: “wherein the outer periphery of the at least one magnet is adjacent to at least a portion of the curved outer wall.”

These limitations would have been obvious in view of Rothbaum⁸⁵⁷ combined with Byun for the reasons I explained for limitation [1n] above.

198.

5. Claim 22

[22]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure.”

These limitations would have been obvious in view of Rothbaum⁸⁵⁷ combined with Byun for the reasons I explained for limitation [1q] above.

199.

6. Claim 31.

[31]: “wherein the at least one magnet is configured to attach the mountable case to a magnetic structure.”

These limitations would have been obvious in view of Rothbaum⁸⁵⁷ combined with Byun for the reasons I explained for limitation [1q] above.

XI. Ground 3: Claims 6, 12, and 36 are unpatentable as obvious under 35 U.S.C. § 103 over Rothbaum857 in view of Rothbaum609.

200.

1. Claim 6

[6]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

See my discussion of claim 6 in Ground 1 above.

201. Claim 6 would have been obvious in view of Rothbaum857 combined with Rothbaum609 because Rothbaum609 discloses these limitations.

202. Rothbaum609 discloses attachment of an accessory to the back of a case magnetically. See FIG. 31A of Rothbaum609 (reproduced below), in which a strap 3104 is removably attached to the back of a phone case 3102 via magnetic materials 3110 on the strap and 3106 on the case.

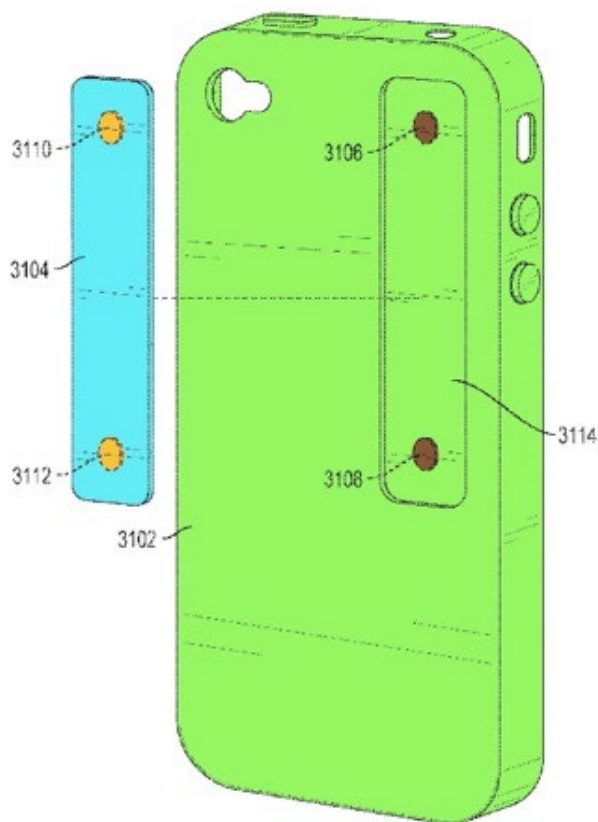
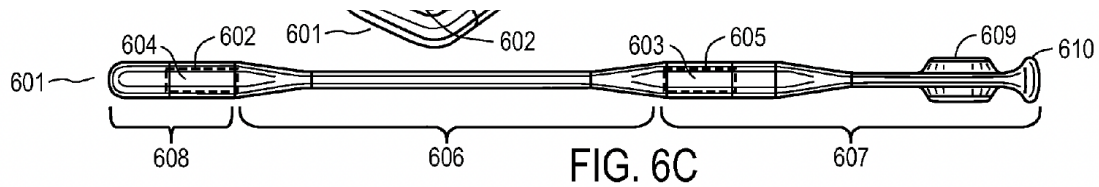


FIG. 31A

EX1005, FIG. 31A.

203. Rothbaum'609 discloses that “[i]n some embodiments, case magnet 3106 can comprise multiple magnets or any other configuration, material, or combination of materials that provides a greater magnetic force between case magnet 3106 and strap magnet/magnetic material 3110.” EX1005, ¶[0363].

204. Rothbaum '609 further discloses an attachment method in FIGS. 6A-6C (FIG. 6C of which is reproduced below).



EX1005, FIG. 6C.

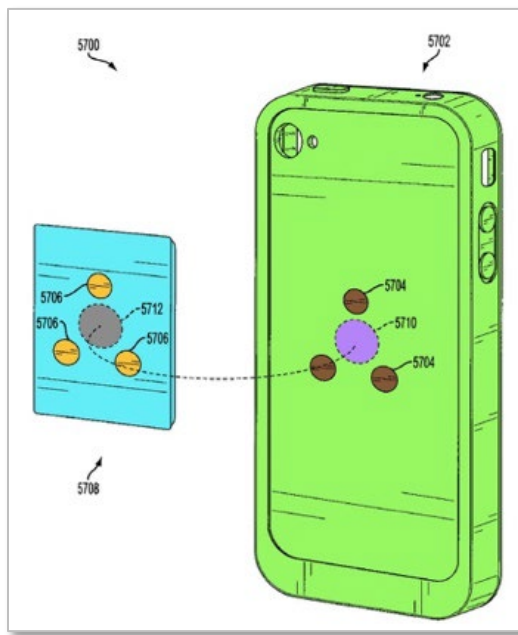
205. The attachment method includes encapsulating the magnets 602, 603 into the strap 601. For example, Rothbaum609 discloses: “[i]n some embodiments, the magnets 602 and 603 are embedded in the magnetic strap 601. In these embodiments, the magnets 602 and 603 are either enclosed or partially enclosed by the material that forms the magnetic strap 601. As illustrated in FIG. 6C, the material that forms the magnetic strap 601 **forms a gradual contour around the magnets 602 and 603.**” EX1005, ¶[0216]. As such, a POSITA would have understood that the materials of the strap 601 directly contact the face of magnets 602, 603 by forming around the magnets.

206. A POSITA would have understood that the attachment methods in FIGS. 6A-6C can be applied to various embodiments in Rothbaum609. Indeed, embodiments in FIGS. 31 are related to embodiments in FIGS. 29 (see Rothbaum609, ¶[0362]: “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”). Rothbaum609 further discloses that methods in FIGS. 6A–6C can be applied to FIG. 29. See EX1005, ¶[0353]: “[t]he 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)... the strap magnets/magnetic materials 2906 and 2908 are to be encapsulated in the material of the strap."

207. Thus, the methods in FIGS. 6A-6C can be applied to FIGS. 31 for encapsulating the magnet in a similar manner as FIGS. 6A-6C are applied to FIG. 29.

208. Rothbaum857 and Rothbaum609 both disclose embedding a magnet in an accessory that is removably attached to a case of a mobile phone. Comparing attachment 5708 in FIG. 57 of Rothbaum857 to strap 3104 in FIG. 31A of Rothbaum '609 (both figures are reproduced below).



EX1004, FIG. 57

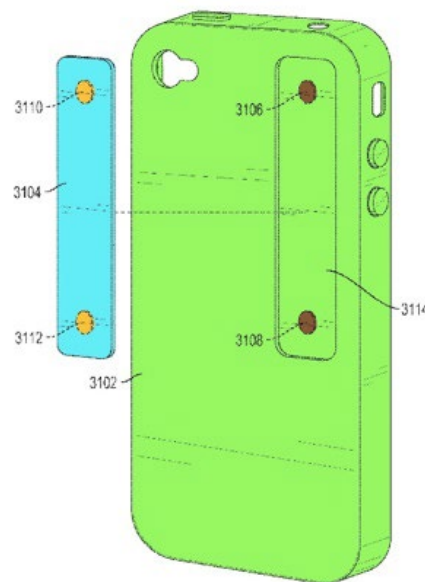
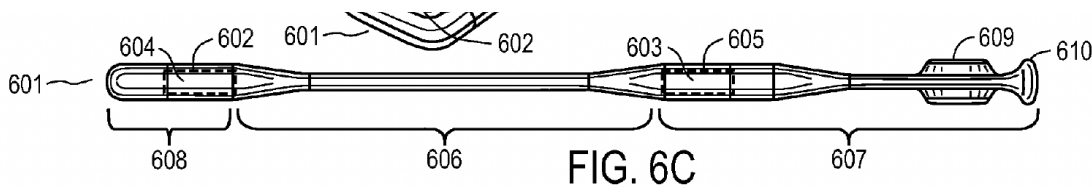


FIG. 31A

EX1005, FIG. 31A

209. As shown, attachment 5708 in Rothbaum857 (EX1004) has an embedded magnet 5706, whereas strap 3104 in Rothbaum609 (EX1005) has an embedded magnet 3110. As such, it would have been obvious to use the known technique of FIG. 6C (reproduced below) of Rothbaum609 for enclosing magnet 3110 to strap 3104 for the attachment 5708 in Rothbaum857 to embed magnet 5706 therein.



EX1005, FIG. 6C.

210. When applied to attachment 5708, this method will encapsulate the magnet 5706 by forming the materials of 5708 around the magnet 5706, resulting in directly contacting the magnet without using any adhesive or introducing any intervening layer between the attachment 5708 and the face of the magnet 5706. A POSITA would have been motivated to so modify the attachment 5708 to securely embed the magnet 5706 in the attachment 5708, and to better protect the magnet from contamination, debris, moisture, etc. in the environment.

211. Accordingly, it is my opinion that the limitations “*wherein the exterior-facing component directly contacts the second face of the at least one*

magnet without an intervening layer” would have been obvious in view of Rothbaum857 in combination with Rothbaum609.

212.

2. Claim 12

[12]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

These limitations would have been obvious in view of Rothbaum857 in combination with Rothbaum698 for the reasons set forth in the immediately preceding for claim 6.

213.

3. Claim 36

[36]: “wherein the exterior-facing component directly contacts the second face of the at least one magnet without an intervening layer.”

These limitations would have been obvious in view of Rothbaum857 in combination with Rothbaum698 for the reasons set forth in the preceding section for claim 6.

XIII. Ground 4: Claims 1-39 are unpatentable as anticipated under 35 U.S.C. § 102 By Whitten584.

a. Claims 1-39 are not entitled to claim priority to the patent application 13/593,220 and therefore, the published patent application corresponding to this application is prior art.

214. I have been told by Counsel that for a claim in a later-filed application to be entitled to the filing date of an earlier application, the earlier

application must comply with the written description requirement of 35 U.S.C. § 112, ¶ 1 (1994). I have been told that section 112, paragraph 1 requires that the specification "contain a written description of the invention, and of the manner and process of making and using it." I have been told that 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.

215. It is my opinion that claims 1-39 of the '835 patent are not entitled to claim priority to the patent application no. 13/593,220 ("the '220 application") because that application discloses only one type of exterior-facing member attached to the rear of a protective case—a non-slip member—and thus does not provide sufficient support for claims 1-39, which is generic as to the type of exterior-facing member.

216. The '220 application repeatedly describes the invention as a protective case for a handheld electronic device including "a non-slip member to prevent the device from slipping on a surface." EX1009, Abstract; *see also id.*, ¶ 13 ("The rear wall defines an attachment region designed to receive an interlocking member and a non-slip region designed to receive a ***non-slip member.***"); *id.* ("The non-slip region comprises a second open space and a recessed surface formed by the disposition of a smaller opening within a larger

opening. The *non-slip member comprises a non-slip material* shaped to fit within the second open space, the non-slip member has a peripheral groove that, in use, engages the recessed surface to attach the non-slip member to the shell.”).

217. My review of the specification and the figures (*e.g.*, FIG. 1 (reproduced with annotations below), FIGs. 7, 8a, 8b, 8c) demonstrates that only this particular species (*i.e.*, non-slip member) is disclosed as an exterior facing member attached to the rear of a protective case.

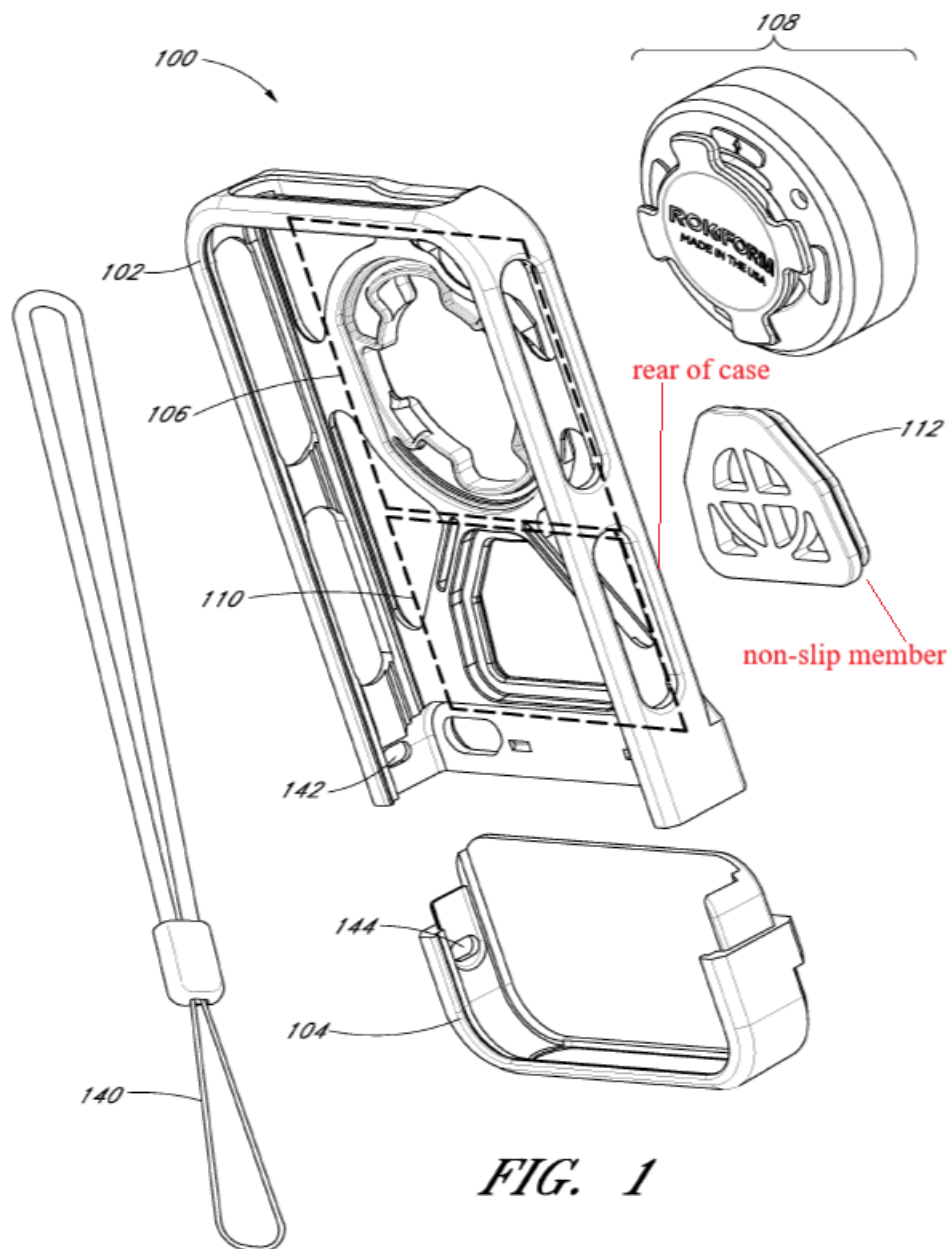


FIG. 1

EX1009, FIG. 1.

218. In addition, the '220 application repeatedly touts the advantages of the non-slip member. *See, e.g.*, EX1009, ¶ [0007] (“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.”); *id.*, ¶[0043] (“Upper shell piece 102 also preferably includes a non-slip region 110, which 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.”). Such statements make clear that the ’220 application discloses only a non-slip member as the exterior-facing member and nothing broader.

219. For these reasons, it is my opinion that the ’220 application does not attempt to identify other exterior facing members or talk in terms of a range of such members and that the narrow language of the ’220 application cannot be said to disclose an entire genus of exterior facing members within which the species of the non-slip member belongs.

220. It is my opinion that the disclosure in the ’220 application, therefore, does not support the later-claimed, generic subject matter in claims 1-39 of the ’835 patent.

221. I also note that it is my opinion that there isn’t an inherent disclosure of other types of exterior facing members in the ’220 application. I have been told by Counsel that 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.

There is nothing in the '220 application to suggest that an exterior facing member other than a non-slip member is necessarily a part of the disclosure.

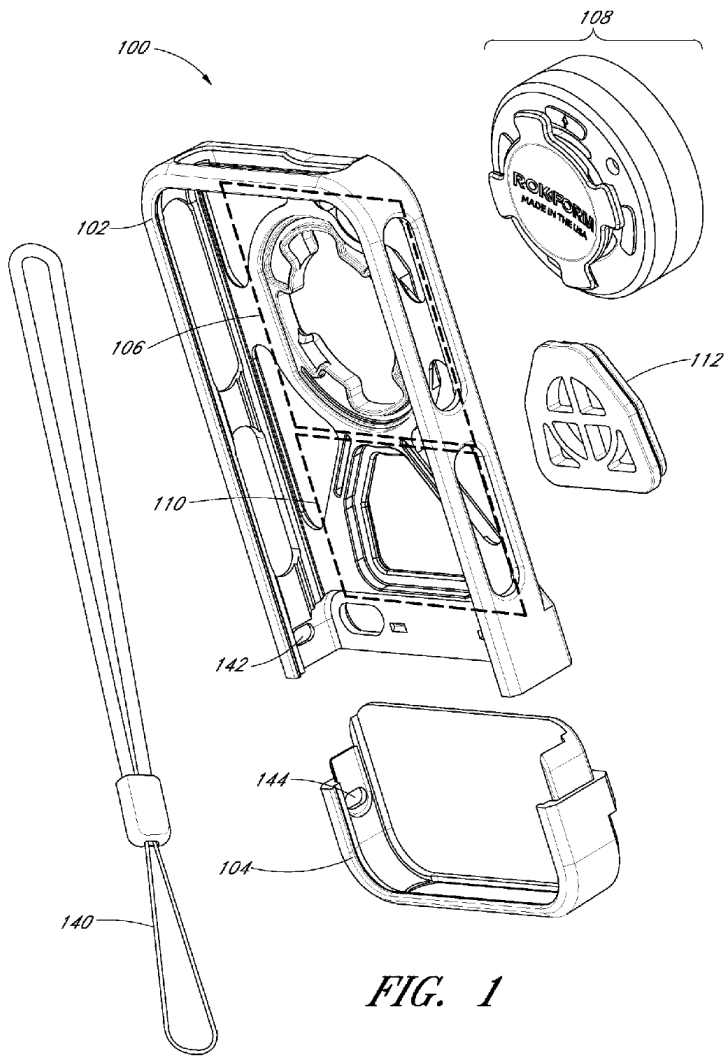
222. It is my opinion as a POSITA that the '220 application discloses only non-slip member type of an exterior facing member, and that because the '220 application fails to meet the written description necessary to support claims 1-39, these claims are not entitled to the filing date of the '220 application. It is also my opinion that none of the other later-filed applications to which the '835 patent claims priority, can possibly address the deficient disclosure of the '220 application because all are continuation applications having the same disclosure as the '220 application. EX1001, cover.

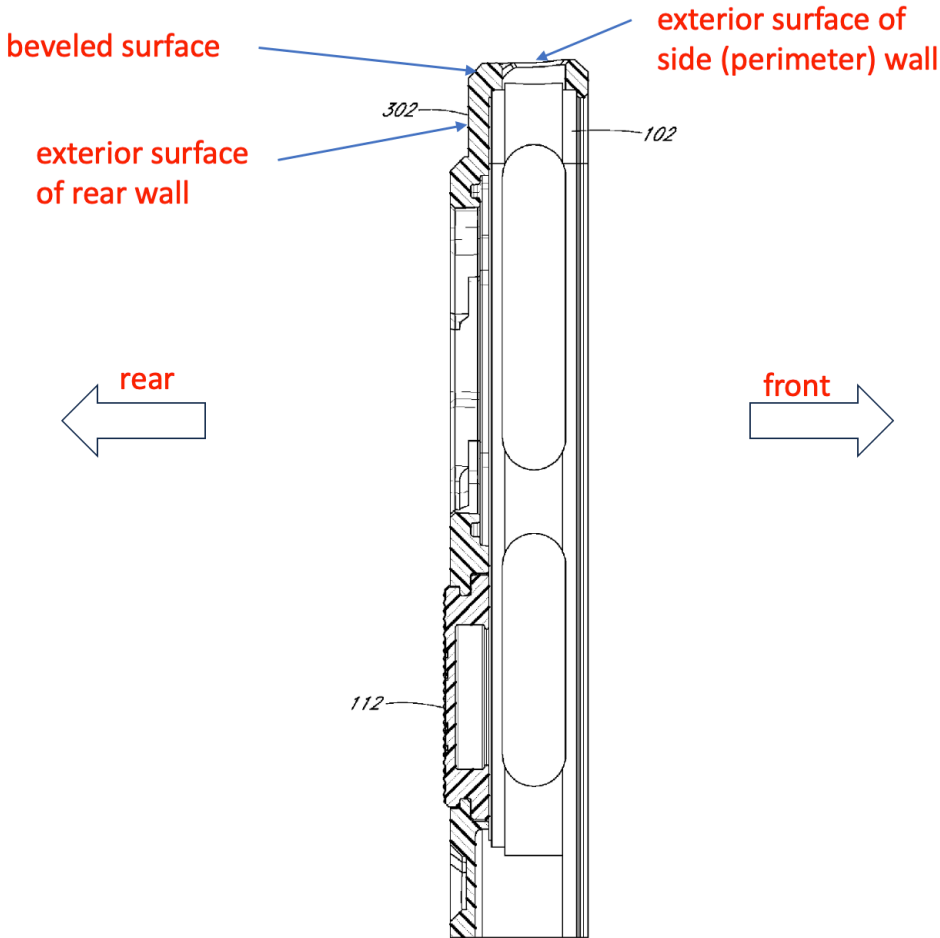
b. The published patent application corresponding to the '220 application discloses all the limitations of claims 1-39.

223. I have been told by Counsel that the published patent application corresponding to the '220 application: U.S. Patent Publication 2013-0181584 to Whitten et al. ("Whitten584") is prior art to claims 1-39 of the '835 patent because it was published on July 18, 2013, well over one year before the filing of the application resulting in the '835 patent. EX1010.

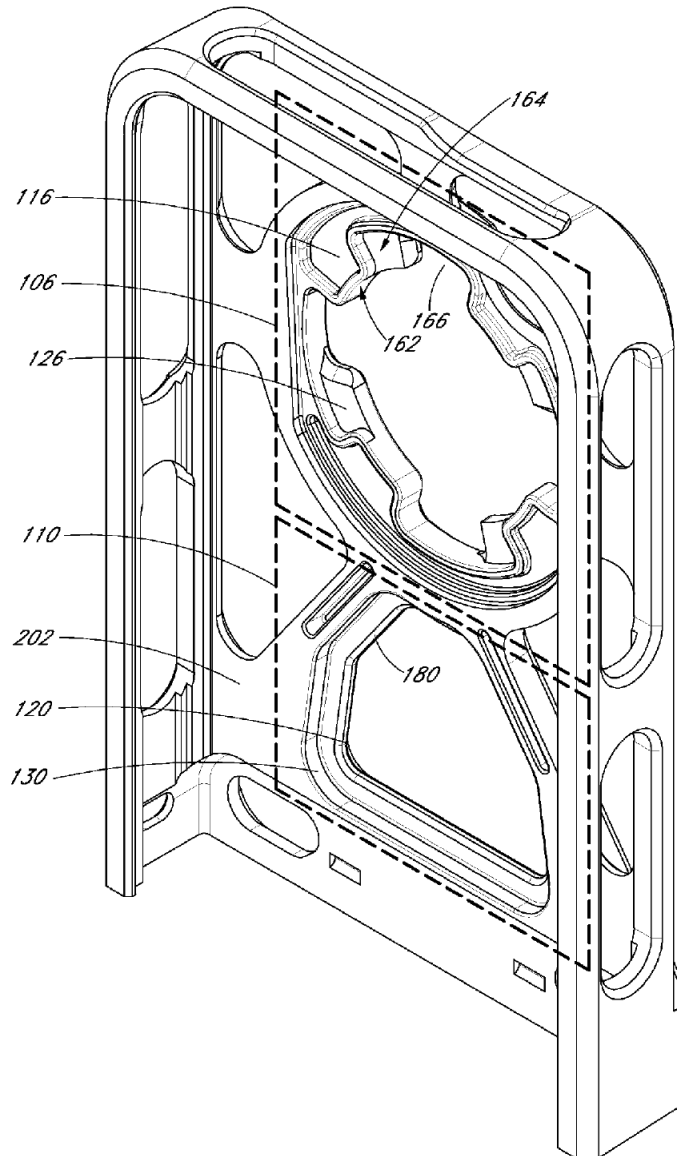
224. It is my opinion that claims 1-39 are anticipated by the publication of the '220 application (Whitten584), because all of their limitations are disclosed by Whitten584, as shown by the claim charts below.

225.

Claim 1:	
[1pre]	See Whitten584: “A protective case for a handheld electronic device is provided... for attaching the device to a magnetic surface” EX1010, Abstract.
[1b]	See Whitten584: “As shown in FIGS. 1–4, 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.” EX1010, ¶[0047], FIG. 1 (reproduced below).  FIG. 1 EX1010, FIG. 1.
[1c]	See Whitten584: “Each of the upper shell piece 102 and the lower shell piece 104 has a rear wall portion 200 ... the enclosing edges are defined by a sidewall portion 150 that extends from the rear wall portion 200.” EX1010, ¶[0047], FIG. 1.

[1d]	 EX1010, FIG. 7. As shown above in illustrated FIG. 7, Whitten584 discloses a “beveled surface.”
[1e]	See Whitten584: “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 upper shell piece 102 and the lower shell piece 104 also include at least one or a plurality of enclosing edges to surround the sides of a handheld electronic device and provide protection for the handheld electronic device. In the illustrated arrangement, the enclosing edges are defined by a sidewall portion 150 that extends from the rear wall portion 200. The illustrated sidewall portion 150 extends along an entire periphery of the rear wall portion 200.” EX1010, ¶[0047], FIG. 1.
[1f]	See Whitten584: “Each of the upper shell piece 102 and the lower

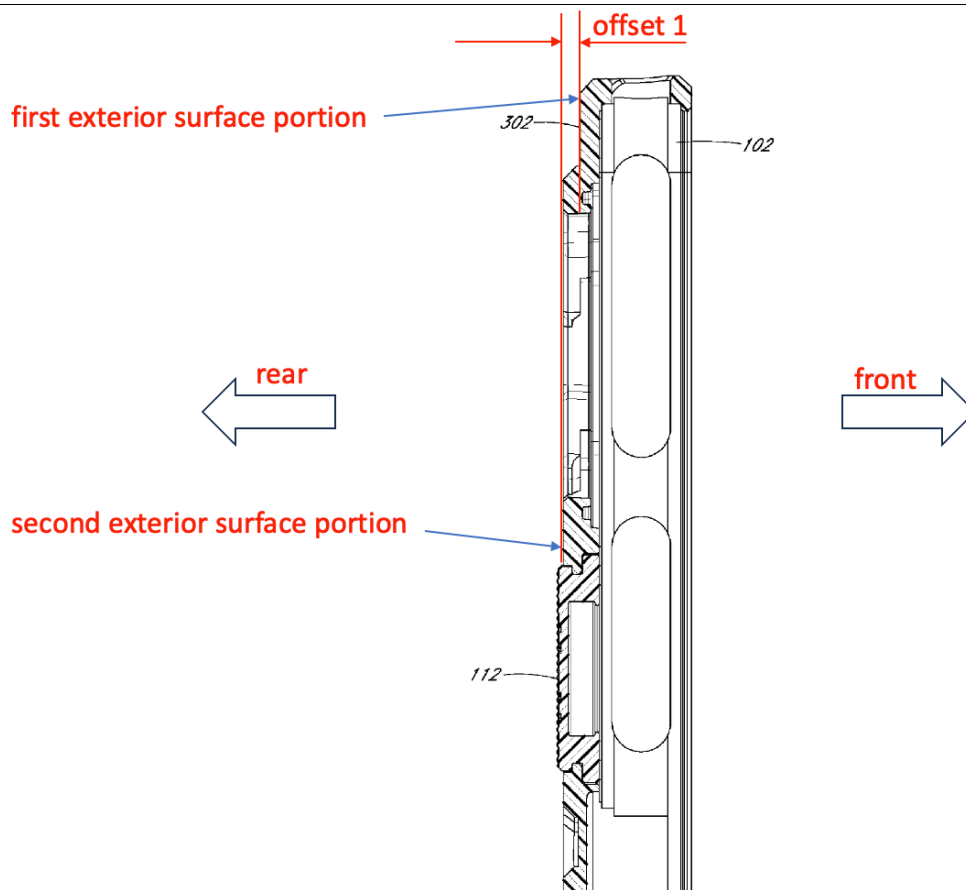
shell piece 104 has a rear wall portion 200 that defines an **interior rear surface 202** positioned adjacent the back surface of an electronic device placed in the protection system 100.” EX1010, ¶[0047], FIG. 4 (reproduced below).



EX1010, FIG. 4

As shown, Whitten584 discloses that the interior surface 202 (FIG. 4) “face[s] towards [adjacent] the rear surface [back surface] of the handheld electronic device.”

[1g]



EX1010, FIG. 7

This illustration of FIG. 7 above shows that Whitten584 discloses the “offset [offset1]... in a thickness direction of the wall” between two portions of the exterior surface of the rear wall.

[1h]

See EX1010, FIGS. 1 (reproduced below, non-slip member 112), 2 and 7, and ¶[0049], [0056].

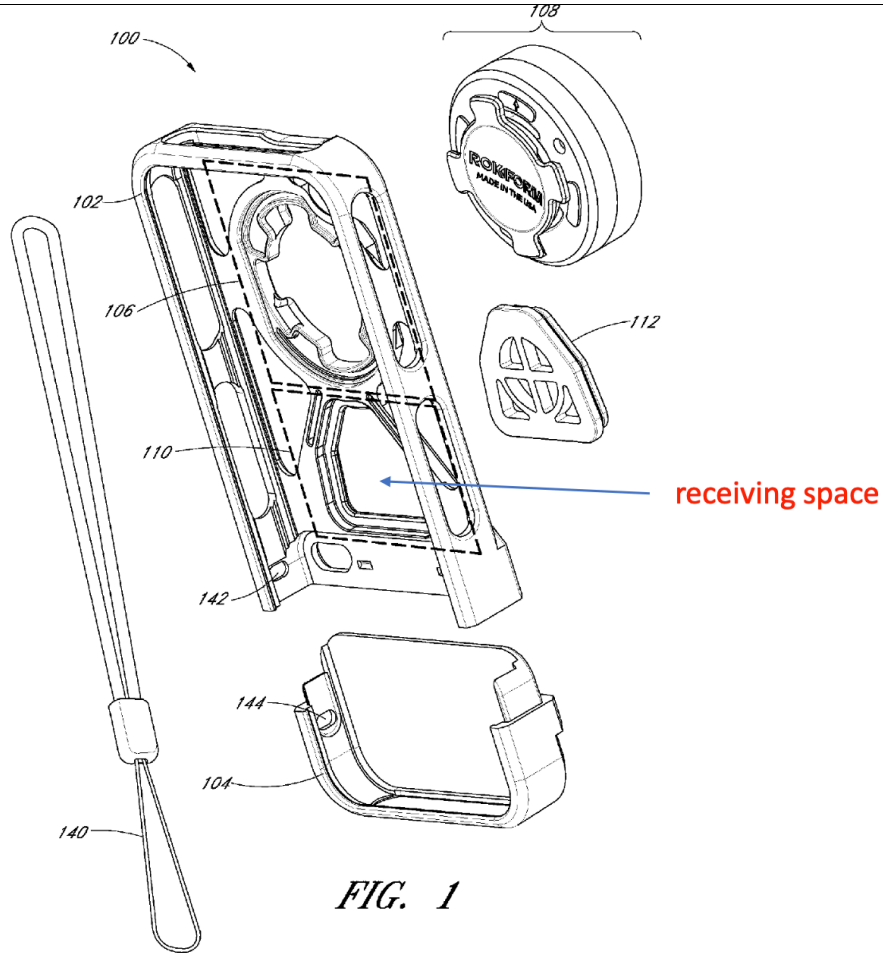


FIG. 1

EX1010, FIG. 1.

See also “removable attachment of mounting member 108 to protection system 100. Similarly, rotation or twisting of interlocking member 902 in the opposite direction allows for removal of mounting member 108.” EX1010, ¶[0063] and FIGS. 1–2.

As shown, both mounting member 108 and non-slip member 112 are inserted in respective openings of the rear wall. A POSITA would have understood that the rotation or twisting method for attaching the mounting member 108 can also be applied to the non-slip member 112, making it removable from the case 100. As such, Whitten584 discloses “an exterior-facing component [non-slip member 112] having at least a portion thereof removably received [inserted] in a receiving space [small opening] defined by the rear wall of the body portion.”

[1i] See EX1010, FIG. 8C (reproduced below, indentation 192 in the

non-slip member 112) and ¶[0057]

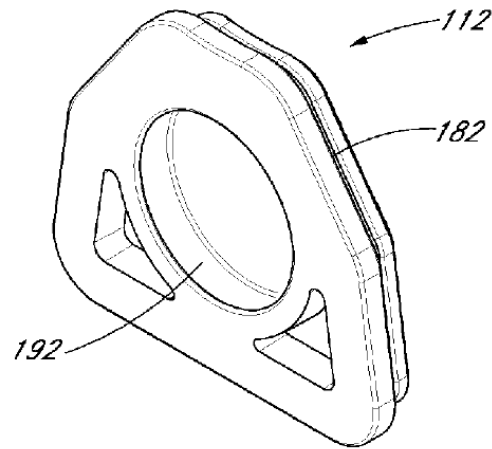
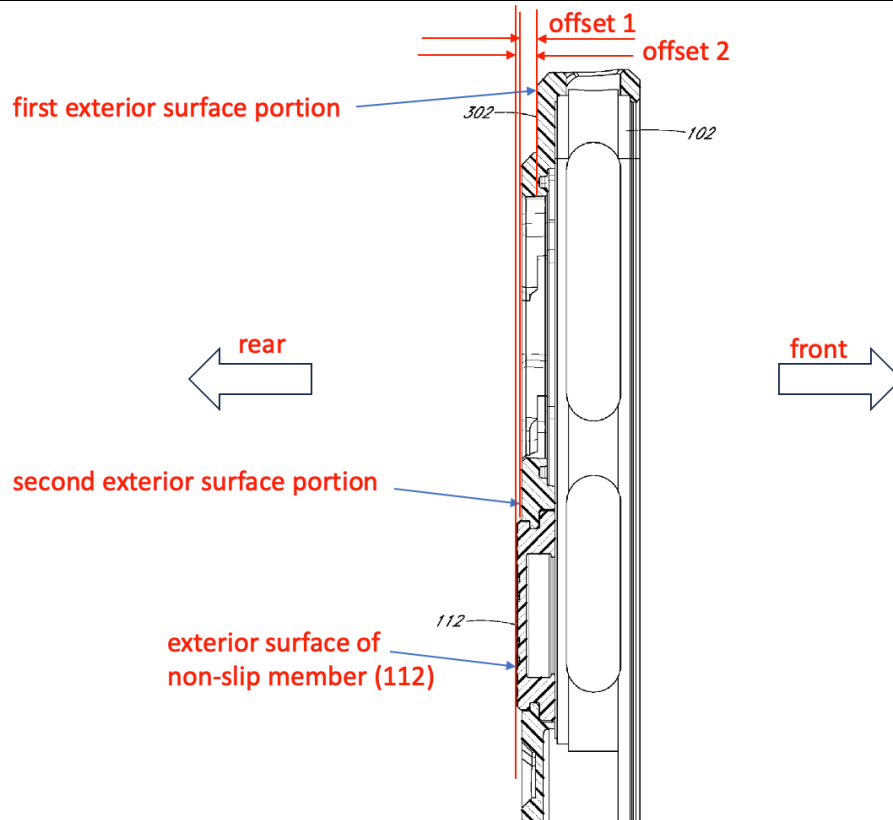


FIG. 8A

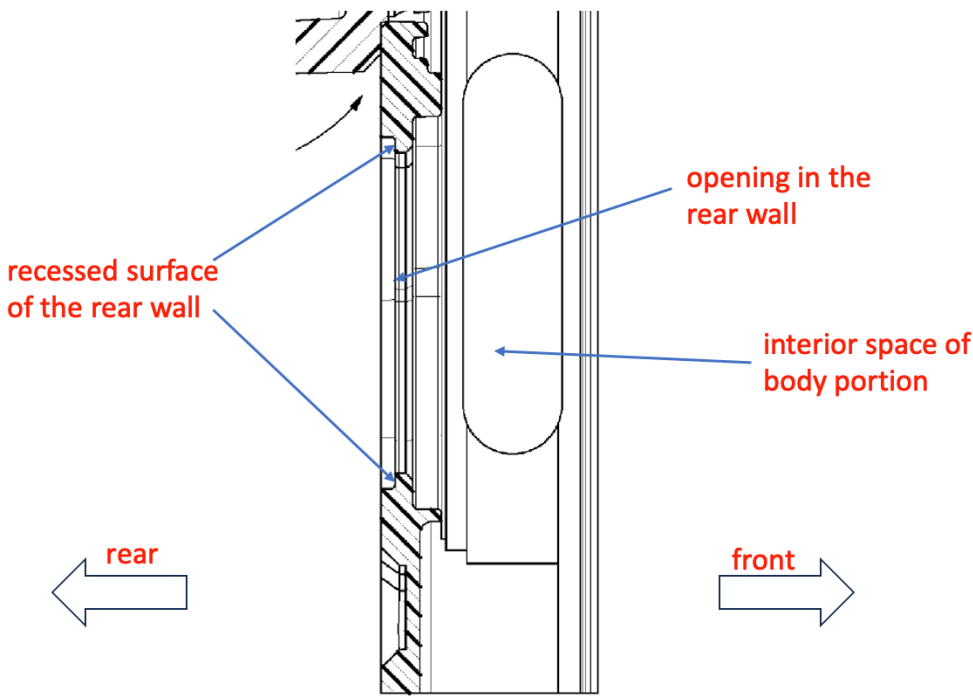
EX1010, FIG. 8A

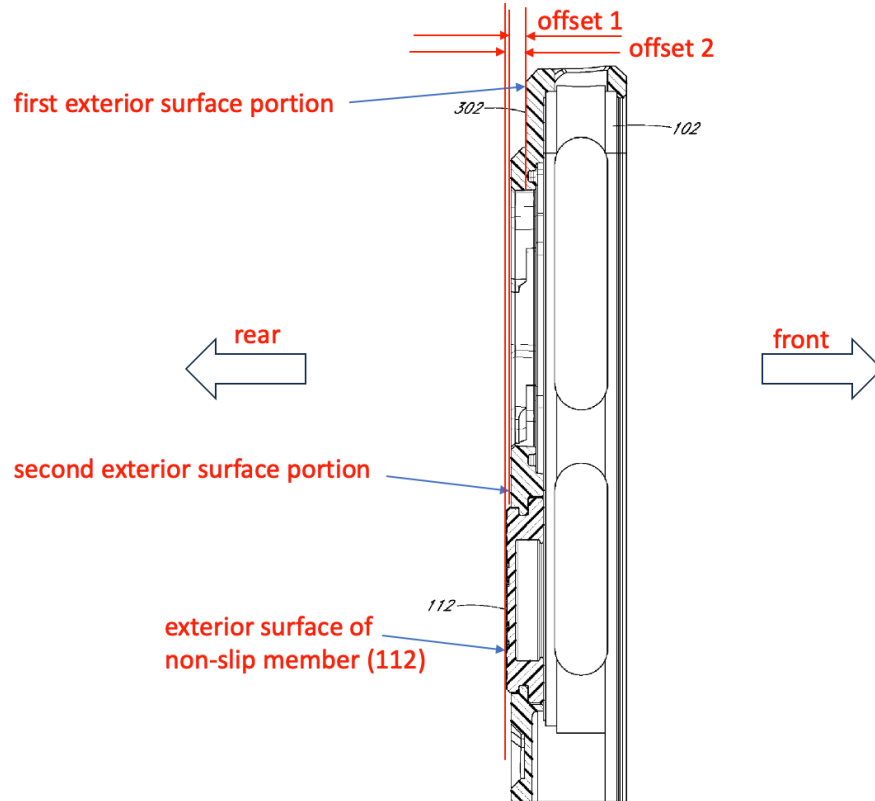
[1j]



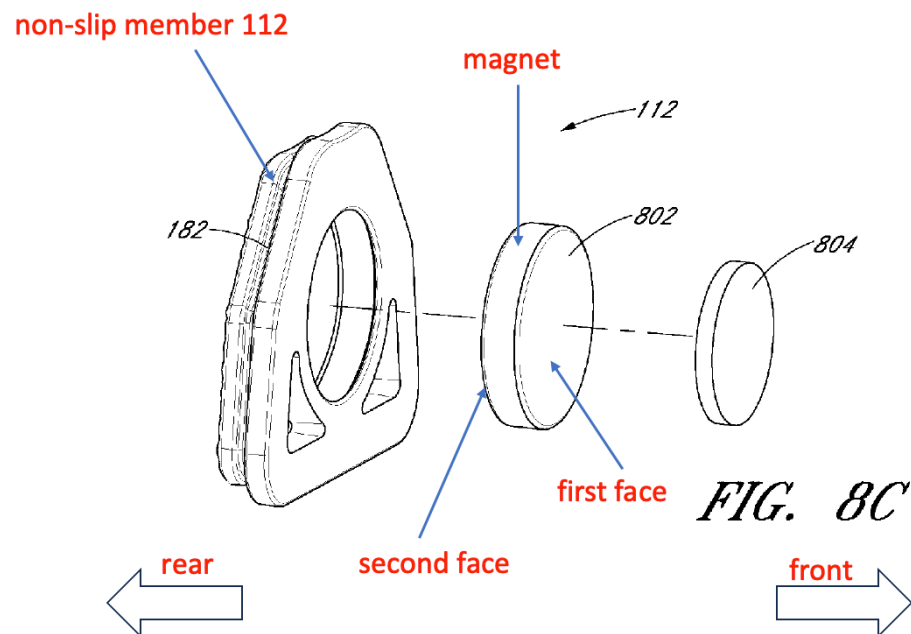
EX1010, FIG. 7

As shown above, Whitten584 discloses “exterior surface of the exterior-facing component [non-slip member 112] is offset [by offset2] from at least ...the first exterior surface portion.”

[1k]	 EX1001, FIG. 6 (partial) As shown in annotated FIG. 6 above, Whitten584 discloses that the “recessed surface of the rear wall ... faces [rearwardly] away from the interior space [front] of the body portion.”
[1L]	See Whitten584: “The inclusion of rare-earth magnet 802 into non-slip member 112 is shown in FIG. 8C.” EX1010, ¶[0059]. See annotated FIG. 7 and FIG. 8C below.



EX1001, FIG. 7

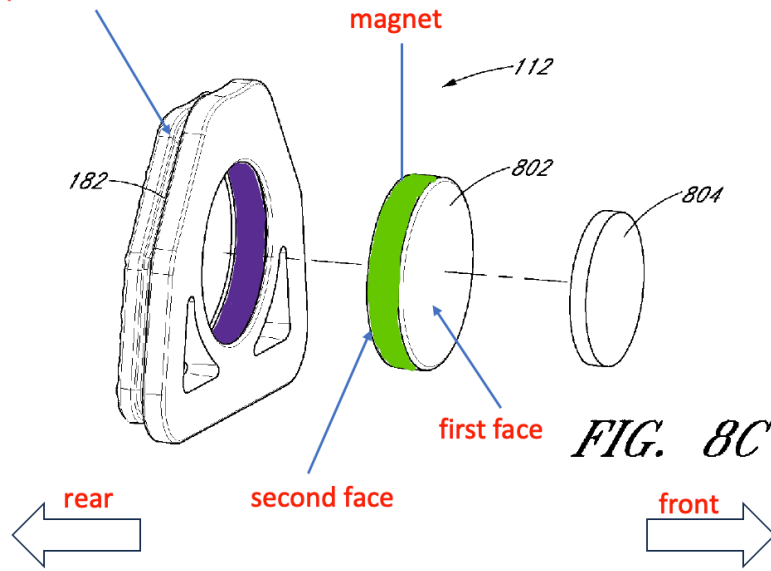


EX1001, FIG. 8C

	As shown, Whitten584 discloses: “one magnet [802] having a first face and a second face, wherein, with the exterior-facing component [non-slip member 112] received in the receiving space [see FIG. 7], the first face of the at least one magnet faces the interior space of the body portion [front] and the second face of the at least one magnet faces the exterior-facing component [rear].”
[1m]	non-slip member 112 magnet 182 112 802 804 first face second face rear front <i>FIG. 8C</i> EX1010, FIG. 8C As shown above in annotated FIG. 8C (exploded view of the non-slip member 112), Whitten584 discloses “the at least one magnet [802] defines an outer periphery [green] that extends in a thickness direction of the at least one magnet between the first face and the second face.”

[1n]

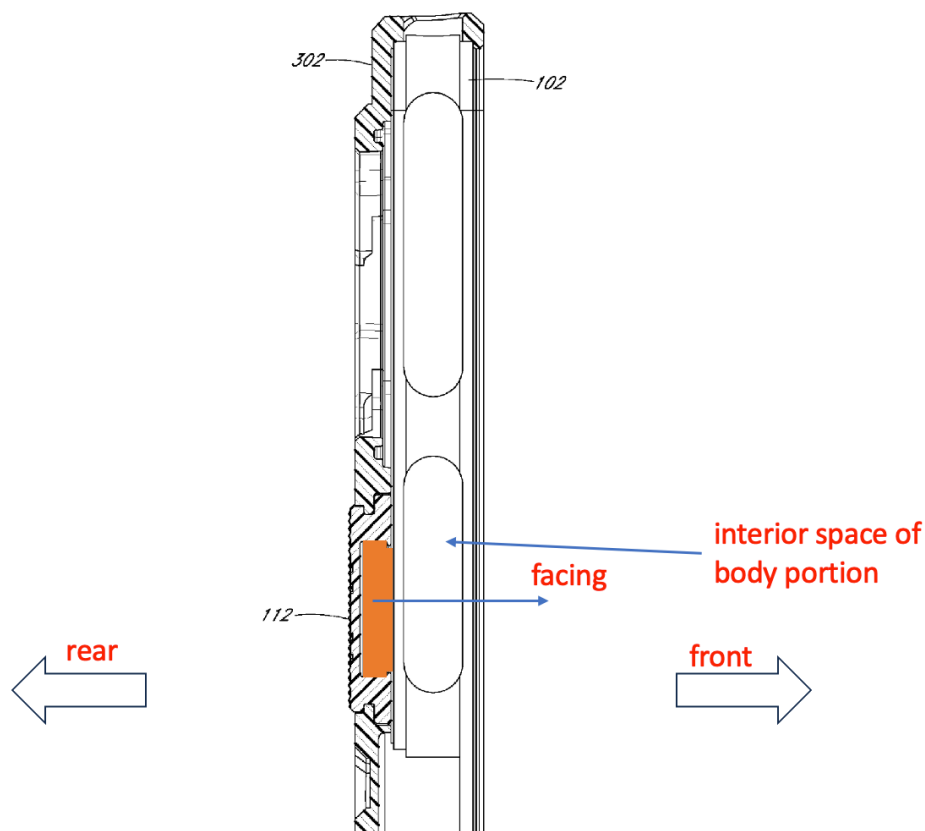
non-slip member 112



EX1010, FIG. 8C

As shown above in annotated FIG. 8C (exploded view of the non-slip member 112), Whitten584 discloses “the cavity of the exterior-facing component [112] is formed ... by a curved outer wall [purple], and wherein the outer periphery [green] of the at least one magnet is adjacent [fitted] to at least a portion of the curved outer wall.”

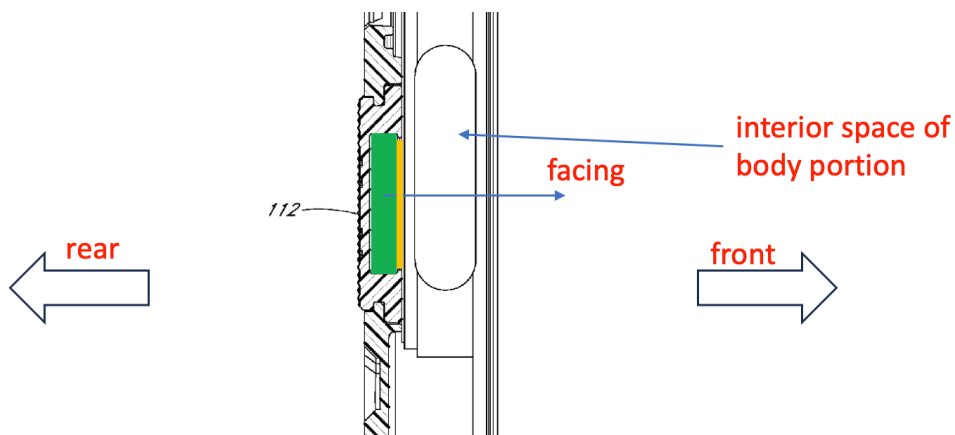
[1o]



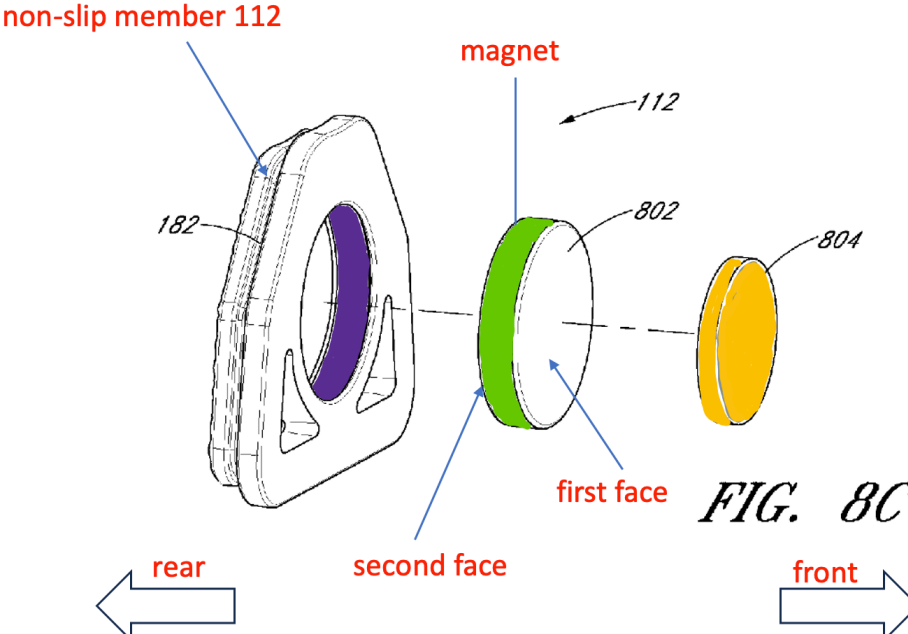
EX1010, FIG. 7.

As shown above in annotated FIG. 7, Whitten584 discloses “with the exterior-facing component [112] received in the receiving space, the cavity [orange] faces the interior space [front] of the body portion.” See EX1010, FIG. 8A.

[1p]

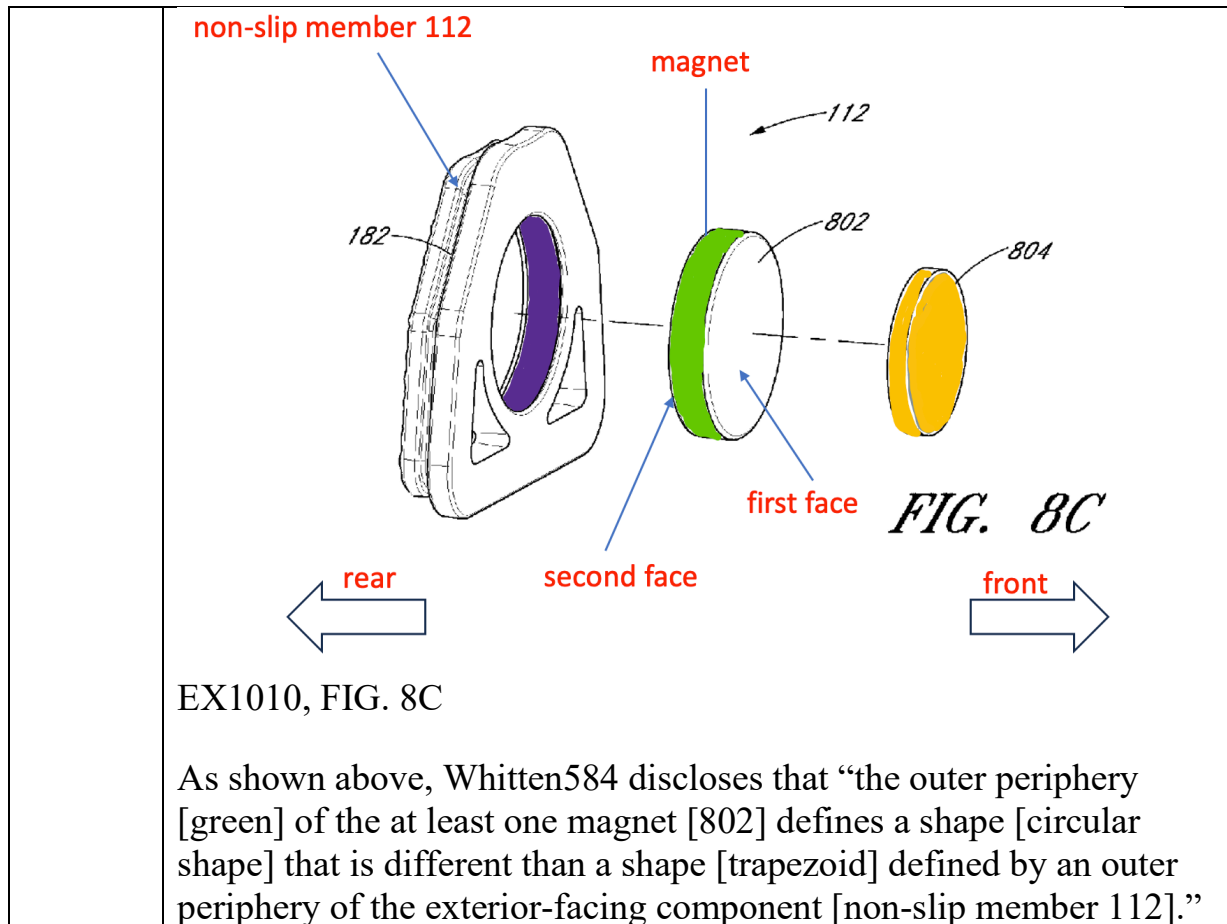


EX1010, FIG. 7 (partial).

	 EX1010, FIG. 8C As shown above in annotated FIGs. 7 and 8C, Whitten584 discloses that, when the magnet 802 is placed into the cavity of the non-slip member 112, “the exterior-facing component [112] covers the second face [rear-facing side] of the at least one magnet [802].”
[1q]	See Whitten584: “a magnet for attaching [mounting] the device to a magnetic surface.” EX1010, Abstract. See also ¶[0045].

226.

Claim 2:	
[2]	



227.

Claim 3:

[3]

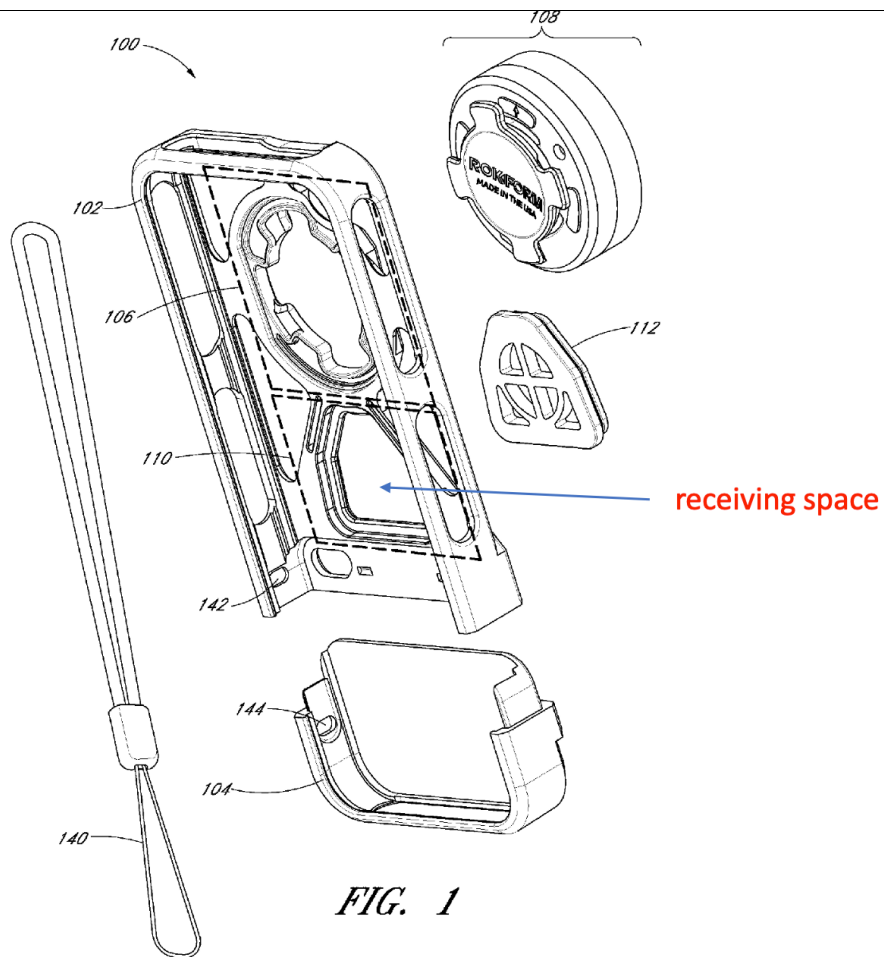


FIG. 1

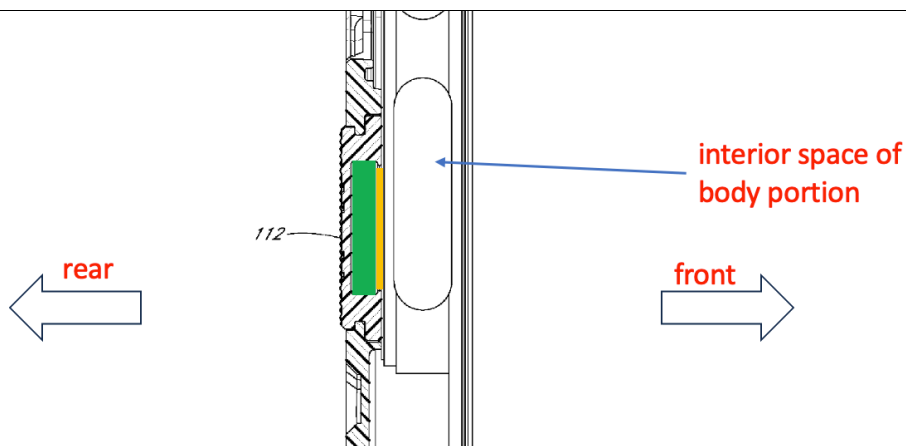
EX1010, FIG. 1.

As shown above, Whitten584 discloses “the exterior-facing component [non-slip member 112] and the receiving space have complementary shapes [trapezoid].”

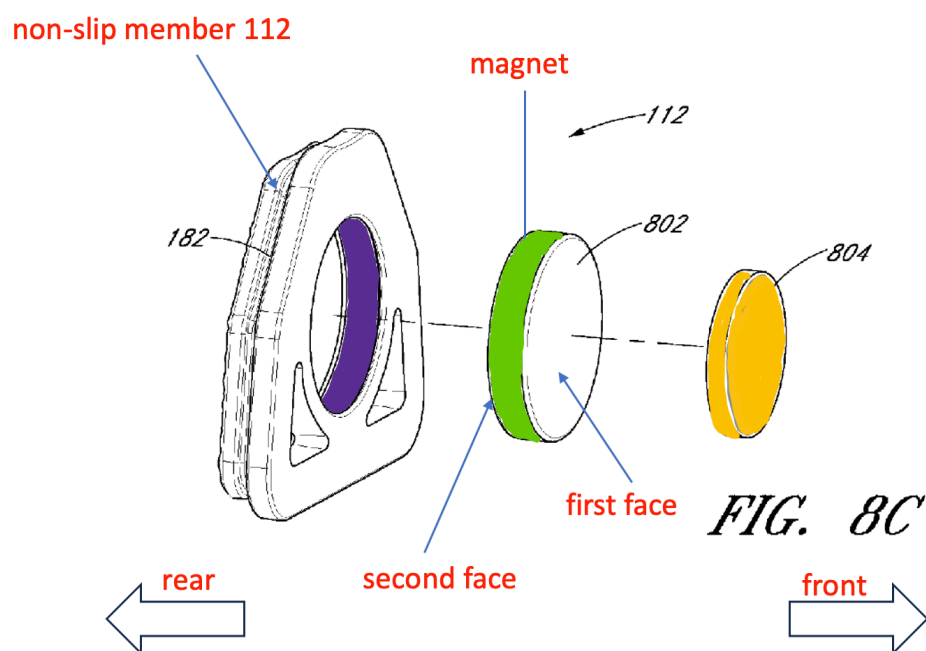
228.

Claim 4:

[4]



EX1010, FIG. 7 (partial).



EX1010, FIG. 8C

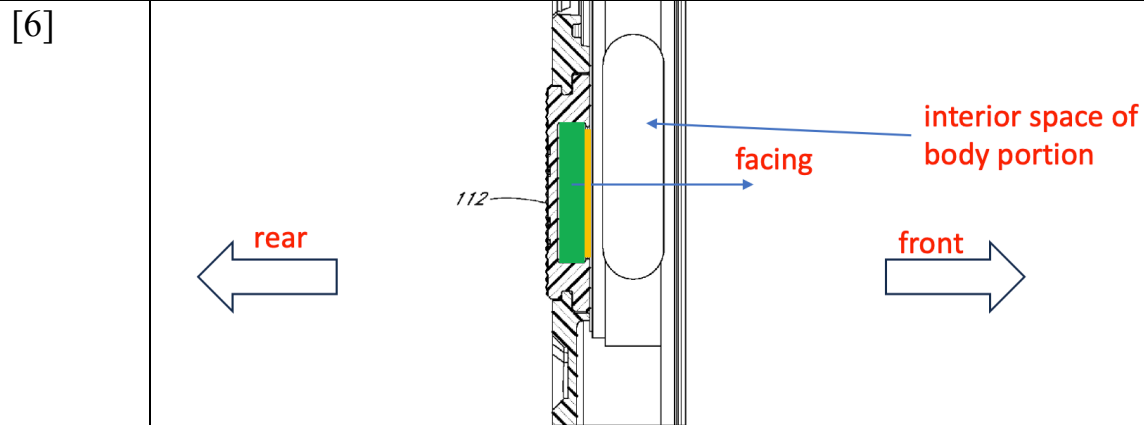
As illustrated above, Whitten584 discloses that, when the magnet 802 in FIG. 8C is inserted in the opening in FIG. 7, “at least one intervening layer [804, yellow] is disposed between the first face of the at least one magnet [802, green] and the interior space of the body portion.”

Claim 5:

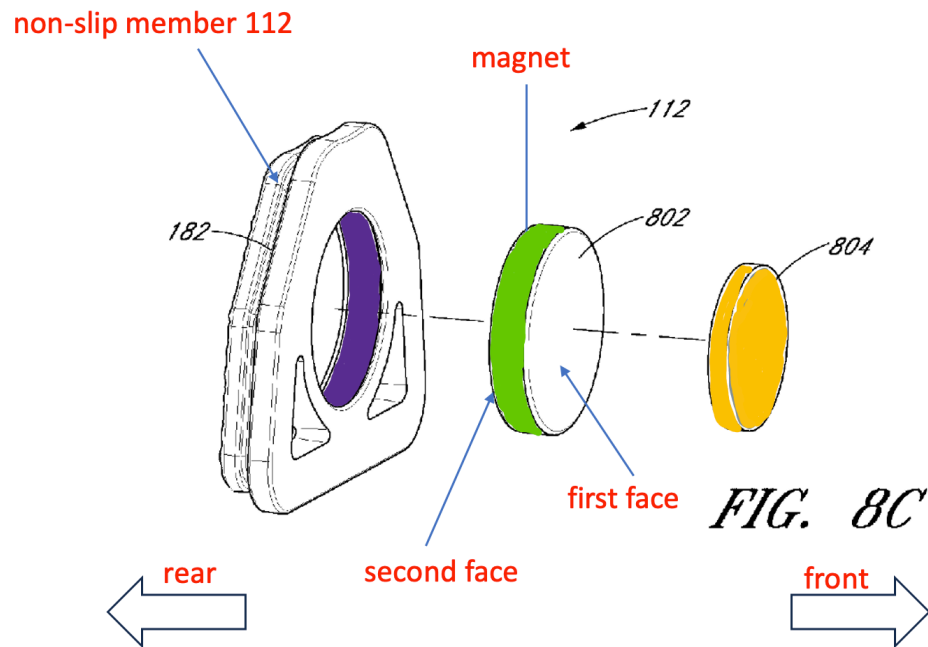
[5] See Whitten584: “Thus, references to the upper shell piece 102 or lower shell piece 104 herein are also intended to refer to the entire shell of an integrated or **unitary** shell arrangement.” EX1010, ¶[0044].

230.

Claim 6:



EX1010, FIG. 7 (partial).



	EX1010, FIG. 8C
	As shown above, Whitten584 discloses that magnet 802 is placed in the cavity of the non-slip member 112 and covered by a cover piece 804. A POSITA would have understood that the “exterior-facing component [112] directly contacts the second face of the at least one magnet [802] without [needing] an intervening layer.” See EX1010, ¶[0059]

231.

Claim 7:	
[7pre]	See [1pre]
[7b]	See [1b]
[7c]	See [1c]
[7d]	See [1e]
[7e]	See [1f]
[7f]	See [1h]
[7g]	See [1i]
[7h]	See [1k]
[7i]	See [1L]
[7j]	See [1m]
[7k]	See [1n]
[7L]	See [1o]
[7m]	See [1p]
[7n]	See [1q]

232.

Claim 8:	
[8]	See [2]
Claim 9:	
[9]	See [3]
Claim 10:	
[10]	See [4]
Claim 11:	
[11]	See[5]

Claim 12:	
[12]	See [6]
Claim 13:	
[13]	See [1g]
Claim 14:	
[14]	See [1p]
Claim 15:	
[15]	See [1j]
Claim 16:	
[16]	See [1d]

233.

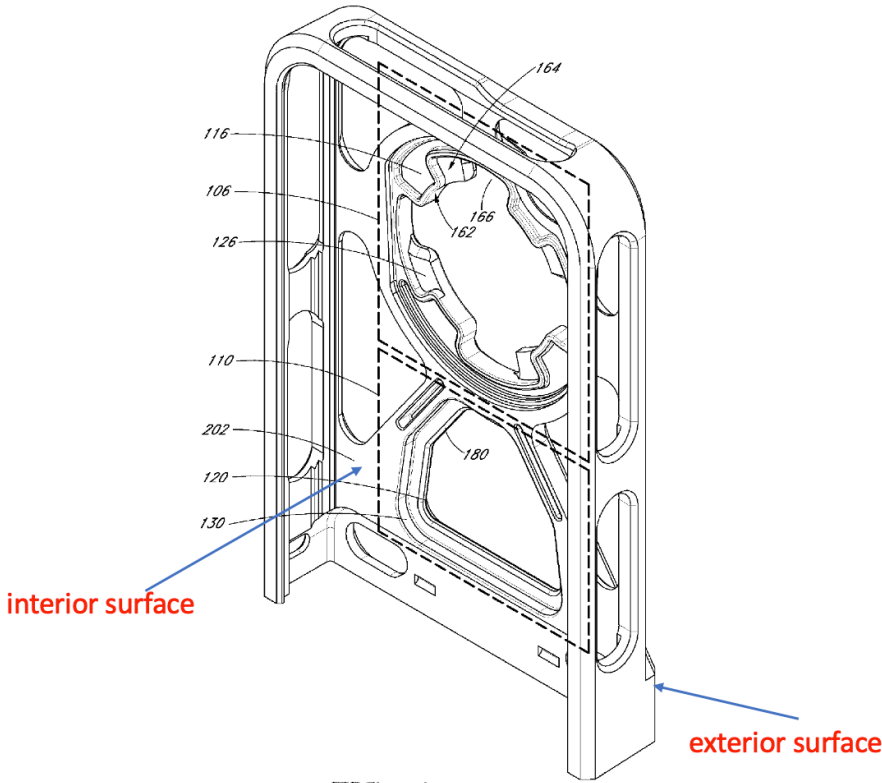
Claim 17:	
[17pre]	See [1pre]
[17b]	See [1b]
[17c]	See [1c]
[17d]	See [1e]
[17e]	See [1f]
[17f]	See [1h]
[17g]	See [1i]
[17h]	See [1L]
[17i]	See [1m]
[17j]	See [1o]
[17k]	See [1p]

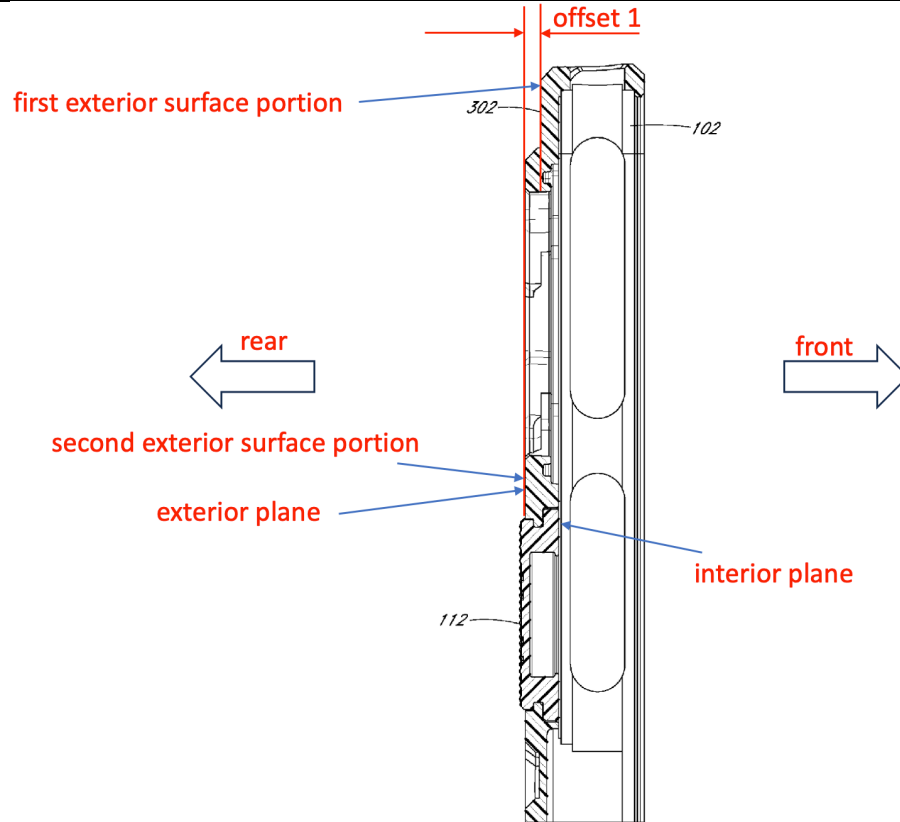
234.

Claim 18:	
[18]	See [1j]
Claim 19:	
[19]	See [1n]
Claim 20:	
[20]	See [1n]
Claim 21:	
[21]	See [2]

Claim 22:	
[22]	See [1q]
Claim 23:	
[23]	See [5]
Claim 24:	
[24]	See [1g]

235.

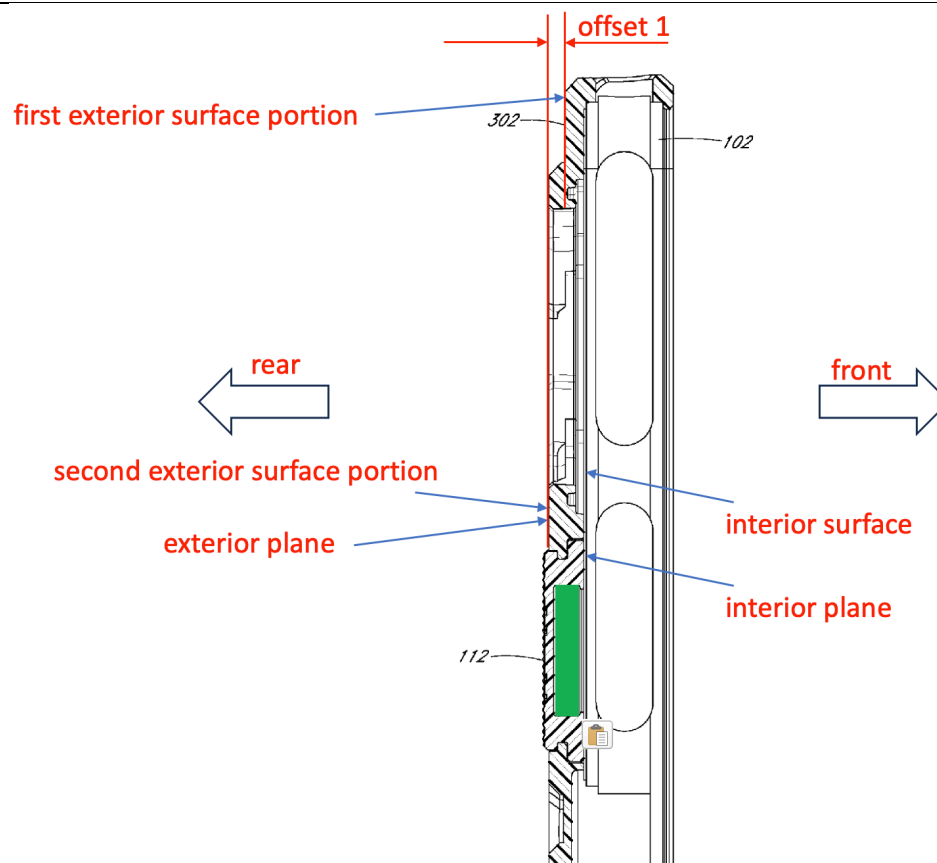
Claim 25:	
[25pre]	See [1pre]
[25b]	See [1b]
[25c]	See [1c] (incorporated herein). In addition:  EX1010, FIG. 4



EX1010, FIG. 7

As shown above, Whitten584 discloses that “a rear wall defining an interior surface [202], an exterior surface, an interior plane ... and an exterior plane.”

[25d]	See [1e]
[25e]	See [1f]
[25f]	See [1L] and [1m]
[25g]	See [1h]
[25h]	See below for modified annotation of FIG. 7 of Whitten584.



EX1010, FIG. 7

As shown above, Whitten584 discloses that, “with the exterior-facing component [112] received in the receiving space, the at least one magnet [green] is positioned between the interior plane and the exterior plane.”

[25i]	See [1L]
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[25j]	See [1p]
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236.

Claim 26:

[26]	See [1k]
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Claim 27:

[27]	See [26] (incorporating [1k]).
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237.

Claim 28:	
[28]	Whitten584 discloses: “when inserted, the non-slip member 112 will protrude outwardly as far as or further than any other rearward surface portion of the protection system 100.” EX1010, ¶[0051].
Claim 29:	
[29]	See [28]. A POSITA would have understood that “further than” would result in “the exterior surface of the exterior-facing component [non-slip member 112] and ... exterior surface of the rear wall [any other rearward surface portion] are offset from one another in a thickness direction of the rear wall.”

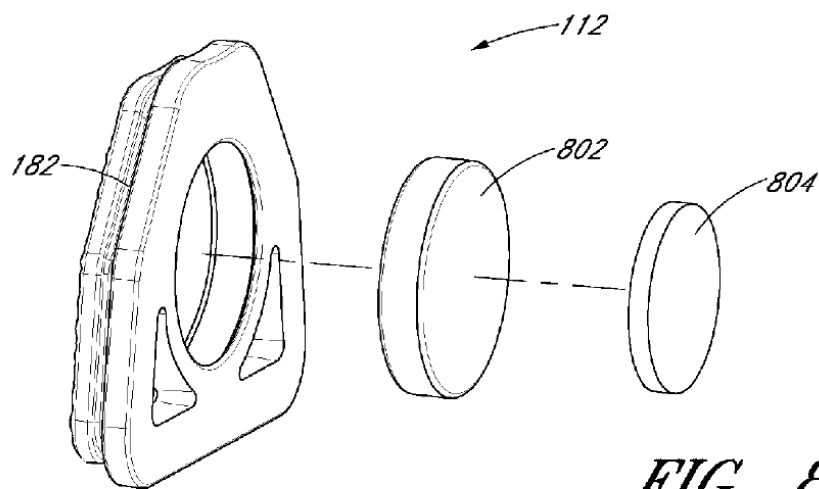
238.

Claim 30:	
[30]	See [2]
Claim 31:	
[31]	See [1q]
Claim 32:	
[32]	See [3]
Claim 33:	
[33]	See [1p]
Claim 34:	
[34]	See [4]
Claim 35:	
[35]	See [5]
Claim 36:	
[36]	See [6]
Claim 37:	
[37]	See [1g]
Claim 38:	
[38]	See [1d]

239.

Claim 39:	
[39]	Whitten584 discloses groove 182 in the non-slip member 112 (see

FIG. 8C reproduced below).



EX1010, FIG. 8C

See Whitten584: “the non-slip member having a circumferential **groove** dividing the non-slip member into a gripping surface and an interior surface.” EX1010, ¶[0009]. See *Id.* ¶[0058].

XIV. Conclusion.

240. This Declaration represents the opinions that I have formed up to date based on the material currently available to me. I reserve the right to revise, supplement, and/or amend my opinions stated in this Declaration based on new information that becomes available to me and on my continuing analysis of the materials available to me.

241. All statements made herein of my own knowledge are true, and all statements made on information and belief are believed to be true. Further, I am aware that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001. I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 9, 2026, in Dallas, TX.

Signature: _____

Dr. Randall King