

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

1LSS, INC.,
Patent Owner

Case IPR2025-01180
U.S. Patent No. 11,864,641

**DECLARATION OF DR. JOSHUA PHINNEY IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT
NO. 11,864,641**

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I, Dr. Joshua Phinney, hereby declare as follows.

I. INTRODUCTION

1. I have been retained as an expert witness on behalf of Petitioner Apple Inc. (“Petitioner”) for the above-captioned *inter partes* review (IPR). I am being compensated for my time in connection with this IPR at my standard consulting rate.

2. I understand that this Declaration accompanies a petition for IPR involving U.S. Patent No. 11,864,641 (“the ’641 patent”) (EX1001), which resulted from U.S. Patent Application No. 17/331,280 (“the ’280 application”), filed on May 26, 2021. Based on Provisional Application No. 62/736,379, I understand that the ’641 patent alleges a priority date of September 25, 2018. I refer to this date throughout this Declaration.

3. In preparing this Declaration, I have reviewed the ’641 patent and each of the documents cited herein, in light of general knowledge in the art before September 25, 2018. In formulating my opinions, I have relied upon my experience, education, and knowledge in the relevant art. In formulating my opinions, I have also considered the viewpoint of a person of ordinary skill in the art at the time of the invention (“POSA”).

II. MY BACKGROUND AND QUALIFICATIONS

4. My complete qualifications and professional experience are described

in my Curriculum Vitae, a copy of which can be found in Exhibit 1004. The following is a brief summary of my relevant qualifications and professional experience.

5. I am a Principal Engineer in the Electrical Engineering and Computer Science practice at Exponent, an engineering and scientific consulting firm headquartered at 149 Commonwealth Drive, Menlo Park, California 94025. I received a Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology (“MIT”) in 2005. I also earned S.M. and B.S. degrees in Electrical Engineering from MIT and the University of Illinois, Chicago (“UIC”), respectively.

6. My master’s thesis at MIT focused on the miniaturization of power converters, by reducing the energy storage and improving the performance of inductors. As part of this work, I designed, tested, and constructed ferrite, iron-powder, and air-core inductors, while minimizing magnetic losses. During this time, I invented with my advisor, Dr. David Perreault, an electrical component with a capacitive impedance and an inductance-cancellation feature provided by magnetically coupled windings. A filter having a capacitor with inductance cancellation provides enhanced performance over frequency compared with conventional capacitors. This work was later extended to a patent, with magnetically coupled windings used to improve EMI filters and common-mode

chokes.

7. My doctoral work at MIT centered on miniaturization of power converters and magnetics. As part of my doctoral work, I constructed and modeled planar magnetic systems, including magnetically coupled, printed magnetic coils. By incorporating such compact, magnetic structures into power converters, the resulting converter enjoyed multiple benefits, including waveform-shaping and reduction of switch stresses. Through the modeling associated with this dissertation, I become proficient in methods for analyzing the inductances of packages and interconnects, especially planar or filamentous systems of conductors. In my Ph.D. dissertation, I developed new switched-mode power amplifiers used to drive the magnetic structures described above. Contributions of both my Master's and doctoral thesis included techniques to track the impedance of resonant systems, and ensure that the passive elements I had constructed were driven at a resistive operating point by measuring voltage-current phase within the driving circuitry.

8. For my publications related to both my Master's and Ph.D. thesis, I received the William M. Portnoy Prize Paper Award (2003) and the IEEE Power Electronics Society Transactions Prize Paper Award (2004).

9. After earning my Ph.D., I joined Exponent and have led technical investigations to portable electronic devices, microcomputers, as well as industrial

and consumer devices with embedded controllers. My job functions include analyzing hardware and software of these devices to understand their modes of failure, and testifying regarding these devices in legal matters involving patents and trade secrets.

10. As part of my employment at Exponent, I have performed design, design reviews, and failure analysis for wireless charging and communication systems. The focus of this work has been (1) coupling between transmitter and receiver coils from the standpoint of efficiency and magnetic-field exposure to users, in particular for the Power Matters Alliance; (2) coupling of interrogators and transponder coils in printed magnetic cards; and (3) integrated-circuit and coil failures due to wear, dimensional changes, and triboelectric charging. In addition to testifying regarding resonant and inductive wireless-power transfer, I have consulted for industry regarding coil design, RFID and near-field communication (NFC) integrated circuits, modulation methods, and on-metal RFID tags. For industrial clients as well, I have led failure-analysis investigations for the components of portable electronic devices, including magnetically attached connectors, permanent-magnet motors, and magnetic cores.

11. Circa 2006, I performed evaluations of ISO/IEC 14443-compliant card readers (“proximity coupling devices”) and cards (“proximity integrated circuit cards”). At the time, there was high incidence of cards conducting current

across them, via the human body model and other charge models, such that they were causing problems at specific card reader installations, mostly notably point-of-sale terminals, and notably causing terminals such as ATMs to freeze up and or require reboot. One aspect of the evaluation was whether the external charging and discharge could affect the normal protocol exchange of the smartcard.

12. In *Scramoge Technology Ltd. v. Apple Inc.*, I testified on behalf of Apple regarding invalidity of six wireless-charging patents, which Scramoge Technology had acquired from LG Innotek. These patents were directed to coils, adhesives, magnetic layers, and magnetic alignment structures for wireless chargers. In particular, I testified regarding the distinctions between soft magnetic materials and hard magnetic materials (e.g., permanent magnets) in the context of flat, axially-aligned coils in portable electronics devices and external chargers.

13. Regarding the mechanical elements of electronic equipment, I have testified regarding buttons and touch interfaces, connectors, linear and rotary actuators, position-measuring devices, and the design and construction of modular housings for computerized equipment and peripherals. In particular, I have testified regarding detachable components (including magnetically attached covers) as they are constructed in relation to the housing and underlying electronic and connector assemblies within the housing of portable electronic devices.

14. In addition to the forgoing, I perform electromagnetic assessment of

utility and communication infrastructure. These issues include permitting, interference, and environmental impact of radar, AC and HVDC transmission lines, substations, photovoltaic installations, generators, broadcast antennas, and electrified mass transit systems.

III. SUMMARY OF OPINIONS

15. In forming my opinions about the '641 patent, I have considered the following grounds of unpatentability. Based on my review of the prior art references that form the basis of these grounds, it is my opinion that claims 1-11 of the '641 patent would have been obvious to a POSA prior to September 25, 2018.

Ground	Basis	Claims	References
1A	§103	1-8	Berkley, Baca, Goto
1B	§103	3	Berkley, Baca, Goto, Cox
1C	§103	11	Berkley, Baca
1D	§103	9	Berkley, Baca, Goto, Haymond
1E	§103	10	Berkley, Baca, Goto, Mitsuyama
2A	§103	1-7, 11	Zhu, Kinshi, Goto
2B	§103	3	Zhu, Kinshi, Goto, Cox
2C	§103	4	Zhu, Kinshi, Goto, Lauder
2D	§103	9	Zhu, Kinshi, Goto, Haymond
2E	§103	10	Zhu, Kinshi, Goto, Mitsuyama
3A	§103	11	Kinshi

3B	§103	1-3, 5, 6, 8	Kinshi, Goto
3C	§103	3	Kinshi, Goto, Cox
3D	§103	4	Kinshi, Goto, Lauder
3E	§103	9	Kinshi, Goto, Haymond
3F	§103	10	Kinshi, Goto, Mitsuyama

16. I have been asked to consider how a POSA would have understood the challenged claims in light of the disclosures of the '641 patent. I have also been asked to consider how a POSA would have understood the prior art references listed in the table above.

17. Further, I have been asked to consider and provide my technical review, analysis, insights, and opinions regarding whether a POSA would have understood that the combinations of the prior art references listed in the table above render obvious claims 1-11 of the '641 patent.

IV. MATERIALS CONSIDERED

18. In formulating my opinions, I have relied upon my training, knowledge, and experience that are relevant to the '641 patent. I have also reviewed and am familiar with the following documents and materials in addition to any other documents cited in this declaration:

Exhibit No.	Description
1001	U.S. Patent No. 11,864,641 B2 to Mora et al., issued January 9, 2024 (“the ’641 patent”)
1002	File History of U.S. Patent No. 11,864,641
1004	<i>Curriculum Vitae</i> of Dr. Joshua Phinney
1005	U.S. Provisional Application No. 62/736,379 to Mora, filed September 25, 2018 (“Provisional”)
1006	U.S. Patent Application Publication No. 2016/0260532 A1 to Baca, published September 8, 2016 (“Baca”)
1007	Chinese Patent Application Publication No. 108023992 A to Zhu, published May 11, 2018 (“Zhu”)
1008	English Language Translation of Zhu
1009	Japanese Patent Application Publication No. 3200923 U to Kinshi, published November 12, 2015 (“Kinshi”)
1010	English Language Translation of Kinshi
1011	U.S. Patent No. 5,288,942 to Godfrey, issued February 22, 1994 (“Godfrey”)
1012	U.S. Patent No. 4,647,714 to Goto, issued March 3, 1987 (“Goto”)
1013	U.S. Patent Application Publication No. 2017/0354229 A1 to Berkley et al., published December 14, 2017 (“Berkley”)
1014	U.S. Patent No. 10,134,517 B2 to Baca, issued November 20, 2018 (“Baca Patent”)
1015	U.S. Patent No. 9,362,968 B1 to Haymond, issued June 7, 2016 (“Haymond”)
1016	U.S. Patent No. 5,080,223 to Mitsuyama, issued January 14, 1992 (“Mitsuyama”)

Exhibit No.	Description
1017	U.S. Patent Application Publication No. 2016/0072933 A1 to Cox, III, published March 10, 2016 (“Cox”)
1018	U.S. Patent No. 8,138,869 B1 to Lauder et al., issued March 20, 2012 (“Lauder”)
1019	U.S. Patent Application Publication No. 2011/0192857 A1 to Rothbaum et al., published August 11, 2011 (“Rothbaum”)
1020	Ho, A., “Mophie Hold Force Review – Modular iPhone 7 and 7 Plus cases,” MobileReviews Eh!, April 26, 2017, accessible at https://www.mobilereviews-eh.ca/mophie-hold-force-review-modular-iphone-7-and-7-plus-cases/ (last accessed June 18, 2025)
1021	Wayback Machine Archive of Exhibit 1020, archived June 6, 2017, accessible at https://web.archive.org/web/20170606185125/https://www.mobile-reviews-eh.ca/mophie-hold-force-review-modular-iphone-7-and-7-plus-cases/ (last accessed July 15, 2025)
1022	U.S. Patent Application Publication No. 2016/0295981 A1 to Lay et al., published October 13, 2016 (“Lay”)
1023	U.S. Patent Application Publication No. 2019/0208878 A1 to Hyncek et al., published July 11, 2019 (“Hyncek”)
1024	“Burkley Magnetic Detachable Wallet Case for iPhone 7+: Handmade Turkish Leather w/ Excellent Magnets!”, Tech Reviewer, May 18, 2017, accessible at https://web.archive.org/web/20170825170230/https://tech-reviewer.com/2017/05/18/burkley-magnetic-detachable-wallet-case-iphone-7-handmade-turkish-leather-w-excellent-magnets/ (last accessed July 15, 2025)
1025	“BUDU - A module phone case that adapts to you!”, Indiegogo Campaign, accessible at https://www.indiegogo.com/projects/budu-a-modular-phone-case-that-adapts-to-you# (last accessed July 15, 2025)

Exhibit No.	Description
1026	“Updates” Tab from “BUDU - A module phone case that adapts to you!”, Indiegogo Campaign, accessible at https://www.indiegogo.com/projects/budu-a-modular-phone-case-that-adapts-to-you#/updates/all (last accessed July 15, 2025)
1027	U.S. Patent No. 4,851,610 to LeBlanc et al., issued July 25, 1989 (“LeBlanc”)
1028	U.S. Patent No. 5,941,375 to Kamens et al., issued August 24, 1999 (“Kamens”)
1029	U.S. Patent Application Publication No. 2012/0228168 A1 to Kitchen, issued September 13, 2012 (“Kitchen”)
1030	U.S. Patent Application Publication No. 2012/0326819 A1 to Malanczyj et al., issued December 27, 2012 (“Malanczyj”)
1031	U.S. Patent No. 5,718,329 to Ippolito et al., issued February 17, 1998 (“Ippolito”)
1032	U.S. Patent Application Publication No. 2006/0279098 A1 to Shipley et al., published December 14, 2006 (“Shipley”)
1033	Excerpts from Griffiths, D., <i>Introduction to Electrodynamics</i> , Third Edition (1999)
1034	Declaration of Timothy L. Tang
1035	U.S. Patent Application Publication No. 2012/0168483 A1 to Jambunathan et al., published July 5, 2012 (“Jambunathan”)

19. To the best of my knowledge, the above-mentioned documents and materials are true and accurate copies of what they purport to be. An expert in the field would reasonably rely on them to formulate opinions such as those set forth in this declaration.

V. LEGAL UNDERSTANDING

20. I have also relied upon various legal principles (as explained to me by Apple's counsel) in formulating my opinions. My understanding of these principles is summarized below.

A. My Understanding of Claim Construction

21. I understand that during an *inter partes* review proceeding, claims are to be construed in light of the specification as would be read by a person of ordinary skill in the relevant art at the time the application was filed. I understand that claim terms are given their ordinary and customary meaning as would be understood by a person of ordinary skill in the relevant art in the context of the entire disclosure. A claim term, however, will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the claim term in the specification. In this case, the claim term will receive the definition set forth in the patent.

B. My Understanding of Obviousness

22. I understand that a patent claim is invalid if the claimed invention would have been obvious to a POSA at the time the application was filed. This means that even if all of the requirements of the claim cannot be found in a single prior art reference that would anticipate the claim, the claim can still be invalid.

23. To obtain a patent, a claimed invention must have, as of the priority date, been nonobvious in view of the prior art in the field. I understand that an

invention is obvious when the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a POSA at the time the invention was made.

24. I understand that to prove that prior art or a combination of prior art renders a patent obvious, it is necessary to:

(1) identify the particular references that, singly or in combination, render the patent obvious;

(2) specifically identify which elements of the patent claim appear in each of the asserted references; and

(3) explain how the prior art references could have been combined in order to create the inventions claimed in the asserted claim.

25. I also understand that prior art references can be combined under several different circumstances. For example, it is my understanding that one such circumstance is when a proposed combination of prior art references results in a system that represents a predictable variation, which is achieved using prior art elements according to their established functions.

26. I also understand that when considering the obviousness of a patent claim, one should consider whether a teaching, suggestion, or motivation to combine the references exists so as to avoid impermissibly applying hindsight when considering the prior art. I understand this test should not be rigidly applied,

but that the test can be important to avoid such hindsight.

27. I understand that certain objective indicia can be important evidence as to whether a patent is obvious or nonobvious. Such indicia include: (1) commercial success of products covered by the patent claims; (2) a long-felt need for the invention; (3) failed attempts by others to make the invention; (4) copying of the invention by others in the field; (5) unexpected results achieved by the invention as compared to the closest prior art; (6) praise of the invention by the infringer or others in the field; (7) the taking of licenses under the patent by others; (8) expressions of surprise by experts and those skilled in the art at the making of the invention; and (9) the patentee proceeded contrary to the accepted wisdom of the prior art.

28. I also understand that “obviousness” is a legal conclusion based on the underlying factual issues of the scope and content of the prior art, the differences between the claimed invention and the prior art, the level of ordinary skill in the prior art, and any objective indicia of non-obviousness.

29. For that reason, I am not rendering a legal opinion on the ultimate legal question of obviousness. Rather, my testimony addresses the underlying facts and factual analysis that would support a legal conclusion of obviousness or non-obviousness, and when I use the term obvious, I am referring to the perspective of one of ordinary skill in the art at the time of invention.

C. A Person of Ordinary Skill in the Art

30. I understand that a person of ordinary skill in the relevant art (“POSA”) is presumed to be aware of all pertinent art, thinks along conventional wisdom in the art, and is a person of ordinary creativity—not an automaton.

31. I have been asked to consider the level of ordinary skill in the field that someone would have had at the time the claimed invention was made. In deciding the level of ordinary skill, I considered the following:

- the levels of education and experience of persons working in the field;
- the types of problems encountered in the field; and
- the sophistication of the technology.

32. My opinion below explains how a POSA would have understood the technology described in the references I have identified herein around the September 25, 2018 timeframe, which I have been advised is the earliest possible effective filing date for the ’641 patent. However, my opinions herein would not be affected if the ’641 patent is found to only be entitled to a later effective filing date.

33. Regardless of whether I use “I” or a “POSA” during my technical analysis below, all of my statements and opinions are to be understood to be based on how a POSA would have understood or read a document at the time of the alleged invention.

VI. BACKGROUND OF THE TECHNOLOGY

34. As I further explain in Section VII, the '641 patent describes “a wallet for attachment to a mobile device” via “magnetic material.” EX1001, Abstract. The claims of the '641 patent broadly recite general concepts related to a wallet attached to a mobile device, such as the wallet having a “body defining a compartment,” a “ferromagnetic shield” or “metallic plate” that is arranged between the compartment and magnetic material, separating magnetic arrangements using “nonmagnetic material,” and magnetic arrangements that cause a “specific orientation” when the wallet is attached to the mobile device. *See* EX1001, Claims 1, 5, 11. These concepts, however, were well known before the '641 patent's earliest possible priority date.

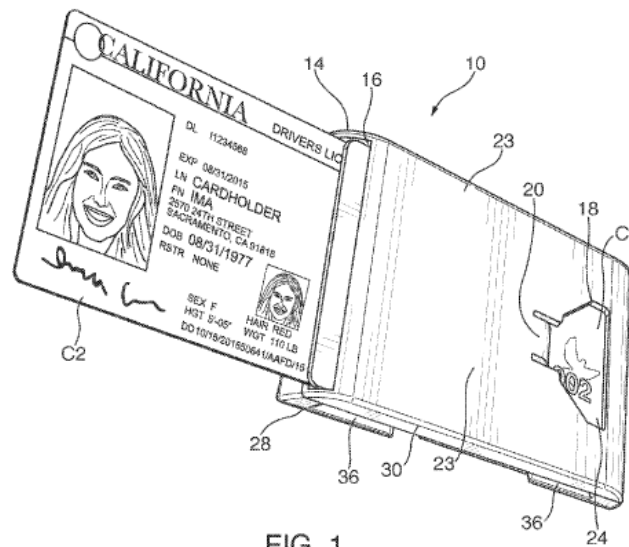
35. As I further explain below, attaching a wallet to a mobile device using magnets was well known. Further, applying magnetic shielding to wallets was also well known, especially to prevent magnetic cards from corruption or data loss due to exposure to a magnetic field.

A. Wallet Attachments for Mobile Devices Were Well Known in the Prior Art

36. Prior to the '641 patent, wallet attachments for mobile devices were well known and ubiquitous. Such wallets came in many styles. I highlight below two of these styles: wallets attached to the back face of a mobile device and folio-style wallets.

1. Back-Attached Wallets

37. By September 2018, attaching a wallet to the back of a mobile device (such as a cell phone) was a well-known configuration used to hold items such as credit cards. For example, Berkley describes and depicts a “cosmetic wallet” that is attachable to a handheld device and “sized to hold and retain credit card(s), identification card(s), and folded bill(s) in an interior cavity.” EX1013, Abstract. Figure 1 from Berkley depicts the cosmetic wallet while Figures 2 and 3 depict the wallet as attached to a smartphone. EX1013, ¶¶2-3, 5, 20, 24-25.



EX1013, FIG. 1.

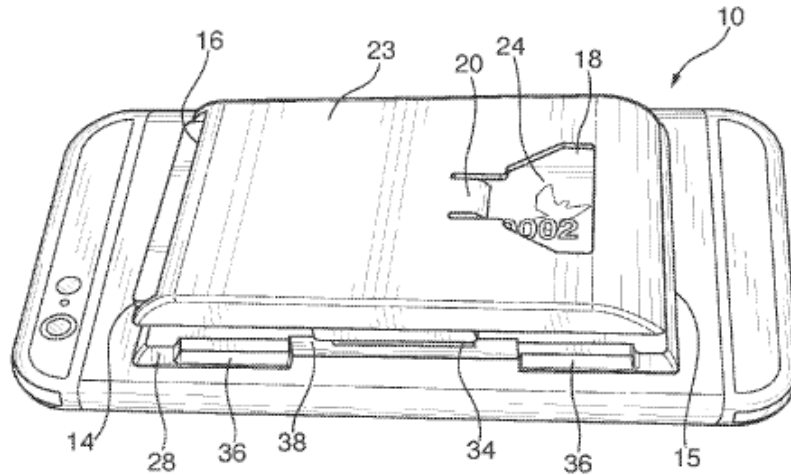


FIG. 2

EX1013, FIG. 2.

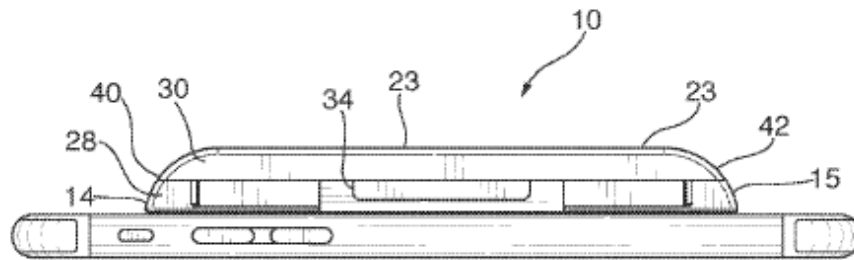


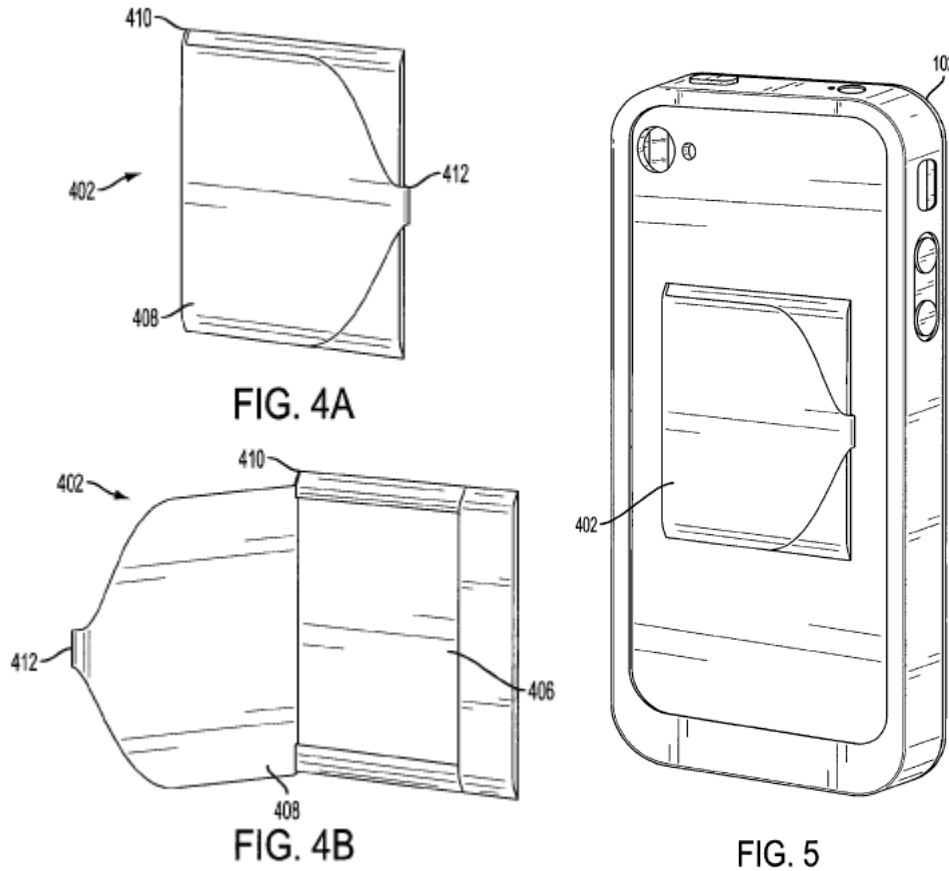
FIG. 3

EX1013, FIG. 3.

38. It was also well known to attach such wallets to mobile devices. As Berkley explains, the wallet can be attached using “a magnet that is placed on the base of the device which enables the entire improved compact to ‘stick’ to a set of corresponding magnets that are attached by a user to a smartphone.” EX1013, ¶29.

39. Rothbaum also describes this configuration by describing “Magnetically Attached Accessories (For A Case) for a Portable Electronics

Device.” EX1019, Title. As I further explain in Section VI.B, Rothbaum describes the use of “discrete magnetic attachment elements” to attach various accessories to mobile electronic devices. EX1019, ¶¶142-143, 148, 256. One such accessory is a “card holder 402” as depicted in Figures 4A, 4B, and 5. EX1019, ¶¶155-158.

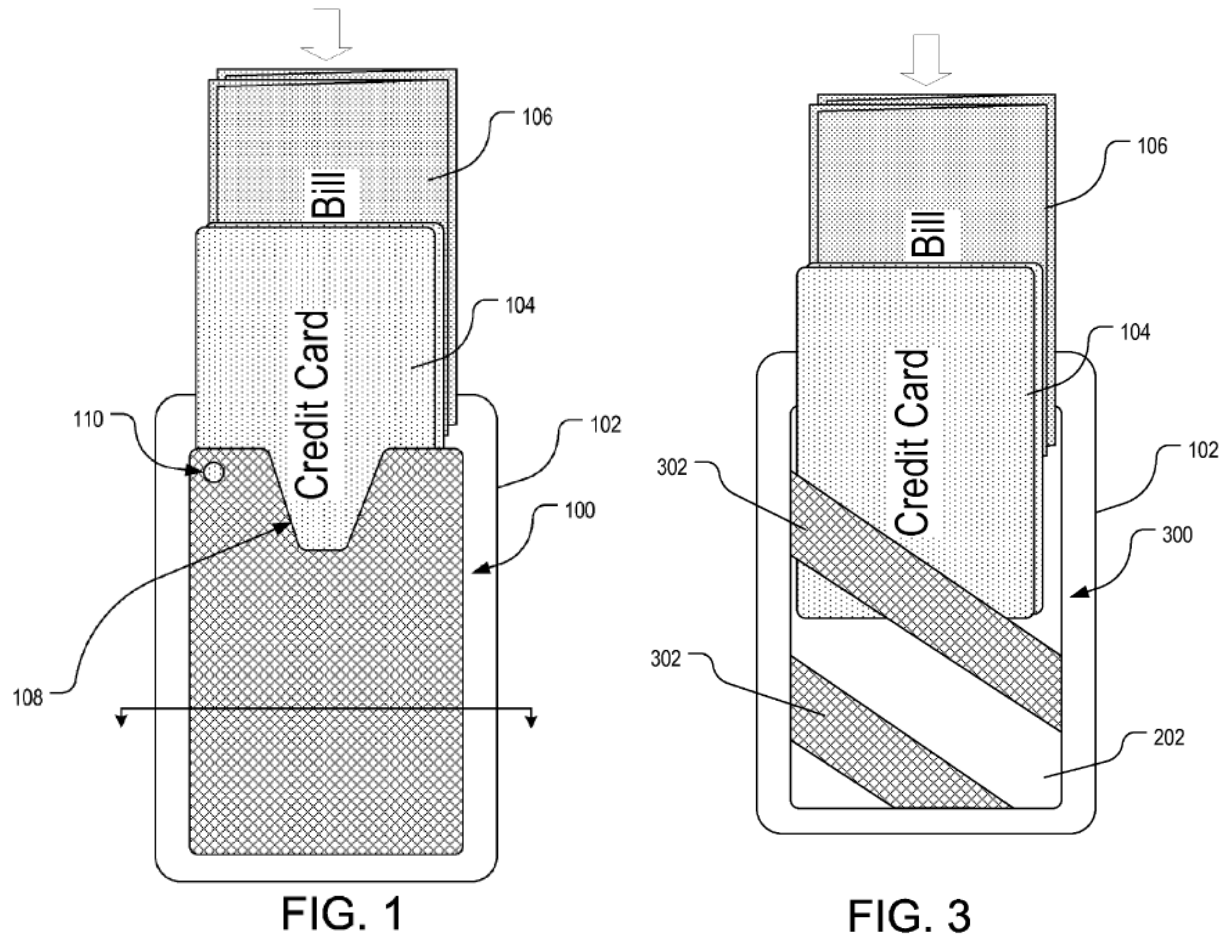


EX1019, FIGs. 4A-4B, 5.

40. Rothbaum explains that the “card holder 402” includes a “rectangular chamber 406 for holding one or more cards” that “can be sized to hold many different sized cards, and many different types of card.” EX1019, ¶155. “[T]he card holder 402 may conveniently hold other items as well, including keys, paper

money, coins, band-aids, etc.” EX1019, ¶155. Card holder 402 can be made of “any suitable material or combination of materials, including, but not limited to, leather, plastic, elastomer, silicone, wood, metal, fabric, fiberglass, polymer, and/or rubber.” EX1019, ¶157. As seen from this description, Rothbaum confirms my opinion that attaching wallets to mobile devices would have been well known to a POSA in the relevant time frame.

41. Jambunathan provide another example of this type of wallet. Jambunathan describes a “wallet for a handheld device” that is “stretchable to accommodate multiple cards and folded bills.” EX1035, Abstract. For example, Figures 1 and 3 from Jambunathan show wallets attached to a wireless phone 102. EX1035, ¶¶5, 7, 17, 22.



EX1035, FIG. 1, FIG. 3.

42. Commercially, this type of wallet was also available to consumers. For example, by April 2017, the Mophie Hold Force and Hold Force Wallet were wallet products that were capable of magnetically attaching to mobile phones. *See* EX1020; *see also* “Great for people wearing suits? Mophie Hold Force Review - Modular iPhone 7/7 Plus Case Review” Published April 16, 2017 and available at <https://youtu.be/Cx0FMNOvw2c?si=Y0D6rDsQXmQQH2eT>.



EX1020, 8.



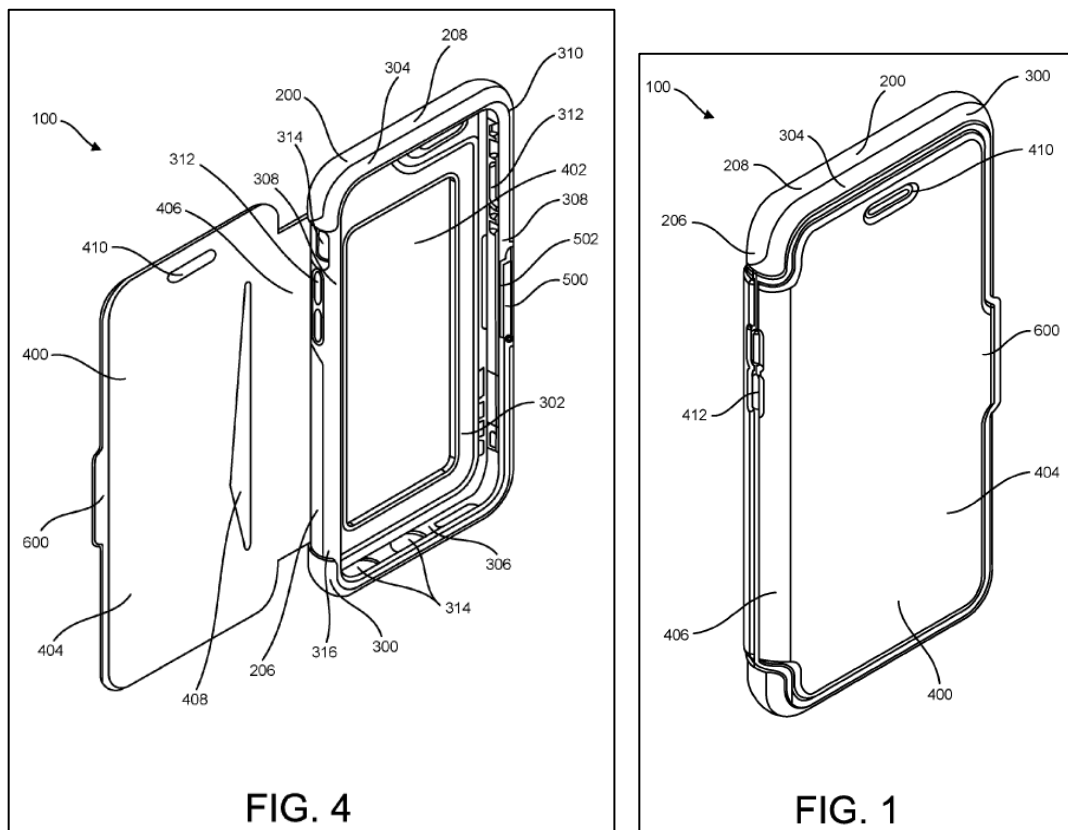
EX1020, 9.

43. As seen from these references, it was well known in the industry to magnetically attach wallets to the back of a mobile device such as a smartphone

prior to the '641 patent.

2. Folio-style Wallets

44. In addition to back-attached wallets, attaching folio-style wallets—and magnetically attaching such wallets—to a mobile device was also well known prior to the '641 patent. For example, Lay describes a “protective folio case for an electronic device.” EX1022, Title. A feature of folio-style cases was to include a panel to cover the front surface of an electronic device to provide protection. *See, e.g.,* EX1022, ¶40. Lay depicts an example of the folio-style case with the protective panel 404 open in Figure 4 and closed in Figure 1. EX1022, ¶¶38-46.



EX1022, FIG. 4, FIG. 1.

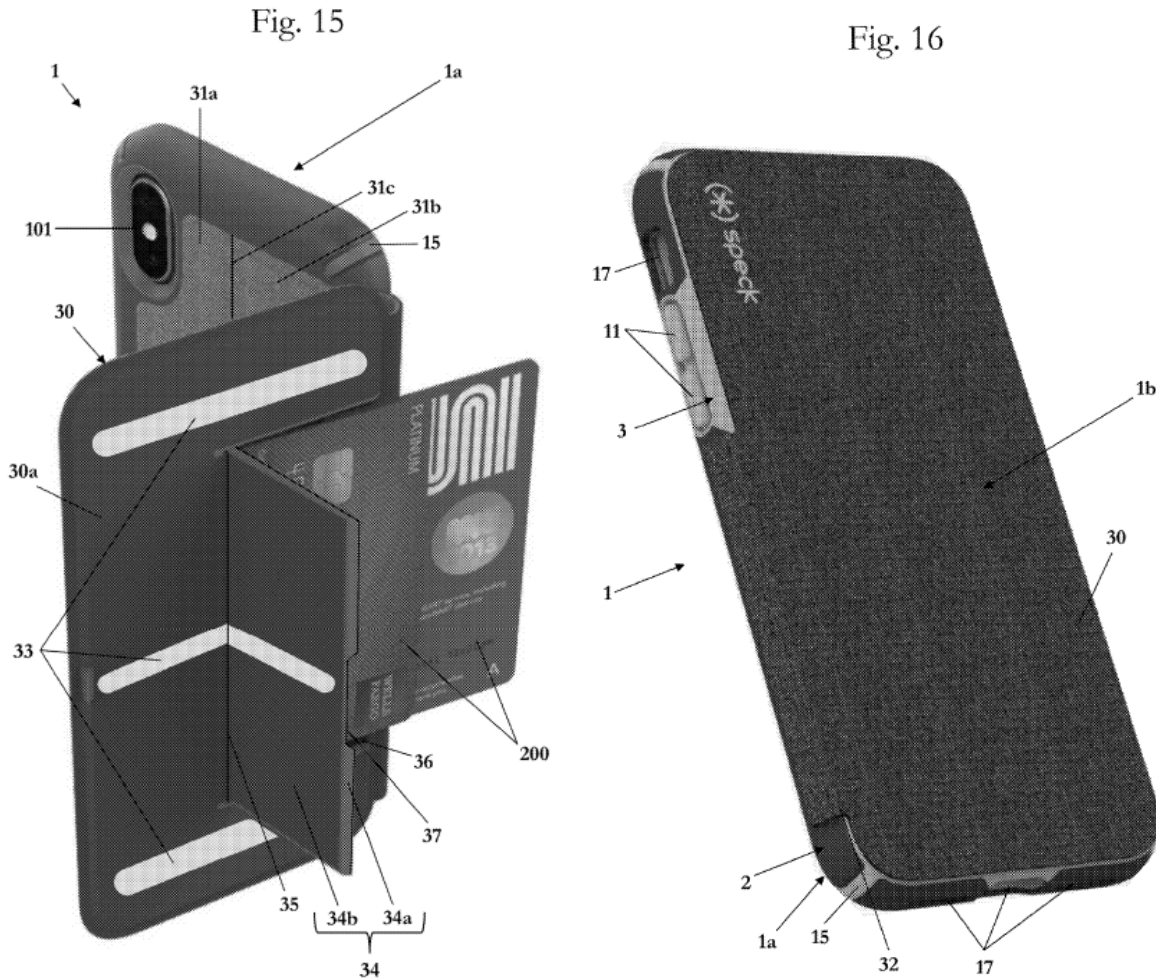
45. Similar to other folio-style wallets, Lay also describes “slot 408” in the protective panel 404 that can function as a wallet:

An inner portion of second panel 404 of flexible member 400 can include slot 408. *Slot 408 can be sized and configured to allow for cards or other thin items, such as currency, credit cards, a key, and/or identification cards to fit within slot 408 and be carried within protective enclosure 100* while the electronic device is installed in the protective enclosure. Slot 408 can be located in a vertical, horizontal, or other orientation, and in some instances more than one slot can be on the interior portion of second panel 404 of flexible member 400. Slot 408 can be designed in a triangular shape, or any shape, for ease of sliding cards or currency out of the slot with a finger or thumb. Slot 408 can be an access point for an area larger than the height and width of slot 408 within the interior portion of second panel 404. *Slot 408, or more than one slot, can also be configured to access different layers within flexible member 400 and provide one or more areas of storage separated by layers of second panel 404 of flexible member 400. In some instances, more than one slot 308 can be configured of a different material and installed within second panel 404.*

EX1022, ¶68 (emphasis added).

46. Additionally, Hyncek describes a “folio case with card holder and shock-absorbing impact geometry.” EX1023, Title. Similar to Lay, Hyncek also describes a “cover” that includes a “card cavity configured to accept at least one card.” EX1023, Abstract. Hyncek depicts an open cover in Figure 15 with the

card cavity exposed and a closed cover in FIG. 16. EX1023, ¶¶42-43, 81, 86.



EX1023, FIG. 15, FIG. 16.

47. Hynecek’s “folio case” includes a “pocket in the cover of the case to hold various types of card (e.g., credit cards, payment cards, coupons, receipts, identification cards, merchandise credit cards, gift cards, business cards, metro cards, etc.).” EX1023, ¶1. “As shown in FIG.15, the inside of the front portion 30 includes a door or flap 34... that exposes an opening of a cavity or pocket 36 in which cards 200 can be placed.” EX1023, ¶86. As seen from Hynecek and Lay

(along with other folio-style wallets like Kinshi, which I further discuss below), it was well known in the art to use folio-style wallets and attach them to mobile devices.

48. As an additional feature for folio-style wallets, users would commonly fold back the protective panel to provide additional access to the attached mobile device. For example, this may be useful for positioning a mobile device in the user's hand or when making phone calls. Lay describes this folding back of the front panel into an "open position" as well and depicts this in Figure 10. EX1022, ¶¶54, 56, 73-74.

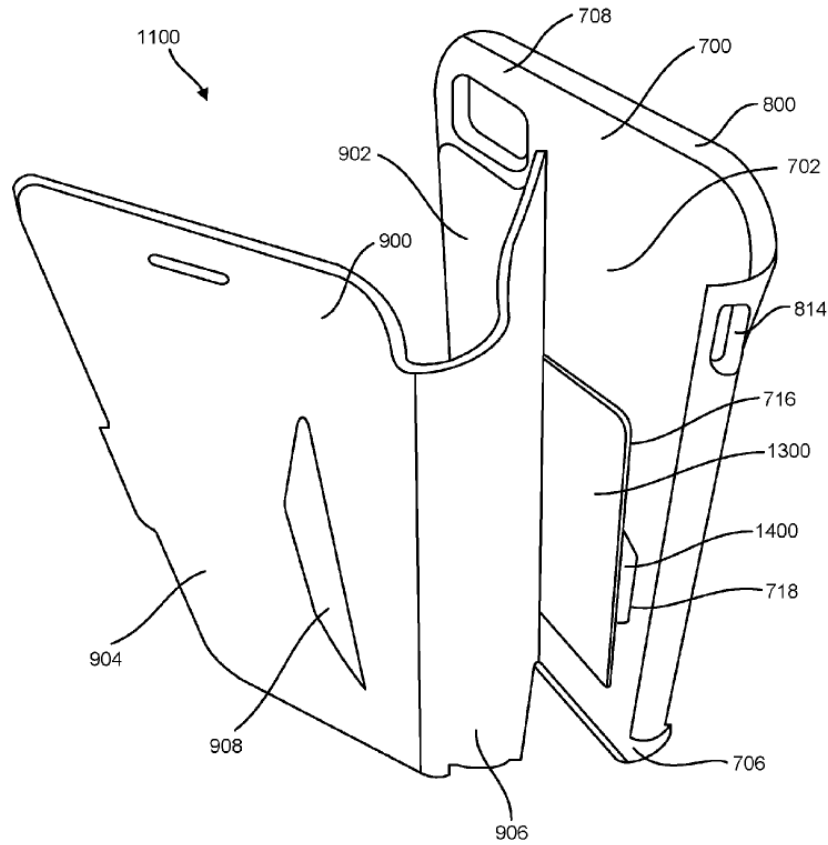


FIG. 10

EX1022, FIG. 10.

49. Lay explains that folding back the panel was a common occurrence and also provides an additional magnet for ensuring that the panel remains in the open position:

In some configurations, an additional magnet and tab combination can be located along the back portion of the structural member of the electronic device to assist in *securing the second panel of the flexible member in an open position, when it is desired to access the touchscreen of the electronic device or tablet device and keep the second panel more securely positioned along the back of the*

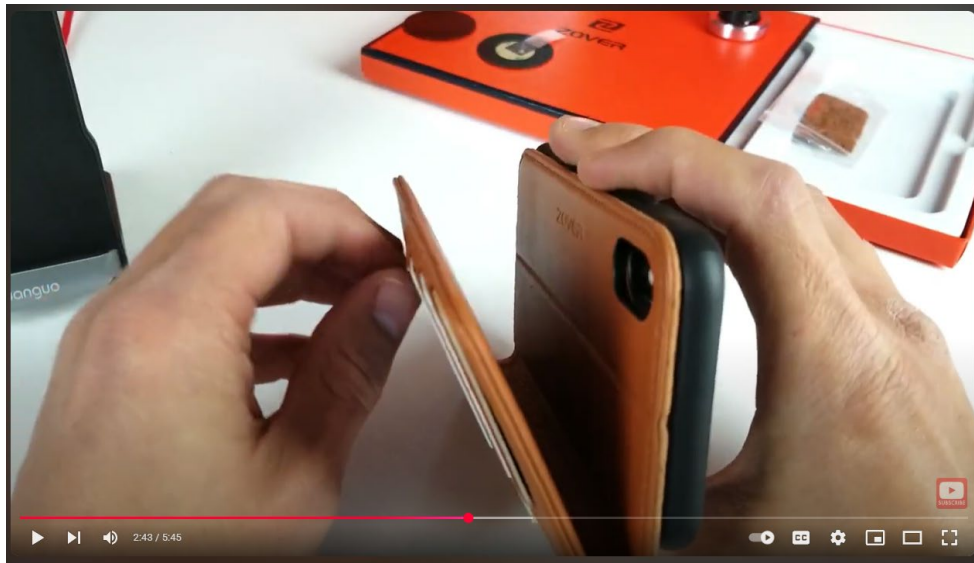
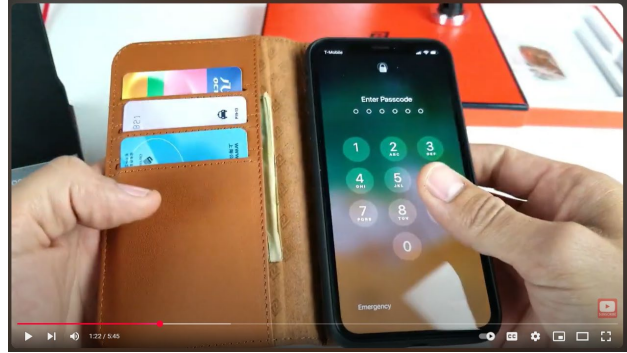
protective enclosure and out of the way of the front surface of the electronic device.

EX1022, ¶56 (emphasis added).

In some instances, magnet 600 can be located on or within second panel 404 of the flexible member 400 such that *when second panel 404 is in an open position and folded away from the front surface of the electronic device and folded around to the back surface of the electronic device*, magnet 600 can engage with second side 504 of tab 500 (as shown in FIG. 9).

EX1022, ¶54 (emphasis added).

50. To illustrate Lay's description, before September 2018, there were also several commercial options for folio-style wallets where users would operate the panels as described in Lay. For example, as described in "iPhone X: Zover Magnetic Detachable Wallet Case (Can Wirelessly Charge too)" Published March 16, 2018 and available at <https://youtu.be/0yDzk4Lqdic?si=apAy1BSBBq9Oh2Aq>, users of magnetic folio-style cases would commonly fold them back. Like Lay, such magnetic folio-style cases also included magnets to secure panels in the open position. Below, I have included screenshots of this video to illustrate the functionality described in Lay.



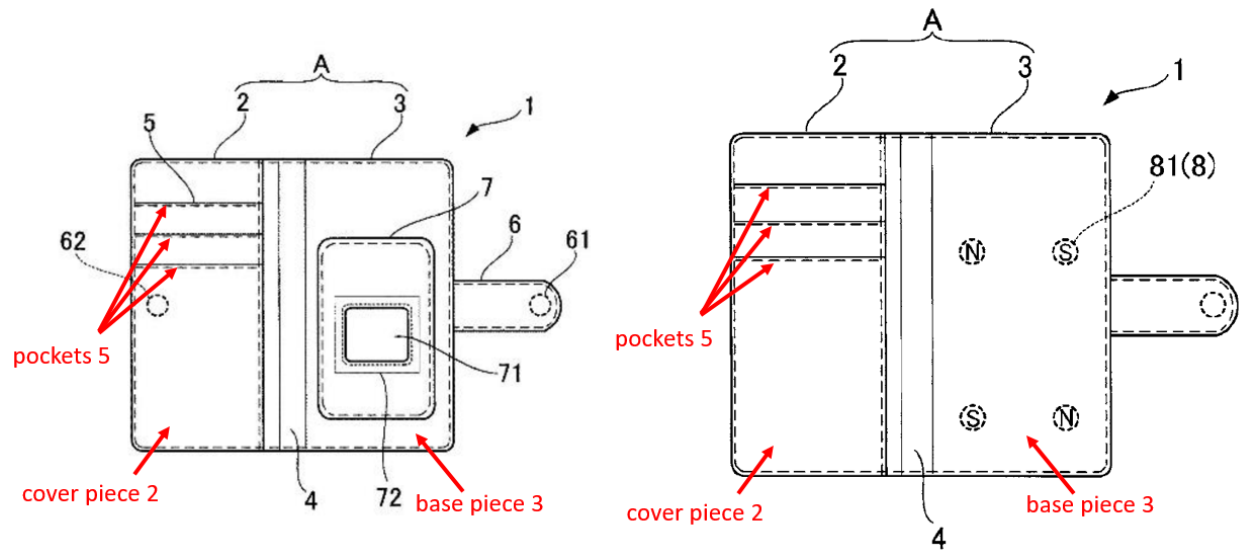
51. The video “A Super Slim, Ultra Premium Leather Folio Case for

iPhone 7+? Check out Vaja Agenda MG!” Published February 16, 2017 and available at <https://youtu.be/ISdU0sH0A9E?si=EdvfbHb9fkoUy3AA> also depicts folding back a folio panel.



52. As seen from these references, folding back a folio panel was a common and expected way for a user to operate and interact with folio cases.

53. To elaborate on a feature I previously described with reference to Lay and Hyncek, folio cases often included slots for holding cards. A common way of holding these cards was to include slots so that the cards could be inserted vertically into the front panel of the folio wallet. For example, Kinshi describes such a phone case with a base piece 3 and a cover piece 2 that includes a plurality of pockets 5 to store cards. EX1010, Abstract, ¶¶14, 15.



EX1010, FIGs. 1 and 4 (annotated).

54. Such a wallet configuration was also common in magnetic folio cases (such as Kinshi). For example, the video “Burkley Magnetic Detachable Wallet Case for iPhone 7+: Handmade Turkish Leather w/ Excellent Magnets” Published May 17, 2017 and available at <https://youtu.be/zbTqNzl32vY?si=sRdYhFCYiWcgqFKg> also depicts a folio-style wallet that magnetically attaches to a phone and includes vertical slots for card

insertion. EX1024, 3 (“Magnetically removable inner phone case is convenient to remove, but also attaches to the outer wallet case with an extremely secure magnet.”) This can be seen from the images below, which are from a written review as well as from the video that I have referenced above.



EX1024, 2.





55. As seen from these examples and the ones I described above, folio-style wallets as attachments to mobile devices such as smartphones were well known in the art before the '641 patent.

B. Attaching Wallets to Mobile Devices Using Magnets Was Well Known in the Prior Art

56. As I explained in Section VI.A, attaching various wallet configurations to mobile devices using magnets was well known in the prior art. For example, in addition to the screenshots that I previously provided, Berkley, Rothbaum, and Kinshi describe wallets that can be attached to a mobile device using magnets. *See, e.g.*, EX1013, ¶¶29; EX1019, Title, ¶¶142-143, 148, 256; EX1010, ¶¶17-18, 26, FIG. 3-4.

57. Examining Rothbaum as an example, Rothbaum describes

“Magnetically Attached Accessories (For A Case) for a Portable Electronics Device” and the use of “discrete magnetic attachment elements” to attach various accessories to mobile electronic devices. EX1019, Title, ¶¶142-143, 148, 256. Figure 57 depicts an example. EX1019, ¶248 (“The case 5702 has a back that includes a first set of magnetic attachment elements 5704. 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.”)

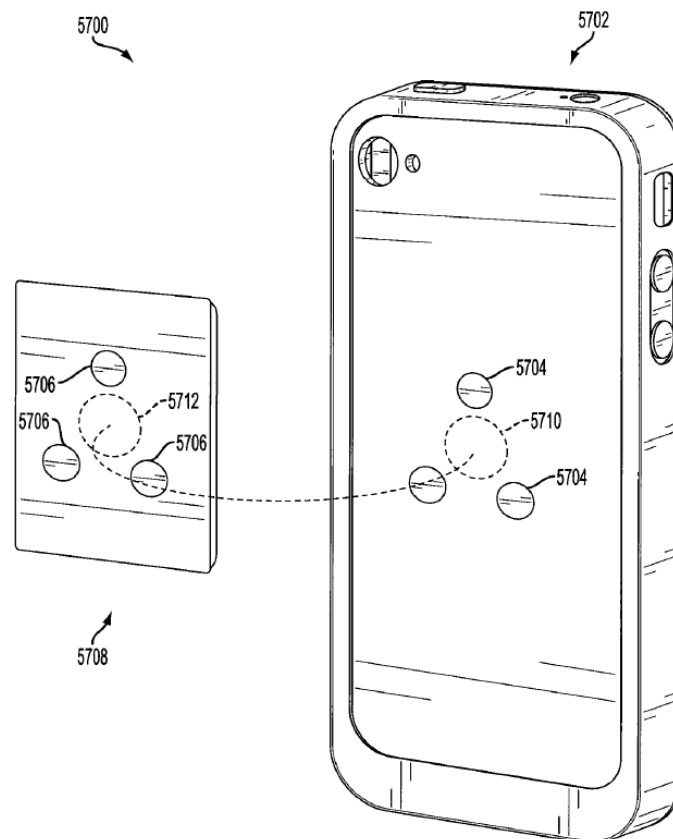


FIG. 57

EX1019, FIG. 57.

58. Rothbaum describes an “alignment mechanism” using these magnets:

[A] case can include *accessory alignment mechanisms*, such as recesses configured to receive corresponding protrusions on the accessories, and/or *discrete magnetic attachment elements, such as individual magnetic disks, that are configured to mate to corresponding magnetic attachment elements on an accessory*. Such corresponding alignment mechanisms can be used to help ensure that accessories are placed in *a consistent location on the case each time the user attaches an accessory to the case*.

EX1019, ¶142. Rothbaum further explains that the magnets can be used to ensure alignment:

In some embodiments, *polarities of magnets can be additionally or alternatively used to help ensure alignment*. For example, in some embodiments, an accessory includes two discrete magnetic attachment elements, each presenting opposite polarities to its attachment surface. Likewise, a case can include two corresponding discrete magnetic attachment elements, each presenting opposite polarities to its attachment surface. Thus, *when a user attempts to attach the accessory to the surface of the case, the accessory will only be attracted to the case when the respective discrete magnetic attachment elements present opposite polarities to one another*. Otherwise, if the respective discrete magnetic attachment elements present the same polarities to one another, *the accessory will be repelled from the case and the accessory will not adhere to the case. It is noted that many different arrangements of magnetic attachment elements can be used to exploit*

the attractive and repulsive properties of magnets. One of skill in the art will recognize that many arrangements are possible without departing from the spirit of the invention.

EX1019, ¶143.

59. Rothbaum elaborates on this and explains that it was well known to use magnets and magnet arrangements to attach objects to a mobile device in a preferred orientation:

It is also possible to use the *magnetic polarity as an alignment method to ensure that a device case (or a device) connects to an object (such as a charger) in a predictable, repeatable way.* For example, it is well known that all magnets have a north pole and a south pole, and that opposite poles attract to one another, while similar poles repel one another. Thus, for magnets to be attracted to each other so that they physically hold to each other, the north pole of one magnet must be brought into proximity with the south pole of another magnet. Likewise, if north poles are brought into proximity with each other, the magnets will repel one another. *It is possible, therefore, to design a magnetic attachment system where a mobile electronic device case and an object for connection to the case will attach to one another in a preferred way. While some designs will only allow attachment of the device case to the object in a single orientation or location, other configurations could be employed as well.*

EX1019, ¶257. Rothbaum further demonstrates that it was well known to use different magnet arrangements for attaching objects:

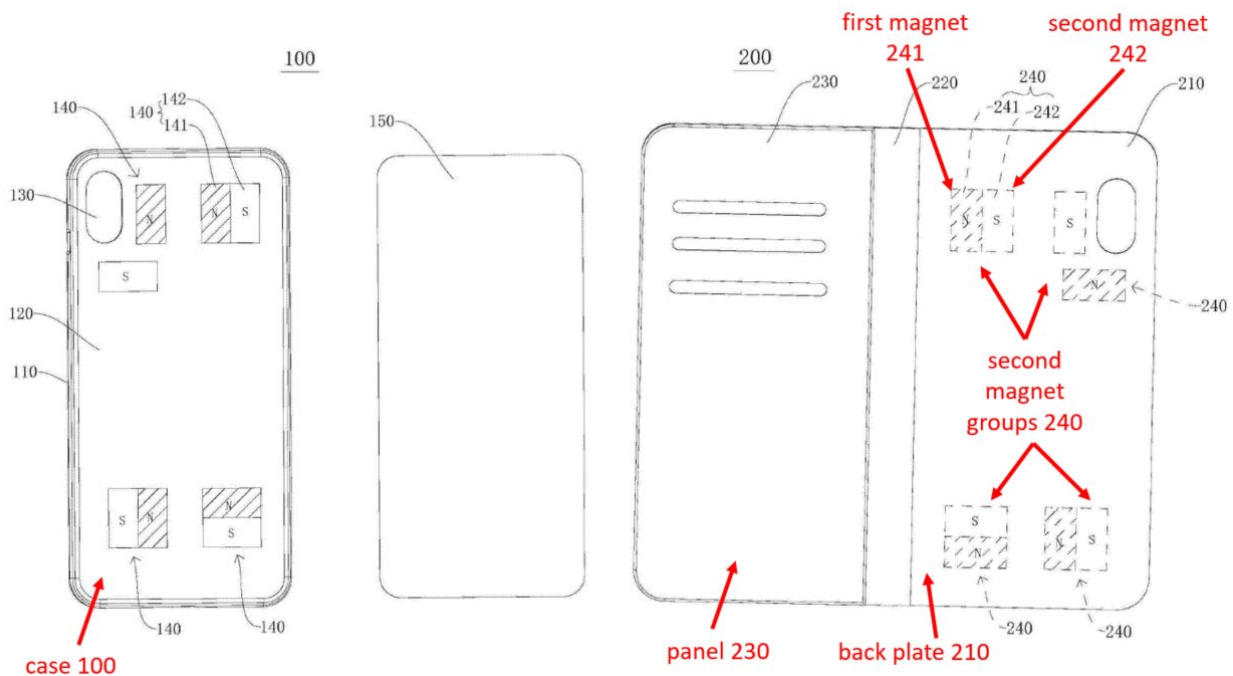
For example, *a set of magnets or magnetic materials on an object and a corresponding case for mounting to the object could be arranged in a symmetrical shape, like a square*. On the case, for example, three of the four sides or vertices of the square could present to the mounting surface a magnetic north pole, while the other side or vertex presents a south pole. The corresponding magnets on the object would have an inverted orientation of magnets. *Thus, the polarity of the magnets will allow the case and the object to attract to one another only in one orientation*. If a user attempted to mount the case to the object upside down, for instance, at least one of the sets of magnets would repel one another, and the case would not be properly or fully held to the object. In some embodiments, *the magnets are selected to have attractive and repulsive forces such that the case will not attach at all when the polarities of the magnets are not properly aligned*. One of skill in the art will recognize that various orientations of magnets, as well as various types of metals and magnetic materials can be used in the above described embodiments without departing from the spirit of the invention.

EX1019, ¶258. In addition to describing the use of different magnet configurations, Rothbaum also describes common materials used for magnets and different compositions of materials that can be used. EX1019, ¶¶144-149.

60. As I will further explain in the Grounds of Unpatentability below, prior art Zhu, Kinshi, and Baca also demonstrate that using magnets (and various magnet configurations) to attach accessories such as wallets to mobile devices was

well known before the '641 patent.

61. For example, as I further explain below, Zhu describes a mobile phone case that attaches to a folio-style cover using magnets. EX1008, ¶¶2, 4-8, 13, 17, 24, 28-30. As shown in Figures 2 and 4 of Zhu below, the front cover panel can easily cover or expose a mobile phone screen, “which can effectively protect the screen of the mobile phone.” EX1008, ¶¶2, 13, 30.

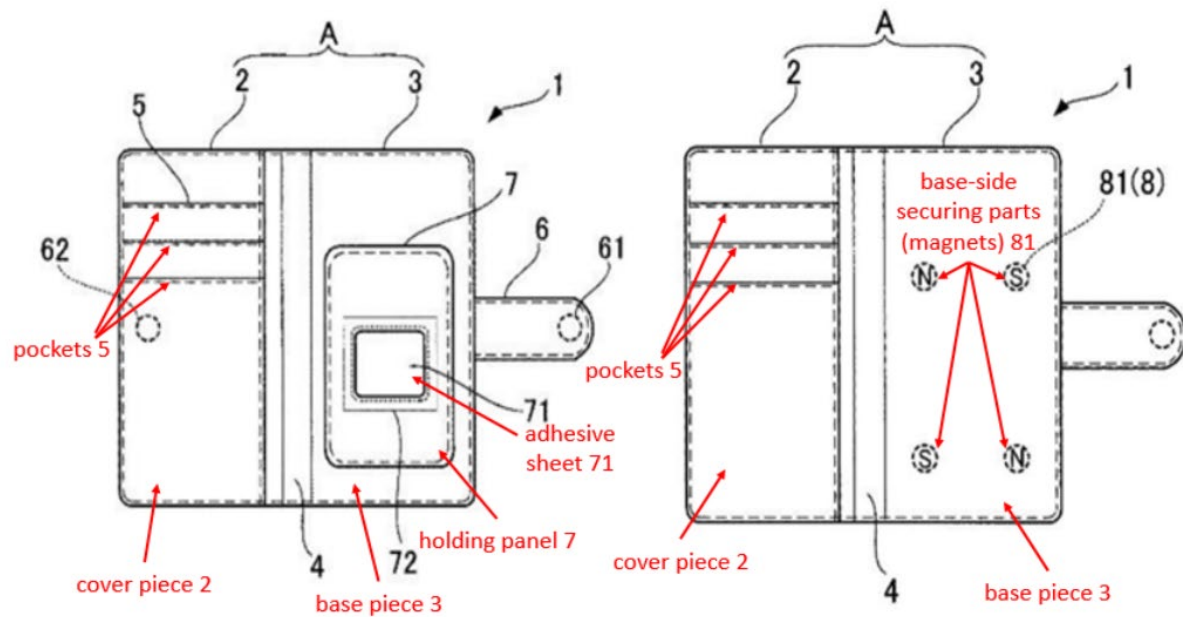


EX1008, FIGs. 2 and 4 (annotated).

62. As seen in Figure 4, Zhu’s mobile phone case includes different “magnet groups 240.” EX1008, ¶30. For example, Zhu describes magnet groups including a magnet 241 disposed “with the N pole” “facing upward,” and a magnet 242 disposed with “the S pole” “facing upward.” EX1008, ¶30. As I will further explain below, a POSA would have considered these different configurations of

magnet groups as different magnet arrangements that would have been implemented to attach the folio cover to a mobile device.

63. Kinshi similarly describes attaching a wallet to a mobile device using magnets. A holding panel 7 attaches to the back surface of a cell phone or case via adhesive sheet 71. EX1010, ¶20. Holding panel 7 and base piece 3 each include a set of corresponding magnets (e.g., 81 in Figure 4 below) that allow holding panel 7 to attach to base piece 3. EX1010, ¶¶17-18.



EX1010, FIGs. 1 and 4 (annotated).

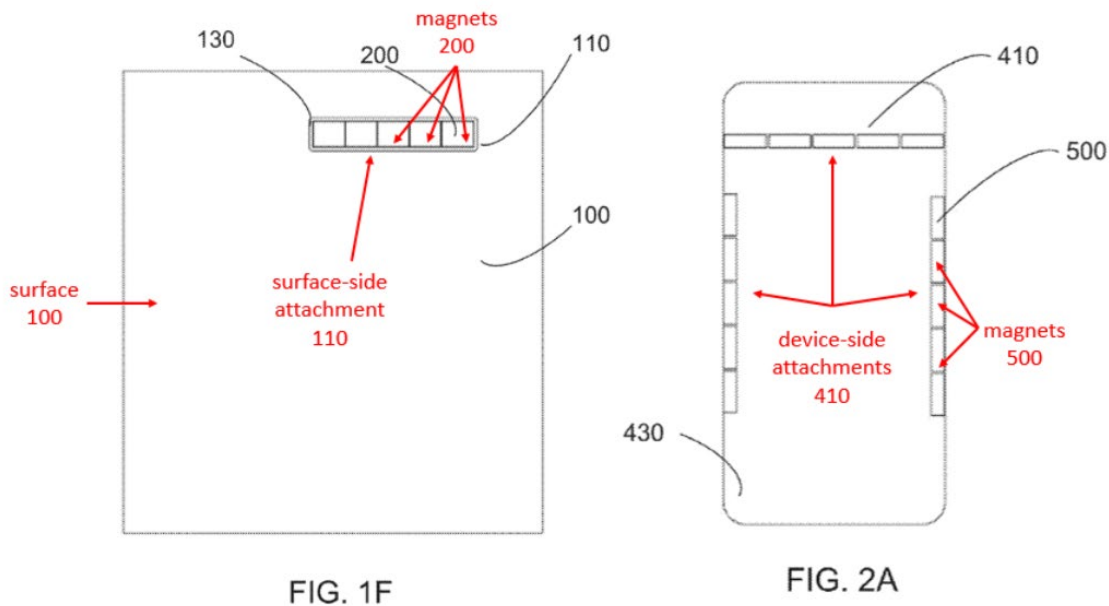
64. The magnets 81 in base piece 3 may comprise four magnets with polarities that alternate in a clockwise order. EX1010, ¶26. In addition, the magnets 81 are separated by a portion of base piece 3 so that holding plate 7 is formed with a rectangular shape. EX1010, ¶¶9, 17. This configuration allows the

holding panel 7 to “automatically and more accurately” attach to the base piece 3.

EX1010, ¶26.

65. Additionally, Baca describes magnetic arrangements for mounting an electronic device, such as a cell phone, to another surface. EX1006, ¶¶3-4, 60.

Baca’s arrangements include a surface-side attachment 110 including a plurality of magnets 200 and a respective device-side attachment 410 that includes a corresponding plurality of magnets 500. EX1006, ¶¶68, 72. The magnets 200, 500 within each attachment 110, 410 include magnets of alternating polarities arranged to be “self-aligning.” EX1006, ¶¶83-84.



EX1006, FIGs. 1F and 2A (annotated).

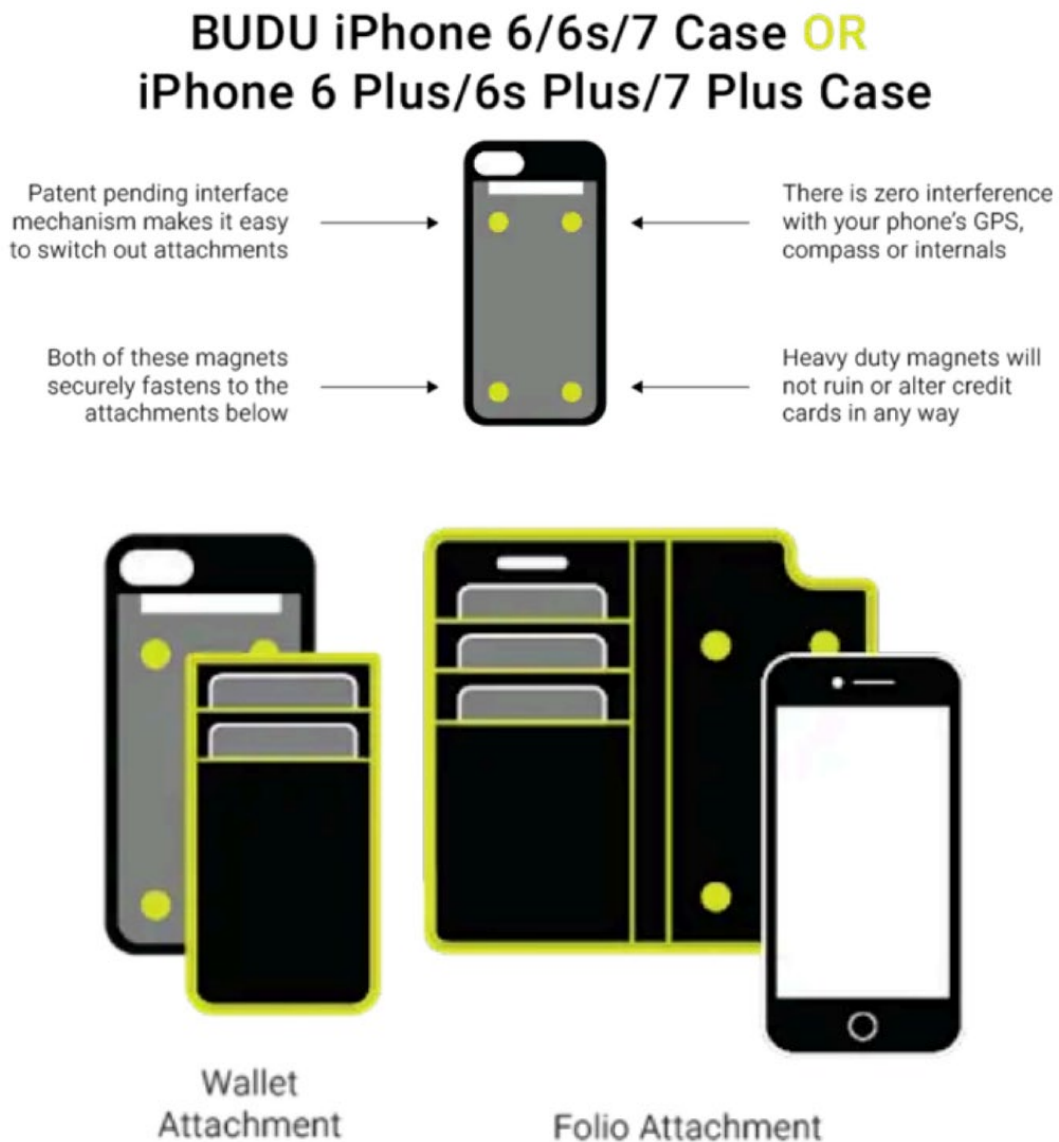
66. To illustrate the magnetic functionality described in Berkley, Rothbaum, Zhu, Kinshi, and Baca, the BUDU case was an example commercial

product that used a magnetic attachment system. EX1025; EX1026; *see also*

“BUDU Main v1 10” Published June 20, 2017 and available at

https://youtu.be/uhYfKMCFo0U?si=btN_d1TXPo21m78-. For example, the

BUDU case used a magnet system to securely attach different attachments such as a wallet attachment and folio attachment. EX1025; EX1026.

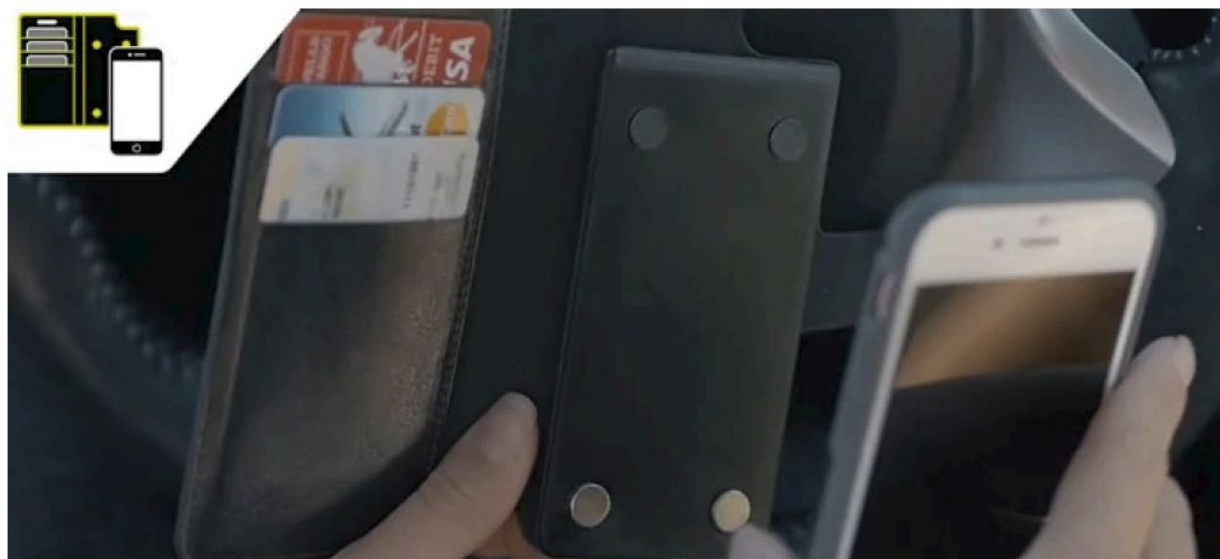


EX1025, 4 (excerpted).



WALLET: Perfect for the times when you don't need a bulky wallet - complete with RFID protection against credit card theft

EX1025, 6.



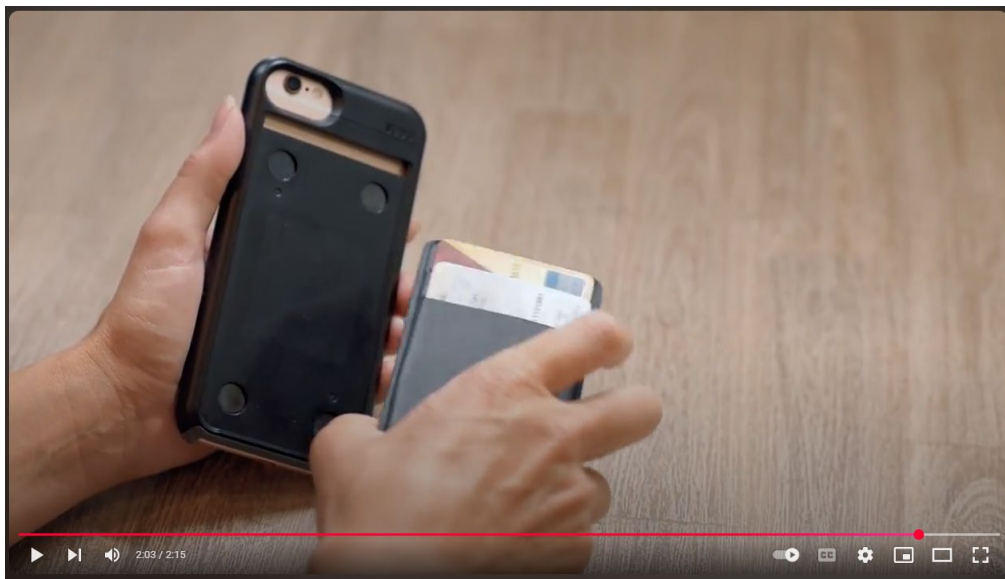
FOLIO: Take 3-4 cards and case with you in a RFID protected, genuine leather-bound folio; perfect when your privacy and convenience are key

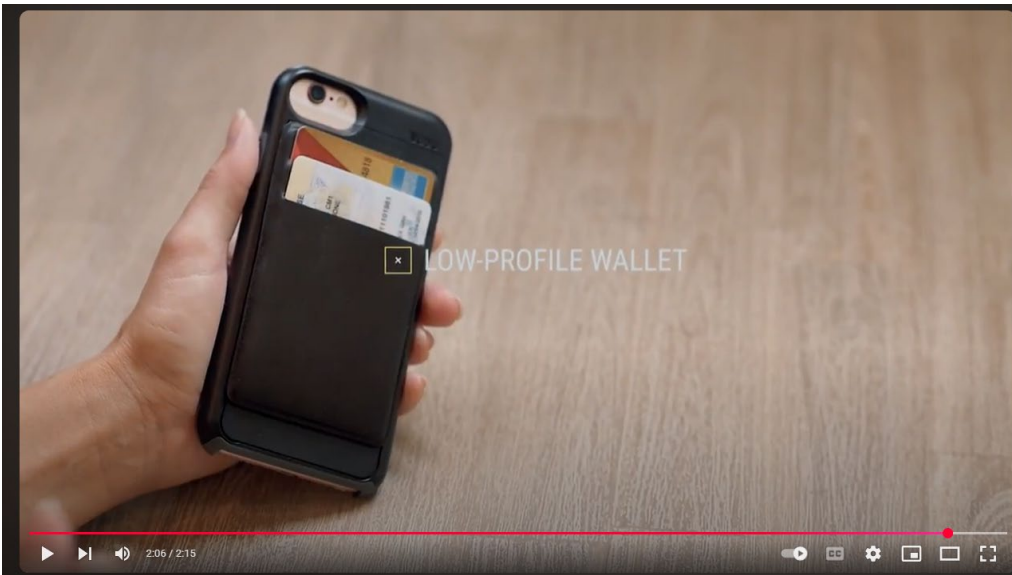
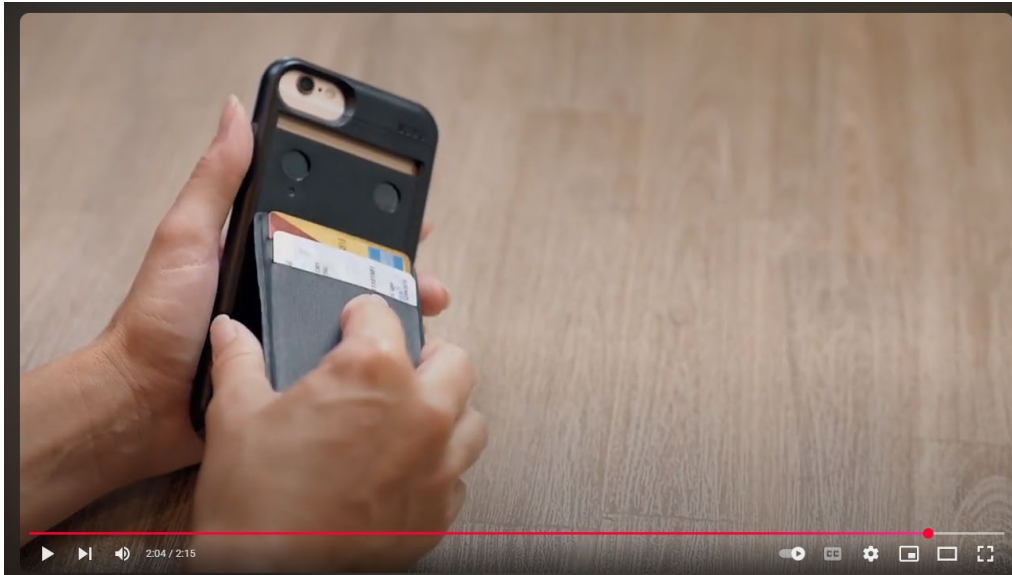
EX1025, 7.



EX1025, 9.

67. For example, the video that I linked above and screenshot below shows the attachment of a wallet to a phone using a magnetic system.





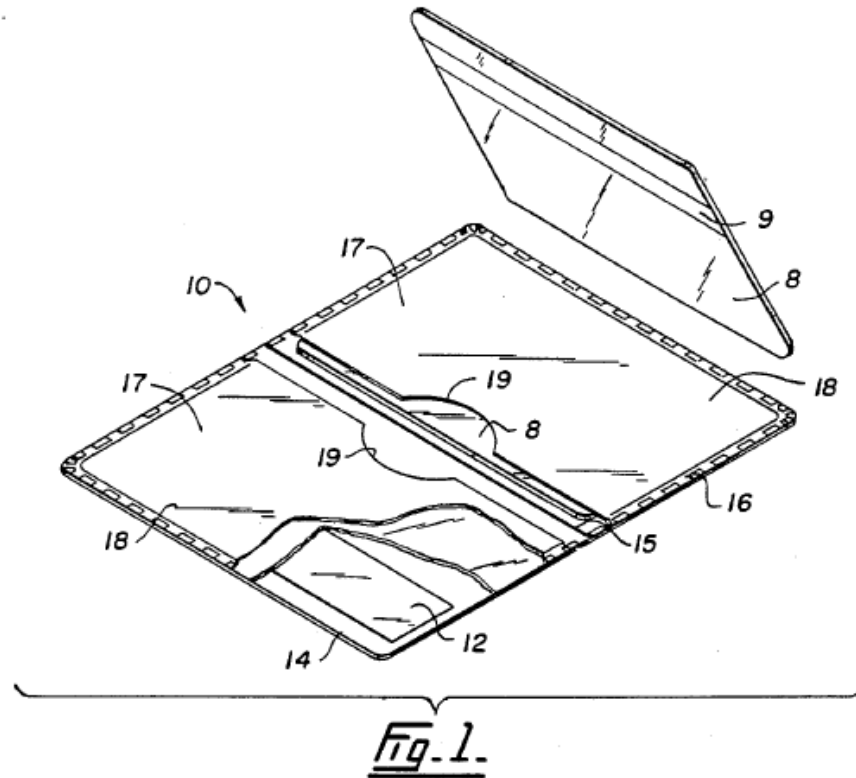
68. In view of these references, a POSA would have viewed the use of magnets to attach a wallet to mobile device to have been known and obvious before the '641 patent. I further elaborate on why the claims of the '641 patent are obvious and unpatentable in view of this understanding based on the grounds of unpatentability presented below.

C. Magnetic Shielding for Wallets was Well Known in the Prior Art

69. Lastly, I understand from my review of the prosecution history of the '641 patent, that the claims were allowed in view of the recitation of “a ferromagnetic shield” or a “metallic plate” being included in the claimed wallet attachments in claims 1 and 5. *See* Section VIII. The use of magnetic shielding (in the form of a ferromagnetic shield or a metallic plate) to protect cards stored in wallets, however, was also well known before the '641 patent.

70. At the outset, the problem of magnets being located near magnetic cards and corrupting the information on those cards was notoriously well known before the '641 patent. LeBlanc—which was filed in 1988—described such a problem and already provided a magnetic shielding solution to the problem 30 years before the alleged priority date of the '641 patent. EX1027, 1:29-34.

71. Specifically, LeBlanc describes a “magnetic card protection system” as seen in Figure 1. EX1027, Title, 2:39-64.



EX1027, FIG. 1.

72. Leblanc describes a “protective device for protecting the information on magnetically encoded areas of plastic cards.” EX1027, Abstract. This includes protecting cards with “encoded information such as credit cards and the like from corrupting statomagnetic or electromagnetic fields.” EX1027, 1:5-10. LeBlanc explains the following:

These cards having magnetically encoded areas are often carried by *people in specially sized pockets in their wallet or purse*. Unfortunately, such holders provide little protection from stray statomagnetic or electromagnetic radiation that can *cause corruption of data on the card thereby rendering the card useless for all*

applications that require the magnetic data to be read from the card.

Statomagnetic corrupting fields are not uncommon and are sometimes generated by the *magnetic clasps sometimes used in purses or wallets.*

Electromagnetic fields are generated by motors and components of electrical appliances.

EX1027, 1:29-34.

73. As shown by this explanation, it was well known in the art that magnets from purses or wallets could potentially cause card degradation through harmful magnetic corrupting fields. EX1027, 1:29-34. To address this issue, LeBlanc proposes the use of protective strips formed from metallic alloys, including iron-based (i.e., ferrous) alloys:

FIG. 3 provides a view of a protective strip 12 according to the present invention. Protective strip 12 of the present invention is formed from *an amorphous alloy having a high saturation inductance.* The material has a very low core loss and weight. *The amorphous alloy is a ferrous-boron or ferrous nickel mixture having a saturation inductance of about 10,000 gauss and a permeability of 500,000 gauss/oersted. Core loss of the alloy in a magnetic field of 1.6 Tesla @400 Hz is less than half that of 4 mil. 3% silicon iron.* A number of alloys have been developed that meet the above requirements. A *preferred alloy composition is comprised of 67 percent iron, 14 percent boron, 1 percent silicon and 18 percent cobalt by weight.* A second alloy composition is comprised of 79 percent iron, 16 percent boron and 5 percent silicon by weight. A third alloy composition is

comprised of 40 percent iron, 38 percent nickel, 4 percent molybdenum and 18 percent boron by weight.

EX1027, 2:8-26.

74. Kamens, which was filed 20 years before the alleged priority date of the '641 patent in December 1997, similarly describes a “Device for protecting magnetic cards and method of making same” using “protective strips.” EX1028, Title, Abstract. Kamens describes using a protective strip in a “protective card case or sheath for a single card having a magnetically encoded strip.” EX1028, Abstract. “The protective strips [] shield the magnetically recorded data from magnetic and electric fields which might otherwise erase or damage such magnetically stored data.” EX1028, Abstract. Kamens further explains:

The metal strips 32 are formed of *a material that is capable of shielding the magnetic encoded strips or the like on a credit card 30 from becoming erased* and is also noncorrosive, durable and flexible. The strips 32 can also function to protect the cards 30 from damage due to impacts and the like. Typically, *strips 32 are made of a magnetic shielding metal* that is permeable to magnetic fields and conductive to electrical fields to thereby protect the encoded strip on the card 30. In a preferred embodiment, *the magnetic shielding metal is an aluminum killed cold rolled steel*, which has been annealed, fully decarburized with a carbon content of less than 1%. The material is preferably ultra flat with an isotropic surface. One such material is commonly known as 1001 Ultra Low Carbon Steel for use in magnetic shielding

applications. However, any suitable alloy or other protective material having high permeability to magnetic fields and high conductivity to electrical fields may be used. Other known *suitable alloys comprise primarily nickel, such as Ni—Fe alloys having a 48% or 80% nickel content. These Ni—Fe metal alloys are available, for instance, from Amuneal Manufacturing Corp. of Philadelphia, Pa.*

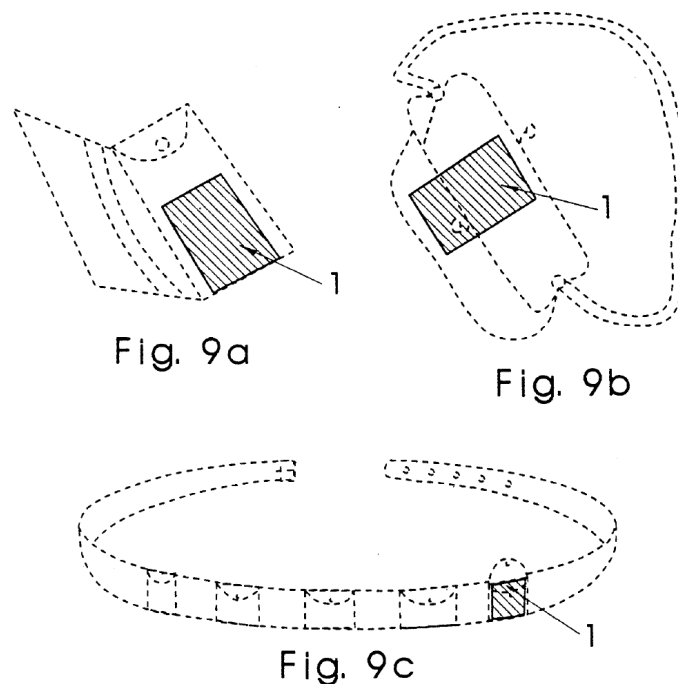
EX1028, 4:51-5:4

75. As seen from LeBlanc and Kamens, the use of magnetic shielding materials to prevent degradation caused by magnetic fields was well known.

76. Similarly, Goto also confirms that using magnetic shielding to protect cards or magnetic cards was well known even as far back as 1984. Goto—which is based on an application filed in 1984—provides this teaching. For example, as I further explain below in the grounds of unpatentability, Goto describes “magnetic card holders” that include “magnetic shielding” plates, wherein the magnetic-shielding plates are made of an “electrodeposited iron foil.” EX1012, Abstract, 3:9-40 (describing iron foil), 7:20-23 (same), 11:44-12:68, FIGs. 16-18 (describing magnetic card holders). It was well known to POSAs that such shielding was needed and used because the data stored on magnetic cards may be negatively affected or become unusable when exposed to a magnetic field. EX1012, 2:14-21. Goto describes and depicts such a shielding with reference to Figure 17. I have also provided an annotated illustration of the cross-section of the holder described with

the rear wall 74.” EX1012, 12:20-24. Goto explains that even when the holder “is exposed to [a] magnetic force line, the card can not be affected.” EX1012, 12:24-26.

78. Similar to Goto, Godfrey also describes magnetic shielding for cards. Specifically, Godfrey describes “cardholders incorporating keepers.” EX1011, Title. Godfrey describes “keepers in the form of sheets of magnetically soft ferromagnetic material with high resistance.” EX1011, Abstract. By implementing these ferromagnetic materials in cardholders, the magnetism on cards with magnetic stripes are preserved. EX1011, Abstract. Godfrey describes implementing this shielding technology in “wallets or pocketbooks” and depicts this implementation in Figures 9a-9c. EX1011, 1:13-24, 1:38-51, 4:14-28.



EX1011, FIGs. 9a-9c.

79. As seen from Figures 9a-9c, Godfrey describes “cardholders incorporating keepers (1) [that] can be secured into wallets or pocketbooks.” EX1011, 4:14-28.

80. Similarly, Kitchen also describes an “Electromagnetic shielding carrying case for contactless smartcards and personal articles.” EX1029, Title. For example, Kitchen’s invention “relates to carrying cases, and more specifically to wallet-sized electromagnetic shielding carrying cases for holding personal articles such as credit cards, contactless smartcards, licenses, identification cards, paper currency, receipts, tickets, and the like.” EX1029, ¶5; *see also* EX1029, ¶18. “The electromagnetic shielding members within the carrying case also help to *prevent the magnetic strips on cards from being demagnetized by external magnetic sources such as speakers, magnets, cell phones* and the like when the carrying case is in its closed position.” EX1029, ¶65.

81. In this manner, as seen from the exemplary references that I have presented above, using magnetic shielding to protect cards stored in wallets—the element that apparently led to the allowance of the ’641 patent—was well known prior to the ’641 patent.

VII. OVERVIEW OF THE ’641 PATENT

82. The ’641 patent is titled “magnetically coupled wallet accessory for mobile device.” EX1001, Title. The ’641 patent describes a “wallet for attachment

to a mobile device” where the “wallet has a body defining a compartment and a device side surface.” EX1001, Abstract. The ’641 patent further describes using arrangements of magnetic materials to “magnetically couple [an] accessory to a mobile device and cause the accessory to adopt a specific orientation on the mobile device.” EX1001, Abstract.

83. At the outset, the ’641 patent observes that cell phones and wallets are “two important items that people carry with them throughout their day.” EX1001, 1:35-36. The ’641 patent states that because these items may be misplaced, there is allegedly a need to “better arrange one’s cell phone, wallet, and other related accessories.” EX1001, 1:35-46. The ’641 patent’s proposed solution is to provide a wallet having “a plurality of magnets” that “renders the wallet magnetically coupleable to” a mobile device. EX1001, 3:1-8. Such a solution, however, was already well known in the art as I explain in Section VI.

84. Indeed, based on my review, the ’641 patent appears to have incorporated the prior art reference Baca (EX1005) by reference and relied on Baca’s prior art disclosures for its alleged invention. EX1001, 3:42-46, 8:15-20; EX1005, ¶¶4, 46. Specifically, as I have reproduced below, the ’641 patent relies on Baca’s previous disclosure (Appl. No. 15/059,163) of self-aligning magnets to attach a wallet:

The mounting systems disclosed herein may include a surface-side attachment affixed to a surface including a nonmagnetic surface and device-side attachment coupled to the electronic display device as described in the above-referenced U.S. patent application Ser. No. 15/059,163.

EX1001, 3:42-46.

Exemplary configurations of back-side magnets 119, front-side bottom magnets 128, and front-side top magnets 129 are disclosed in U.S. Publication No. 2016-0260532, and in particular the disclosure of the device-side attachments that provide self-alignment with surface-side attachments.

EX1001, 8:15-20.

The following discussion with reference to FIGS. 40-48, describes various magnet arrangements which may be utilized within the systems for facilitating the attachment of add-on devices to mobile devices described with reference to FIGS. 1-39. See also U.S. Pat. No. 10,134,517, the content of which is incorporated by reference herein.

EX1001, 14:29-34.

85. To illustrate this incorporation, Figures 40-48 from the '641 patent can also be found in Baca as Figures 1A-4, 9A-11, and 12-13. I have included some examples comparing the figures below:

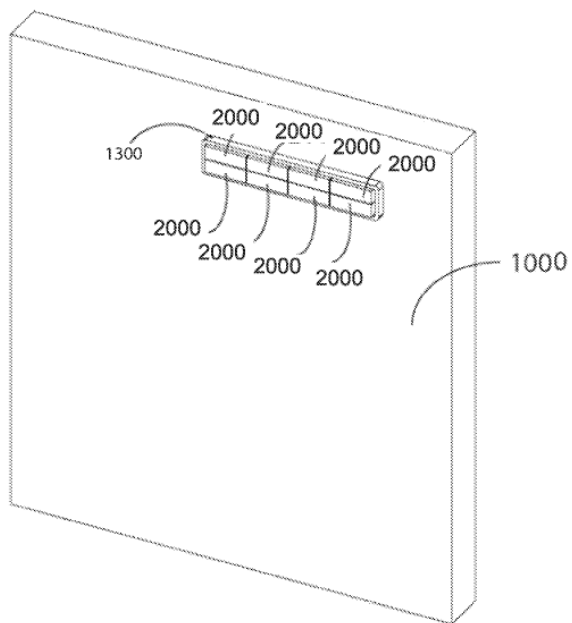


FIG. 40A

EX1001, FIG. 40A.

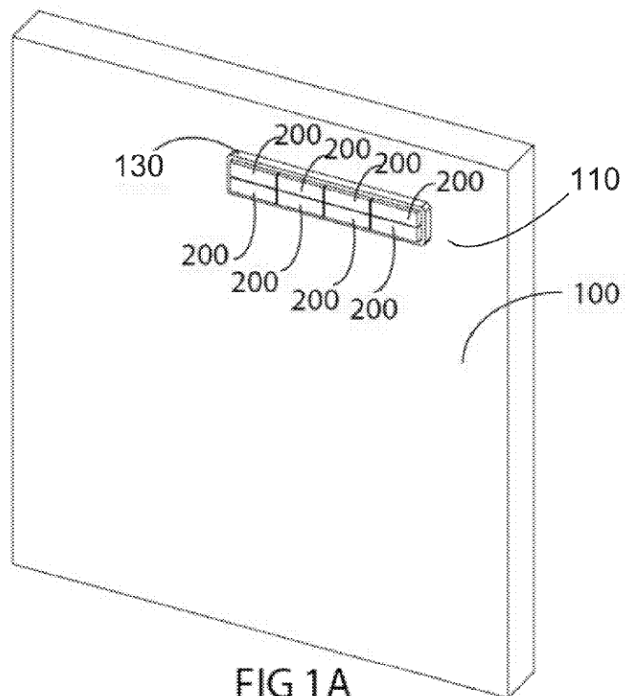


FIG 1A

EX1006, FIG. 1A.

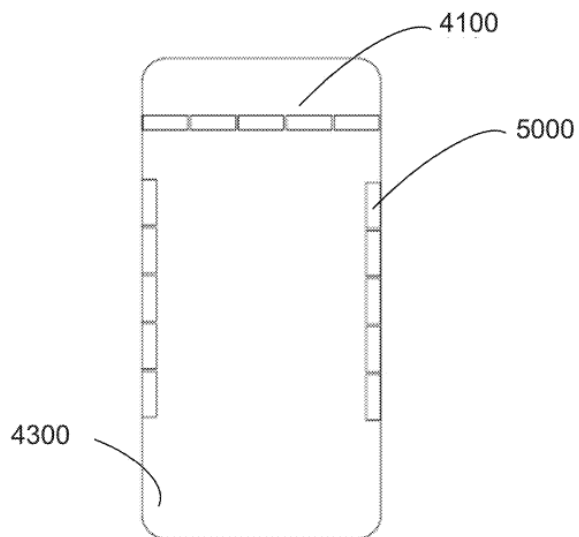


FIG. 41A

EX1001, FIG. 41A.

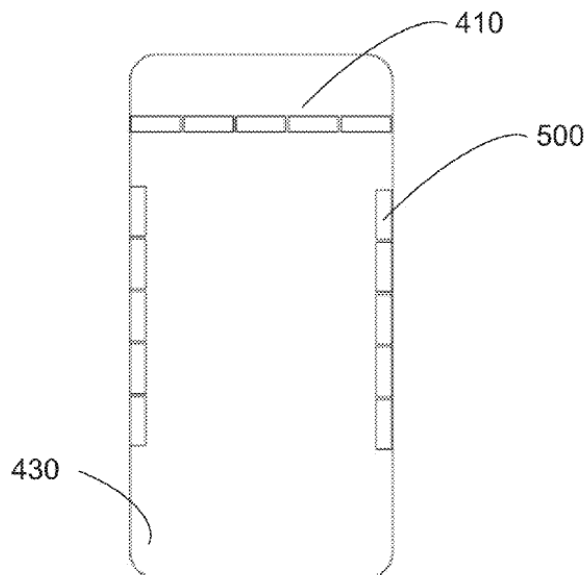


FIG. 2A

EX1006, FIG. 2A.

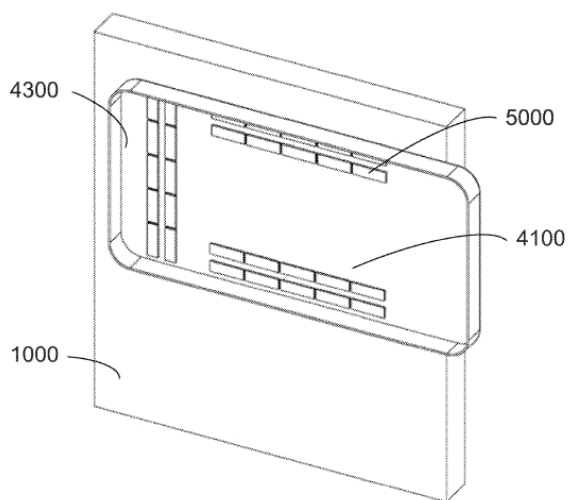


FIG. 42C

EX1001, FIG. 42C.

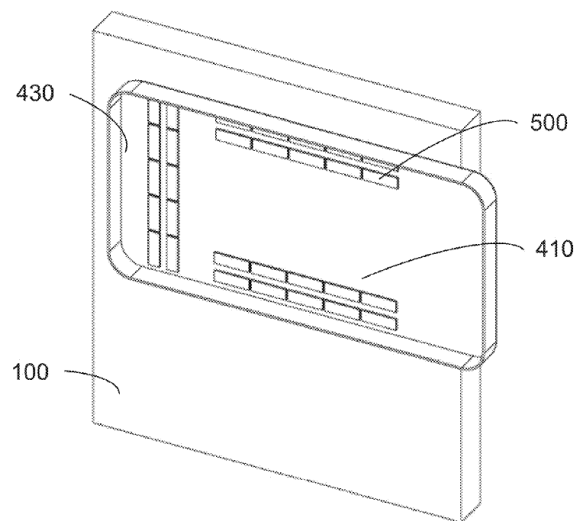


FIG. 3C

EX1006, FIG. 3C.

FIG 43A

N	S	N	S	N
N	S	N	S	N

FIG. 4A

N	S	N	S	N
N	S	N	S	N

FIG 43B

N	S	N	S	N
S	N	S	N	S

FIG. 4B

N	S	N	S	N
S	N	S	N	S

FIG 43C

N	N	S	N	N
S	S	N	S	S

FIG. 4C

N	N	S	N	N
S	S	N	S	S

FIG 43D

S	N	S	N	S
S	S	N	S	S

FIG. 4D

S	N	S	N	S
S	S	N	S	S

FIG 43E

S	N	S	N
---	---	---	---

FIG. 4E

S	N	S	N
---	---	---	---

FIG 43F

S	N	N	S
---	---	---	---

FIG. 4F

S	N	N	S
---	---	---	---

FIG 43G

S	N	S	N
---	---	---	---

FIG. 4G

S	N	S	N
---	---	---	---

FIG 43H

S	N	S
---	---	---

FIG. 4H

S	N	S
---	---	---

FIG 43I

S	N
---	---

FIG. 4I

S	N
---	---

EX1001, FIG. 43A-43I.

EX1006, FIG. 4A-4I.

FIG 43J

N	S	Fe	N	S
---	---	----	---	---

FIG. 4J

N	S	Fe	N	S
---	---	----	---	---

FIG 43K

Fe	N	S	Fe
----	---	---	----

FIG. 4K

Fe	N	S	Fe
----	---	---	----

FIG 43L

S	Fe	N
---	----	---

FIG. 4L

S	Fe	N
---	----	---

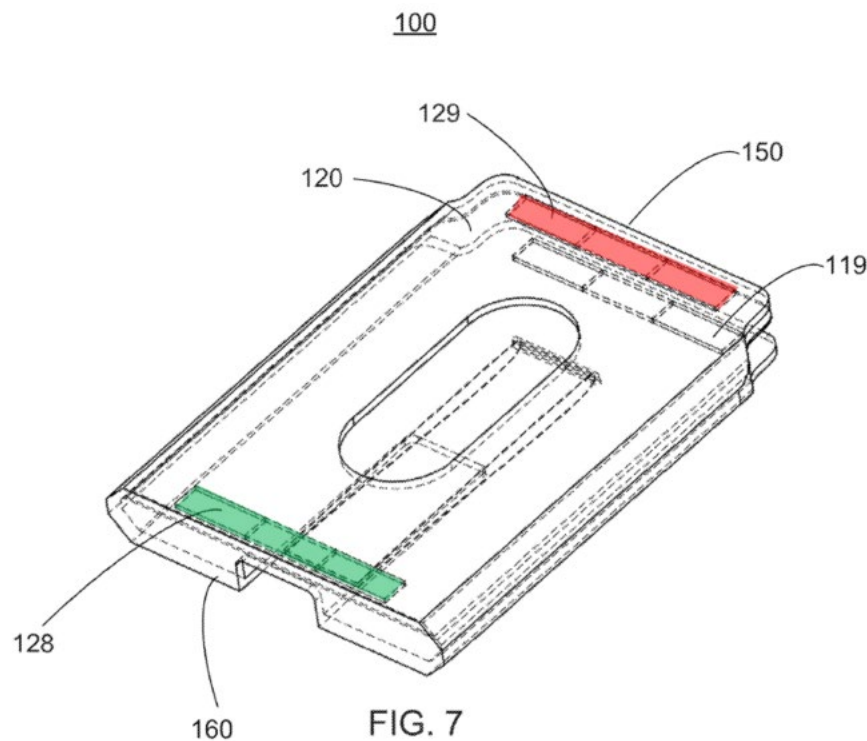
EX1001, FIG. 43J-43L.

EX1006, FIG. 4J-4L.

86. These figures and their corresponding descriptions illustrate the “various magnet arrangements ... for facilitating the attachment of add-on devices to mobile devices described with reference to FIGS. 1-39,” including its wallet.

EX1001, 14:29-34; 18:3-7. While incorporating these figures from Baca, the '641 patent explains that “[f]or each magnet having an outwardly-facing north pole ‘N’ on a given attachment” (e.g., a cell phone case), “the complementary attachment” (e.g., wallet) “will have a magnet with outwardly-facing south pole ‘S’ positioned to align when the attachments are coupled.” EX1001, 18:7-10; EX1006, ¶84.

87. The '641 patent implements Baca's description and use of magnets and depicts the magnet arrangements in Figure 7. I have provided an annotated version of Figure 7 below:



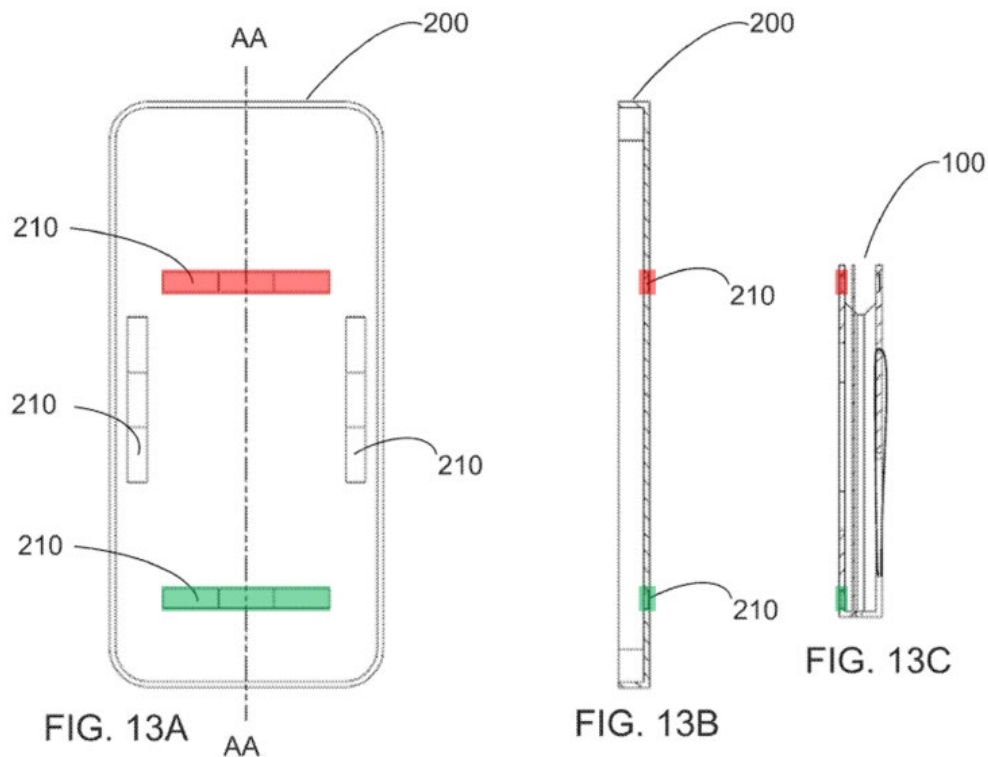
EX1001, FIG. 7 (annotated).

88. Figure 7 depicts wallet 100, which includes the magnet arrangements described in Baca. Namely, Baca's prior art magnets 128 (green) and 129 (red) are

depicted on the back surface of the wallet, which will face the mobile device.

EX1001, 8:50-56.

89. The '641 patent further depicts these magnet configurations in Figures 13A-C. These figures depict an “electronic display device case 200.” EX1001, 9:46-58. The case 200 can be used with a cell phone/mobile device and includes magnets 210 (red/green), which were simply brought into the '641 patent from Baca. EX1001, 9:46-58.



EX1001, FIGS. 13A-C (annotated).

90. The '641 patent additionally incorporates Figure 2A from Baca and implements this same figure as FIG. 41A. I have provided these figures below as a

side-by-side comparison. This figure provides another example of an “electronic display device” case 4300 having embedded magnets 5000 for the wallet to attach to. EX1001, 15:14-31. “The device-side attachments 4100 are embedded in the perimeter of the protective case 4300 to allow the electronic display device to be hung in either a portrait orientation, as shown in FIG. 41A, or a landscape orientation, as shown in FIG. 41B.” EX1001, 15:17-21.

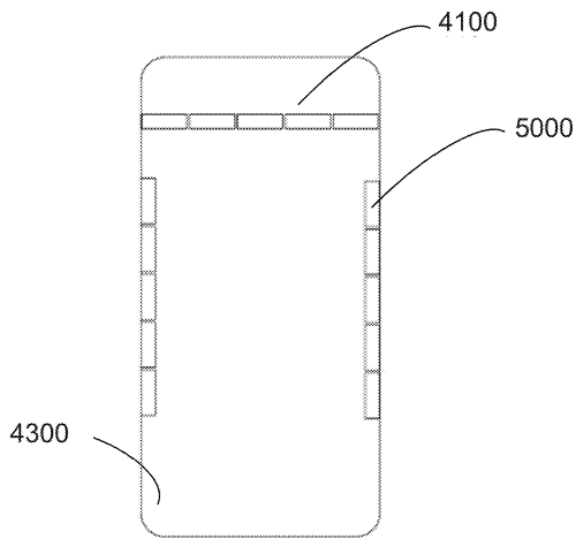


FIG. 41A

EX1001, FIG. 41A.

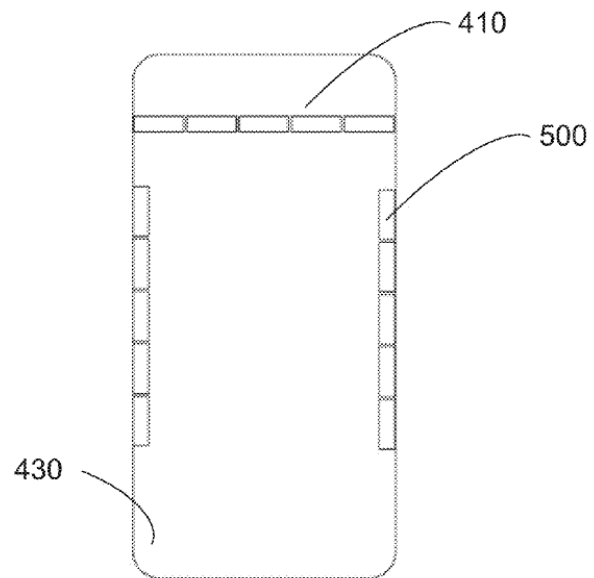
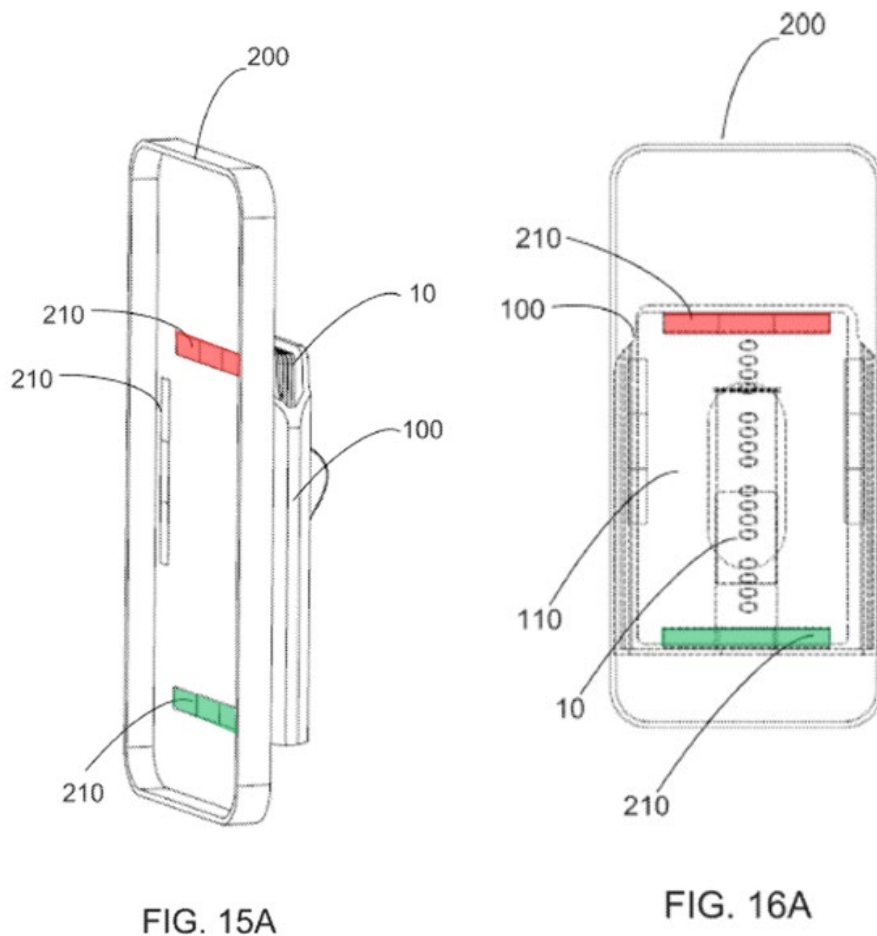


FIG. 2A

EX1006, FIG. 2A.

91. As another example, Figures 15A and 16A also show wallet 100 attached to case 200 using Baca’s magnets 210. EX1001, 9:62-10:3.



EX1001, FIGs. 15A, 16A (annotated).

92. Importantly, the '641 patent provides no new disclosure regarding the magnets used in the wallet other than that described by Baca. That the '641 patent simply uses prior art magnets in the wallet is not surprising because, as I previously explained, the concepts of magnetically attaching wallets to mobile devices was well known prior to the '641 patent. *See* Section VI. I understand that the USPTO also acknowledged this based on my review of the prosecution history. *See* Section VIII.

VIII. PROSECUTION HISTORY

93. I have reviewed the prosecution history of the '641 patent and understand that the application that issued as the '641 patent was the subject of several office actions and an *ex parte* appeal to the Patent Trial and Appeal Board, which I will refer to as the “Board” or “PTAB.” The originally filed application included eleven claims, with only claim 1 being independent. EX1002, 116-117. In the first Office Action, the examiner provided several rejections. EX1002, 142-164. I understand that this Office Action included prior art rejections based on the Baca, Sartee, and Gluck references.

94. In responding to the rejections, the application provided several arguments and characterizations of the claims and application. For example, the applicant argued that the specification provided written description support for prosecution claims 8 and 9, which I have copied below:

8. The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly one orientation.
9. The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly two orientations.

EX1002, 191.

95. I understand that the applicant argued that paragraph 134 and Figure 43I of the specification provided support for these claims. EX1002, 193-194. As I

explained in Section VII, however, this paragraph and figure were simply incorporated from Baca into the application. That is, the applicant relied on paragraph 84 and Figure 4I from prior art Baca for providing support for claims 8 and 9. EX1006, ¶84, FIG. 4I.

96. I understand that the applicant further characterized the claims by arguing that the claim does not require a “mobile device” to be a structural requirement:

The Office raises whether Applicant intends the mobile device to be structurally required. Applicant does not. Rather Applicant submits that the structure of the device to which the wallet coupled imposed structural limitations on the wallet. And those are the limitations intended to be claimed.

EX1002, 195.

97. While this statement indicates that the mobile device is not structurally required in the claims, the prior art references that I discuss in the grounds of unpatentability below still describe every element of the claimed including a “mobile device.” *See* Sections XII-XXVII.

98. In addressing the prior art rejections, I understand that the applicant argued the following:

It is axiomatic that to anticipate a claim every element of the claim must be disclosed in a single reference. Here the claims are directed to a wallet while *Baca* is directed to a surface mount for mobile device. Inasmuch as *Baca* has not teaching or suggestion of a wallet it cannot anticipate claim 1 or its dependent claims. The Examiner acknowledged in the interview that to the extent that the claims are limited to a wallet, *Baca* would not anticipate them.

EX1002, 195.

The Office assert those skilled in the art would make the combination “in order to provide a strong and self-orienting connection, for the other art known benefits of the *Baca* structure, and/or as a mere selection of an art appropriate magnetic arrangement to use.” Applicant notes that *Baca* is directed to a surface mounting system and not related to a wallet at all. Applicant notes that generally the requirements to surface mount are not the same as those to couple two items together. There is nothing in either reference that indicate the arrangement of *Baca* would provide benefits in the context of the *Berkley* invention. In fact, *Berkley*’s

EX1002, 198.

99. Additionally, the applicant argued that Sartee and Gluck did not teach dependent claims 2 and 6. EX1002, 196-197.

100. In response to these arguments, I understand that the examiner issued a Final Office Action, which maintained a prior art rejection. EX1002, 202-221. In responding to this Office Action, the applicant argued the following:

things it does not. Particularly, *Baca* disclose a pattern of magnets on a mobile phone or on a case that couples mechanically to the mobile phone. *Baca* discloses that a surface mount with a linear array of magnets couples to the magnets attached directly or indirectly to the mobile phone to hold the mobile phone on the surface mount. *Baca* neither teaches nor suggests that the thing that connects to the mobile phone (the wall mount in *Baca*) has a first and second arrangement of magnets as claimed. Thus, a combination *Berkley* with *Baca* would at most yield a wallet that

EX1002, 241.

101. I understand that the applicant also reiterated the arguments regarding Sartee and Gluck. EX1002, 241-244.

102. As prosecution continued, I understand that the applicant filed another response and amended claim 1 to recite the “first arrangement” and “second arrangement” being “physically separated” and also added independent claim 12. EX1002, 247-268. Following this amendment, the examiner added the prior art reference Levy and provided the following prior art rejections:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/ Basis
1, 3–5, 7, 11 ³	103	Berkley, Levy
2	103	Berkley, Levy, Sartee
6	103	Berkley, Levy, Sartee, Gluck
10	103	Berkley, Levy, Yeo, Murphy, and/or Baker
11	103	Berkley, Levy, and Ippolito or Van Geer and Matsuyama
1, 3–5, 7–9, 11	103	Berkley, Baca, or Levy
2	103	Berkley, Baca, Sartee
6	103	Berkley, Baca, Sartee, Gluck
10	103	Berkley, Baca, Levy, Yeo, Murphy, Baker
11	103	Berkley, Baca, Levy, Ippolito, Van Geer, Matsuyama
12	103	Berkley, Baca, Levy

EX1002, 440. Regarding dependent prosecution claims 2 (“ferromagnetic shield”) and 6 (“metallic plate”), the Examiner continued to rely on Sartee and Gluck.

EX1002, 276-278, 284-286. For independent prosecution claim 12, the examiner

cited Levy for the limitation “the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.” EX1002, 288-89.

103. In response to this, the applicant appealed to the Patent Trial and Appeal Board. EX1002, 319-460. In the appeal decision the Board confirmed that many claims and claim elements were obvious based on Berkley and Baca. EX1002, 459-460. For example, the Board determined that combining Baca and Berkley would have been obvious and that “a person of ordinary skill in the art would have been motivated to combine Berkley and Baca.” EX1002, 449. For the reasons that I present in Section XII.A, I agree with this assessment. The Board also indicated that all but the following three limitations were taught by the Baca-Berkley combination: (1) a “ferromagnetic shield” (claim 2); (2) a “metallic plate” (claim 6); and (3) the first and second arrangements “cause the wallet to adopt a specific orientation on the mobile device” (claim 12). EX1002, 459-460. For point (3), I note that the Board determined that Baca taught this claim element when it was recited in claim 1 and that the rejection of claim 12 was reversed only because the Examiner relied on Levy. EX1002, 447-449, 459-460.

104. I have provided a summary of the conclusions below:

Prosecution Claims	Board's Decision
1, 3-5, 7-9	Taught by combination of Berkley and Baca. EX1002, 444-453.
2	“[T]he Examiner has not adequately explained how combining the teachings of Sartee with Berkley and Baca accounts for the limitation of claim 2.” EX1002, 456.
6	“The Examiner does not cite any evidence from Gluck that would cure the deficiencies in the rejection of claim 2. Therefore, we do not sustain the rejection of claim 6 for the same reasons discussed above for claim 2.” EX1002, 456.
12	“The rejection relies on Levy to satisfy the second wherein clause reciting that the first and second arrangements “cause the wallet to adopt a specific orientation on the mobile device. [] Non-Final Act. 19-20. As discussed above in rejection 1, we find that Levy’s protuberances and recesses, not the magnets, cause the orientation of the electronic device in mount 106. In the Answer, the Examiner changes position and relies on Baca with Levy to satisfy the second wherein clause. Ans. 33.” EX1002, 459

105. In response to the Board's decision, the applicant amended independent claim 1 to incorporate claim 2 and rewrote claim 6 to be independent. EX1002, 462-467. Namely, the independent claims that were allowed were written as follows:

CLAIMS.

1. (Currently Amended) A wallet for attachment to a mobile device comprising:
 - a body defining a compartment and having a device side surface;
 - a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
 - a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and
 - a ferromagnetic shield between the first and second arrangements and the compartment;wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material, the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and
wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

EX1002, 463.

6. (Original) A wallet for attachment to a mobile device comprising:~~The wallet of claim 1~~
further comprising:
a body defining a compartment and having a device side surface;
a first arrangement of magnetic material having a first region exposing a first polarity
magnetic field at the device side surface and a second adjacent region exposing an opposite
polarity magnetic field at the device side surface;
a second arrangement of magnetic material having a first region exposing a first polarity
magnetic field at the device side surface and a second adjacent region exposing an opposite
polarity magnetic field at the device side surface; and
a metallic plate between the first arrangement and the compartment;
wherein the first arrangement and the second arrangement are physically separated on the
wallet by a region of nonmagnetic material, the region of nonmagnetic material having a
maximum cross dimension greater than a distance between any two immediately adjacent first
polarity and opposite polarity regions in the first or second arrangement; and
wherein the first and second arrangements, in use, concurrently magnetically couple the
wallet to a mobile device and wherein the first and second arrangements cause the wallet to
adopt a specific orientation on the mobile device.

EX1002, 464.

106. I understand that the examiner then allowed the claims. EX1002, 523-529.

107. While the claimed “ferromagnetic shield” and “metallic plate,” ultimately led to allowance, I note that such features were very well known in view of the prior art as I previously explained. *See* Section VI.C. As I further explain below with reference to the grounds of unpatentability, a POSA would have viewed the claims and all of the claim elements as obvious in view of the prior art. *See* Sections XII-XXVII.

IX. LEVEL OF ORDINARY SKILL IN THE ART

108. A person of ordinary skill in the art (POSA) at the time of the '641 patent was filed would have had a bachelor's degree in mechanical or electrical engineering, or industrial design, and would have had at least two years of experience with magnetics design for consumer products.

109. I am well qualified to determine the level of ordinary skill in the art. I am very familiar with the technology of the '641 patent during the September 2018 timeframe. As mentioned above, by 2018, I had obtained both a Masters and a Ph.D. (in Electrical Engineering) from MIT and had acquired extensive experience relating to magnetics, magnetic systems, and consumer products.

X. CLAIM CONSTRUCTION

110. I have been informed that the challenged claims of the '641 patent are to be given their plain and ordinary meaning as understood by one of ordinary skill in the art at the time of the invention in light of the specification and the prosecution history pertaining to the patent. Based on my review of the challenged claims, it is my opinion that a POSA would have construed the terms "wallet" as defined in the specification. I also note that the term "compartment" was defined by the Board during prosecution, which I discuss below. The remaining claim terms should receive their plain and ordinary meaning in the context of the '641 patent specification.

A. “wallet”

111. The claims of the '641 patent recite the term “wallet.” The '641 patent provides the following definition for this term:

As used herein in the specification and in the claims, a “wallet” should be understood to mean any apparatus for holding at least one of a credit card, cash, identification, a check, a badge, a picture, a key, a piece of paper, a coupon, business cards, and combinations thereof. While the wallet described herein is intended for containing the aforementioned items, it should be understood that a wallet is also suitable for containing any objects of similar size and dimensions as these items. While the wallet's contents are generally described as credit cards, it should be understood that a wallet can carry any number of the items identified above.

EX1001, 7:3-15.

112. In view of the '641 patent's description, the Board should apply the '641 patent's definition of the term “wallet.” I note that the prior art and the grounds of unpatentability that I discuss below teach the claimed “wallet” under this definition or under any reasonable construction of this term.

B. “compartment”

113. The claims of the '641 patent recite the term “compartment.” Based on my review of the prosecution history, I understand that the Board previously construed this term during prosecution using the following dictionary definition:

“The ordinary meaning [of] compartment is ‘a part or space marked or partitioned off.’” EX1002, 455. I have been informed that the Board applies the broadest reasonable construction standard during prosecution, which is not the same claim construction standard that is used in this proceeding. Regardless, I note that the prior art and the grounds of unpatentability that I discuss below teach the claimed “compartment” under the Board’s previous definition or under any reasonable construction of this term.

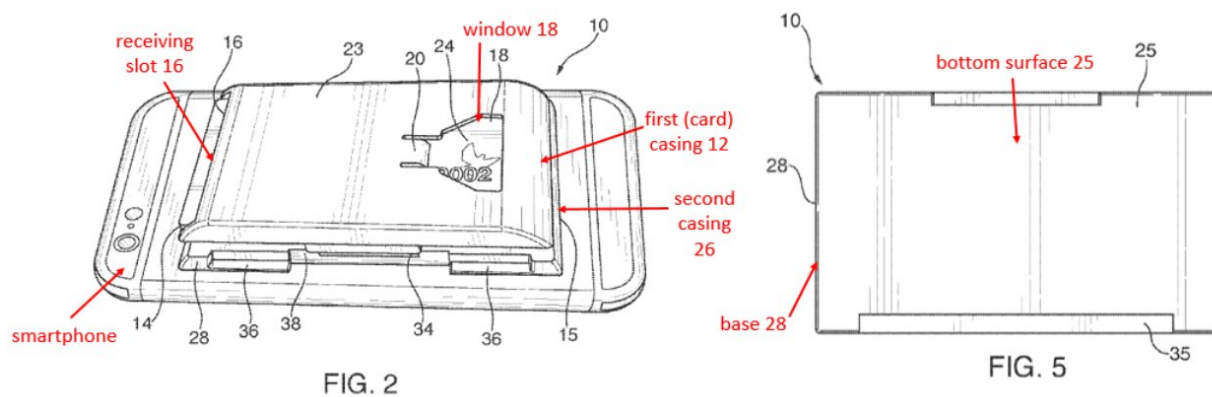
XI. OVERVIEW OF THE PRIOR ART

114. In this section, I provide an overview of the prior art that is ultimately used in the grounds of unpatentability that I further analyze below. *See* Sections XII-XXVII. I note that the prior art references summarized below and applied in the grounds of unpatentability are analogous. Specifically, and as I further explain throughout this declaration, the prior art references are directed to accessories for mobile devices (such as wallets and cardholders), wallets, and/or mechanisms for attaching those accessories to the mobile devices. This is the same field of technology as the ’641 patent and the claims of the ’641 patent. I additionally note that all of the prior art references are pertinent to problems presented by the ’641 patent. For example, the prior art references are all pertinent to addressing a “need [that] exists to better arrange one’s cell phone, wallet and other related accessories” issues related to mounting and unmounting mobile electronic devices via the use of

“magnetic coupling,” and issues related to protecting items (such as magnetic cards) that are stored in wallets. EX1001, 1:35-46, 1:50-62.

A. Berkley

115. Berkley is titled “Cosmetic Wallet Compact.” EX1013, Title. Berkley describes a wallet compact that attaches to a smartphone and stores credit cards, identification cards, and cosmetics. EX1013, ¶2. This cosmetic wallet compact includes a first casing that is “adapted and sized to hold and retain credit card(s), identification card(s) and folded bill(s) in an interior cavity.” EX1013, Abstract. Figures 2 and 5 depict wallet compact 10 as I have annotated below. Figure 5 provides a bottom view of the wallet compact 10. EX1013, ¶¶17, 30.



EX1013, FIGs. 2 and 5 (annotated).

116. With reference to Figure 2, Berkley elaborates and explains that wallet compact 10 includes a first casing 12 (a card casing) disposed on top of a second casing 26. EX1013, ¶¶20, 23. The first casing 12 includes a receiving slot (opening) 16 and a window 18 that allows a user to access the cards. EX1013,

¶¶20, 22. The second casing 26 is formed with base 28 having a flat bottom surface so that an attachment mechanism can be provided on bottom surface 25. EX1013, ¶¶26-28. Berkley describes an embodiment that disposes a magnet in the base so that the wallet compact can “stick” to magnets attached to a smartphone: “fixation means comprises a magnet that is placed on the base of the device which enables the entire improved compact to ‘stick’ to a set of corresponding magnets that are attached by a user to a smartphone.” EX1013, ¶29.

B. Baca

117. As I previously explained, the ’641 patent incorporates many figures and their corresponding description from Baca. *See* Section VII. Baca describes a “Self-Aligning, Multi-Surface Magnetic Mount for Electronic Display Devices.” EX1006, Title, ¶3.¹ As illustrated in Figures 3C and 3F, Baca depicts using magnets to attach objects to an electronic display device 400 (e.g., tablet/iPad or smartphone/iPhone/Android). EX1006, ¶¶31, 34, 74-76.

¹ I understand that Baca issued as U.S. Patent No. 10,134,517. EX1014.

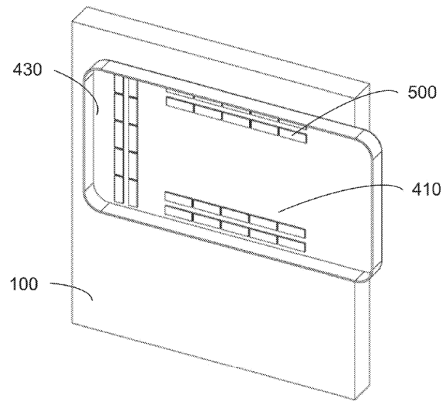


FIG. 3C

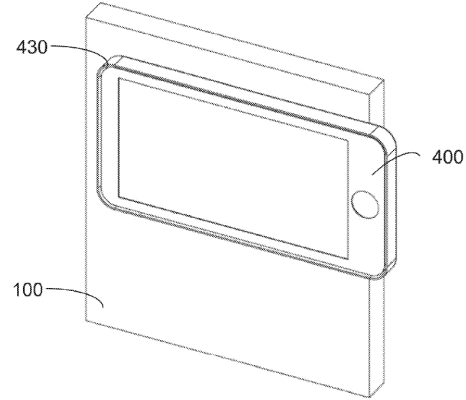


FIG. 3F

EX1006, FIG. 3C, FIG. 3F.

118. To perform this magnetic attachment, Baca describes a surface-side attachment 110 including a plurality of magnets 200 and a respective device-side attachment 410 that includes a corresponding plurality of magnets 500. EX1006, ¶¶68, 72. This can be seen in Figures 1F and 2A as I have annotated below:

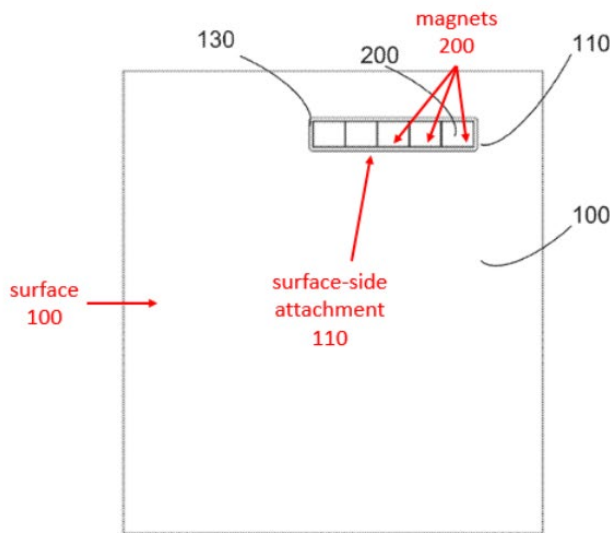


FIG. 1F

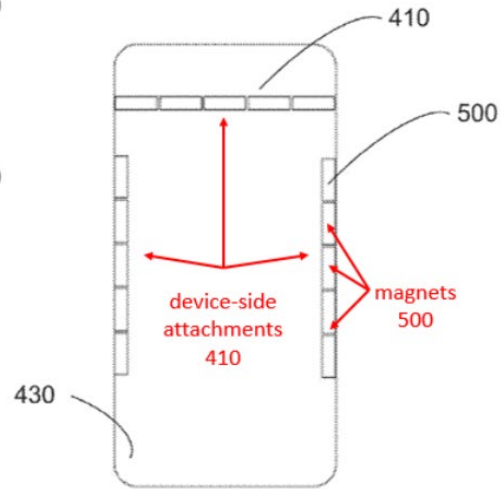


FIG. 2A

EX1006, FIGs. 1F and 2A (annotated).

119. As illustrated in Figure 2A, Baca shows that device-side attachment 410 may be embedded in the case of an electronic device while surface-side attachment 110 may be “permanently or temporarily affixed” by “double-sided adhesive tape” to virtually anything, including surfaces made of “wood, fabric, glass, painted wall, leather and aluminum.” EX1006, ¶¶62, 70, 72, 106. The magnets 200, 500 within each attachment 110, 410 include magnets of alternating polarities arranged to be “self-aligning.” EX1006, ¶¶83-84. Baca explains that the “magnetic forces of attraction and repulsion, along with the predetermined arrangement of the outwardly-facing poles of the magnets within each attachment, provide for self-alignment of the coupled attachments.” EX1006, ¶83. Baca further explains that:

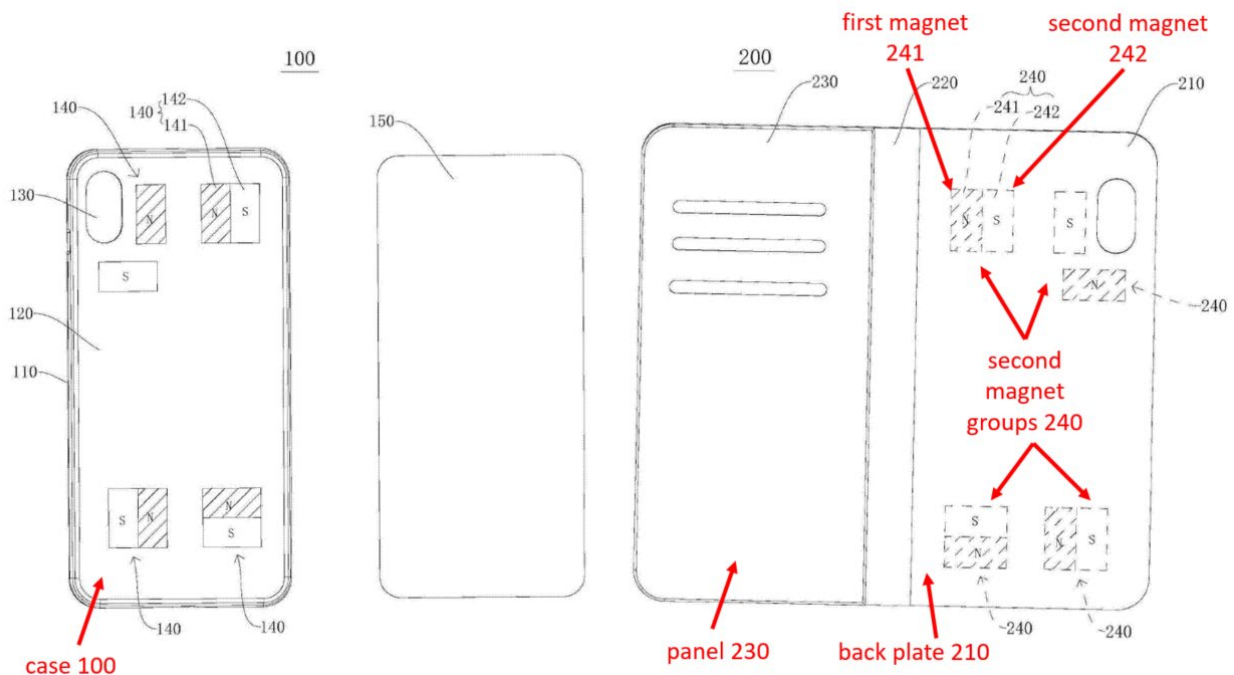
FIGS. 4A, 4F, and 4H are examples of symmetrical self-aligning magnet pole arrangements whereby the electronic display device can be mounted in either of two positions that are 180 degrees of each other. FIGS. 4B to 4E, 4G and 4I are examples of asymmetrical self-aligning magnet pole arrangements whereby the electronic display device can be mounted in only one position.

EX1006, ¶84.

Similar to the other passages and figures that I identified in Section VII, the '641 patent also recites this passage from Baca and incorporates Baca's Figures 4A-4I as Figures 43A-43I. EX1001, 18:10-16.

C. Zhu

120. Similar to the other prior art wallets that I described in Section VI.A, Zhu describes a mobile phone case that attaches to a folio-style cover using magnetic arrangements. EX1008, ¶¶2, 4-8, 13. Zhu refers to this cover as a “clip,” but describes a conventional folio-style cover with a back plate and a cover panel 230. EX1008, ¶¶2, 4-8, 13. Specifically, Zhu’s clip 200 includes a back plate 210 and a panel 230 as shown in Figures 2 and 4. EX1008, ¶13. Back plate 210 and panel 230 are connected by a flexible connecting portion 220, which allows the panel to easily cover or expose a mobile phone screen, “which can effectively protect the screen of the mobile phone.” EX1008, ¶¶2, 13, 30. I have provided an annotated version of Figures 2 and 4 below.



EX1008, FIGs. 2 and 4 (annotated).

121. As shown above, Zhu's panel 230 includes three elongated ovals but is simply silent with respect to the ovals. In my opinion, however, a POSA would have understood that Zhu may have intended the ovals to depict compartments for storing items consistent with the folio style wallets I described above. Section VI.A.2.

122. As seen from these figures, back plate 210 includes at least four "second magnet groups" 240. EX1008, ¶30; *see also* EX1008, ¶¶8, 13, 17. Zhu further explains:

Each second magnet group 240 includes two magnets 241 and 242. The magnets 241 and 242 of each second magnet group 240 are arranged flatly on the back plate 210, with the N pole of one magnet facing upward and the S pole of the other magnet facing upward (that is, the magnetic poles are arranged alternately). The magnets 241 and 242 of at least one second magnet group 240 are arranged horizontally, and the magnets 241 and 242 of at least one second magnet group 240 are arranged vertically.

EX1008, ¶30.

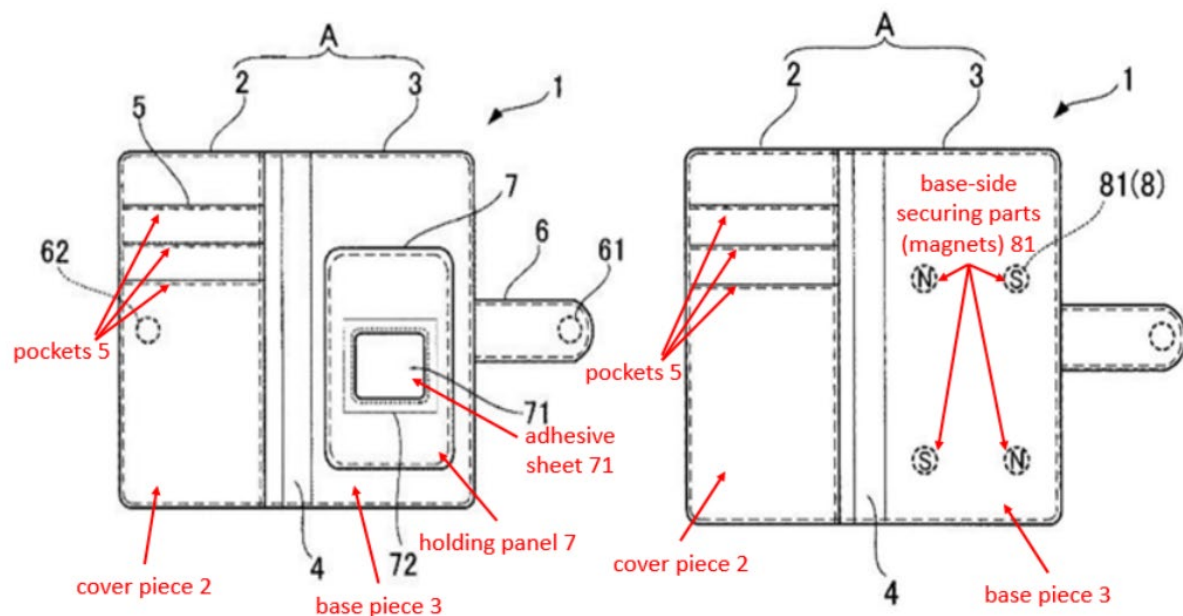
123. As seen in Figure 4, each second magnet group 240 includes a first magnet 241 (showing the "N pole") and a first magnet 242 (showing the "S pole"). EX1008, ¶30.

124. These second magnet groups 240 attach to corresponding magnet groups 140 in a back surface 120 of case 100 on the mobile phone. EX1008, ¶¶8,

13, 17, 30. Additionally, each of the second magnet groups 240 are located at respective corners of back plate 210, which is rectangular. EX1008, ¶¶29-30. Each second magnet group 240 is separated from any other second magnet group 240 by a region of back plate 210. Some of second magnet groups 240 are disposed with a “horizontal” orientation, while others are disposed with a “vertical” orientation. EX1008, ¶¶13, 30.

D. Kinshi

125. Similar to Zhu and the other folio-style cases I described in Section VI.A, Kinshi also describes a mobile phone case formed from a base piece 3 and a cover piece 2. EX1010, Abstract, ¶¶14, 15. This can be seen from Figures 1 and 4 as I have annotated below:



EX1010, FIGs. 1 and 4 (annotated).

126. As seen in these figures, cover piece 2 includes a plurality of pockets 5 to store cards. EX1010, Abstract, ¶¶14, 15. This is similar to other well-known folio-style wallets, which also included pockets on a cover panel to store cards. *See* Section VI.A.

127. Turning to base piece 3, Kinshi describes attaching a cell phone or case to base piece 3 using holding panel 7. Holding panel 7 attaches to the back surface of a cell phone or case via adhesive sheet 71. EX1010, ¶20. Holding panel 7 can then be magnetically attached to base piece 3 using corresponding sets of magnets as referenced by the number “81” in Figure 4 above. EX1010, ¶¶17-18. The magnets 81 in base piece 3 may comprise four magnets with polarities that alternate in a clockwise order. EX1010, ¶26. In addition, the magnets 81 are separated by a portion of base piece 3 so that holding plate 7 is formed with a rectangular shape. EX1010, ¶¶9, 17. This configuration allows the holding panel 7 to “automatically and more accurately” attach to the base piece 3. EX1010, ¶26.

128. As I explained in Section VI, such magnetic configurations and attachment schemes were well known in the art prior to the ’641 patent.

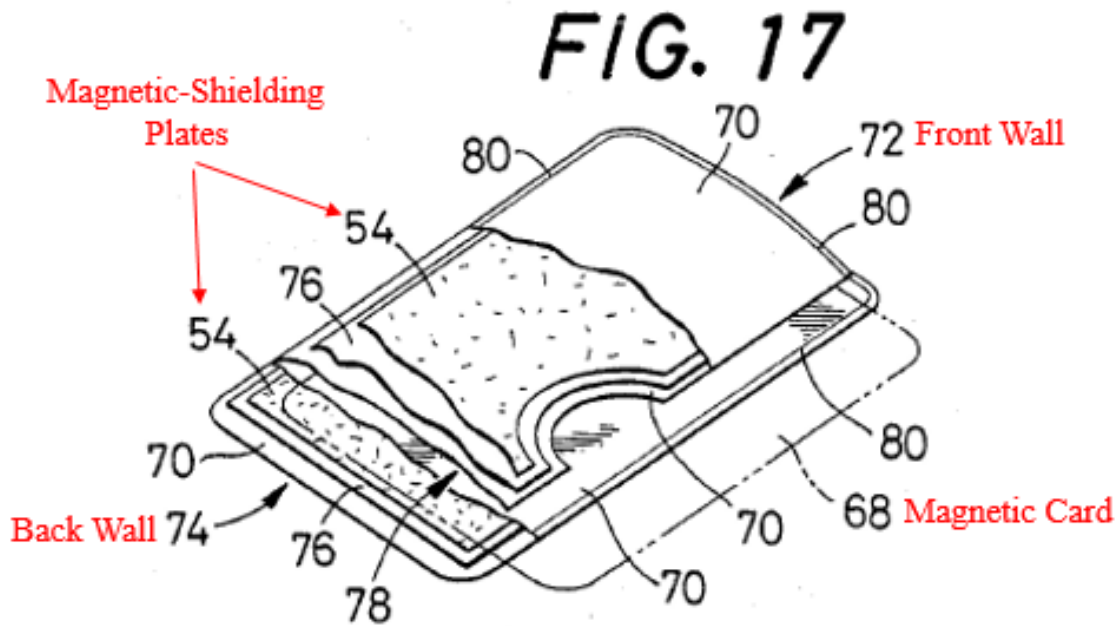
E. Goto

129. As I explained in Section VI.C, the use of magnetic shielding was a well-known technique to prevent degradation of magnetic cards. Goto provides an example of using such a technique as early as 1984 to achieve these well-known

benefits. In particular, Goto describes “magnetic card holders” that include “magnetic shielding” plates, wherein the magnetic-shielding plates are made of an “electrodeposited iron foil.” EX1012, Abstract, 3:9-40 (describing iron foil), 7:20-23 (same), 11:44-12:68, FIGs. 16-18 (describing magnetic card holders).

Specifically, Goto describes “composite sheet material, used for shielding magnetism and electromagnetic waves, principally made of an electrodeposited iron foil.” EX1012, Abstract. Goto explains that this shielding can be used as an essential element of card holders: “A variety of products utilizing this composite sheet material as an essential elements thereof which stretches over a wide field wherein magnetic and electronic shield is required, for example: magnetic-card holders; magnetic-card protection cases or boxes... etc.” EX1012, Abstract.

130. As was well known and further reiterated by Goto, magnetic shielding was useful and needed because the data stored on magnetic cards may be negatively affected or become unusable when exposed to a magnetic field. EX1012, 2:14-21. To address this problem, Goto describes a magnetic-card holder, which is depicted in Figure 17 (others are shown in Figures 16 and 18 as well). I have provided an annotated version of Figure 17 below along with an illustrated cross-section version of the figure to better visualize the layers:



EX1012, FIG. 17 (annotated).

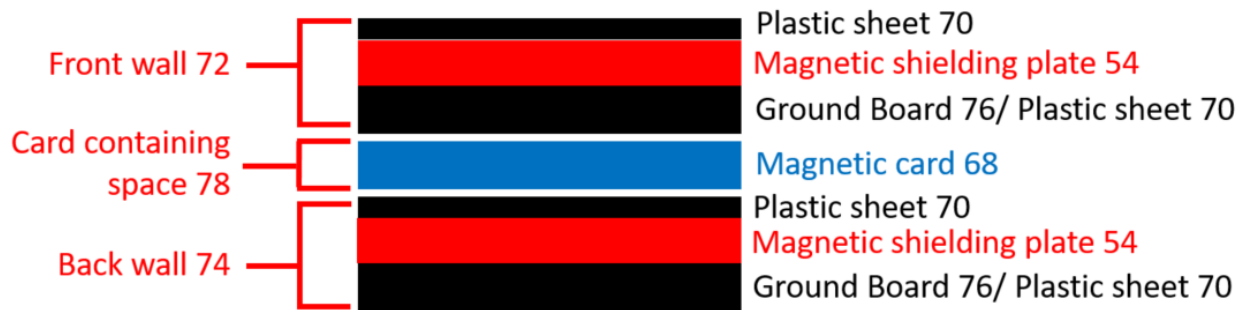


FIG. A: Annotated Cross-Section of EX1012, FIG. 17.

131. As seen from Figure 17, Goto describes a card holder that “is formed of a front wall 72 and a rear wall 74” inside each of which is “a magnetic shielding plate 54” that is “slightly smaller than the plane of” their respective walls. EX1012, 12:9-14. Figure 17 shows that a magnetic card 68 is inserted into the holder. Goto further explains:

The magnetic-card 68 accommodated in this magnetic-card protection case shown in FIG. 17 is also similarly protected, since the card containing space 78, is due to the magnetic shielding plate 54 in the front wall 72 and that of the rear wall 74. Even when the magnetic-card protection case is exposed to magnetic force line, the card can not be affected.

EX1012, 12:20-26.

132. In view of Goto's description, Goto's holder therefore teaches a "wallet" as claimed in the '641 patent. As I explained in Section X.A, the '641 patent inclusively explains "any apparatus for holding at least one of a credit card" qualifies as a "wallet." Goto's magnetically shielded cardholder teaches such an apparatus and therefore teaches a "wallet" in the context of the '641 patent.

F. Cox

133. Cox discloses a protective case for a mobile device that can magnetically couple one or more accessories to the case. EX1017, Abstract, ¶¶1, 51. For example, Figure 3 from Cox depicts an exploded view of a mobile device case 300. EX1017, ¶47.

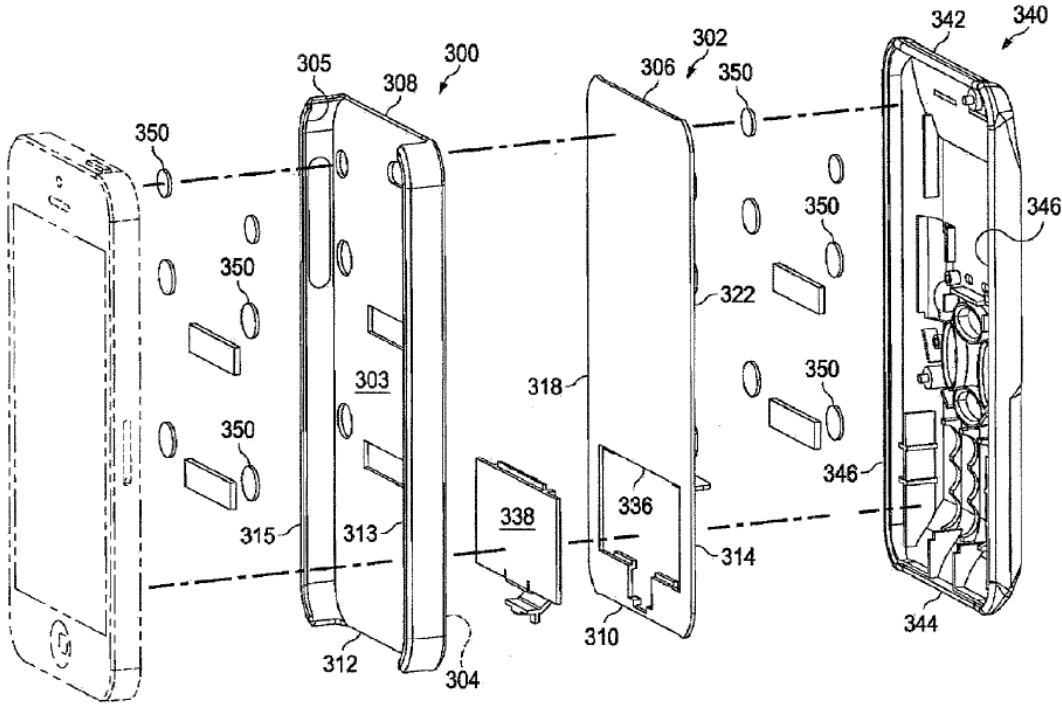


FIG. 3

EX1017, FIG. 3.

134. As seen in this view, Cox depicts magnets 350. EX1017, ¶¶51-52. To hold accessories and a mobile device together, Cox describes using magnets that “may vary in size, position, and strength” so long as they “produce enough attractive force between the article 340 and case 300 such that the two components do not unintentionally or undesirably separate.” EX1017, ¶52. In addition, Cox describes that the magnets may “vary in strength in accordance with the size or weight of the article 340” and may be “sized or positioned in the article 340 to account for and defend against the placement and direction of anticipated forces applied to the article.” EX1017, ¶52.

G. Lauder

135. Lauder is titled “Accessory Device with Magnetic Attachment.” EX1018, Title. Lauder describes “a magnetic attachment mechanism” for releasably attaching an accessory device to an electronic device. EX1018, Abstract, 1:25-27. Lauder’s mechanism includes a plurality of magnets disposed adjacent to each other on the electronic device (or the case thereof), and a corresponding plurality of magnets disposed on the accessory device. EX1018, 13:39-45, 16:63-17:10. For example, Lauder explains:

FIG. 7A shows electronic device 100 in proximity to object 200 having magnetic attachment feature 202. Magnetic attachment feature 202 of object 200 can include magnetic elements each generating an individual magnetic field that can interact with the other to form in the aggregate a resulting magnetic field. The resulting magnetic field can have magnetic characteristics (such as field strength and shape) that can interact with magnetic field 112 of electronic device 100 to attach electronic device 100 and object 200 together in a well-defined, precise, and repeatable manner without mechanical fasteners and nor require external assistance. It should be noted that magnetic field 208 can be about 2500 Gauss whereas magnetic field 112 can be on the order of about 1400 Gauss when device attachment feature 108 is inactive.

EX1018, 16:63-17:10.

136. Figure 11A below shows magnetic assembly 702 that includes magnets 712a-712c. EX1018, 22:9-24:5.

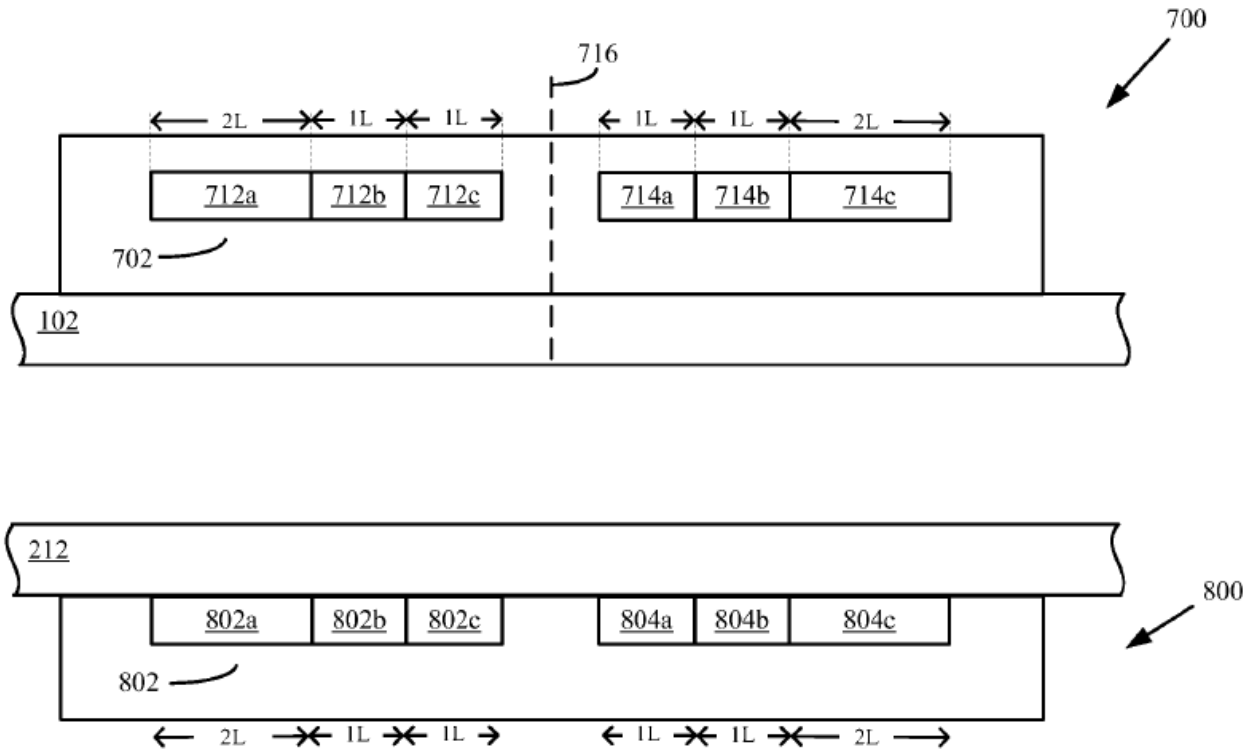


Fig. 11A

EX1018, FIG. 11A.

137. Lauder further describes that, when magnets of opposite polarities are disposed next to each other, they may be “magnetically attached to each other,” so that the magnetic bond between the magnets may “maintain the integrity of the sequence of magnets in the magnetic assembly.” EX1018, 23:21-29.

H. Haymond

138. Haymond is titled “Adhesive Pocket with a Finger Tether Strap for a Cellular Phone.” EX1015, Title. Haymond describes forming a finger tether strap

in a pocket device to tether a cellular phone to a user. EX1015, Abstract, 1:17-22.

For example, such a strap is depicted in Figure 6:

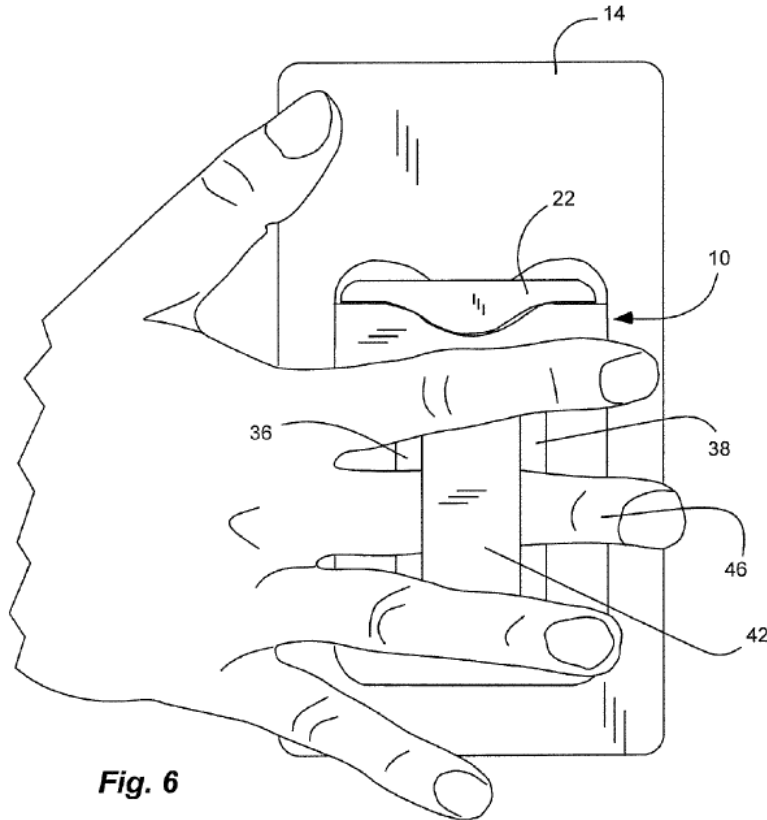


Fig. 6

EX1015, FIG. 6.

139. As seen in Figure 6, Haymond's pocket device 10 attaches to a cellular phone and includes a pouch 18 that is sized to hold a card (e.g., a credit or ID card). EX1015, 1:64-2:22. A finger tether strap is provided in a front surface of pocket device 10 by forming slots 36 and 38 in the outer panel 28 thereof. EX1015, 4:8-11.

I. Mitsuyama

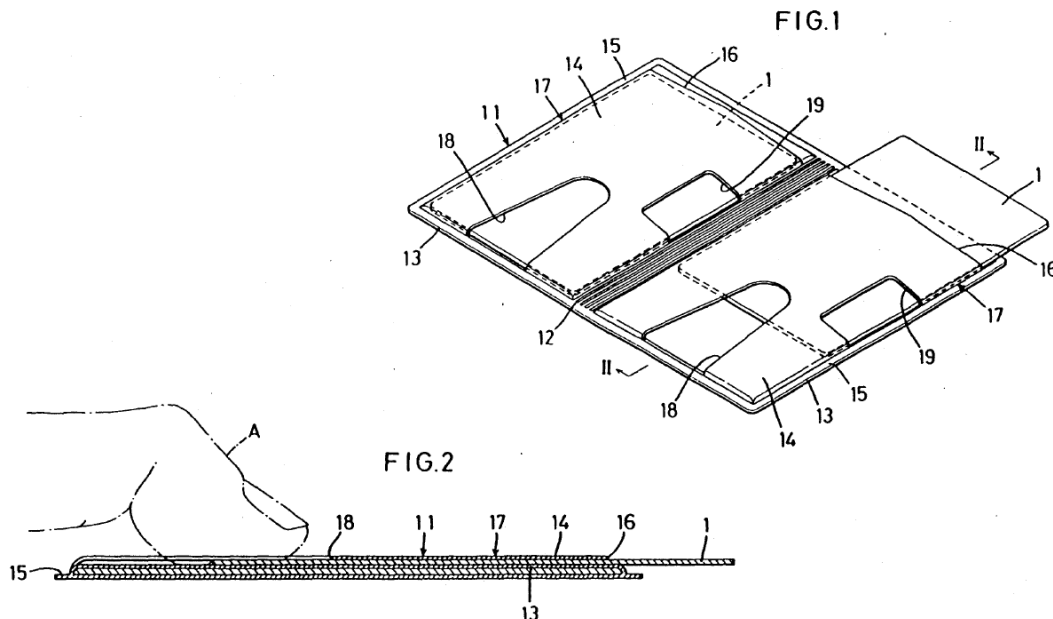
140. Mitsuyama is titled "Card Case Having a Finger Access Hole" and

describes a “card case” with an “elongated opening the width of which is at least sufficient to receive a finger tip so as to allow a card to be pushed through the open side.” EX1016, Title, Abstract; *see also* EX1016, 1:38-54. Mitsuyama further explains:

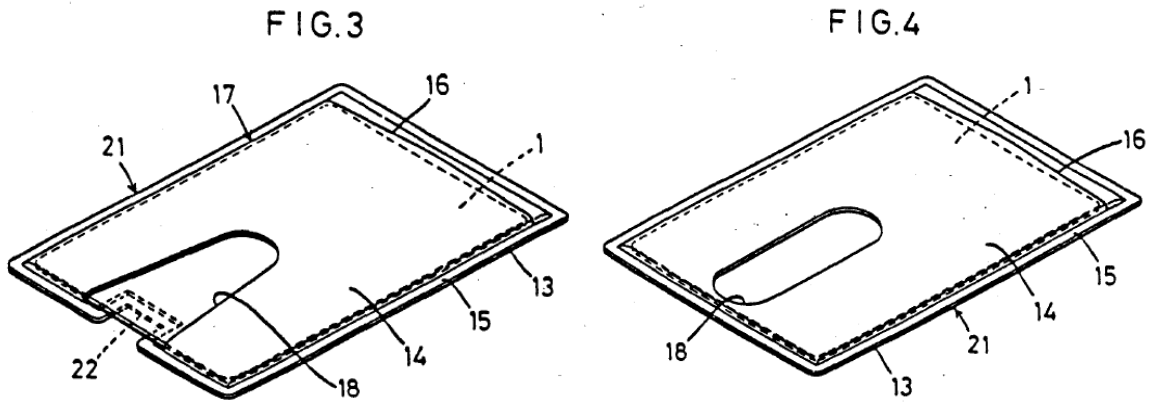
The card case is constructed such that it can be used conveniently for cash dispenser cards, telephone cards, name cards, season tickets and the like because bearers can remove the cards quickly from the case by simply putting their finger tip on the card through the opening and pushing the card out.

EX1016, Abstract.

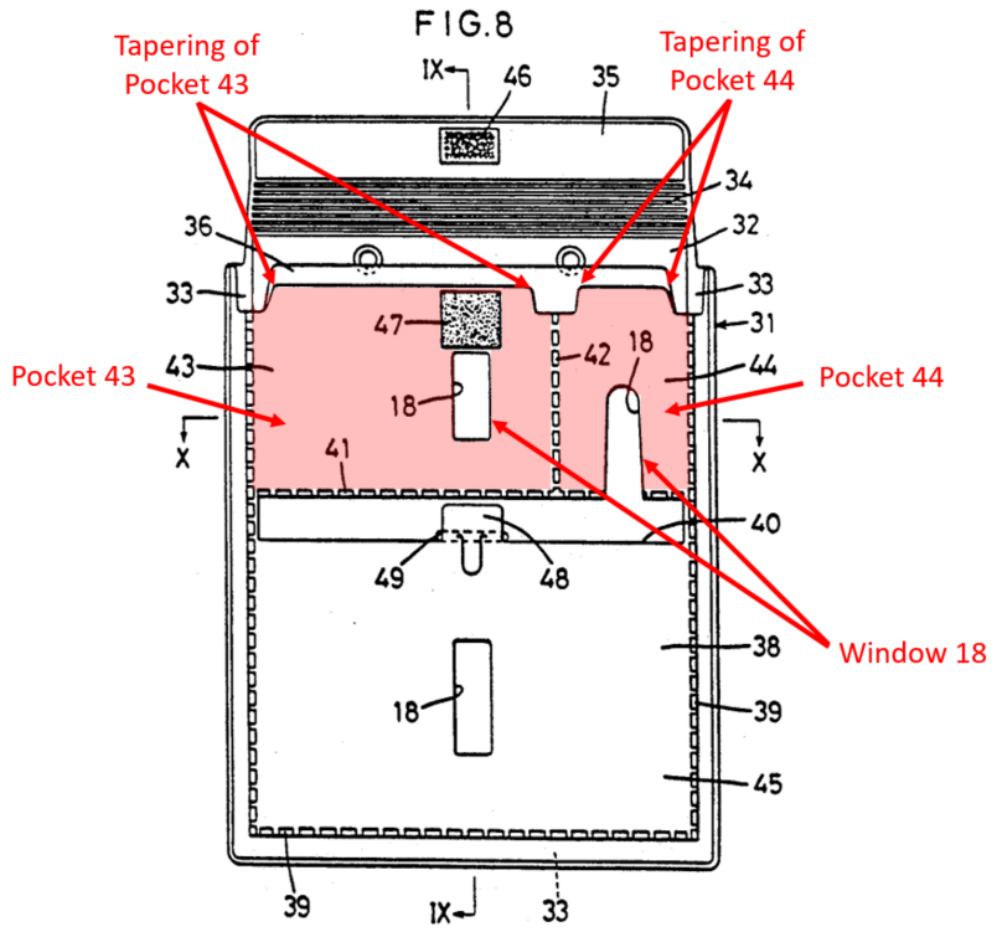
141. Mitsuyama provides several example designs of card holders with a finger opening (referred to as “window 18”) as depicted in Figures 1-4 and 8. *See, e.g.*, EX1016, 2:32-36.



EX1016, FIGs. 1 and 2.



EX1016, FIGs. 3 and 4.

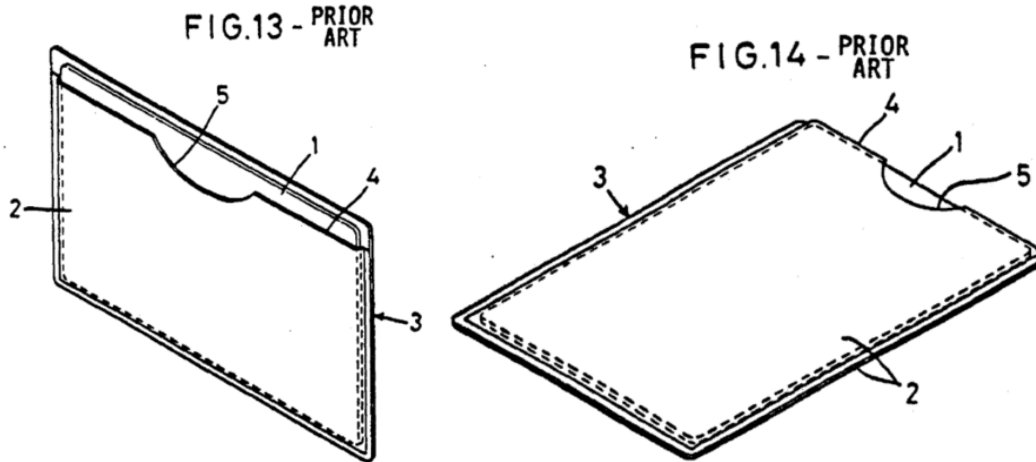


EX1016, FIG. 8 (annotated).

142. Examining Figure 8, Mitsuyama describes several pockets 43, 44, and 45 and “cards can be put in each of the pockets.” EX1016, 4:1-19. “A longitudinal opening or window 18 is provided for each of the pockets 43, 44, 45.” EX1016, 4:6-7.

143. As part of Mitsuyama’s design, Mitsuyama explains that some conventional card cases include shallow openings such that “it is difficult to hold one side of the card appearing out of the card case [] between fingers. This is especially true during cold winters due to fingers becoming numbed by the cold.” EX1016, 1:26-30. “Under the circumstances, the object of [Mitsuyama’s] invention is to solve the above mentioned problem and to provide a card case which allows bearers to remove a card therefrom without any difficulty even when their fingers are numbed due to cold.” EX1016, 1:31-35. Accordingly, Mitsuyama provides the designs that I have reproduced above to address these problems and so that “bearers can push a card out of the pocket so as to remove it quickly even when their fingers are numbed by cold.” EX1016, 4:37-41.

144. Mitsuyama also provides Figures 13 and 14, which also depict other types of openings 4 for card case 3. EX1016, 1:11-25. For example, the openings 4 include “indent 5” shaped as a semi-circle so that a card can be “held between fingers when removed.” EX1016, 1:16-25.



EX1016, FIGs. 13-14.

XII. GROUND 1A: THE COMBINATION OF BERKLEY, BACA, AND GOTO RENDERS OBVIOUS CLAIMS 1-8.

145. Claims 1-8 would have been obvious over Berkley, Baca, and Goto.

As I previously explained, the Board acknowledged that the combination of Berkley and Baca taught all of the claim limitations of the independent claims except for following limitations: (1) a “ferromagnetic shield”; (2) a “metallic plate”; and (3) the first and second arrangements “cause the wallet to adopt a specific orientation on the mobile device.” EX1002, 459-460. As I explain below, however, the combination of Berkley, Baca, and Goto teaches these limitations and therefore renders claims 1-2 and 4-8 obvious.

A. Motivation to Combine

1. A POSA Would Have Been Motivated to Combine Berkley and Baca.

146. A POSA would have been motivated to modify Berkley to use Baca’s magnetic arrangements in order to attach Berkley’s wallet to a mobile device, as

the Board previously found.² EX1002, 447-49. As I previously explained, the use of magnets to attach wallets to a mobile device was already well known in the art.

VI.B. A POSA would have therefore found the combination of Berkley and Baca to be predictable and would have been motivated to form such a combination.

147. To elaborate, Berkley describes “a cosmetic wallet compact that accommodates credit cards, identification cards and cosmetics for effective and easy access by users.” EX1013, ¶2. Berkley also describes several ways to attach the wallet to a handheld device (e.g., a mobile device or mobile phone). EX1013, ¶¶27, 29. For example, Berkley describes using hook and loop fasteners (e.g., Velcro) as well as magnets in the base of the wallet. EX1013, ¶¶27, 29. In particular, Berkley states that attaching a wallet to a smartphone can be performed using “a magnet that is placed on the base of the device which enables the entire improved compact to ‘stick’ to a set of corresponding magnets that are attached by

² Specifically, I note that the Board previously considered and rejected an argument that Baca was not analogous art. EX1002, 447. I agree that this is true because the ’641 patent incorporates several passages by reference from Baca as I previously explained. *See* Section VII. Specifically, the ’641 patent incorporates disclosure from Baca related to magnetic arrangements. EX1002, 447.

a user to a smartphone.”³ EX1013, ¶29.

148. While Berkley does not explicitly provide additional details for how to implement this magnetic attachment, a POSA would have recognized this to be a well-known and obvious implementation for the reasons that I previously presented. *See* Section VI.B. In view of this well-known implementation, a POSA would have sought out or looked to references such as Baca that teach and provide additional details for implementing magnets. *See* Section VI.B, XI.B.

149. As I previously explained, Baca describes arrangements of magnets for “rapidly mounting and unmounting” an electronic display device “to various surfaces.” EX1006, ¶3; Section XI.B. Baca describes disposing corresponding arrangements of magnets on opposing surfaces (e.g., an electronic display device and some other surface). EX1006, ¶68. Such arrangements can be attached to virtually anything, including surfaces made of “wood, fabric, glass, painted wall, leather and aluminum” merely using, for example, “double-sided adhesive tape.”

³ I understand that Patent Owner has acknowledged that a POSA would find magnets to be more desirable over hook and loop fasteners, which are “kludgy,” “can catch on things” or “snag your clothes,” and “just doesn’t look very good.” EX1002, 475 (Transcript of oral arguments dated June 22, 2023, in *Ex Parte Fernando Mora, et al.*, PTAB Appeal 2023-001432).

EX1006, ¶¶70, 106. Baca also describes integrating magnets directly into the electronic display device as well. EX1006, ¶62 (“In some embodiments, a plurality of magnets is integrated into a protective case for an electronic display device. In some embodiments, the device-side attachment is integrated into the electronic display device during its manufacture.”). In view of this description, Baca discloses a general technique for using arrangements of magnets to attach an electronic device to other items. Again, as I explained in Section VI, using magnet attachments to attach accessories to electronic devices was well known in the art prior to the ’641 patent.

150. In view of this knowledge and in view of Baca’s teachings, a POSA would have found it obvious to combine Berkley in view of Baca. *See* Section VI. For example, a POSA would have been motivated to incorporate Baca’s magnets into Berkley’s wallet to realize the magnetic attachment mechanism expressly taught by Berkley. EX1013, ¶29.

151. I have illustrated below an example of this combination. Combining Baca with Berkley would merely amount to implementing Berkley’s teaching and explicit description of using magnets. A POSA would have implemented Baca’s magnetic arrangements (as shown in Figure 2B of Baca) onto the backside of Berkley’s device in the same manner as taught by Baca. *See* Section XI.B; EX1006, ¶¶31, 34, 62, 68, 70, 72, 74-75. To implement Baca’s attachment

mechanism, a POSA would have implemented corresponding arrangements of magnets on the bottom surface of Berkley's wallet as I have shown in annotations in Figures B and C of my declaration below.

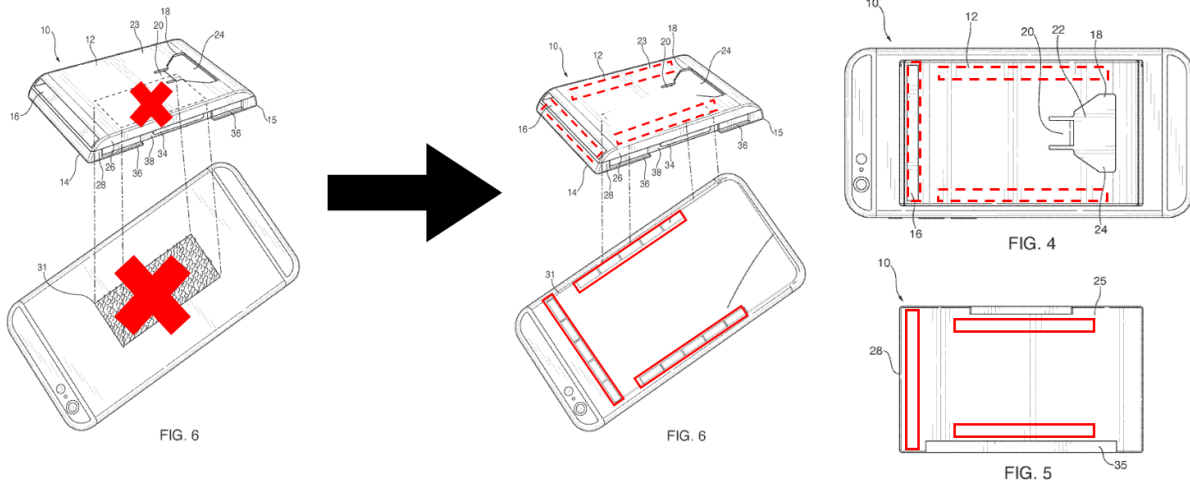


FIG. B: EX1013, FIGs. 4-6 (annotated to show combination of Berkley and Baca).

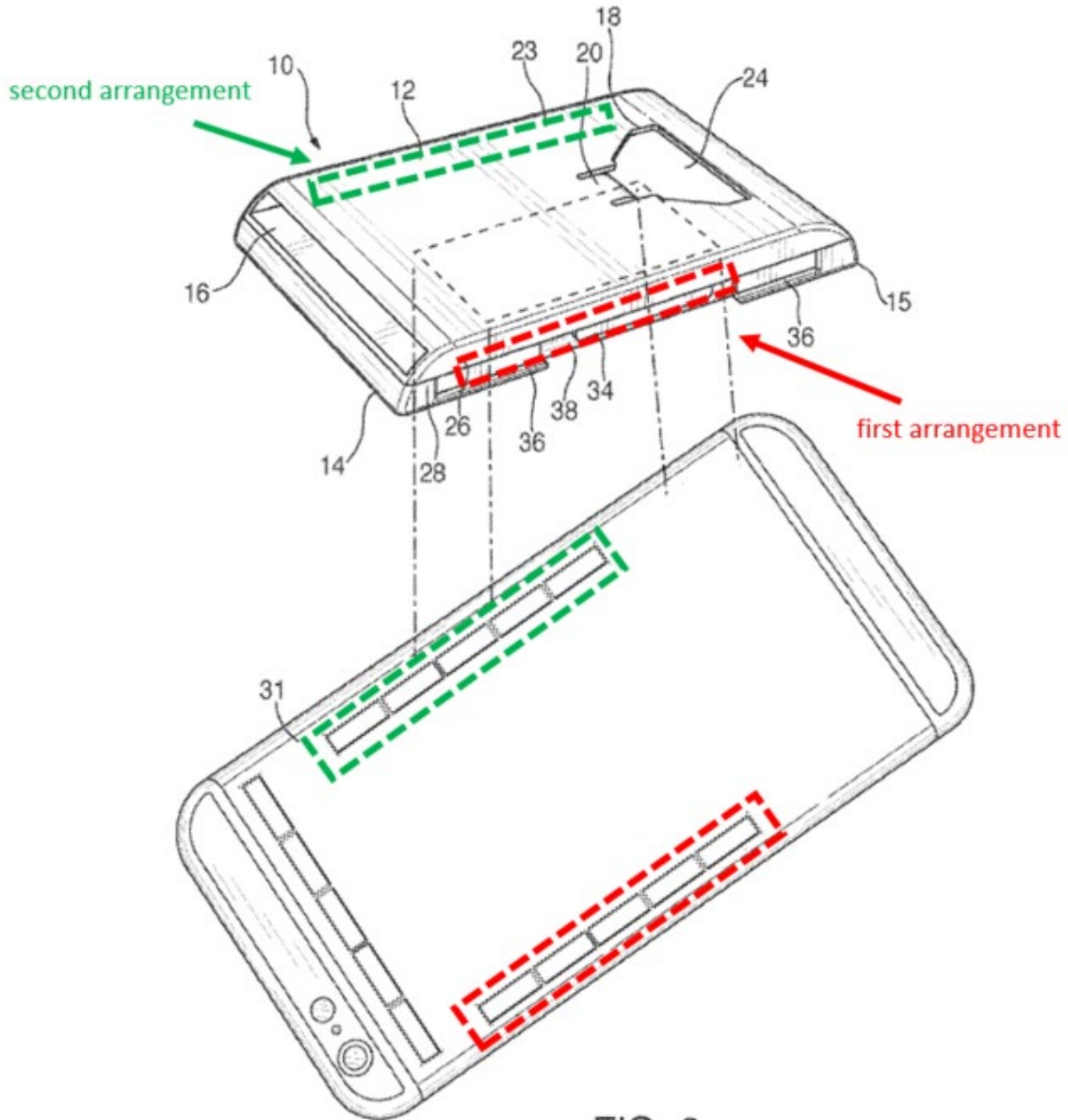


FIG. 6

FIG. C: EX1013, FIG. 6 (annotated to show combination of Berkley and Baca's magnetic arrangements).

152. In addition to the Board's prior determination that Berkley and Baca are capable of being combined, a POSA would have been motivated to form this combination for several reasons. First, Berkley's explicitly recites using a magnetic

attachment, which would have taught and motivated a POSA to seek out additional references detailing how to implement such magnet attachments. Second, the combination simply amounts to combining the prior-art elements of Berkley's wallet with Baca's magnetic arrangements according to well-known methods for coupling accessories—like wallets—to a mobile device. *See* Section VI. The combination of Berkley with Baca would have yielded the predictable result of a wallet that is magnetically attachable to a mobile device. Again, as I explained in Section VI, such wallets were well known prior to the '641 patent. And third, the combination uses Baca's known technique to attach a mobile device to an item via magnetic arrangements to improve Berkley's similar devices in the same way. As I previously explained, this would have been predictable given Berkley's description of attaching a wallet to a mobile device as well as Baca's magnet implementation being used for mobile devices as well.

153. In addition to being motivated to combine Berkley and Baca, a POSA would have had a reasonable expectation of success in forming the combination and modifying Berkley to implement Baca's teachings. Specifically, Baca's teachings make such a combination predictable and easy to implement based on Baca's permissive and flexibly language. For example, Baca explains that “[s]urface-side attachment 110 can be” “permanently or temporarily affixed to” any “surface 100” using, for example, “double-sided adhesive tape.” EX1006, ¶70.

In view of this flexibility, a POSA would have been able to and would have been motivated to place Baca's magnetic surface-side attachments 110 onto the bottom surface 25 of Berkley's wallet to achieve Berkley's disclosure of using magnets. EX1002, 282.

2. A POSA Would Have Been Motivated to Combine Berkley, Baca, and Goto.

154. As I previously explained, I understand that the Board previously found that (1) it would have been obvious to combine Berkley and Baca and (2) the Berkley-Baca combination teaches the elements of issued claims 1 and 5 except for the claimed "ferromagnetic shield" and "metallic plate" (which were recited by original dependent claims 2 and 6 during prosecution). *See* EX1002, 447-49, 454-56; Section VIII. As I previously explained, however, the use of magnetic shielding for wallets was already well known prior to the '641 patent. *See* Section VI.C. This can be seen based on the teaching of Goto, which was a reference not considered during prosecution of the '641 patent. As I previously explain and will further explain below, Goto clearly teaches the claimed "ferromagnetic shield" and "metallic plate." *See* Section XI.E.

155. At the outset, a POSA would have been motivated to modify the Berkley-Baca wallet to include Goto's iron-foil, magnetic-shielding plates to avoid erasing data stored magnetically on cards. *See* Section VI. As I explained in Section VI.C, it was a well-known problem for magnetic cards to become

corrupted, especially when exposed to magnetic fields. EX1027, 1:29-34. For example, such harmful magnetic fields could be caused by “magnetic clasps sometimes used in purses or wallets.” EX1027, 1:29-34.

156. But solutions and measures for protecting against degradation of cards were already well known prior to the '641 patent. *See* Section VI.C. For example, to protect against the degradation of magnetic cards, Goto describes using magnetic shielding plates and explains that this shielding is needed because the data stored on magnetic cards may be negatively affected or become unusable when exposed to a magnetic field. EX1012, 2:14-21; Section XI.E. To avoid such damage, Goto teaches using magnetic-shielding plates made of iron foil embedded within the front and back walls of a “wallet” that holds cards. EX1012, 12:9-27. For example, Goto explains the following benefits of implementing its magnetic shielding:

The electrodeposited iron foil obtained through such a process generally consists of high purity iron of not less than 99.97% purity, which is, irrespective of its being an extremely thin foil, very high in magnetic permeability and excellent in adsorption of magnet shielding of electromagnetic waves, and magnetism shieldability. Since this kind of the electrodeposited iron foil is, in comparison with common steel sheet, higher in magnetic permeability, and allows lines of magnetic force to extend in the direction of the plane of the iron foil, its composite is favourably provided with a high preventive capability

against the influence of magnetism from an ordinary magnet, being synergistically supported by attenuation effect due to the distance of total thickness of the composite.

EX1012, 3:9-33.

157. Goto further teaches and describes embedding the magnetic-shielding plates—formed via electrodeposition of a thin iron foil—as layers that sit beneath various materials used for wallets, such as leather and plastic. EX1012, 11:48-55, 12:9-19.

158. As I explained in Section VI.C, it was well-known problem long before the '641 patent that magnetically stored data on certain cards (such as credit cards, identification cards, etc.) are susceptible to corruption and erasure when exposed to magnets. *See* Section VI.C. A POSA would have recognized that cards stored near magnets would have been susceptible to magnetic damage. For example, as LeBlanc explains, the use of magnets in wallets may corrupt cards. EX1027, 1:29-34. Similarly, cards stored in the Berkley-Baca wallet would have been susceptible to this type of magnetic damage, at least due to their proximity to Baca's magnets used to attach Berkley's wallet to a mobile device. With this understanding, a POSA would have been motivated to address the potentially harmful effects arising from the Berkley-Baca wallet and its use of magnets.

159. Accordingly, a POSA would have been motivated to modify the

Berkley-Baca wallet to include Goto's magnetic-shielding plate on or embedded as a layer within (at least) the bottom surface of Berkley's base 28—between the compartment that holds cards and Baca's magnets—to prevent potential magnetic damage caused by Baca's magnets. *See* Section XI.E. As I explained in Section VI.C, this type of shielding was well known in the art to achieve the benefits of providing card protection. Such a modification to the Berkley-Baca wallet would therefore lead to the predictable result of protecting cards from magnetic damage. *See* Section VI.C.

160. In addition to achieving a predictable result, a POSA would have also had a reasonable expectation of success in making this modification because it simply combines prior art elements (wallet and magnetic shielding) according to known methods to achieve the predictable result of protecting cards from magnetic damage. I presented several examples of such an implementation in Section VI.C. Further, the modification applies a known technique (magnetic shielding) to improve a similar wallet—such as the one described in Berkley—in the same way as Goto provides shielding for a cardholding wallet. *See* Sections VI.C, XI.E.

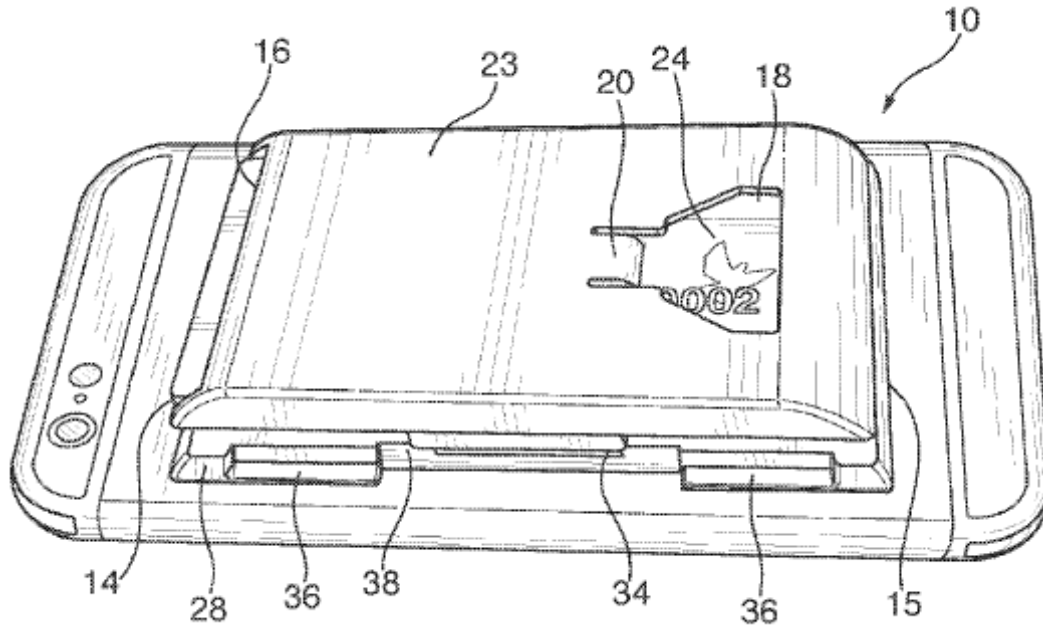
B. Independent Claims 1 and 5

1. Independent Claim 1

a. [1.P]: A wallet for attachment to a mobile device comprising:

161. I understand that a preamble for a claim is generally not limiting.

Relatedly, I again note that during prosecution, the applicant explicitly indicated that the mobile device is not a structural requirement of the claims. EX1002, 195; Section VIII. Regardless of whether the preamble to claim 1 is limiting, a POSA would have found the preamble obvious in view of Berkley. *See* Section XI.A. As I previously explained, Berkley discloses a “cosmetic wallet compact comprising a housing” and an “attachment means ... to attach the cosmetic wallet compact to a handheld device.” EX1013, Abstract. Like the wallet of the ’641 patent, Berkley’s wallet compact 10 “accommodates credit cards,” “identification cards,” and “paper bills,” and “selectively attaches to and detaches from the back surface of a handheld device, such as a smartphone.” *Compare* EX1013, ¶¶2, 5, 23 with EX1001, 7:3-7. Berkley’s cosmetic wallet 10 may be attached to a mobile device via “a magnet placed on the base of the device” that ““stick[s]’ to a set of corresponding magnets” on the mobile device. EX1013, ¶29.

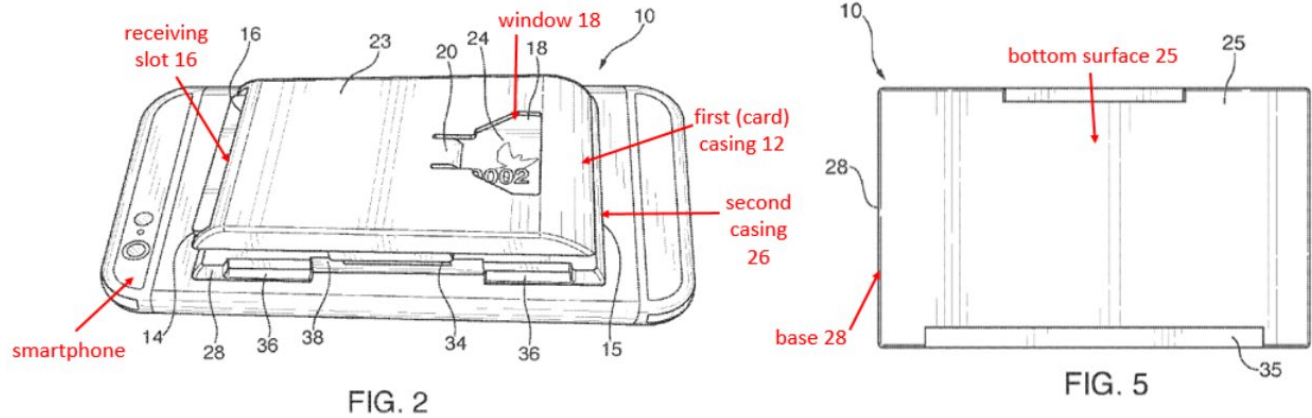


EX1013, FIG. 2.

162. Thus, as found by the Board previously, Berkley discloses a “*wallet for attachment to a mobile device*” as recited in the preamble. See EX1002, 447-49.

b. [1.A] a body defining a compartment and having a device side surface;

163. Berkley teaches claim element [1.A]. Berkley’s wallet 10 includes “a card casing or first casing 12 having an interior cavity.” EX1013, ¶20. First casing 12 “accommodate[s] a combination of at least two to four credit card(s), identification card(s), and one or more folded paper bills.” EX1013, ¶23. Second casing 26, attached to first casing 12, includes a “base 28 that rests against and is fastened to a handheld device.” EX1013, ¶24. I have annotated Figures 2 and 5 from Berkley below.



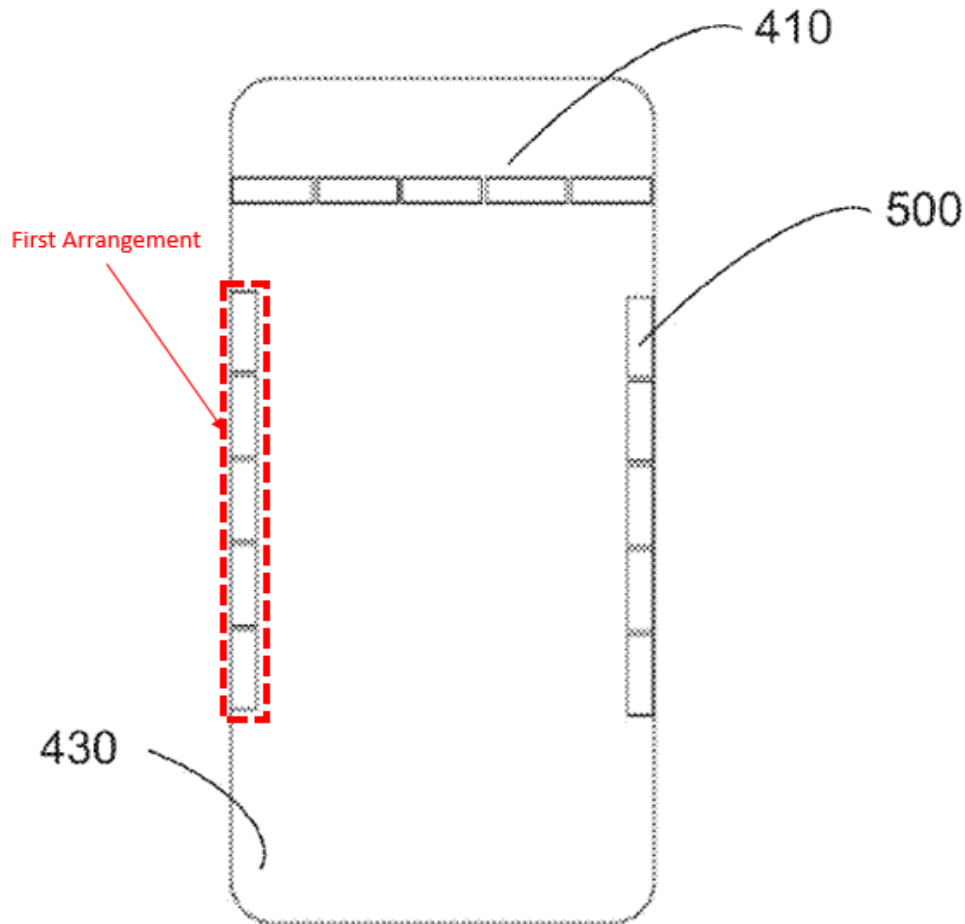
EX1013, FIGs. 2 and 5 (annotated).

164. Berkley's first casing 12 and base 28 together teach the claimed "body" which has "a device side surface." The device side surface can be seen in Figure 5 as bottom surface 25. EX1013, ¶¶17, 26, 28. Berkley's interior cavity of the first casing 12 that is configured to store cards and paper bills teaches the claimed "compartment" defined by the body. Thus, as the Board previously determined, Berkley discloses claim element [1.A]. See EX1002, 447-49.

- c. [1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface**

165. The combination of Berkley and Baca renders obvious each of the aspects of claim element [1.B]. As I previously noted, the '641 patent's specification support for the claimed "magnetic arrangements" is incorporated directly from the disclosure of Baca. *See* Section VII. With this understanding,

Baca teaches the claimed “*first arrangement of magnetic material.*” This can be seen from Figure 2A of Baca, which illustrates the positioning of several magnets into an arrangement positioned on the backside of an electronic device (e.g., mobile phone):

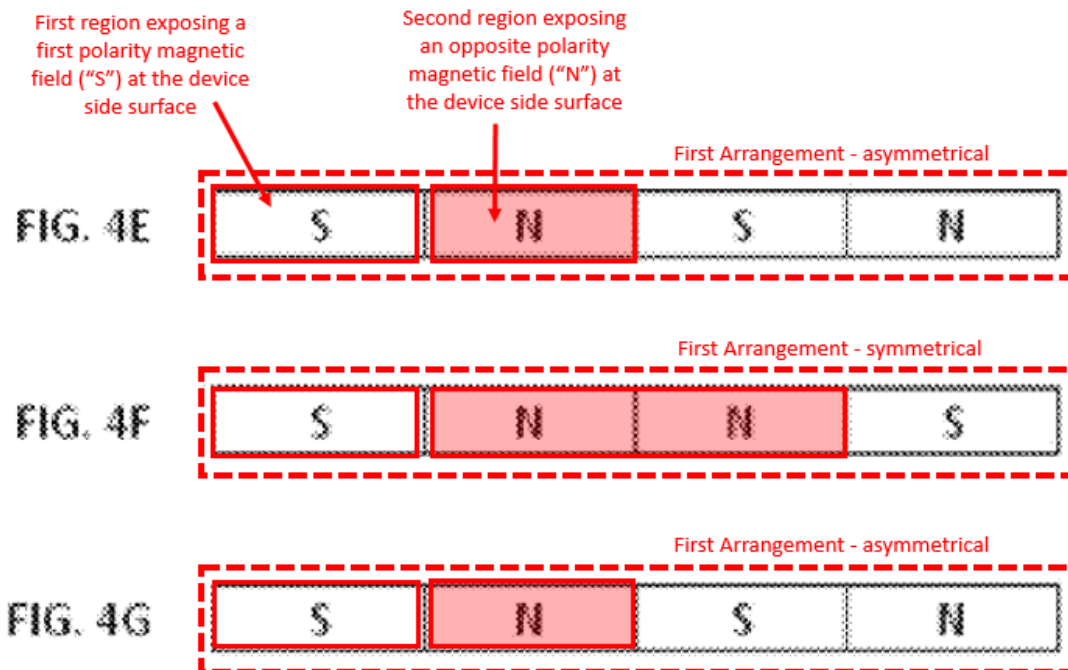


EX1006, FIG. 2A (annotated).

166. Each arrangement of magnets in Figures 2A-3D of Baca is comprised of a “self-aligning” arrangement made up of several magnets of opposite polarities, examples of which are shown in Figures 4A-4I of Baca. EX1006, ¶84. When combined with Berkley’s wallet as I described in Sections XII.A.1 and XII.B.1.b,

Baca's arrangement of magnets having opposite polarities teaches a first magnetic arrangement having *"a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface"* as recited in claim element [1.B].

167. To further elaborate, Baca explains that each self-aligning magnetic arrangement includes at least one region that exposes a magnetic north polarity ("N"), and at least one region that exposes a magnetic south polarity ("S"), as illustrated in Figures 4E-4G of Baca below. EX1006, ¶84.



EX1006, FIGs. 4E-4G (annotated).

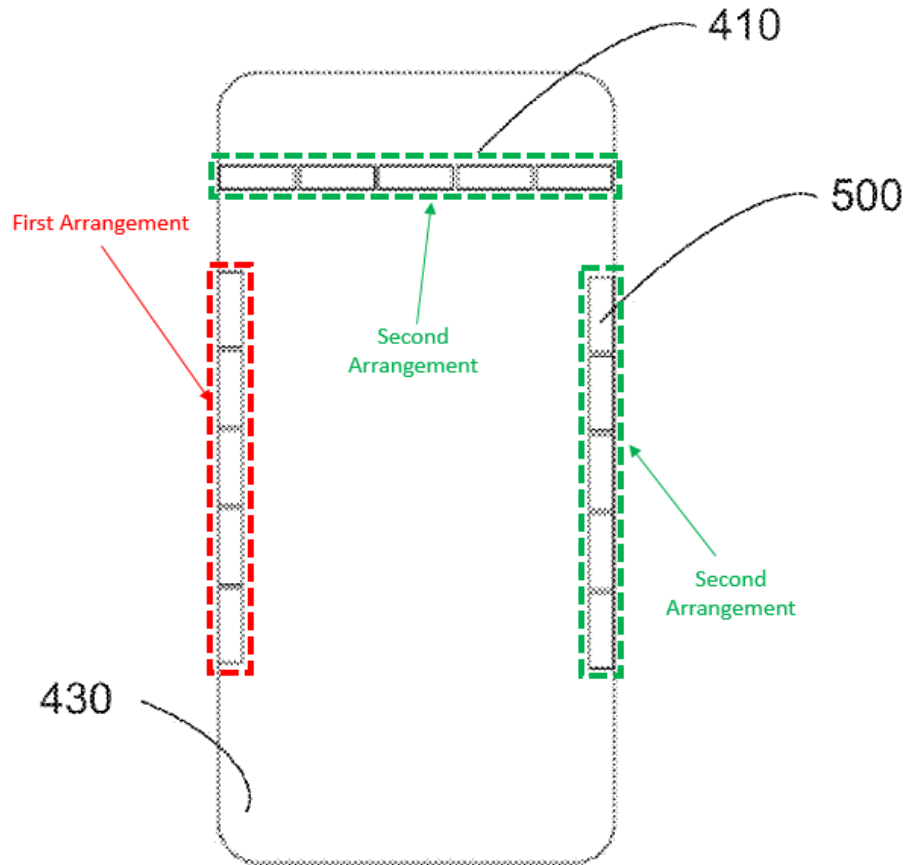
168. In this manner, when any of the first arrangements depicted in Baca's FIGs. 4E-4G are implemented in the electronic device, for example as shown in

FIG. 2A, Baca forms and teaches the claimed “*first arrangement of magnetic material.*” EX1006, ¶¶72, 84. In the combination, this first arrangement would be implemented on the device-side surface of Berkley’s wallet 10 as I explained in Section XII.A.1 and with reference to claim element [1.A] and as I further explain with reference to claim element [1.C]. Thus, as the Board found, the Berkley-Baca combination renders obvious claim element [1.B]. *See* EX1002, 447-49.

- d. **[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface**

169. The combination of Berkley and Baca renders obvious each of the aspects of claim element [1.C] for reasons similar to those that I presented for claim element [1.B].

170. As I have annotated below in Figure 2A of Baca, several of Baca’s magnetic arrangements can be considered as teaching the claimed “*second arrangement of magnetic material.*”



EX1006, FIG. 2A (annotated).

171. Specifically, Baca illustrates multiple arrangements relative to the first arrangement that are disposed on the back side of an electronic device. EX1006, ¶¶62, 72. And each of Baca’s magnetic arrangements comprise a “self-aligning” arrangement made up of several magnets of opposite polarities as I explained with reference to claim element [1.B]. *See* Section XII.B.1.c; EX1006, ¶¶83-84. A POSA would have also understood that, for each magnetic arrangement shown in Figure 2A, a corresponding magnetic arrangement would be disposed on the bottom surface 25 of Berkley’s wallet. EX1013, ¶¶17, 26, 28. Thus, each of the

“*second arrangements*” shown in Figure 2A meets all the requirements of the claimed “*second arrangement*.” Specifically, like the first arrangement, these second arrangements would also include “*a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface*.” As I previously explained, this can be seen by the different polarity configurations depicted in FIGs. 4E-4G from Baca. EX1006, ¶¶72, 84.

172. To the extent Patent Owner argues Baca teaches only “a single array of magnetic elements,” I understand that the Board has previously rejected this argument. *See* EX1002, 446, 448. Specifically, I understand that the Board determined that, at a minimum, it would have been obvious to duplicate Baca’s surface-side attachments to arrive at the claimed first and second arrangements of magnetic materials, particularly because there is no evidence the claimed arrangement yields unexpected results. *See* EX1002, 446, 448. This also applies to Baca’s teachings here in view of the ’641 patent incorporating and relying on the same magnetic elements disclosed by Baca without adding any additional disclosure beyond Baca’s teaching. *See* Section VII. A POSA would have duplicated Baca’s surface-side attachments to strengthen the attachment between wallet and mobile device so that the wallet does not detach and become lost. *See, e.g.,* EX1006, ¶¶80, 87.

173. To aid with visualization and as I further explain below, the combination of the first and second arrangement of magnetic materials from Baca to the wallet depicted in Berkley can be seen as follows. I have provided an annotation below (designated as Figure C of my declaration) to show the combination of Berkley and Baca that I discussed in Section XII.A.1.

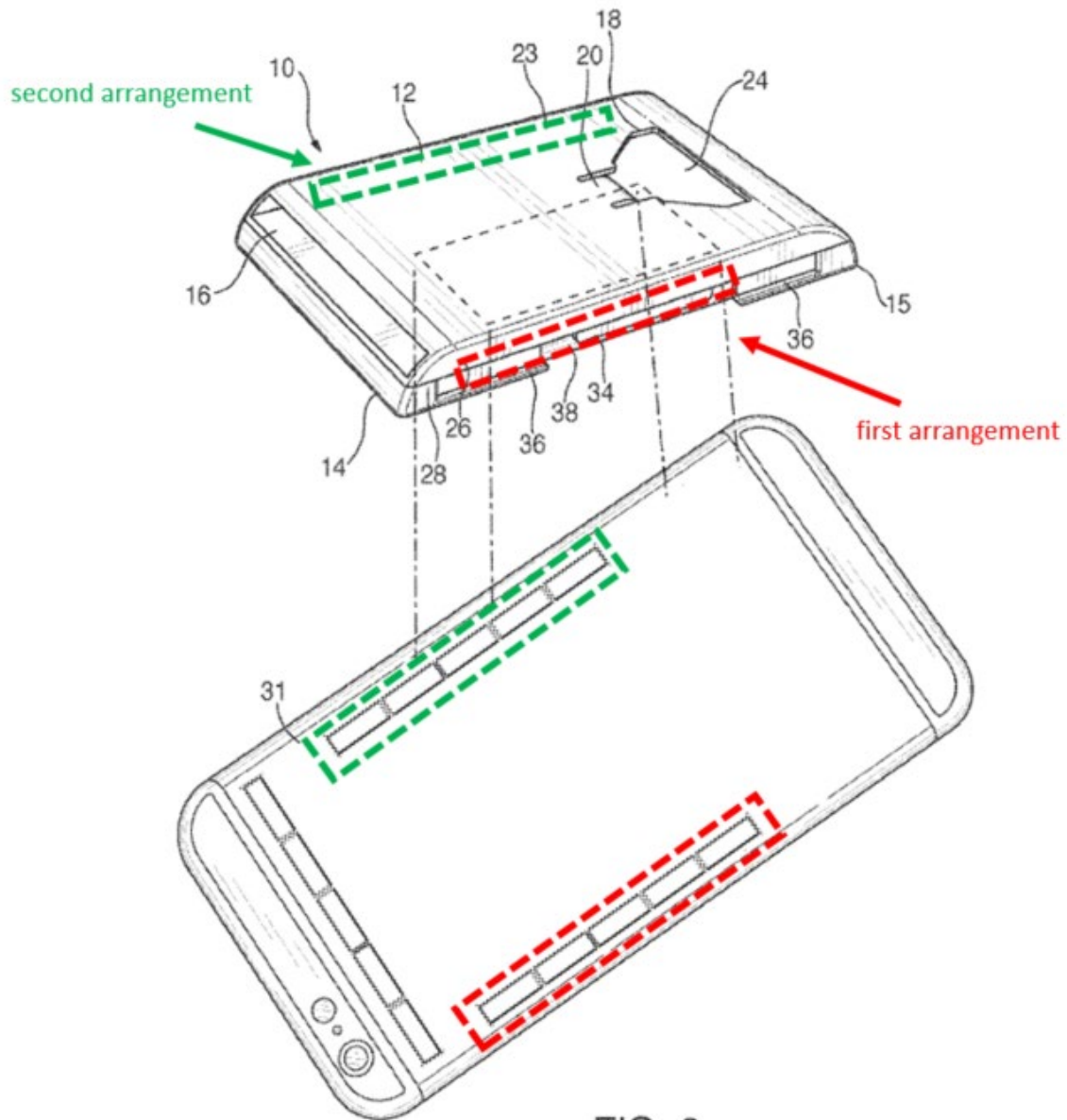


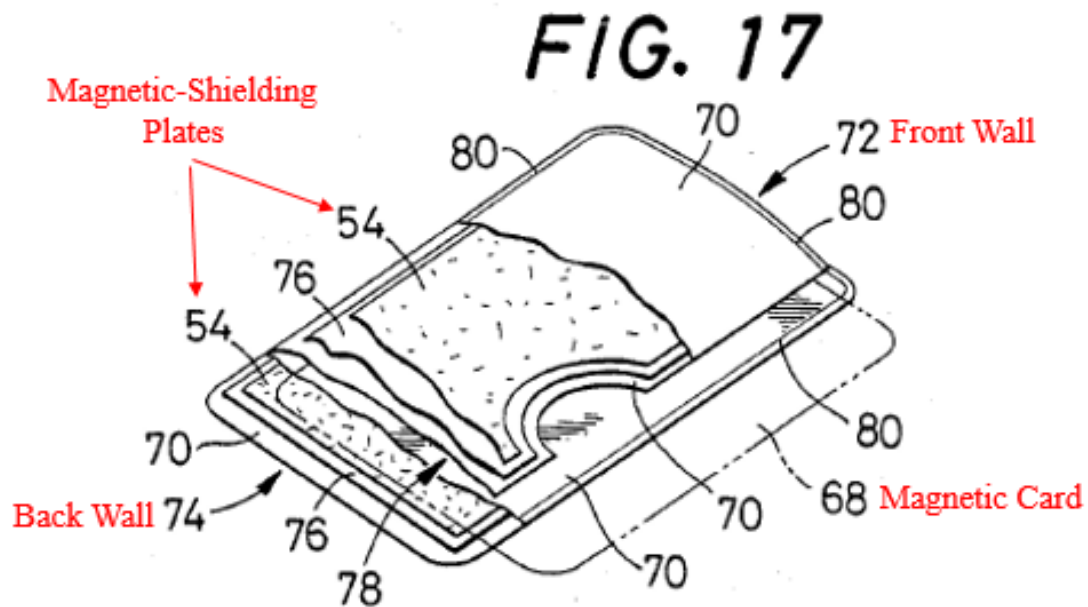
FIG. C: EX1013, FIG. 6 (annotated to show combination with Baca).

e. [1.D] a ferromagnetic shield between the first and second arrangements and the compartment

174. As I explained in Section XII.A, the combination of Berkley, Baca, and Goto renders obvious claim element [1.D]. At the outset and as I explained with reference to claim elements [1.A]-[1.C], the Berkley-Baca wallet teaches the claimed first and second magnetic arrangements in view of the magnet arrangements taught by Baca which would have been implemented on the bottom surface 25 of Berkley's wallet 10. *See* Sections XII.B.1.b-d. Similarly, Berkley's interior cavity of the first casing 12 that is configured to store cards and paper bills teaches the claimed "*compartment*" defined by the body. EX1013, ¶20.

175. In view of this configuration, a POSA would have implemented Goto's magnetic shielding between Berkley's interior cavity and Baca's magnetic arrangements as positioned on the bottom surface 25. This positioning would also teach the claimed ferromagnetic shield being located "*between the first and second arrangements and the compartment.*" This positioning would have been obvious to protect cards stored in the interior cavity from being exposed to potentially harmful magnetic fields generated by Baca's magnetic arrangements. *See* Section VI.C, XII.A.2. Indeed, Goto teaches implementing its magnetic-shielding plate as a layer between a back or front wall and a card containing space. EX1012, Abstract, 3:9-40, 7:20-23, 11:53-55.

176. To further elaborate on Goto's teachings, as seen in Figure 17 (annotated below), Goto describes a magnetic-card holder that "is formed of a front wall 72 and a rear wall 74," and inside each wall is "a magnetic shielding plate 54" that is "slightly smaller than the plane of" their respective walls. EX1012, 12:9-14. I have provided annotations below including an illustration of the cross-section of FIG. 17 to better visualize each of the layers. EX1012, 12:1-27.



EX1012, FIG. 17 (annotated).

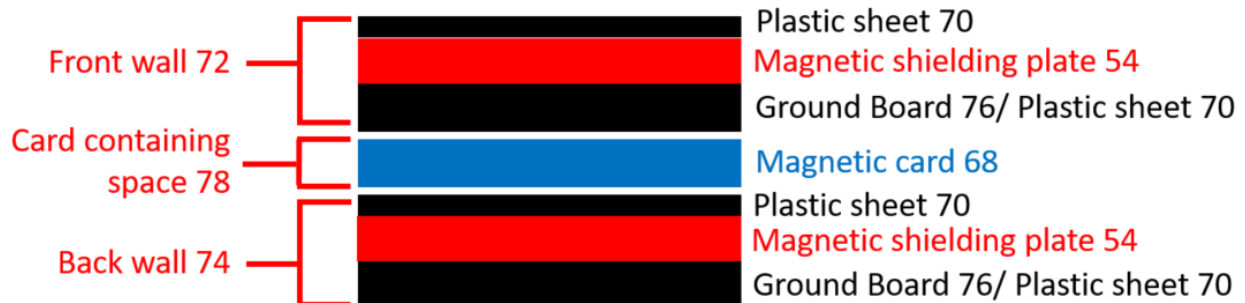


FIG. A: Annotated Cross-Section of EX1012, FIG. 17.

177. Goto explains that the magnetic-shielding plates 54 are made of “iron foil.” EX1012, Abstract, 3:9-40, 7:20-23, 11:53-55. Because iron is an example of a “ferromagnetic” material, Goto’s magnetic plate shielding, which uses iron, teaches the claimed “*ferromagnetic shield*.” See, e.g., EX1011, Abstract, 3:4-20 (describing a ferromagnetic shielding for cards made from iron); see also EX1030, ¶52 (describing a “ferromagnetic material” as comprising “iron”). For example, “Introduction to Electrodynamics” by David. J Griffiths (Third Edition 1999) explains that iron is the most common example of a substance that is “ferromagnetic”:

Chapter 6

Magnetic Fields in Matter

6.1 Magnetization

6.1.1 Diamagnets, Paramagnets, Ferromagnets

If you ask the average person what “magnetism” is, you will probably be told about horse-shoe magnets, compass needles, and the North Pole—none of which has any obvious connection with moving charges or current-carrying wires. Yet all magnetic phenomena are due to electric charges in motion, and in fact, if you could examine a piece of magnetic material on an atomic scale you *would* find tiny currents: electrons orbiting around nuclei and electrons spinning about their axes. For macroscopic purposes, these current loops are so small that we may treat them as magnetic dipoles. Ordinarily, they cancel each other out because of the random orientation of the atoms. But when a magnetic field is applied, a net alignment of these magnetic dipoles occurs, and the medium becomes magnetically polarized, or **magnetized**.

Unlike electric polarization, which is almost always in the same direction as $\mathbf{E}$, some materials acquire a magnetization *parallel* to $\mathbf{B}$ (*paramagnets*) and some *opposite* to $\mathbf{B}$ (*diamagnets*). A few substances (called *ferromagnets*, in deference to the most common example, iron) retain their magnetization even after the external field has been removed—for these the magnetization is not determined by the *present* field but by the whole magnetic “history” of the object. Permanent magnets made of iron are the most familiar examples of magnetism, though from a theoretical point of view they are the most complicated; I’ll save ferromagnetism for the end of the chapter, and begin with qualitative models of paramagnetism and diamagnetism.

EX1033, 255 (annotated).

6.4.2 Ferromagnetism

In a linear medium the alignment of atomic dipoles is maintained by a magnetic field imposed from the outside. Ferromagnets—which are emphatically *not* linear⁷—require no external fields to sustain the magnetization; the alignment is “frozen in.” Like paramagnetism, ferromagnetism involves the magnetic dipoles associated with the spins of unpaired electrons. The new feature, which makes ferromagnetism so different from paramagnetism, is the interaction between nearby dipoles: *In a ferromagnet, each dipole “likes” to point in the same direction as its neighbors.* The reason for this preference is essentially quantum mechanical, and I shall not endeavor to explain it here; it is enough to know that the correlation is so strong as to align virtually 100% of the unpaired electron spins. *If you could somehow magnify a piece of iron and “see” the individual dipoles as tiny arrows, it would look something like Fig. 6.25, with all the spins pointing the same way.*

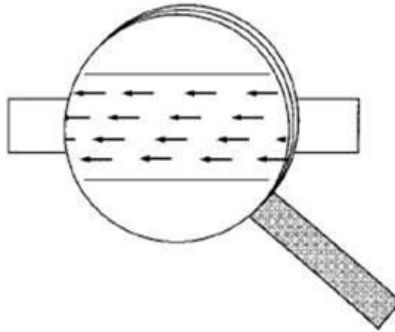


Figure 6.25

EX1033, 278 (annotated).

178. With this understanding that Goto’s iron-based shielding is ferromagnetic, Goto explains several benefits from using the iron-based shielding:

The electrodeposited iron foil obtained through such a process generally consists of high purity iron of not less than 99.97% purity, which is, irrespective of its being an extremely thin foil, very high in magnetic permeability and excellent in adsorption of magnet shielding of electromagnetic waves, and magnetism shieldability.

Since this kind of the electrodeposited iron foil is, in comparison with

common steel sheet, higher in magnetic permeability, and allows lines of magnetic force to extend in the direction of the plane of the iron foil, ***its composite is favourably provided with a high preventive capability against the influence of magnetism from an ordinary magnet***, being synergistically supported by attenuation effect due to the distance of total thickness of the composite.

EX1012, 3:9-33.

179. In this manner, Goto's magnetic shielding plates 54 teach the claimed *"ferromagnetic shield."*

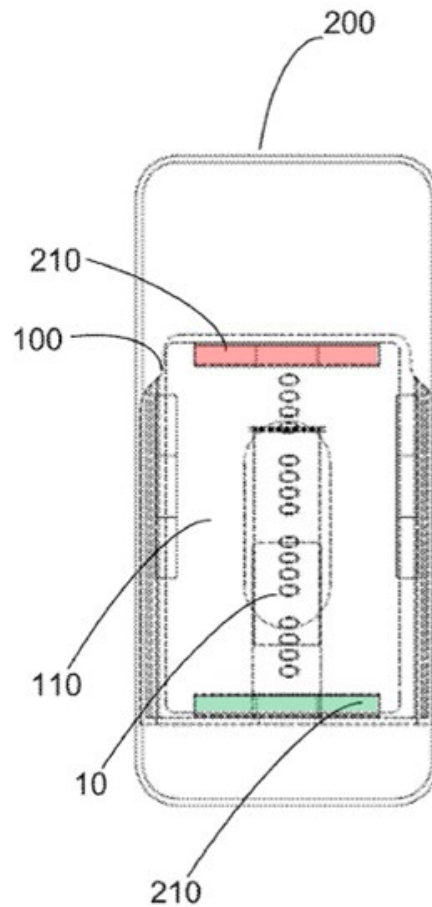
180. For the reasons that I previously explained, a POSA would have been motivated to modify the Berkley-Baca wallet to include Goto's magnetic-shielding plates as an embedded layer to prevent magnetic damage to stored cards. *See* Section XII.A.2. As depicted in Figure 17 above, Goto discloses embedding a magnetic-shielding plate made of thin iron foil as a layer that sits beneath materials used for wallets, such as leather and plastic. EX1012, 11:48-55, 12:9-19. A POSA would have included Goto's magnetic-shielding on or embedded as a layer within the bottom surface of Berkley's base 28—between Berkley's compartment that holds cards and Baca's magnets—to prevent potential magnetic damage caused by Baca's magnets. *See* Section XII.A.2. Iron is "ferromagnetic," and thus Goto's magnetic-shield plate made of iron is a "ferromagnetic shield."

181. The combination of Berkley, Baca, and Goto therefore teaches the

claimed “*ferromagnetic shield between the first and second arrangements and the compartment.*”

f. [1.E.1] the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material

182. The combination of Berkley and Baca renders obvious claim element [1.E.1]. As noted below, the combination of Berkley, Baca, and Goto also renders obvious this element. Based on my review, the specification of the '641 patent does not provide a definition for the claimed “*region of nonmagnetic material*” physically separating the first and second arrangements. I note that during prosecution and on appeal, however, the applicant argued that Figure 16A provided support for this limitation. EX1002, 327. I have reproduced Figure 16A below, which shows two magnetic arrangements 210 separated by a portion of the surface of wallet 100. EX1001, 9:66-10:3.

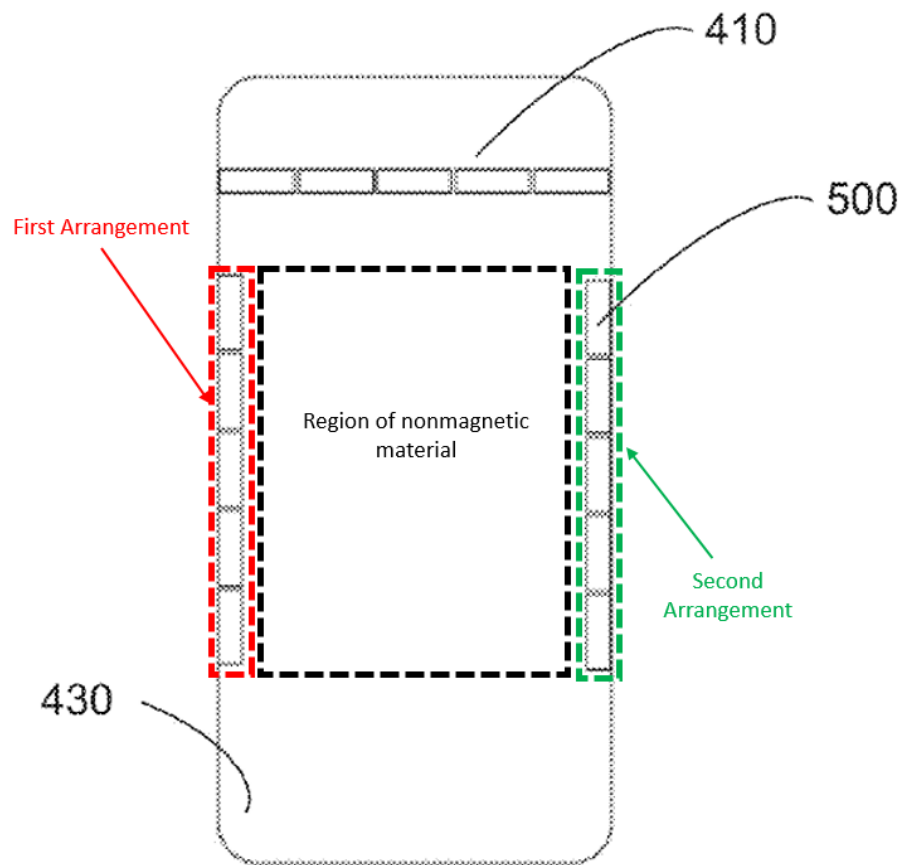


EX1001, FIG. 16A (annotated).

183. Upon examining the description corresponding to Figure 16A and the figure, this support does not appear to provide any explanation for physically separating the magnetic arrangements using a “*region of nonmagnetic material.*” EX1001, 9:66-10:3. That is, this cited portion of specification does not appear to provide a reason or explanation as to why the claimed region should be nonmagnetic. *See, e.g.*, EX1001, 9:66-10:3 (describing Figures 16A and 16B). In view of this limited description, a POSA would have understood that two separated magnetic arrangements would have helped to constrain the orientation of the

wallet, and that any separation between the magnetic arrangements that is not itself a magnet is sufficient for the claimed “*region of nonmagnetic material.*”

184. Regardless of the interpretation, Figure 2A of Baca teaches a configuration of magnetic arrangements that are “separated geographically” like Figure 16A of the ’641 patent. EX1002, 266 (Applicant “clarifying in the claims that first and second arrangement were separated geographically so as not to be part of the same grouping” during prosecution). I have included an annotated version of Figure 2A below:



EX1006, FIG. 2A (annotated).

185. As seen from Figure 2A, Baca teaches separating a first and second magnetic arrangement via a region that is nonmagnetic. *See* EX1006, FIG. 2A. For example, the magnetic arrangements can be attached to virtually anything, including surfaces made of “wood, fabric, glass, painted wall, leather and aluminum” merely using, for example, “double-sided adhesive tape.” EX1006, ¶¶70, 106. In this manner, Baca suggests that a nonmagnetic region can separate the first and second magnetic arrangements.

186. In considering these magnetic arrangements in combination with Berkley, a POSA would have recognized that the magnetic arrangements would have been disposed on the bottom surface 25 of Berkley’s wallet 10 as I previously explained. I provide an example figure of such a configuration below (designated as Figure D in my declaration):

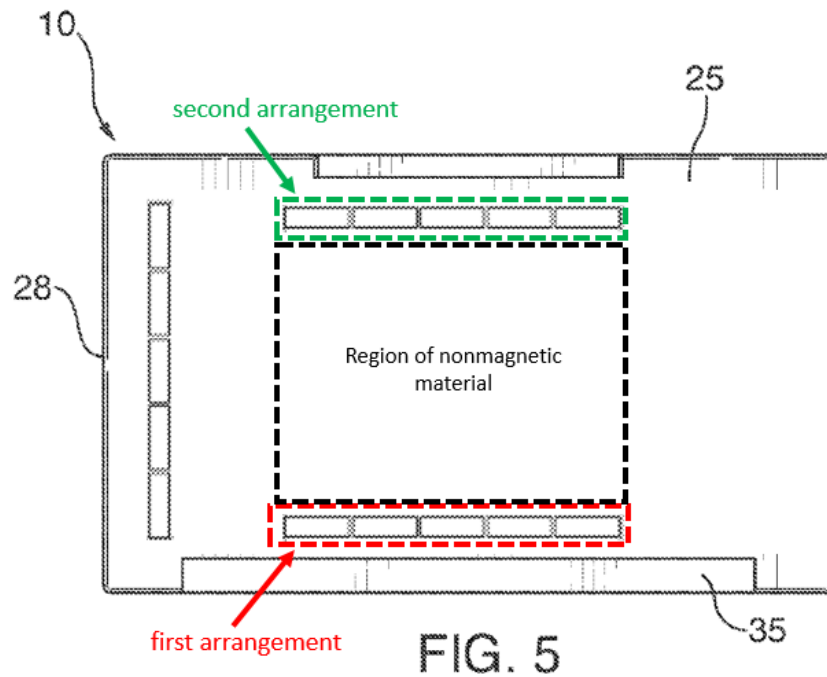


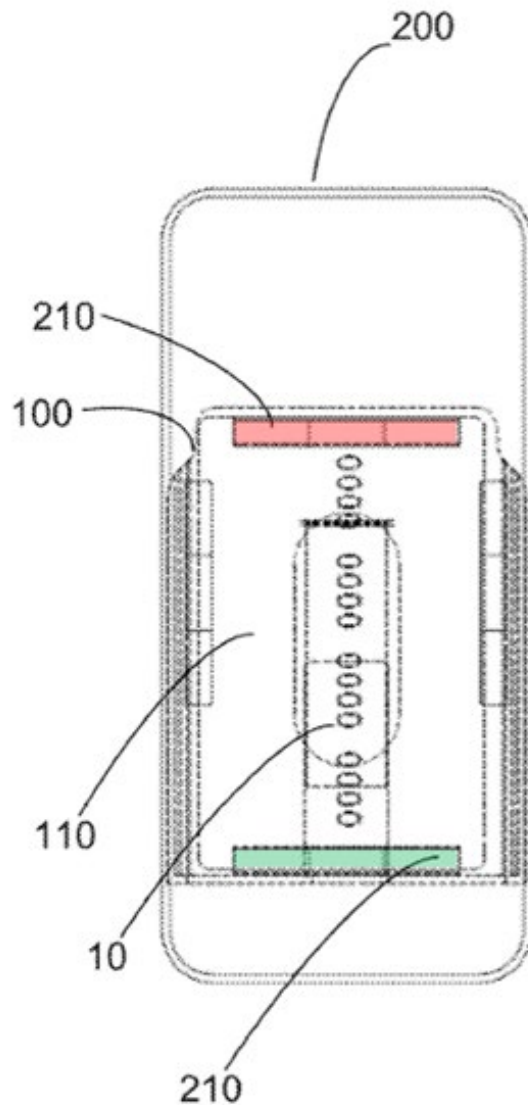
FIG. D: EX1013, FIG. 5 (annotated to show combination with Baca’s magnet arrangements).

187. When combined with Berkley, the combined wallet would similarly include a physical separation between the magnetic arrangements on the wallet by a region of nonmagnetic material, otherwise the magnets would not properly align and the wallet would not attach to the mobile device. A POSA would have understood Berkley’s wallet to be made of a nonmagnetic material. Goto, for example, discloses wallets made of leather or plastic. EX1012, 11:48-55, 12:9-19; *see also* Section VI.A. Thus, the combinations of Berkley-Baca and Berkley-Baca-Goto renders obvious “*the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material.*”

188. I also note that the Board determined that the Berkley-Baca combination taught this claim element during examination and the applicant did not dispute this determination. *See* EX1002, 447-49.

- g. [1.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement**

189. For reasons similar to claim element [1.E.1], the combination of Berkley and Baca renders obvious claim element [1.E.2]. I note that similar to claim element [1.E.1], the specification of the '641 patent does not describe this claim element or provide further elaboration on its meaning. I understand that during prosecution the applicant again solely relied on Figure 16A as providing support for this claim limitation. EX1002, 327.



EX1001, FIG. 16A (annotated).

190. Figure 16A includes “electronic display device case magnets (device-side attachments) 210” which have been annotated above. EX1001, 9:66-10:3.

Within each of these magnet groupings 210, Figure 16A shows that the magnets are touching or abutting one another. In view of this figure and the limited disclosure in the specification of the ’641 patent, there is no distance between each

of the magnets within a particular grouping 210. See EX1001, FIG. 16A. In this manner, the claimed “*distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” would be zero.

191. In view of Figure 16A and the lack of any distance between the “*immediately adjacent*” regions within a magnetic arrangement, claim element [1.E.2] would therefore be satisfied whenever two magnetic arrangements are “separated geographically” or simply are not abutting one another. EX1002, 266. I understand that the applicant during prosecution also introduced claim element [1.E.2] via amendment to indicate that the “first and second arrangement were *separated geographically* so as not to be part of the same grouping of magnetic material.” EX1002, 263, 266.

192. In view of this understanding along with Figure 16A, a POSA would have understood that the claimed “*region of nonmagnetic material*” has a “*maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” whenever the two magnetic arrangements are “separated geographically” or simply are not abutting one another. EX1002, 266.

193. Based on this understanding and in view of the explanation I provided for claim element [1.E.1], the “*region of nonmagnetic material*” formed from the Berkley-Baca combination also satisfies and teaches claim element [1.E.2].

Specifically, the configuration of magnetic arrangements shown in Figure 2A of Baca that in the Berkley-Baca combination would have been included in Berkley's wallet to be mounted to the mobile device would teach claim element [1.E.2] in the manner that I have depicted below:

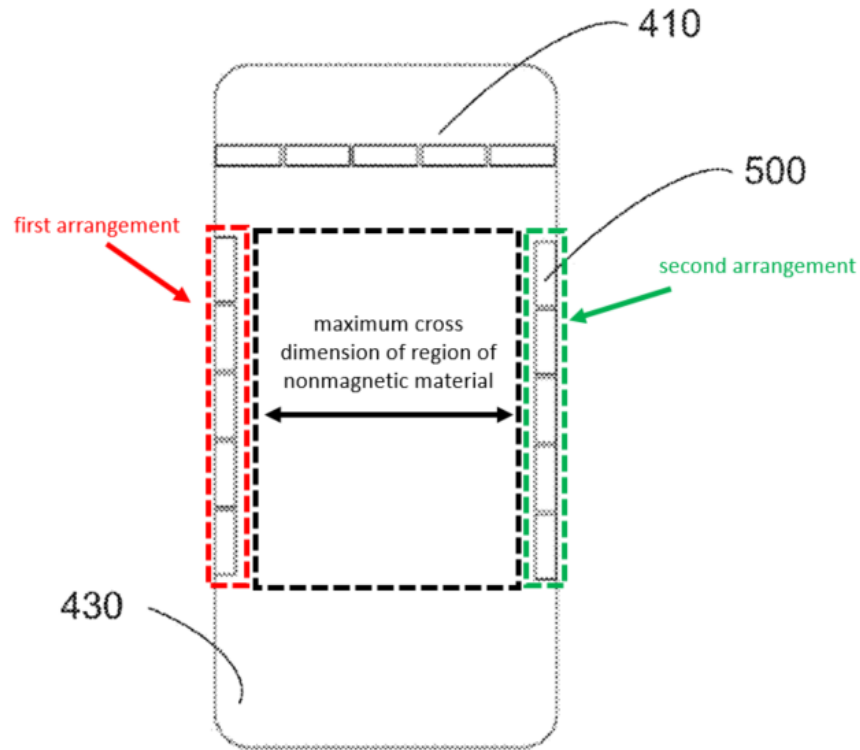
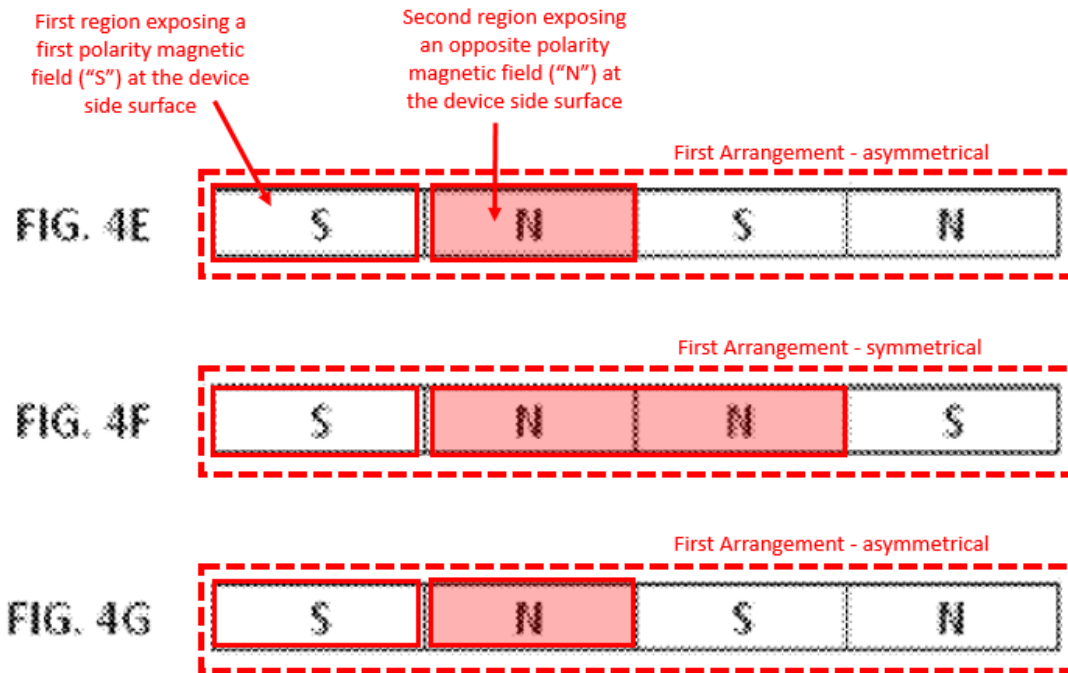


FIG. 2A

EX1006, FIG. 2A (annotated).

194. As seen from Figure 2A of Baca, the two arrangements of magnets (annotated in red and green) are separated by a region of the protective case 430 or device itself. EX1006, ¶¶62, 72. This nonmagnetic region has a maximum cross dimension that is larger than the separation between any two adjacent magnets in

either the first or second arrangements. This is because the magnets and their corresponding regions—which are further depicted in Figures 4E-4G from Baca—are located immediately adjacent to one another. EX1006, ¶¶72, 84; Section XII.B.1.c (claim element [1.B]).



EX1006, FIGs. 4E-4G (annotated).

195. In this manner, when viewing Figure 2A in the context of Figures 4E, for example, it can clearly be seen that the relative distance between the first and second arrangements is larger than the distance between two magnets or magnet regions in either the first or second arrangement. That is, the first and opposite polarity regions of the magnetic arrangements abut each other; whereas the first and second magnetic arrangements (as I have shown in red and green above) are

separated by a distance about the width of the mobile device. Thus, the combination of Berkley and Baca teaches the claimed “*region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” recited in claim element [1.E.2]. I have also provided an example of this combined arrangement below and designated as Figure E in my declaration:

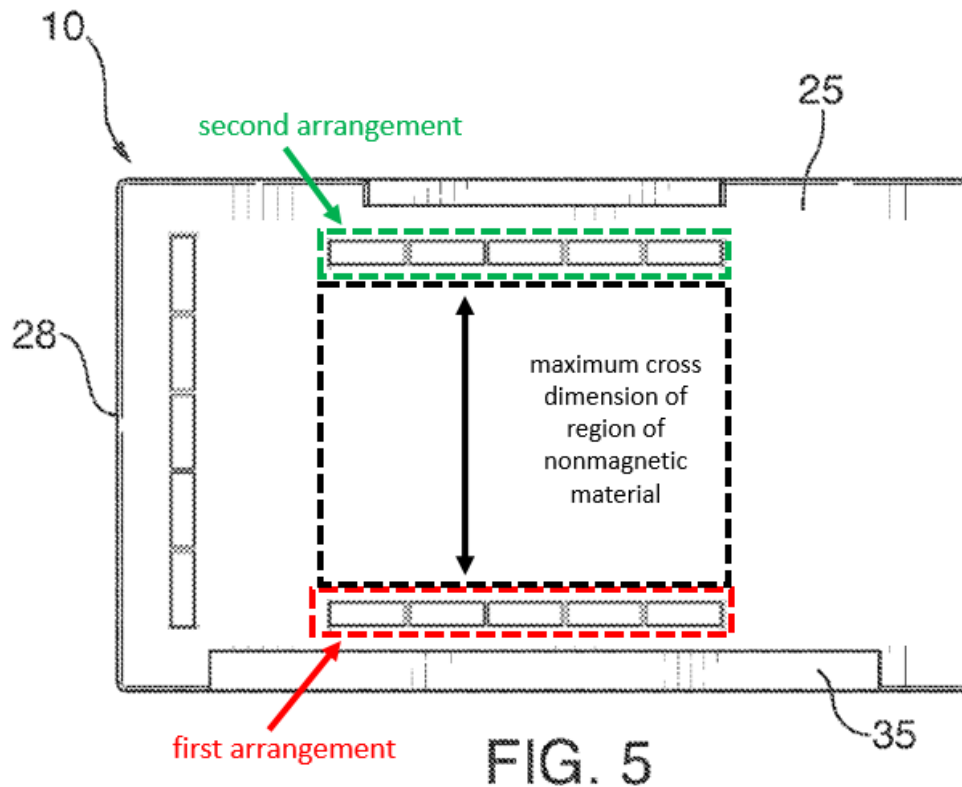


FIG. E: EX1013, FIG. 5 (annotated to show Baca’s magnet arrangements and cross dimension).

196. I also note that the Board determined that the Berkley-Baca

combination taught this claim element during examination. *See* EX1002, 447-49.

h. [1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device

197. The combination of Berkley and Baca renders obvious claim element [1.F.1]. As I previously explained in Section XII.A and also with reference to claim elements [1.B] and [1.C], in the Berkley-Baca combination, the first and second arrangements of magnets on the base of Berkley's wallet compact would concurrently magnetically couple Berkley's wallet compact 10 to the mobile device. I have provided below an annotated version of Figure 6 from Berkley, which includes Baca's magnetic arrangements.

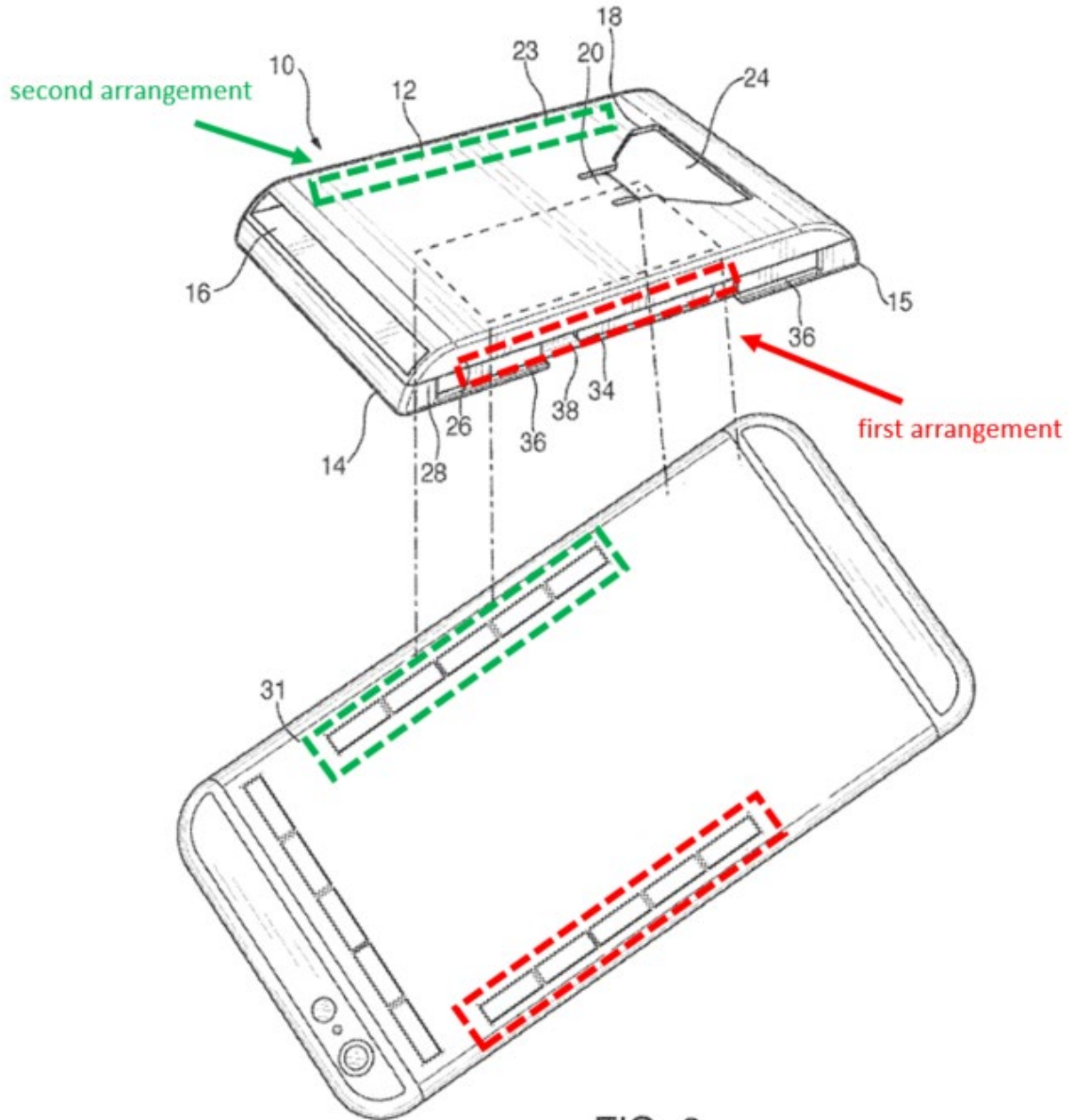


FIG. 6

FIG. C: EX1013, FIG. 6 (annotated to show combination of Baca's magnetic arrangements).

198. Based on the teachings from Berkley and Baca, a POSA would have been motivated to and would have known how to combine their respective teachings. *See* Section XII.A.1. In view of the magnetic attachment taught by Baca,

the combination of Berkley and Baca renders obvious “*wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device*” as recited in claim element [1.F.1]. Accordingly, the Berkley-Baca renders claim element [1.F.1] obvious, as I understand the Board confirmed as well. *See* EX1002, 447-49.

i. [1.F.2] the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device

199. The combination of Berkley and Baca renders claim element [1.F.2] obvious. In Berkley-Baca, the wallet would include the first and second arrangements on the base that would cause Berkley’s wallet to adopt no more than two orientations on the handheld device (right-side up or upside-down). I have again provided an annotated version of Figure 6 from Berkley below (designated as Figure C of my declaration) that shows how the magnetic arrangements from Baca would dictate the particular orientation of attachment.

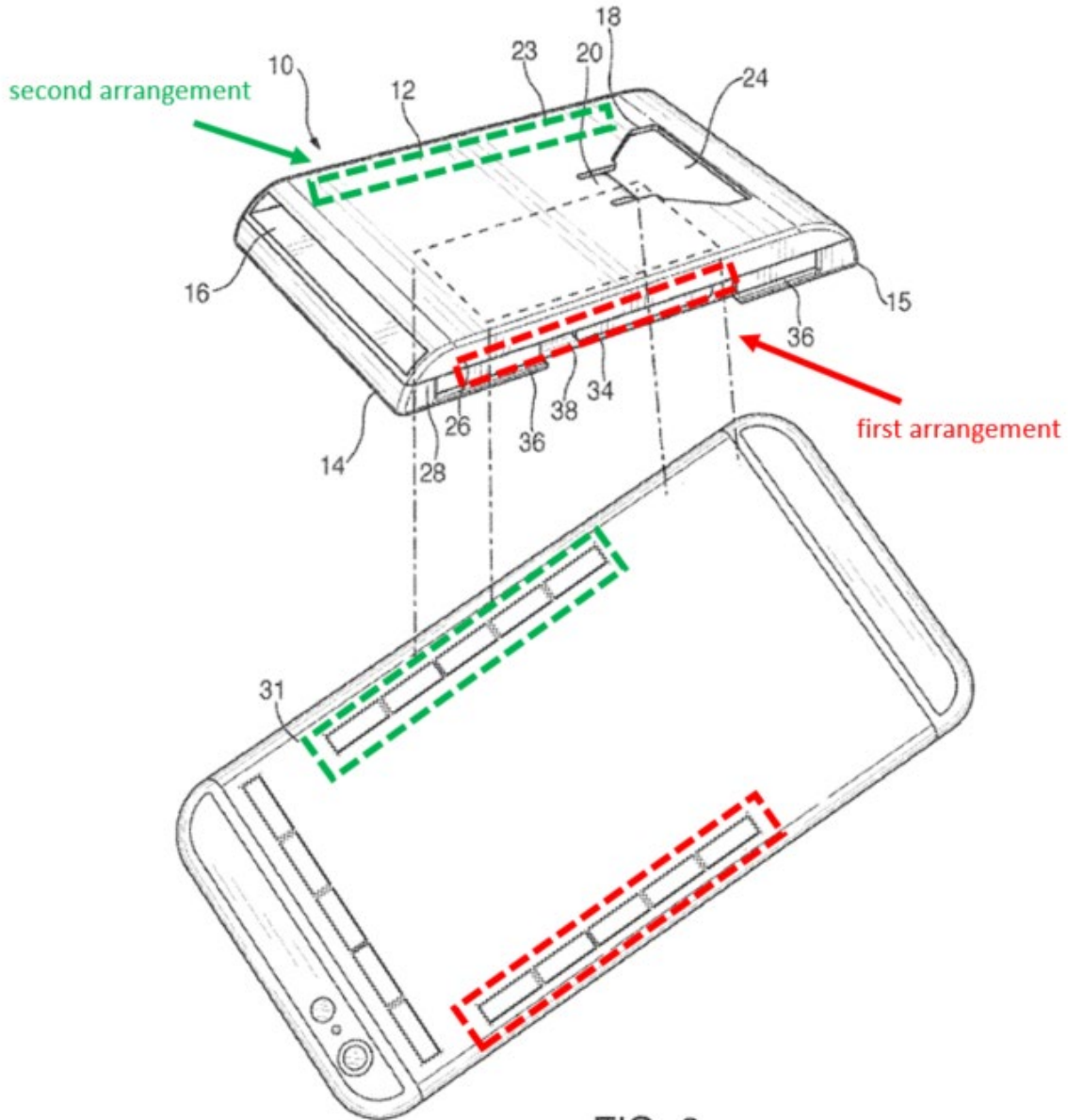
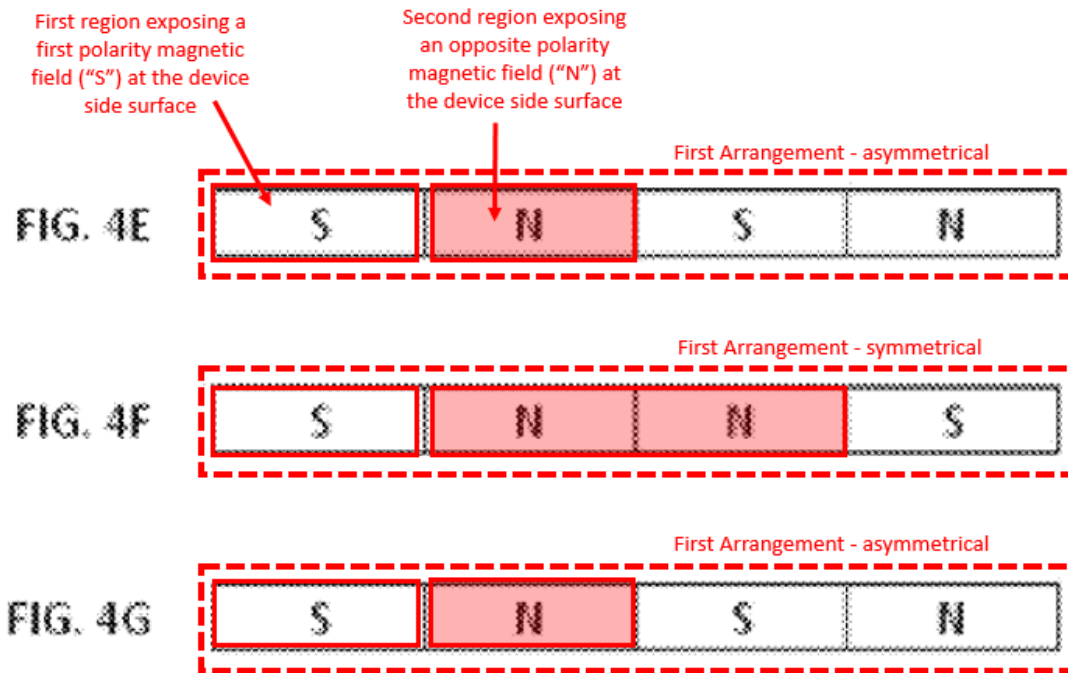


FIG. 6

FIG. C: EX1013, FIG. 6 (annotated to show combination of Baca's magnetic arrangements).

200. As I previously explained and further explain with reference to claims 7 and 8 below, Baca's specific arrangement of magnet polarities within each of the arrangements enable the wallet to attach according to a specific orientation. *See*

Section XII.B.1.c; XII.C.4-5. For example, Baca explains that each self-aligning magnetic arrangement includes at least one region that exposes a magnetic north polarity (“N”), and at least one region that exposes a magnetic south polarity (“S”), as illustrated in Figures 4E-4G of Baca below. EX1006, ¶84.



EX1006, FIGs. 4E-4G (annotated).

201. Baca also depicts additional magnet configurations in Figures 4A to 4D and 4H to 4L. EX1006, ¶84. Based on the particular selection of magnets for the first and second arrangements, a specific orientation for attaching the Berkley-Baca wallet to a mobile device can be established.

202. This understanding of the claimed “*specific orientation*” is consistent with claims 7 and 8 below, which clarify that the specific orientation can be either

“exactly one orientation” (claim 7) or one of “exactly two orientations” (claim 8).

Section XII.C.5-6. As I further explain below, the selection of magnets from Baca to be either symmetrical or asymmetrical allows for allowing “exactly one orientation” or “exactly two orientations.” Section XII.C.4-5. The combination of Berkley and Baca therefore teaches “*the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device*” as recited in claim element [1.F.2].

203. I understand that this is consistent with the Board’s previous determination that the Berkley-Baca combination renders this claim element obvious. *See* EX1002, 447-49. I also understand that this interpretation is consistent with the applicant’s characterization provided during prosecution, which also relied on Baca’s disclosures (e.g., Figure 43I of the ’641 patent). Section VIII; EX1002, 193-195.

2. Independent Claim 5

204. The combination of Berkley, Baca, and Goto teach all of the elements of claim 5 for the same reasons that I presented for claim 1. *See* Section XII.B.1. Notably, the elements recited in claim 5 are identical to those of claim 1 except for element [5.D]. I present these elements in the table below:

Independent Claim 1	Independent Claim 5
[1.P] A wallet for attachment to a mobile device comprising:	[5.P] A wallet for attachment to a mobile device comprising:
[1.A] a body defining a compartment and having a device side surface;	[5.A] a body defining a compartment and having a device side surface;
[1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[5.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[5.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and
[1.D] <i>a ferromagnetic shield between the first and second arrangements and the compartment;</i>	[5.D] <i>a metallic plate between the first arrangement and the compartment;</i>
[1.E.1] wherein the first arrangement and the second arrangement are	[5.E.1] wherein the first arrangement and the second arrangement are

physically separated on the wallet by a region of nonmagnetic material,	physically separated on the wallet by a region of nonmagnetic material,
[1.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and	[5.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and
[1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[5.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[1.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[5.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

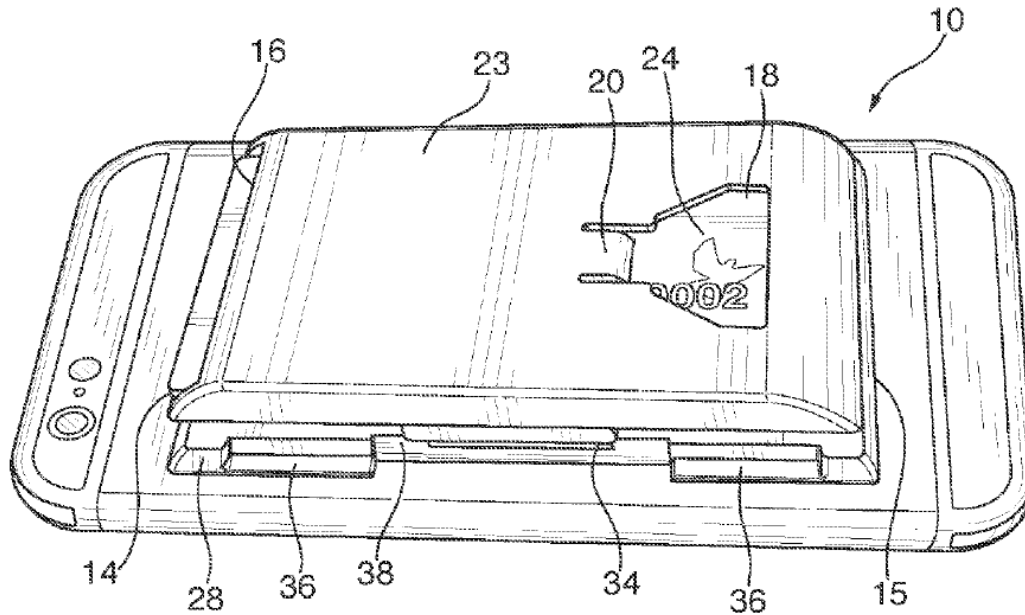
205. As seen in the table, claim element [1.D] recites “*a ferromagnetic shield between the first and second arrangements and the compartment*” while claim element [5.D] more broadly recites “*a metallic plate between the first arrangement and the compartment.*” Goto teaches the claimed “metallic plate between the first arrangement and the compartment” for the reasons that I explained with reference to claim element [1.D]. *See* Section XII.B.1.e.

Specifically, Goto's magnetic-shielding plates are made of iron foil. EX1012, Abstract, 3:9-40, 7:20-23, 11:53-55. Iron—being a metal—therefore teaches the claimed “*metallic plate*.” When considered in combination with Berkley and Baca, Goto's magnetic-shielding plate would also be located “*between the first arrangement and the compartment*” for the reasons presented with reference to claim element [1.D] as well. Thus, the Berkley-Baca-Goto combination teaches or suggests all the elements of claim 5 for the same reasons as I provided with respect to claim 1. *See* Section XII.B.1.

C. Dependent Claims 2-4, and 6-8

1. Claim 2: The wallet of claim 1 wherein the body defines at least one content removal slot.

206. Berkley discloses this claim element. Berkley discloses that first casing 12 includes a window 18 that exposes the contents of the compartment. EX1013, FIG. 2, ¶¶20-22.



EX1013, FIG. 2.

207. In particular, Berkley states that “[a]s credit card C1 is completely inserted into the interior of the first casing 12, it becomes visible through a dual function window 18, as shown in FIG. 1 and FIG. 2.” EX1013, ¶20. Like the “content removal slot” described by the ’641 patent, Berkley’s window 18 “is sized and adapted to accommodate the finger of a user,” so that the user “may selectively guide and push card C1 from the first casing 12 by gently directing a card forward through and out of receiving slot 16.” *Compare* EX1013, ¶22 with EX1001, 8:58-64.

208. In view of this description, Berkley’s window 18 teaches the claimed “*content removal slot*,” and Berkley therefore teaches claim 2. This is consistent with the Board’s determination that Berkley-Baca renders obvious this claim

element. *See* EX1002, 447-49.

2. **Claim 3: The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.**

209. The combination of Berkley and Baca renders obvious claim 3. Baca discloses using magnetic materials “selected based on their strongly magnetic properties.” EX1006, ¶80. Additionally, Baca describes using complementary magnets that are capable of supporting the weight of a mobile device; such a magnet “supports the weight of a mounted electronic display device 400 and resists the force of gravity upon the mounted electronic display device 400.” EX1006, ¶87. Additionally, the ’641 patent also incorporates a paragraph from Baca that describes using an “angled face” attachment that can

provide increased coupling strength by the *angled face supporting a portion of the weight of the electronic display device 400*. The angled face can also improve the coupling strength of the mounting system by positioning the lower end of the electronic display device 400 against the surface 100 which reduces the tendency of the electronic display device 400 to rotate about the bottom edge of surface-side attachment 110 and separate from the top edge of surface-side attachment 110.

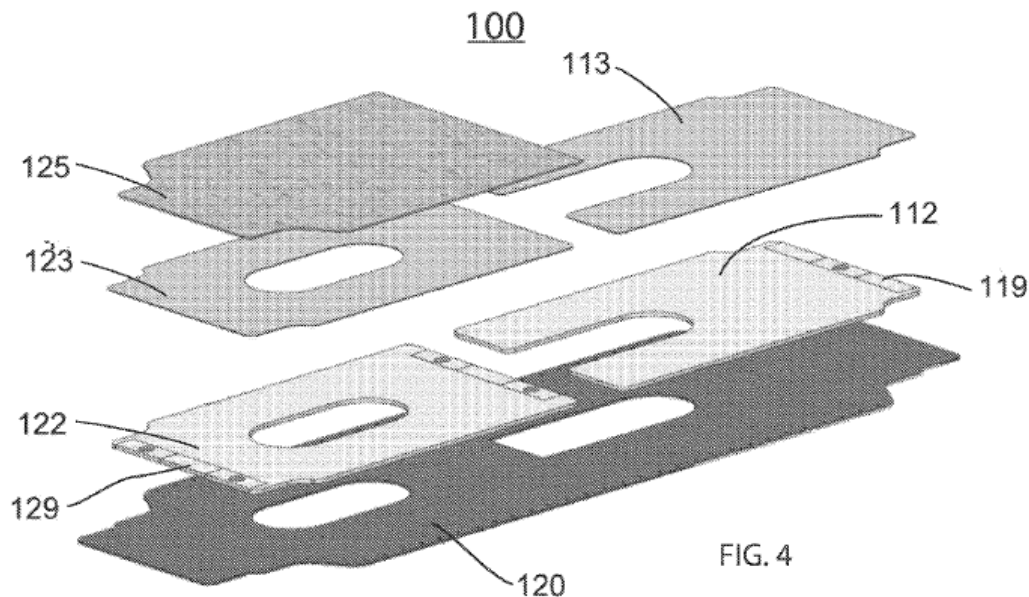
EX1006, ¶99; *see also* EX1001, 19:7-18.

210. In this manner, Baca provides the same disclosure as the ’641 patent when describing the elements of Claim 3. In view of Baca’s disclosure of selecting

magnets having sufficiently strong magnetic properties, a POSA would have found it obvious to use magnetic materials having attractive force sufficient to support the weight of a mobile device to prevent unintentional detachment from the wallet. *See* Section VI.B; EX1006, ¶80.

3. Claim 4: The wallet of claim 1 wherein a spacing between the first region and the second region in the first arrangement is less than 2 mm.

211. The combination of Berkley and Baca teaches claim 4. At the outset, I understand that during prosecution, the applicant identified Figure 4 of the '641 patent as allegedly providing support for this claim. EX1002, 328 (discussed as claim 5 during prosecution).



EX1001, FIG. 4.

212. Figure 4 depicts magnetic arrangements 119 and 129. *See* EX1001,

8:4-45. As seen in this figure, the magnets in those respective magnetic arrangements are adjacent and abut each other just like in Baca. *See* Sections VII, XI.B. In this manner, the support for claim 4 is still found in Baca. *See, e.g.*, EX1001, FIGs. 40-48; EX1006, FIGs. 1A-4, 9A-11, and 12-13; Section VII. I understand that Patent Owner cannot now require a level of detail in the prior art that is not provided in its own specification. Baca's teachings—which were incorporated into the '641 patent—therefore teach claim 4.

213. To illustrate, as I explained in Section VII, the arrangement of magnets and magnet regions are depicted in Figures 43A to 43L of the '641 patent and Figures 4A to 4L of Baca. *See* Section VII. This is because the '641 patent incorporates Baca's disclosure of magnet arrangements by reference. Section VII. This can be seen from the comparison of figures that I have reproduced below:

FIG 43A

N	S	N	S	N
N	S	N	S	N

FIG. 4A

N	S	N	S	N
N	S	N	S	N

FIG 43B

N	S	N	S	N
S	N	S	N	S

FIG. 4B

N	S	N	S	N
S	N	S	N	S

FIG 43C

N	N	S	N	N
S	S	N	S	S

FIG. 4C

N	N	S	N	N
S	S	N	S	S

FIG 43D

S	N	S	N	S
S	S	N	S	S

FIG. 4D

S	N	S	N	S
S	S	N	S	S

FIG 43E

S	N	S	N
---	---	---	---

FIG. 4E

S	N	S	N
---	---	---	---

FIG 43F

S	N	N	S
---	---	---	---

FIG. 4F

S	N	N	S
---	---	---	---

FIG 43G

S	N	S	N
---	---	---	---

FIG. 4G

S	N	S	N
---	---	---	---

FIG 43H

S	N	S
---	---	---

FIG. 4H

S	N	S
---	---	---

FIG 43I

S	N
---	---

FIG. 4I

S	N
---	---

EX1001, FIG. 43A-43I.

EX1006, FIG. 4A-4I.

FIG 43J

N	S	Fe	N	S
---	---	----	---	---

FIG. 4J

N	S	Fe	N	S
---	---	----	---	---

FIG 43K

Fe	N	S	Fe
----	---	---	----

FIG. 4K

Fe	N	S	Fe
----	---	---	----

FIG 43L

S	Fe	N
---	----	---

FIG. 4L

S	Fe	N
---	----	---

EX1001, FIG. 43J-43L.

EX1006, FIG. 4J-4L.

214. With this understanding and as seen in these figures, Baca teaches that the “*spacing*” between any two magnets within in an arrangement is “*less than 2 mm*” as recited in claim 4 because the magnets are depicted as abutting one

another. See EX1006, FIGs. 4A-4L. This is the same disclosure presented in the '641 patent. See EX1001, FIGs. 43A-43L. Baca therefore teaches a “*spacing between the first region and the second region in the first arrangement [being] less than 2 mm*” as recited by claim 4.

215. In addition, I note that the Board determined that this claim element was obvious in view of the combination of Berkley and Baca. EX1002, 449 (indicating that prosecution claim 5 was obvious over Berkley in view of Baca). Prior to reaching the Board, the Examiner first determined that magnets that “appear to contact each other” or are separated by “some minimal distance” make this claim element “obvious as a mere selection of an art appropriate distance or at most a mere change in size/proportion,” “or a mere rearrangement of parts,” and the Patent Owner never challenged this finding. See EX1002, 274-75 (rejecting original claim 5 over Berkley in view of Baca and Levy). With this understanding and applying this rationale, the Board determined that original claim 5 was obvious. EX1002, 449. I agree with this assessment based on the teachings provided in each of the figures that I have discussed above with respect to Baca and the '641 patent.

216. Thus, the combination of Berkley and Baca renders claim 4 obvious.

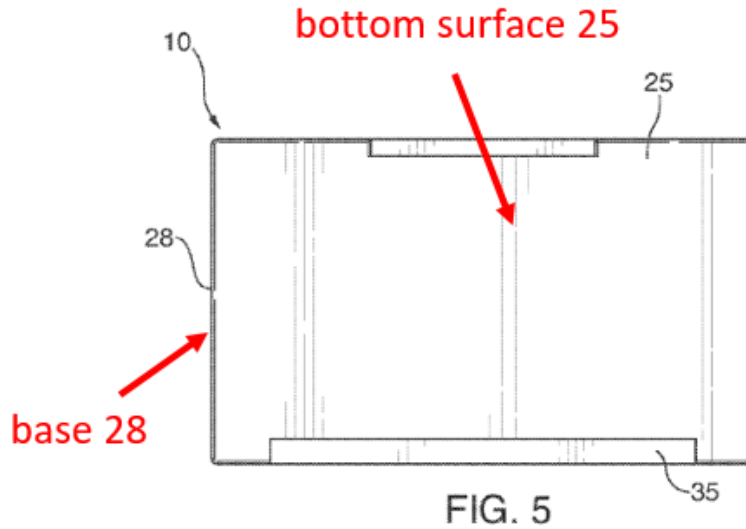
4. Claim 6: The wallet of claim 1 wherein the device side surface is substantially planar and an attachment surface of the mobile device is also substantially planar.

217. Berkley discloses claim 6. The combination of Berkley and Baca further demonstrates that claim 6 is obvious. At the outset, I note that during prosecution, the applicant provided the following explanation for the term “planar:”

Regarding claim 7, the Office has taken issue with the term “substantially” planar. Applicant submits that “substantially” does not create any lack of clarity and such has consistently be held to be the case in prior precedent binding on the Office. Applicant notes that “planar” has a ideal geometric definition that is unachievable in the real world. Applicant intends to distinguish from arcuate surfaces having a significant radius of curvature and surfaces that have protrusive attachment features.

EX1002, 195 (highlighted).

218. The combination of Berkley and Baca still teaches claim 6 even in view of this explanation. As I previously explained, Berkley describes wallet compact 10 as having a base 28, which includes a “bottom surface 25.” EX1013, ¶26. Figure 5 from Berkley depicts this configuration as I have previously annotated:



EX1013, FIG. 5 (annotated).

219. As seen from Figure 5, Berkley depicts a “bottom plan view” of “bottom surface 25.” EX1013, ¶¶17, 28, 35. In the combination of Berkley and Baca, bottom surface 25 would remain substantially planar and also substantially free of contours or recesses to allow better magnetic attachment between the wallet and the mobile device. I have reproduced and annotated the combination of Berkley and Baca below based on Figure 6 of Berkley, which also shows that each surface would be substantially planar:

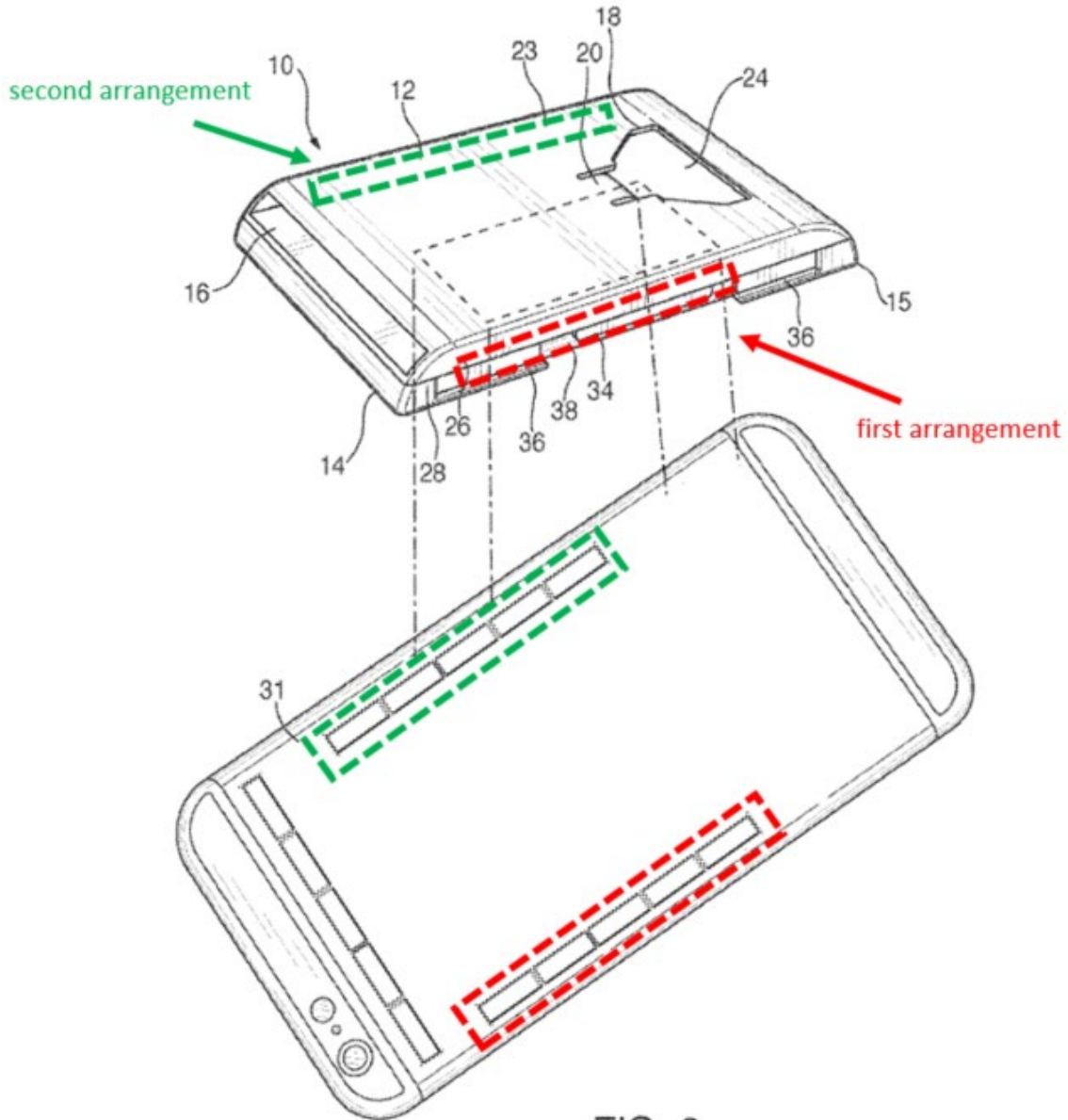


FIG. C: EX1013, FIG. 6 (annotated to show combination of Baca's magnetic arrangements).

220. Indeed, such substantially surfaces were well known in the art and used when attaching objects to a mobile device as I previously explained. *See* Section VI.B. A POSA would have understood that each of these surfaces in

Berkley should be substantially flat to make it easier to dispose the magnet(s) on each surface and to avoid obstructions when forming the magnetic coupling.

221. I note that the Examiner during prosecution also determined that Berkley disclosed this claim element. *See* EX1002, 157, 207. Although the applicant argued the patentability of other dependent claims (e.g., claims 2, 6, and 10), the applicant did not dispute the Examiner’s finding regarding this claim element. EX1002, 196-99, 241-45, 335 (arguing only that Levy teaches away from this claim element). The Board affirmed the rejection of original claim 7 over Berkley-Baca. EX1002, 449.

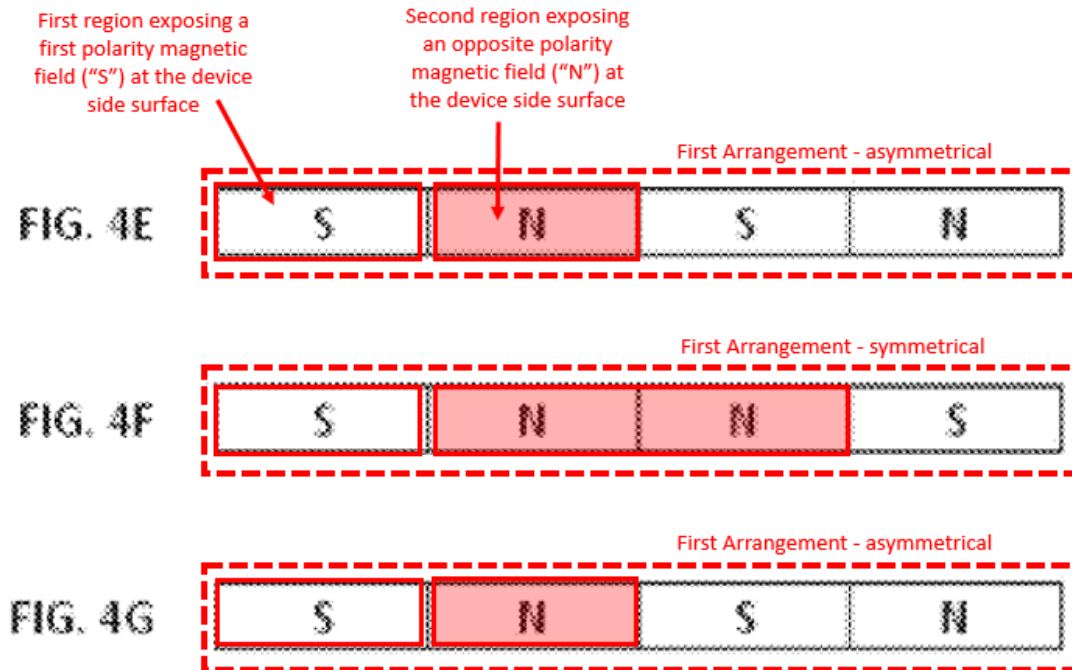
222. Thus, Berkley and Baca teach “*The wallet of claim 1 wherein the device side surface is substantially planar and an attachment surface of the mobile device is also substantially planar*” as recited in claim 6.

5. Claim 7: The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly one orientation.

223. The combination of Berkley and Baca teaches claim 7. As I previously explained with reference to claim element [1.F.2], Baca teaches that each of its magnetic arrangements comprises either a symmetric or asymmetric configuration of magnets. EX1006, FIGs. 4A-4I, ¶84; Section XII.B.1.i. With respect to claim 7, Baca explains:

FIGS. 4B to 4E, 4G and 4I are examples of asymmetrical self-aligning magnet pole arrangements whereby the electronic display device can be *mounted in only one position*.

EX1006, ¶84 (emphasis added).



EX1006, FIGs. 4E-4G (annotated).

224. In view of this explicit disclosure, Baca explains that in duplicating or mirroring one of Baca's asymmetric arrangements (e.g., FIG. 4E or FIG. 4G), the two magnetic arrangements together would have at most one degree of rotational symmetry about an axis extending out of the page. EX1006, ¶84. Thus, when implementing any of Baca's asymmetric magnetic arrangements (e.g., as seen in Baca's FIG. 2A) in the combination of Berkley and Baca, the first and second

arrangements will only permit coupling between the wallet and the mobile device in exactly one orientation. See also Section XII.B.1.i.

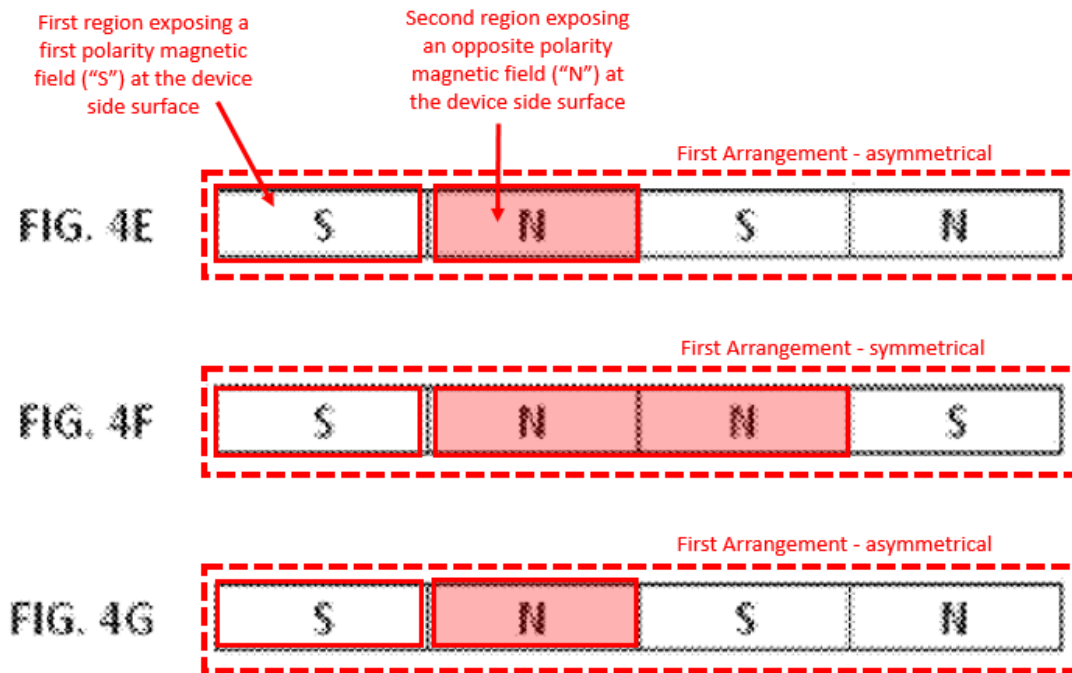
225. Thus, Berkley and Baca teach “*wherein the first and second arrangement permit coupling to the mobile device in exactly one orientation*” as recited in claim 7. I understand that this same conclusion was reached by the Examiner and the Board. EX1002, 283, 451. I understand that the Board also determined that this claim limitation “is explicitly disclosed in paragraph 84 of Baca.” EX1002, 283, 451.

6. Claim 8: The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly two orientations.

226. The combination of Berkley and Baca teaches claim 8. As I previously explained with reference to claim element [1.F.2], Baca teaches that each of its magnetic arrangements comprises either a symmetric or asymmetric configuration of magnets. EX1006, FIGs. 4A-4I, ¶84; Section XII.B.1.i. With respect to claim 8, Baca explains:

FIGS. 4A, 4F, and 4H are examples of symmetrical self-aligning magnet pole arrangements whereby the electronic display device can be *mounted in either of two positions that are 180 degrees of each other*.

EX1006, ¶84 (emphasis added).



EX1006, FIGs. 4E-4G (annotated).

227. In view of this explicit disclosure, Baca explains that in duplicating or mirroring one of Baca's symmetric arrangements (e.g., FIG. 4F), the two magnetic arrangements together would permit coupling in exactly two orientations. That is, the two magnetic arrangements together would have two degrees of rotational symmetry about an axis extending out of the page. EX1006, ¶84. Thus, when implementing any of Baca's symmetric magnetic arrangements (e.g., as seen in Baca's FIG. 2A) in the combination of Berkley and Baca, the first and second arrangements will only permit coupling between the wallet and the mobile device in exactly two orientations. *See also* Section XII.B.1.i.

228. Thus, Berkley and Baca teach "*wherein the first and second*

arrangement permit coupling to the mobile device in exactly two orientations” as recited in claim 8. I understand that this same conclusion was reached by the Examiner and the Board. EX1002, 284, 452-453.

XIII. GROUND 1B: THE COMBINATION OF BERKLEY, BACA, GOTO, AND COX RENDERS OBVIOUS CLAIM 3.

229. Claim 3 recites “*The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.*”

230. The combination of Berkley, Baca, and Goto renders obvious a magnetically attachable wallet for a mobile device for the reasons that I previously explained. *See* Section XII.B.1. Berkley in view of Baca teaches a mutual attraction of magnets that should be strong enough to hold a mobile device and a wallet together.

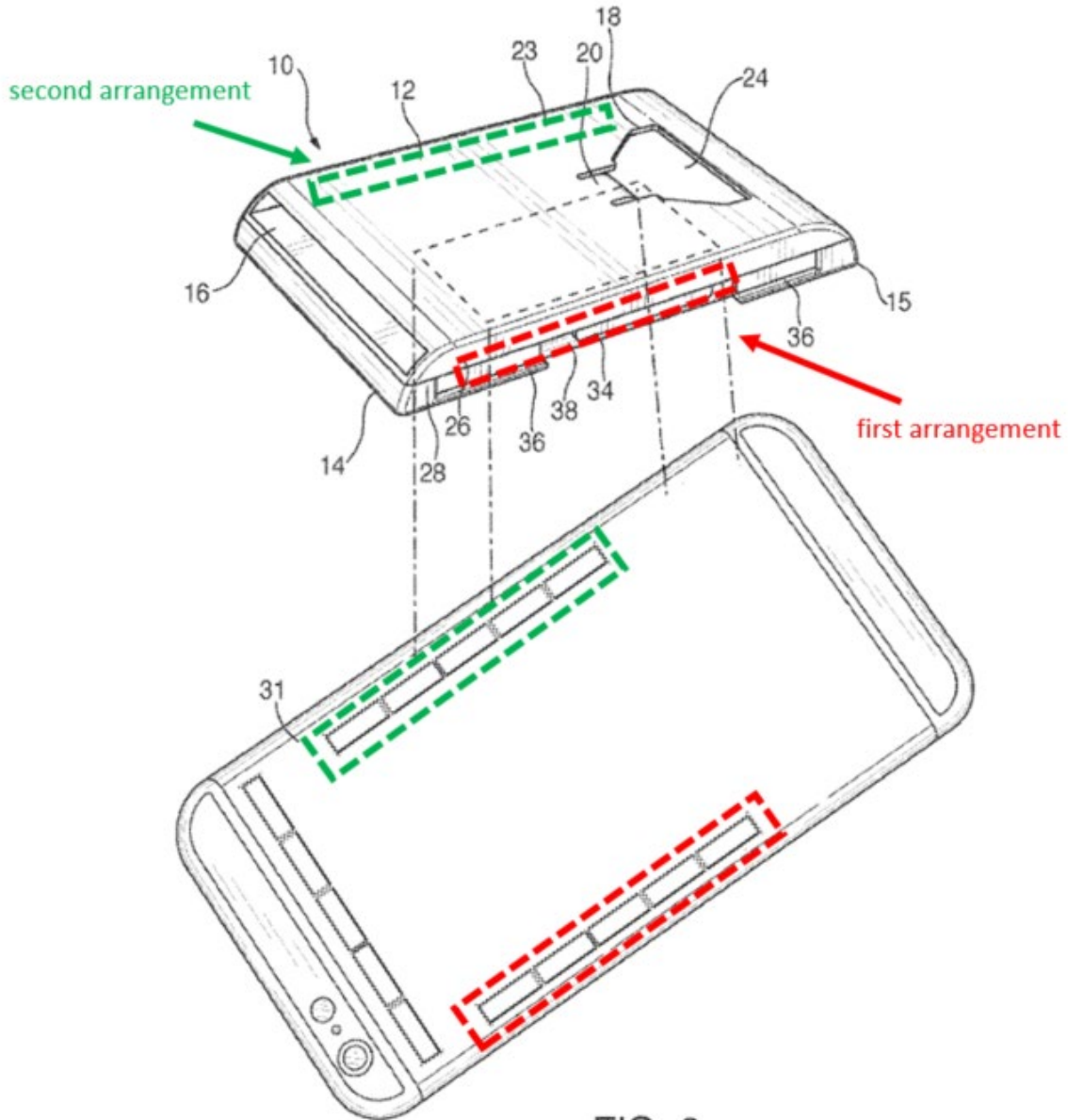


FIG. 6

FIG. C: EX1013, FIG. 6 (annotated to show combination of Baca’s magnetic arrangements).

231. For example, Baca describes using complementary magnets that are capable of supporting the weight of a mobile device; such a magnet “supports the weight of a mounted electronic display device 400 and resists the force of gravity

upon the mounted electronic display device 400.” EX1006, ¶87. Additionally, the ’641 patent also incorporates a paragraph from Baca that describes using an “angled face” attachment that can

provide increased coupling strength by the *angled face supporting a portion of the weight of the electronic display device 400*. The angled face can also improve the coupling strength of the mounting system by positioning the lower end of the electronic display device 400 against the surface 100 which reduces the tendency of the electronic display device 400 to rotate about the bottom edge of surface-side attachment 110 and separate from the top edge of surface-side attachment 110.

EX1006, ¶99; *see also* EX1001, 19:7-18.

232. In this manner, Baca provides the same disclosure as the ’641 patent when describing the elements of Claim 3.

233. To the extent that this is still unclear, Cox also explicitly explains that the magnetic attraction described in Claim 3 was well known in the art as well. Cox describes a similar technique directed to using magnets to attach an article to a protective case of a mobile device. EX1017, ¶52. For example, Cox describes using magnets that

produce enough attractive force between the article 340 and case 300 such that the two components do not unintentionally or undesirably separate after attachment therebetween due to, for example, the

dropping of the components, jostling of the components in a pocket, back, or other container, or even through normal use of the components.

EX1017, ¶52. Cox also describes that the choice of magnets may

vary in strength in accordance with the size or weight of the article 340—heavier/larger articles 340, such as a satellite communication device or credit-card reader, may have larger/stronger/more magnets 350, while slimmer/lighter articles 340, such as a decorative plate, may have smaller/weaker/fewer magnets 350

EX1017, ¶52. The choice of magnets may also “account for and defend against the placement and direction of anticipated forces.” EX1017, ¶52. Cox thus explicitly describes using magnets that produce an attractive force that varies with the weight of the components and defends against anticipated forces. EX1017, ¶52. Namely, being able to vary the number of strength of the magnets used to account for varying weights teaches selecting a magnet that can sufficiently support the weight of a mobile device. EX1017, ¶52. In this manner and in view of Cox’s teachings, a POSA would have been motivated to and would have selected appropriate magnets in the Berkley-Baca-Goto wallet to provide “*an attractive force*” that is “*sufficient to support a weight of the mobile device*” as recited in Claim 3.

XIV. GROUND 1C: THE COMBINATION OF BERKLEY AND BACA RENDERS OBVIOUS CLAIM 11.

234. The combination of Berkley and Baca teaches all of the elements of claim 11 for the reasons that I presented for claim 1 and as I further explain below.

See Section XII.B.1. I note that because claim 11 does not recite a “*ferromagnetic shield*” as recited in claim 1, Goto is not required to render claim 11 obvious. I present a comparison of claim 11 to claim 1 below and emphasize the minor elements that differ:

Independent Claim 1	Independent Claim 11
[1.P] A wallet for attachment to a mobile device comprising:	[11.P] A wallet for attachment to a mobile device comprising:
[1.A] a body defining a compartment and having a device side surface;	[11.A] a body defining a compartment and having a device side surface;
[1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[11.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[11.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and

[1.D] <i>a ferromagnetic shield between the first and second arrangements and the compartment;</i>	[11.D] <i>wherein the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second arrangement; and</i>
[1.E.1] wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,	
[1.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and	
[1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[11.E.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[1.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[11.E.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

235. As seen from this table, claim elements [11.P]-[11.C], [11.E.1], and [11.E.2] of claim 11 are identical to elements [1.P]-[1.C], [1.F.1], and [1.F.2] of claim 1.

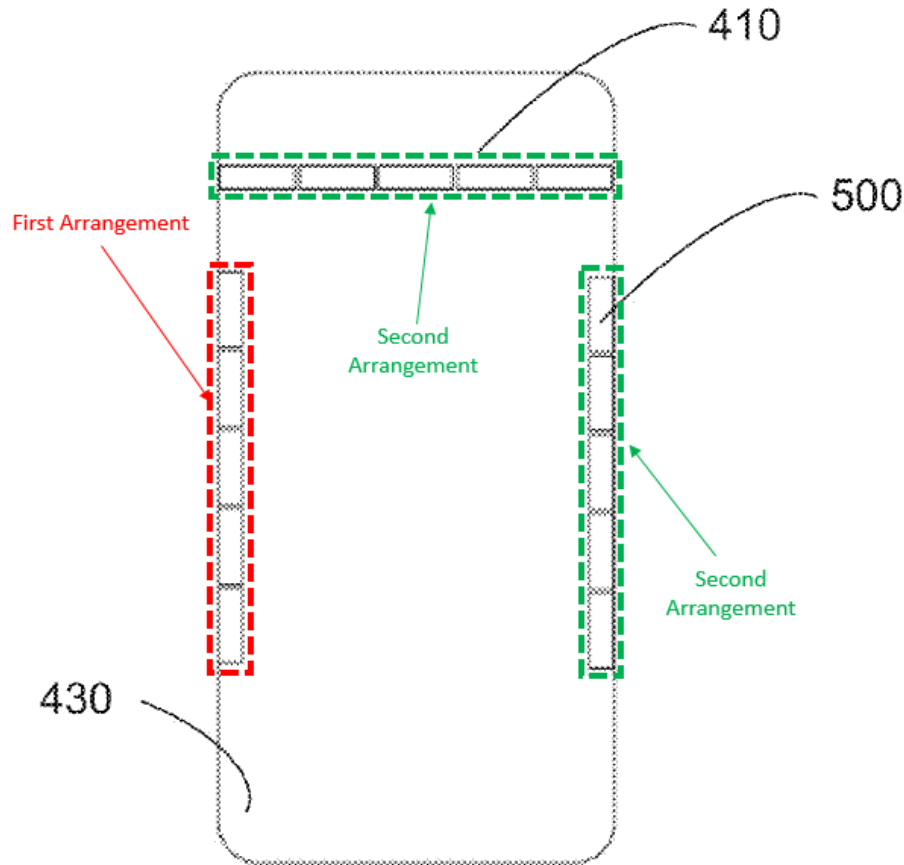
236. In terms of differences, claim 11 does not recite a “*region of nonmagnetic material*” or “*ferromagnetic shield*,” as recited in elements [1.D], [1.E.1], and [1.E.2]. Instead, claim element [11.D] states that “*the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second arrangement.*” For the reasons that I further explain below, the combination of Berkley and Baca teaches claim element [11.D]. See also Section XII.B.1.i (claim element [1.F.2]).

237. At the outset, I note that Baca’s disclosure appears to provide the support for the claim element due to the ’641 patent incorporating Baca’s teachings. Based on my review of the prosecution history, I understand that the applicant relied on FIG. 19 as allegedly providing specification support for claim element [11.D]. EX1002, 329. Figure 19, however, is directed to a “charging device 500” rather than a wallet. EX1001, 10:20-25. Figure 19 also does not depict different orientations or different geometric patterns as recited in claim element [11.D]. Rather, support for this element in the ’641 patent appears to be the same disclosure from Baca that is incorporated into FIGs. 43A-I.

238. To confirm this understanding, I note that the Board determined that

the '641 patent did not provide any additional explanation beyond Baca's magnetic arrangements. EX1002, 448. Rather, the Board noted that the '641 patent simply duplicated Baca's arrangements. EX1002, 448. I understand that the Board only overturned the rejection of this claim (original claim 12) because "the Examiner fail[ed] to provide any reasoning as to how or why" a POSA would have modified Berkley-Baca "with the teachings of Levy to meet" this element. EX1002, 459. Based on my review of Baca, however, the Examiner's reliance on Levy to reject this claim was unnecessary and appeared to be an error. As I further explain below, Baca sufficiently teaches claim element [11.D] especially in view of the same disclosures from Baca being incorporated into the '641 patent.

239. Turning to Baca's teachings, as I previously explained, Baca describes the use of multiple magnetic arrangements as depicted in Figure 2A. EX1006, ¶72.



EX1006, FIG. 2A (annotated).

240. As depicted in Figure 2A (and as I have annotated above), Baca teaches a second arrangement that can have a different orientation from the first arrangement. For example, a first arrangement can be vertical while a second arrangement can be horizontal. This is one way that Baca teaches claim element [11.D].

241. Baca also teaches claim element [11.D] based on flexibly allowing the selection of the particular magnets within each of the arrangements as well. For example, each of Baca's magnetic arrangements comprise a "self-aligning"

arrangement made up of several magnets of opposite polarities as I previously explained. *See* EX1006, ¶¶83-86; *see also* Section XII.B.1.d. Baca explains and provides ten examples of self-aligning magnetic arrangements that could equally be used as surface-side attachments 110. EX1006, FIG. 4A-4I, ¶84. The choice of potentially two different self-aligning magnetic arrangements between the first and second arrangements depicted in Figure 2A also teaches claim element [11.D]. For example, Baca allows for the selection of “symmetrical” and/or “asymmetrical” arrangements as I previously explained. *See* Section XII.C.4-5. When selecting two different self-aligning magnetic arrangements, Baca also teaches “*the first magnetic arrangement [having] at least one of a different orientation or a different geometric pattern than the second arrangement*” as recited in claim element [11.D]. Such a selection amounts to no more than simply choosing two items from the list provided by Baca. EX1006, FIG. 4A-4I, ¶84. A POSA would have found such a selection obvious given the options provided by Baca and ultimately incorporated into the ’641 patent. I note that the Board also determined that simply choosing one item from a list and using it twice was obvious. EX1002, 448. Simply choosing two different items from the same list is also obvious.

242. Thus, the combination of Berkley and Baca renders claim 11 and claim element [11.D] obvious.

XV. GROUND 1D: THE COMBINATION OF BERKLEY, BACA, GOTO, AND HAYMOND RENDERS OBVIOUS CLAIM 9.

243. Claim 9 recites “*The wallet of claim 1 further comprising: a finger loop on a surface opposite the device side surface.*” Claim 9 would have been obvious in view of the Berkley-Baca-Goto Combination further modified in view of Haymond.

244. As I previously explained, the combination of Berkley, Baca, and Goto teaches a wallet that attaches to a mobile device using a magnetic attachment mechanism. *See* Section XII.B.1. Berkley describes one problem with using a wallet-handheld device combination, noting that “the combined thickness or height of these devices ... often render the combined unit extremely difficult to ... handle manually.” EX1013, ¶4. While Berkley suggests addressing this problem by providing a wallet that “add[s] minimal bulk to the thickness of a handheld device to which it is attached,” EX1013, ¶25, a POSA would have been aware of various methods of improving the usability of thick handheld devices. *See, e.g.*, EX1032, ¶¶4, 9-16 (describing the well-known use of a “universal finger loop which solves the obvious concern of dropping, damaging, or losing one’s cellular phone or portable electronic device by facilitating a secure grip during interaction”). As an example of well-known technique to address this problem, Haymond describes tethering the phone to the user’s hand.

245. Specifically, Haymond describes a technique for forming a finger

tether strap in a pocket device to tether a cellular phone to a user. EX1015,

Abstract, 1:17-22. Haymond's pocket device 10 attaches to a cellular phone and

includes a pouch 18 that is sized to hold a card (e.g., a credit or ID card). EX1015,

1:64-2:22. A finger tether strap is provided in a front surface of pocket device 10

by forming slots 36 and 38 in the outer panel 28 thereof. EX1015, 4:8-11, FIG. 1.

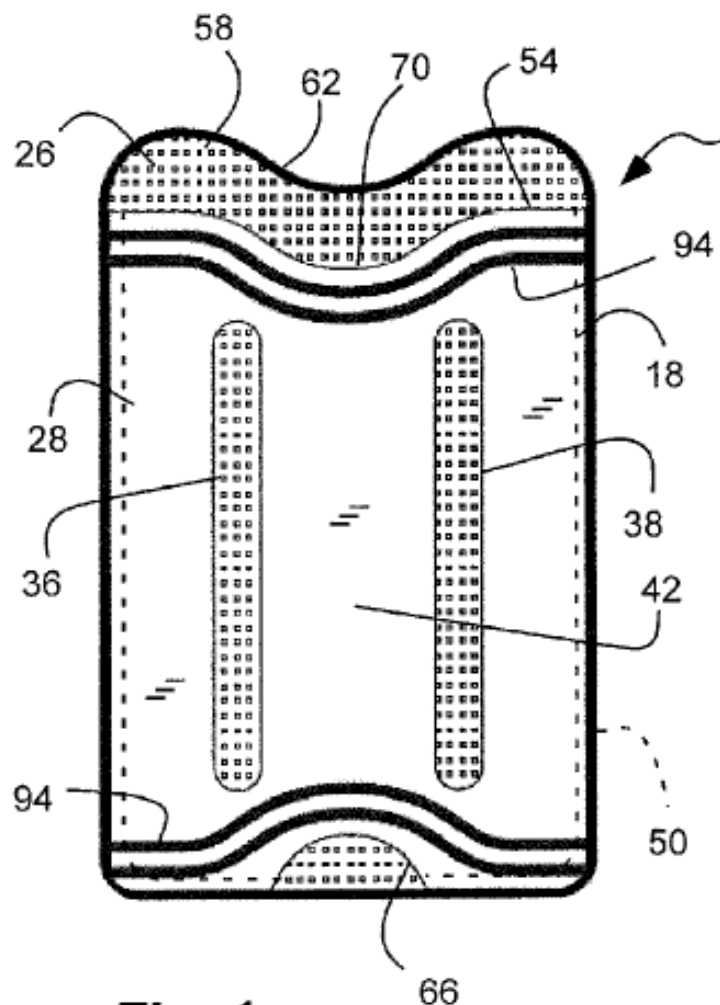


Fig. 1

EX1015, FIG. 1.

246. Haymond is analogous to Berkley, Baca, Goto, and the '641 patent because Haymond discloses a pocket device (e.g., a wallet) that attaches to a mobile device. EX1015, 1:18-22, 4:9-11. Haymond explains that it is desirable to “tether” such a wallet and mobile device to a user. EX1015, 1:40-44. A POSA would have understood that such a “tether” would prevent a user from dropping the mobile phone either during use or in removing or placing the mobile phone into a pocket. *See, e.g.*, EX1032, ¶¶4, 9-16 (describing the well-known use of a “universal finger loop which solves the obvious concern of dropping, damaging, or losing one’s cellular phone or portable electronic device by facilitating a secure grip during interaction”).

247. Haymond forms this “tether” by, for example, providing a “pair of slots” “in the outer panel” of a pouch of a pocket device, thereby “form[ing] a strap 42 in the outer panel 28” such that a “user’s finger 46 can be inserted under the strap 42 to tether the pocket 10, and thus the cellular phone 14, to the user’s finger.” EX1015, 4:8-11. Haymond further describes forming the pocket device “as a single, unitary, monolithic body” “made of silicone.” EX1015, 4:11-13.

248. A POSA would have been motivated to modify the wallet of Berkley-Baca-Goto further in view of Haymond to include a finger strap for tethering the wallet (and thus the smartphone) to the user’s hand. EX1015, 1:18-22. As I previously explained, this would aid a user in better gripping a mobile device when

a wallet is attached and avoid potentially dropping the mobile device.

249. Combining Haymond with Berkley, Baca, and Goto would have also been a simple modification. For example, adding Haymond would amount to simply adding a finger strap to top surface 23 of Berkley's wallet. A POSA would have known that such a modification could be made in many ways. For example, window 18 could be modified to include a finger strap; a new pair of slots could be added to top surface 23; Haymond's pocket device 10 could be affixed to the top surface 23; or first casing 12 could be replaced with Haymond's pocket device 10. Any such modification would result in a wallet for a handheld device that includes a finger strap for tethering the wallet (and the handheld device) to the user.

EX1015, Abstract, 1:17-22.

250. A POSA would also have had a reasonable expectation of success in modifying the wallet of Berkley-Baca-Goto further in view of Haymond. As I discussed above, Haymond provides a simple technique for forming a finger strap in the surface of a wallet, with the predictable result of a wallet that tethers a handheld device to a user's hand. EX1015, Abstract, 1:17-22. Such a modification merely amounts to using Haymond's known technique to improve a similar device ready for improvement. The use of such techniques was already well known in the art prior to the '641 patent. EX1032, ¶¶4, 9-16. In this manner, such a modification would have amounted to merely combining known prior art elements to achieve

the predictable result of a wallet for a handheld device that includes a finger strap.

251. Thus, the combination of Berkley, Baca, Goto, and Haymond renders obvious “*The wallet of claim 1 further comprising: a finger loop on a surface opposite the device side surface*” as recited in claim 9.

XVI. GROUND 1E: THE COMBINATION OF BERKLEY, BACA, GOTO, AND MITSUYAMA RENDERS OBVIOUS CLAIM 10.

252. Claim 10 recites “*The wallet of claim 1 wherein the body defines an opening into the compartment and wherein a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening.*” The combination of Berkley, Baca, Goto, and Mitsuyama renders claim 10 obvious.

253. At the outset, I understand that during prosecution, the applicant characterized claim 10 and the tapering as follows:

Appellant submits that the relevant dictionary definition of axis is “a straight line with respect to which a body or figure is symmetrical.” See Merriam Webster dictionary attached as evidence hereto. “Long axis” under the plain definition is the axis of the long dimension of the body. “Tapers” as a verb means to become progressively smaller in the direction of taper, here, towards the long axis. As shown in the annotated figure 8B below, the material forming the wallet tapers from a larger dimension of the main body to a smaller dimension near the opening. The direction of taper is towards the central long axis of the body as shown.

EX1002, 396-397.

254. The applicant then cited and annotated Figures 8B and 14A from the ’641 patent to allegedly show the tapered material:

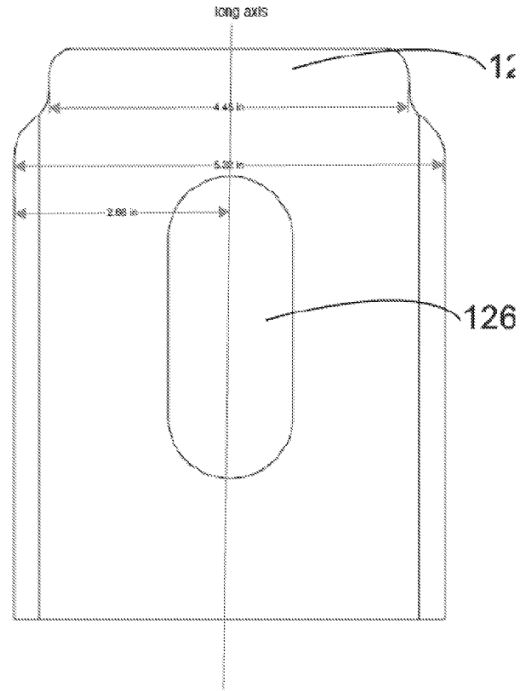
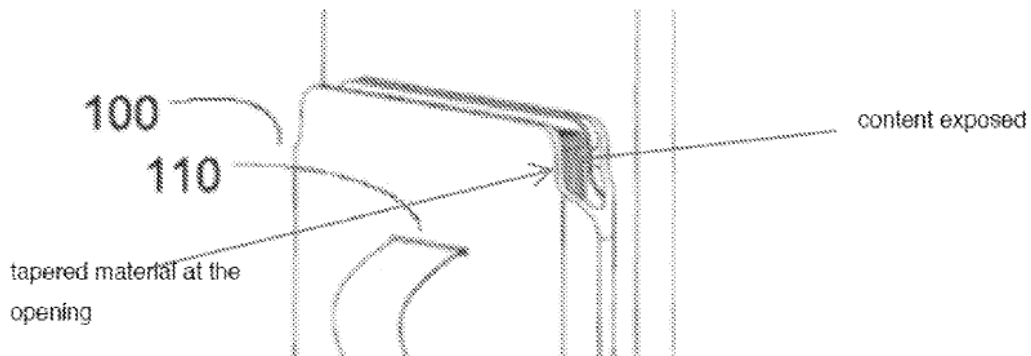


FIG. 8B

EX1002, 397.



EX1002, 398.

255. In view of this description and characterization of claim 10, Mitsuyama (in combination with Berkley, Baca, and Goto) teaches the same tapering and compartment body that “*defines an opening into the compartment and wherein a material defining the opening tapers towards a long axis of the body at*

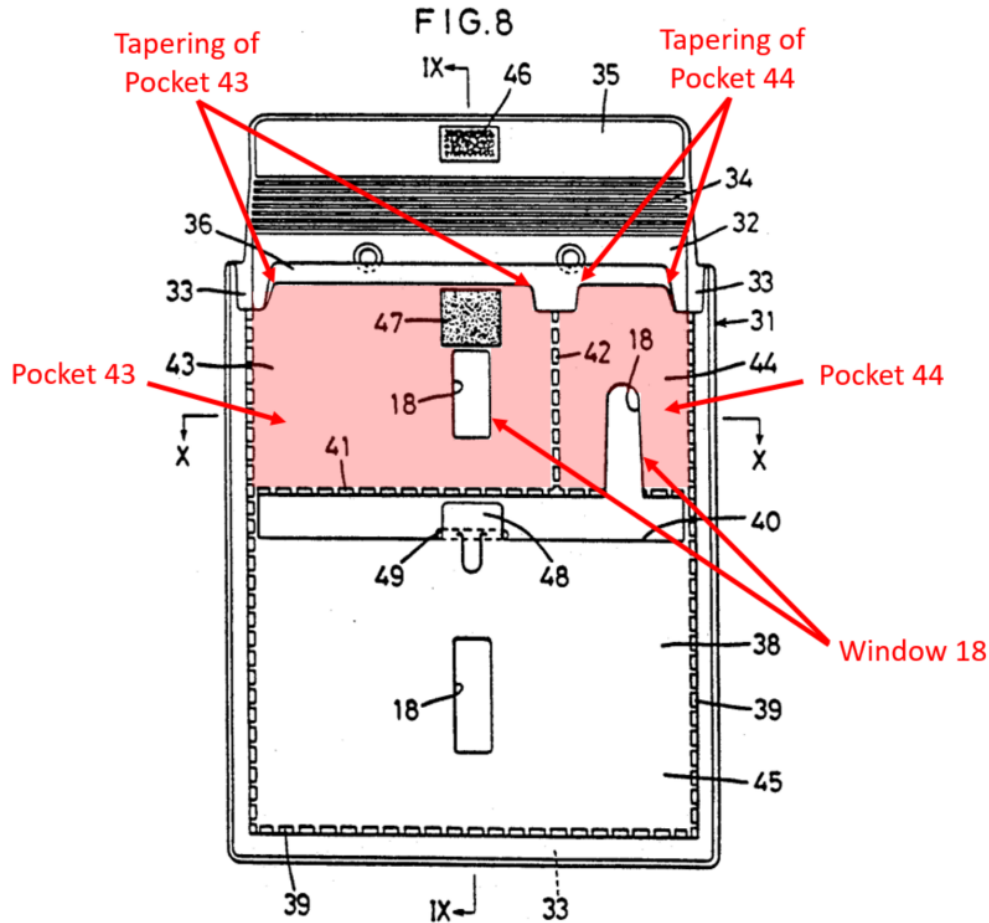
the opening to expose a content of the compartment at the opening” as recited in claim 10.⁴

256. Specifically, and as I previously explained, Mitsuyama describes a “card case” with an “elongated opening the width of which is at least sufficient to receive a finger tip so as to allow a card to be pushed through the open side.”

EX1016, Title, Abstract; *see also* EX1016, 1:38-54, 2:32-36; Section XI.I.

Mitsuyama depicts an example design of this “card case” in Figure 8, as I have annotated below:

⁴ I note that during prosecution, the Examiner indicated that “Mitsuyama discloses the use of a tapered corner cutout similar to the invention on a card holding structure.” EX1002, 377. While the applicant argued that the Examiner’s analysis was deficient, the Board did not address Mitsuyama during appeal. EX1002, 398, 457.



EX1016, FIG. 8 (annotated).

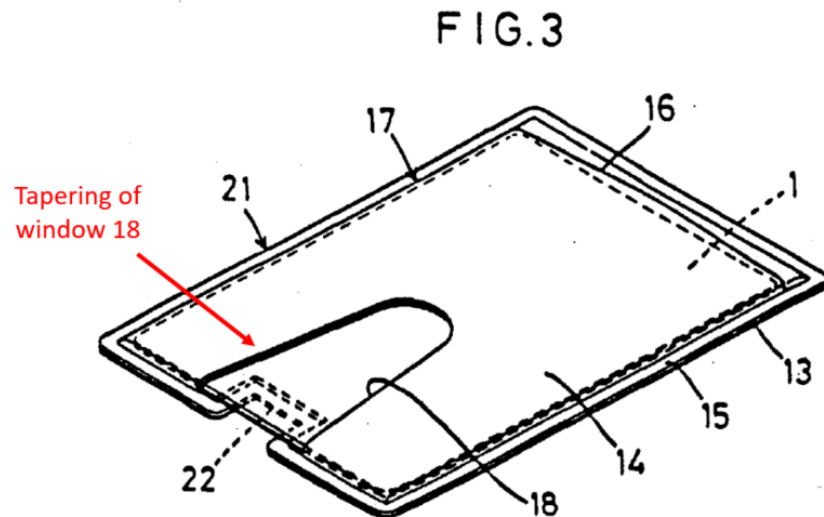
257. As seen in Figure 8, the pockets designated as pockets 44 and 43 include the same tapering described by the applicant and depicted in Figures 8A-8B of the '641 patent. EX1002, 397. For example, Mitsuyama's pocket 44 also includes rounded corners near the opening that expose the edge of a card when one is inserted. EX1016, FIG. 8, 4:1-19. In this manner, Mitsuyama's pockets 44 and/or 43 as depicted in Figure 8 teach "*an opening into the compartment*" and "*a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening*" as recited in claim 10.

258. In view of Mitsuyama's teachings, a POSA would have been motivated to modify the compartment in the Berkley-Baca-Goto wallet to include an opening that tapers along with a finger window, as taught by Mitsuyama. EX1016, FIG. 8, 4:1-19; *see also* EX1016, 1:26-35, 4:37-41. As Mitsuyama explains, such a design would have improved a user's ability to remove cards from a pocket, especially when "fingers are numbed due to cold." EX1016, 1:31-35. Such a tapered opening would also complement Berkley's window 18 by making it easier for a user to remove a particular card from Berkley's wallet. EX1006, FIG. 2, ¶¶20-22. Indeed, Mitsuyama implements both a window 18 as well as a tapered opening. EX1016, FIG. 8. And a POSA would have known that such a modification would have merely amounted to changing the opening 16 of Berkley's wallet. In this manner, combining Berkley, Baca, Goto, and Mitsuyama would have predictably resulted in a wallet for a handheld device that includes a tapered opening extending along a long axis of the wallet.

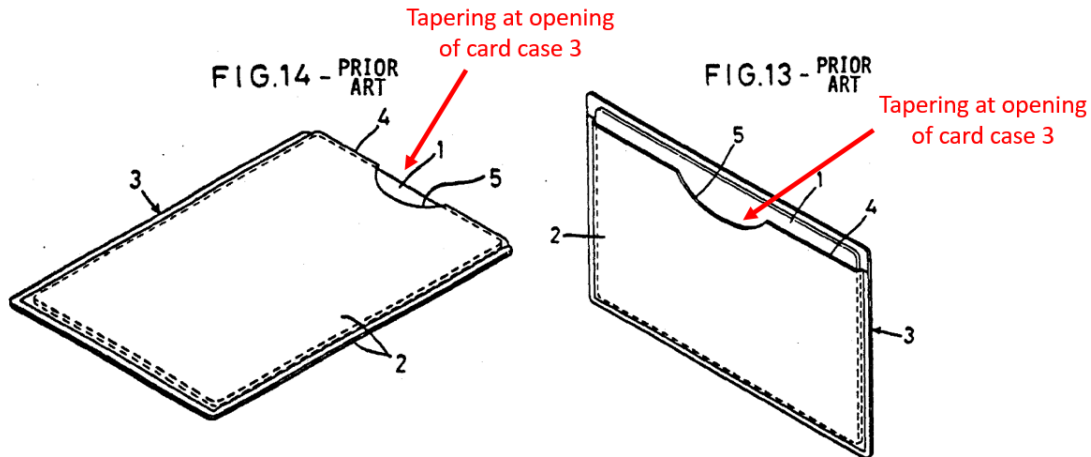
259. A POSA would have also had a reasonable expectation of success in modifying the Berkley-Baca-Goto wallet further in view of Mitsuyama to achieve the predictable result of a wallet having a tapered opening. Indeed, as I explained in with reference to claim 2, Berkley also includes a mechanism for aiding a user in retrieving a card. Modifying Berkley to include another mechanism to aid a user would have been desirable and easy to implement as Mitsuyama explicitly depicts

in Figure 8. Implementing Mitsuyama’s known technique of including a tapered opening would have improved the usability of the wallet of Berkley-Baca-Goto by providing easier means to access and retrieve cards and bills contained therein. As Mitsuyama explains, this would have been especially relevant to users whose “fingers are numbed due to cold.” EX1016, 1:26-35, 4:37-41. In this manner, such a modification constitutes simply combining known prior art elements to achieve the predictable result of a wallet that includes a tapered opening.

260. I note that the openings depicted in Figures 3, 13, and 14 of Mitsuyama also provide an alternative way for teaching the elements of claim 10. EX1016, 1:11-25, 3:10-28.



EX1016, FIG. 3 (annotated).



EX1016, FIGs. 13-14 (annotated).

261. Specifically, I note that the Board analyzed the Ippolito reference during appeal and indicated that Ippolito's tapered portion 18 as depicted as a semi-circle teaches the elements of claim 10. EX1002, 456-457. I have reproduced Ippolito's disclosure below:

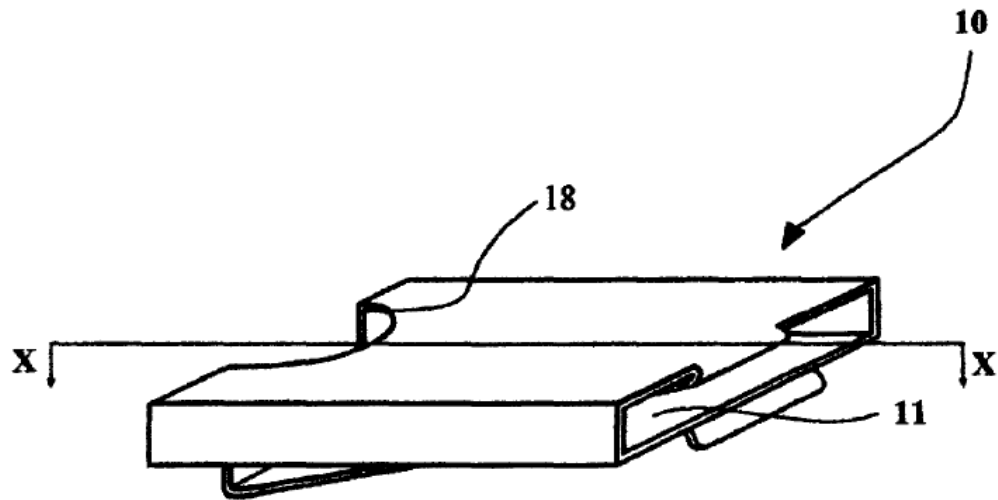


FIG. 1-A

EX1031, FIG. 1-A.

262. Based on Ippolito's disclosure, the Board indicated the following:

Appellant does not specifically address Ippolito's tapered portion 18 or the Examiner's reasons why a person of ordinary skill in the art would have combined Ippolito with the other references. Appeal Br. 15–16, 19. We agree with the Examiner that tapered portion 18 shown in Ippolito's Figure 1-A tapers from the outside edge of the semi-circle toward axis x-x which corresponds to the recited "long axis of the body." For these reasons, we sustain the rejection of claim 11.

EX1002, 457.

263. Based on the Board's explanation—and as seen from Figures 3, 13, and 14 from Mitsuyama as I have annotated above—Mitsuyama also teaches a semi-circle design that teaches the claimed "*material defining the opening [tapering] towards a long axis of the body,*" which also exposes content of the compartment. That is, Mitsuyama's semi-circle design teaches the same design depicted in Ippolito and which the Board determined taught the tapering recited in claim 10. EX1002, 457; EX1031, FIG. 1-A. In this way, Figures 3, 13, and 14 from Mitsuyama provide an alternative teaching of the elements of claim 10. A POSA would have been motivated to implement any of these designs and would have also had a reasonable expectation of success when implementing any of these designs for the reasons that I previously explained.

264. Thus, the combination of Berkley, Baca, Goto, and Mitsuyama renders obvious "*The wallet of claim 1 wherein the body defines an opening into*

the compartment and wherein a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening” as recited in claim 10.

XVII.GROUND 2A: THE COMBINATION OF ZHU, KINSHI, AND GOTO RENDERS OBVIOUS CLAIMS 1-7 AND 11.

265. A POSA would have viewed claims 1-7, and 11 as obvious over the combination of Zhu, Kinshi, and Goto for the reasons that I explain further below. For example, Zhu discloses the majority of the claim elements, including the specific magnetic arrangements recited in the claims. Kinshi expressly discloses a wallet that stores cards, such as credit cards. Goto discloses using magnetic-shielding plates in a magnetic-card protection case to prevent the data stored on magnetic cards (such as credit cards) from being erased. Because such techniques were already well known and combinable for the reasons I explained in Section VI, a POSA would have been motivated to combine Zhu, Kinshi, and Goto to achieve their respective benefits and would have known how to combine the teachings in these references with a reasonable expectation of success.

A. A POSA Would Have Been Motivated to Combine Zhu, Kinshi, and Goto.

266. As I previously explained in Section VI, the existence and use of folio-style, mobile-phone covers that also functioned as wallets was commonplace well before the '641 patent. These folio-style wallets typically included a folio-

style cover to “protect the screen of the mobile phone,” EX1008, ¶2, and “prevent damage to dropped mobile phones,” EX1010, ¶2, with the ability to store common items, such as money, credit cards, and identification cards, EX1012, ¶2. As I explained in Section XI.C, Zhu provides an example of this well-known folio-style cover. *See also* Section VI.A.2. Zhu describes a folio-style cover that has a panel 230 and is attachable to a mobile device. While Zhu does not explicitly refer to its cover panel as a “wallet,” a POSA would have found such a modification obvious in view of the numerous examples of such wallet cases before the ’641 patent. *See* Section VI. Kinshi is an example of such a folio-style case that includes wallet compartments for storing items such as credit cards.

267. As I explained in Section VI, there were many well-known benefits to providing a folio-style cover capable of storing cards. For example, as Berkley explains, attaching a wallet to a smartphone “promot[es] mobility by reducing or eliminating the need for larger carrying instruments.” EX1013, ¶¶3-4.

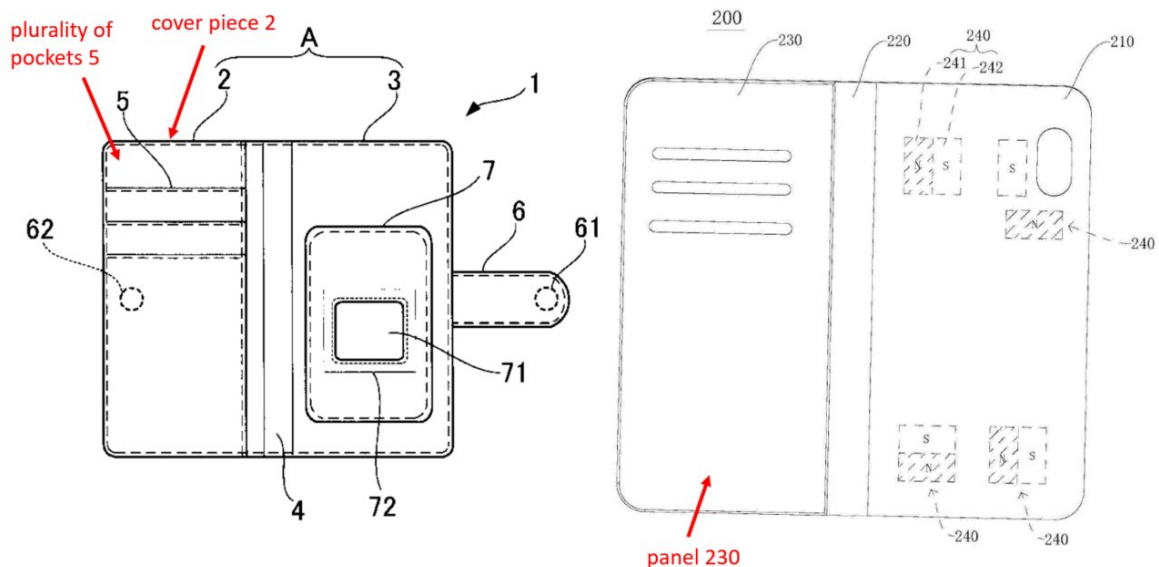
Additionally, Berkley also explains that combining a wallet with a protective smartphone case in a way to reduce the difficulty of removing credit cards or identification cards would also be beneficial. EX1013, ¶4; *see also* EX1013, ¶6 (describing the benefits of allowing a user to “easily insert and retain credit cards, identification cards and cash”). Lay and Hynecek also describe folio-style wallets with slots in a cover panel for storing “cards or other thin items, such as currency,

credit cards, a key, and/or identification cards.” EX1022, ¶68; EX1023, ¶86.

268. In view of these well-known benefits and designs, a POSA would have been motivated to modify Zhu’s cover to hold items typically carried along with a mobile phone, such as credit cards and identification cards. Section VI. For example, as described in Kinshi, providing pockets in the front cover of a folio-style case would have allowed for “improved ease of handling” and would have allowed cards to be easily “slid in and out in the vertical direction.” EX1010, Abstract, ¶¶12, 15. A POSA would have found it obvious and would have been motivated to including this card-holding functionality on Zhu’s cover to provide these well-known benefits to consumers using Zhu’s case.

269. Additionally, a POSA would have found it obvious and would have easily formed this combination. Converting Zhu’s cover into a folio-style wallet, as taught by Kinshi, would require only adding compartments to store cards (or other items). Again, such a configuration was well known in the art as I explained in Section VI. Further, combining Zhu and Kinshi would be a simple modification using a known technique (Kinshi’s folio-style wallet for holding cards) to improve a similar device (Zhu’s folio-style case) to operate in the same way. A POSA would have therefore found such a combination obvious and would have been motivated to combine Zhu and Kinshi for the benefits that I previously described. *See* Section VI.

270. While not necessarily requiring that the combination rely on a bodily incorporation of Zhu and Kinshi's teachings, a POSA would have known how to incorporate of Zhu and Kinshi's teachings, a POSA would have known how to combine the teachings from each reference. For example, one way of combining the references would be to simply modify Zhu's panel 230 to include one or more compartments for the predictable result of being able to store one or more items, such as credit cards and identification cards. Section VI. I have illustrated an example of such a modification below in Figure F of my declaration showing how Kinshi's plurality of pockets could be combined with Zhu's panel 230.



EX1010, FIG. 1 (left); EX1008, FIG. 4 (right; annotated).

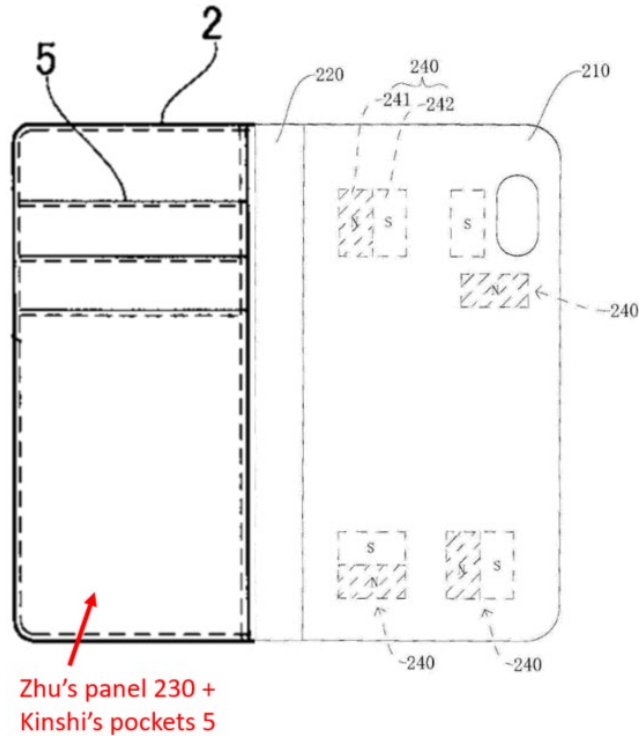


FIG. F: EX1010, FIG. 1; EX1008, FIG. 4 (combined; annotated).

271. In the combination, Zhu's cover would function as a wallet in addition to continuing to function as a protective cover for a mobile phone. This is because both Zhu and Kinshi describe protective covers for mobile phones. EX1008, ¶2; EX1010, Abstract, ¶14. Thus, the modification of Zhu's panel 230 would not change the principle of operation of Zhu's cover. Section VI.

272. A POSA would have had a reasonable expectation of success of modifying Zhu using Kinshi. This modification amounts to simply combining Kinshi's known card slots into Zhu's cover to yield the predictable result of a folio-style wallet. As I explained in Section VI, folio-style wallets were already well known, so a POSA would have had a reasonable expectation of success when

combining Zhu and Kinshi.

273. In addition to Zhu and Kinshi, a POSA would have been further motivated to modify the Zhu-Kinshi wallet to include Goto's iron-foil, magnetic-shielding plates to avoid erasing data stored magnetically on cards. Section VI. As I explained in Section VI.C, it was a well-known problem for magnetic cards to become corrupted, especially when exposed to magnetic fields. EX1027, 1:29-34. For example, such harmful magnetic fields could be caused by "magnetic clasps sometimes used in purses or wallets." EX1027, 1:29-34.

274. But solutions and measures for protecting against degradation of cards were already well known prior to the '641 patent. *See* Section VI.C. For example, to protect against the degradation of magnetic cards, Goto describes using magnetic shielding plates and explains that this shielding is needed because the data stored on magnetic cards may be negatively affected or become unusable when exposed to a magnetic field. EX1012, 2:14-21; Section XI.E. To avoid such damage, Goto teaches using magnetic-shielding plates made of iron foil embedded within the front and back walls of a "wallet" that holds cards. EX1012, 12:9-27. For example, Goto explains the following benefits of implementing its magnetic shielding:

The electrodeposited iron foil obtained through such a process generally consists of high purity iron of not less than 99.97% purity, which is, irrespective of its being an extremely thin foil, very high in

magnetic permeability and excellent in adsorption of magnet shielding of electromagnetic waves, and magnetism shieldability.

Since this kind of the electrodeposited iron foil is, in comparison with common steel sheet, higher in magnetic permeability, and allows lines of magnetic force to extend in the direction of the plane of the iron foil, ***its composite is favourably provided with a high preventive capability against the influence of magnetism from an ordinary magnet***, being synergistically supported by attenuation effect due to the distance of total thickness of the composite.

EX1012, 3:9-33.

275. A POSA would have recognized that cards stored in the Zhu-Kinshi wallet would have been susceptible to magnetic damage. For example, as LeBlanc explains, the use of magnets in wallets may corrupt cards. EX1027, 1:29-34. With this understanding, a POSA would have recognized potentially harmful effects arising from the Zhu-Kinshi wallet and its use of magnets. For example, both Zhu and Kinshi describe removing a mobile phone from the folio case for various purposes, such as to mount the phone in a car, EX1008, ¶2, or to take a photo, EX1010, ¶4. When the mobile phone is removed and the folio is closed, the cards may become exposed to the magnets in back plate 210 of Zhu (or base piece 3 of Kinshi). This may expose the cards stored in the plurality of pockets described in Kinshi to potential magnet damage. Section VI.C.

276. Additionally, even when the mobile phone is attached to the folio, it

was common for a user to fold the cover back (like bending the spine of a paperback novel) when using the mobile phone while in the folio. I provided several examples of this operation in Section VI. In view of this common operation performed by a user, a POSA would have recognized that folding the cover back would potentially expose the cards to the magnets in back plate 210 of Zhu (or base piece 3 of Kinshi). Section VI.

277. To address the well-known issue of magnetic corruption, a POSA would have therefore been motivated to modify the Zhu-Kinshi wallet to include Goto's magnetic-shielding plates in both the front and back of Zhu's panel 230 (as Goto teaches) to prevent magnetic damage when the mobile phone is removed and when the folio is folded back, respectively, as I have illustrated below in Figure G of my declaration. Section VI.

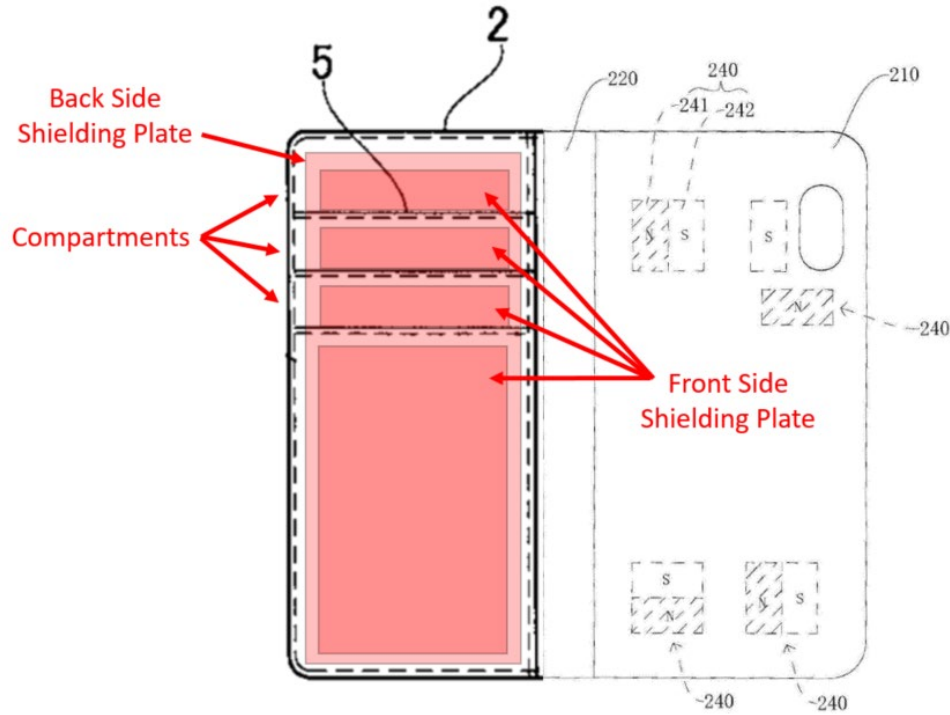


FIG. G: EX1010, FIG. 1; EX1008, FIG. 4 (combined and annotated to show insertion of Goto's magnetic-shielding plates).

278. For example, as I explained in Section XI.E, Goto describes surrounding a “card containing space 78” with a front wall 72 and a back wall 74 that both include a “magnetic shielding plate 54.” EX1012, FIG. 17, 12:9-14. A POSA would have been motivated to modify the Zhu-Kinshi wallet in a similar manner as I have illustrated above. I also note that implementing Goto's magnetic shielding plate on the front *or* back satisfies the claims as I further explain below.

279. A POSA would have viewed such a modification as predictable and beneficial for the reasons that I previously explained. *See* Section VI. For example, in view of the well-known benefits of protecting cards from degradation caused by external magnetic sources, a POSA would have been motivated to implement

magnetic shielding in the Zhu-Kinshi wallet to similarly protect cards from magnetic damage. Section VI. A POSA would have had a reasonable expectation of success in making this modification because it simply combines prior art elements (folio-style wallet and magnetic shielding) according to known methods to achieve the predictable result of protecting cards from magnetic damage. *See* Section VI.C. Further, the modification applies a known technique (magnetic shielding) to improve a similar folio-style wallet in the same way as Goto. Section VI; *see also* EX1012, FIG. 16, 11:48-63 (describing a foldable wallet with Goto's magnetic shielding), 12:59-65 (describing the application of Goto's shielding to a wide range of pocket sizes).

B. Independent Claims 1, 5, and 11

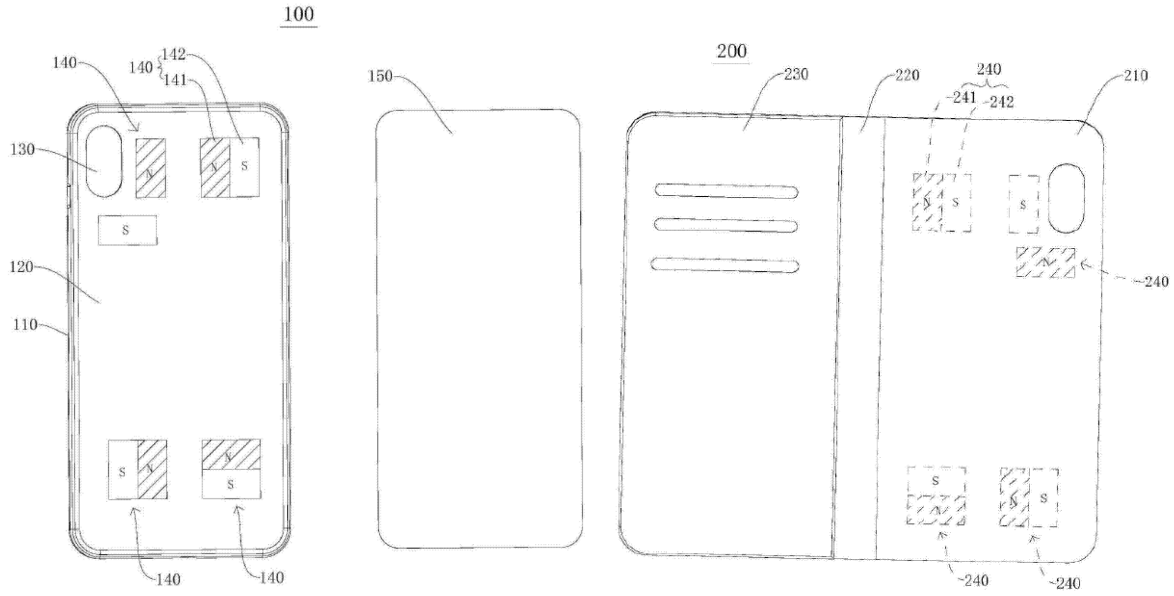
1. Independent Claim 1

a. [1.P]: A wallet for attachment to a mobile device comprising:

280. I understand that a preamble for a claim is generally not limiting. Relatedly, I again note that during prosecution, the applicant explicitly indicated that the mobile device is not a structural requirement of the claims. EX1002, 195; Section VIII. Regardless of whether the preamble to claim 1 is limiting, a POSA would have found the preamble obvious in view of Zhu and the Zhu-Kinshi combination. Zhu discloses a mobile phone case that attaches to a folio-style cover via magnetic arrangements. EX1008, ¶¶2, 4-8, 13, 30-31, FIGs. 2, 4. As I

previously explained, Zhu uses the term “mobile phone clip 200” but this refers to a folio-style cover that provides a covering over the face of a mobile phone. As seen in Figure 4, Zhu discloses that the cover or clip 200 includes at least four (second) magnet groups 240 positioned to correspond to (first) magnet groups disposed on the surface of a mobile phone case. EX1008, ¶30. The phone is inserted in the case 100, and the cover 200 is attached to the case 100 (and thus to the mobile phone) via magnetic attraction between the magnet groups.⁵ EX1008, ¶31.

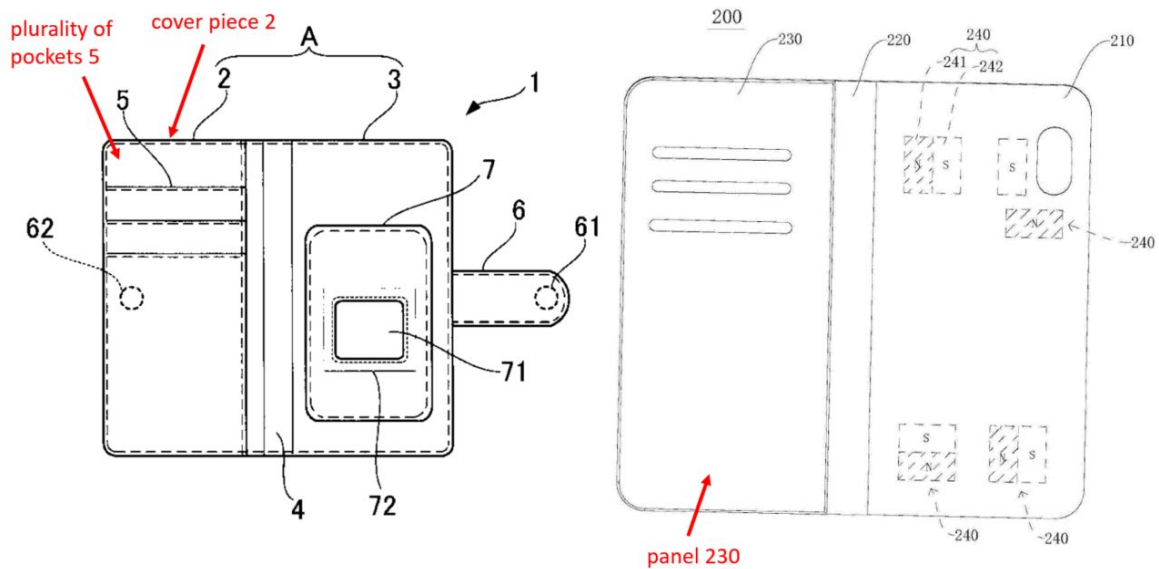
⁵ While Zhu provides magnets on case 100, a POSA would have also found it obvious for such magnets to have been included in a mobile phone itself. *See, e.g.*, EX1006, ¶62. Regardless, whether the magnets are located on case 100 or within a mobile phone is not relevant to the claims because the claims are structurally directed to a “wallet.” *See* Section VIII. As I previously explained, the applicant during prosecution explicitly stated that a mobile device is not a structural requirement of the claims. *See* Section VIII; EX1002, 195.



EX1008, FIGs. 2 and 4.

281. As I previously explained in Section VI, a folio-style cover functioning as a wallet was well known before the '641 patent. A POSA would have therefore found it obvious, based on Zhu's Figure 4, to implement a wallet or compartments on panel 230 to store items, such as cards, for the reasons that I previously explained. *See* Section XVII.A. While Zhu does not expressly disclose storing items in the cover, a POSA would have found such an implementation obvious and desirable as I explained in Section XVII.A. For example, Kinshi provides an example of such a folio-style wallet that includes pockets for storing cards. Specifically, cover piece 2 of Kinshi's mobile phone case includes a "plurality of pockets 5 for storing cards." EX1010, ¶15. A POSA would have been motivated to modify Zhu's cover to include a plurality of pockets, as disclosed by

Kinshi, and would have easily combined the teachings from both references for the reasons that I explained in Section XVII.A. I have provided an example illustration of how Zhu and Kinshi would have been combined below in Figure F of my declaration:



EX1010, FIG. 1 (left); EX1008, FIG. 4 (right; annotated).

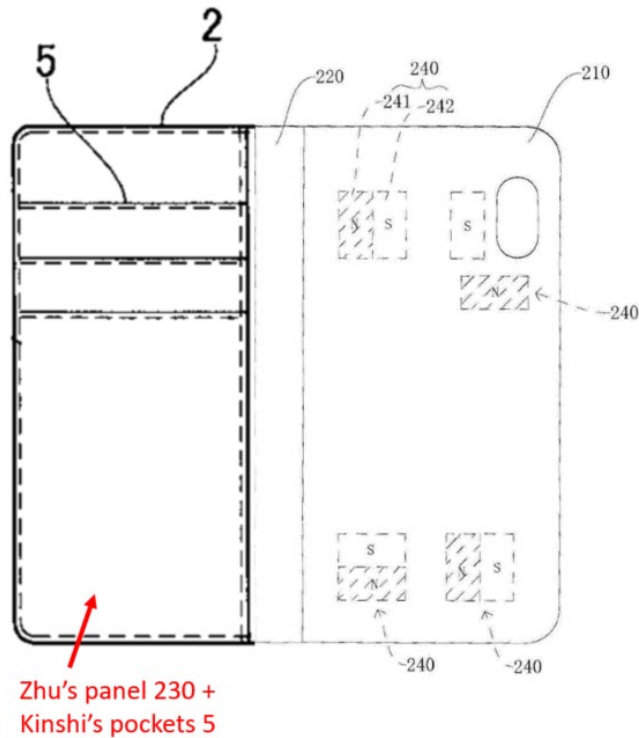


FIG. F: EX1010, FIG. 1; EX1008, FIG. 4 (combined; annotated).

b. [1.A] a body defining a compartment and having a device side surface;

282. The combination of Zhu and Kinshi renders obvious [1.A]. Zhu's cover includes a back plate 210 and a panel 230, EX1008, ¶30. This teaches the "body" recited in claim element [1.A]. Additionally, Zhu's back plate 210 is configured to attach to the back surface of case 100. EX1008, ¶31. Zhu explains:

The mobile phone case 100 and mobile phone clip 200 of this mobile phone case assembly can be quickly and conveniently combined, and the mobile phone clip 200 and mobile phone case 100 can be automatically and accurately positioned.

EX1008, ¶31.

283. The surface of Zhu's back plate 210 that attaches to the back surface of case 100 teaches the claimed "*device side surface*." As I previously explained and have annotated below, the combination of Kinshi's "plurality of pockets 5 for storing cards" with Zhu's panel 230 teaches the claimed "*compartment*." Compare EX1010, ¶15 with EX1001, 8:20-27; see also Sections X.B, XVII.A. The plurality of pockets 5 are examples of compartments that can hold cards. EX1010, Abstract, ¶¶14, 15. Indeed, such a configuration was well known in the art as I explained in Section VI. I have annotated below how the combination of Zhu and Kinshi teaches claim element [1.A].

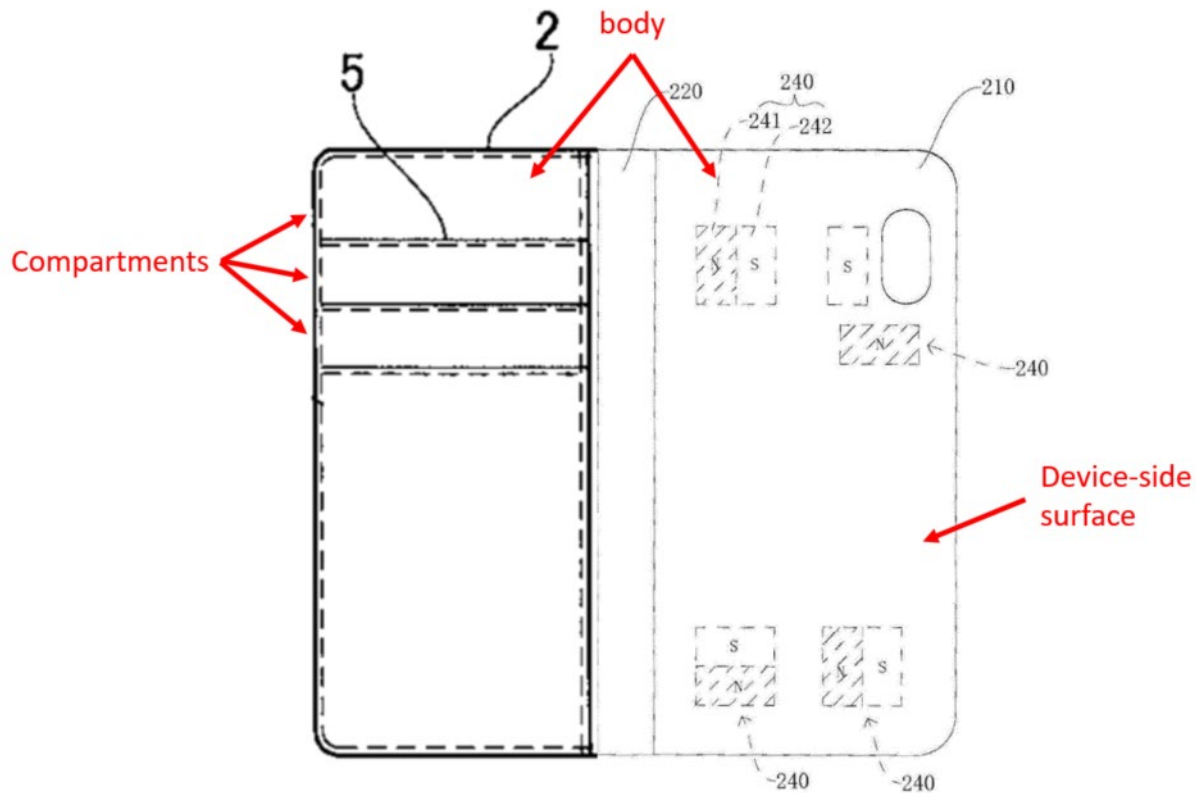
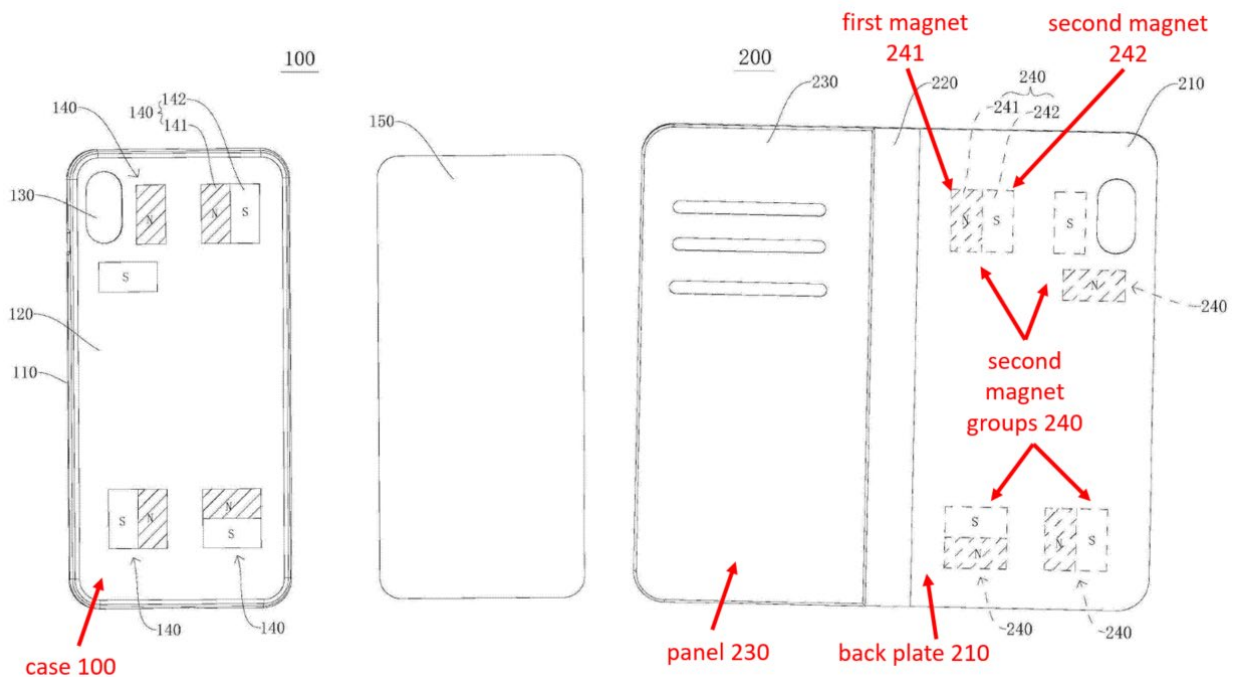


FIG. F: EX1010, FIG. 1; EX1008, FIG. 4 (combined; annotated).

- c. [1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface

284. Zhu describes each of the aspects of claim element [1.B]. As I have annotated in Figure 4 below, Zhu depicts four “second magnet groups 240” positioned at corners of back plate 210. EX1008, ¶30; *see also* EX1008, ¶¶8, 13, 17.



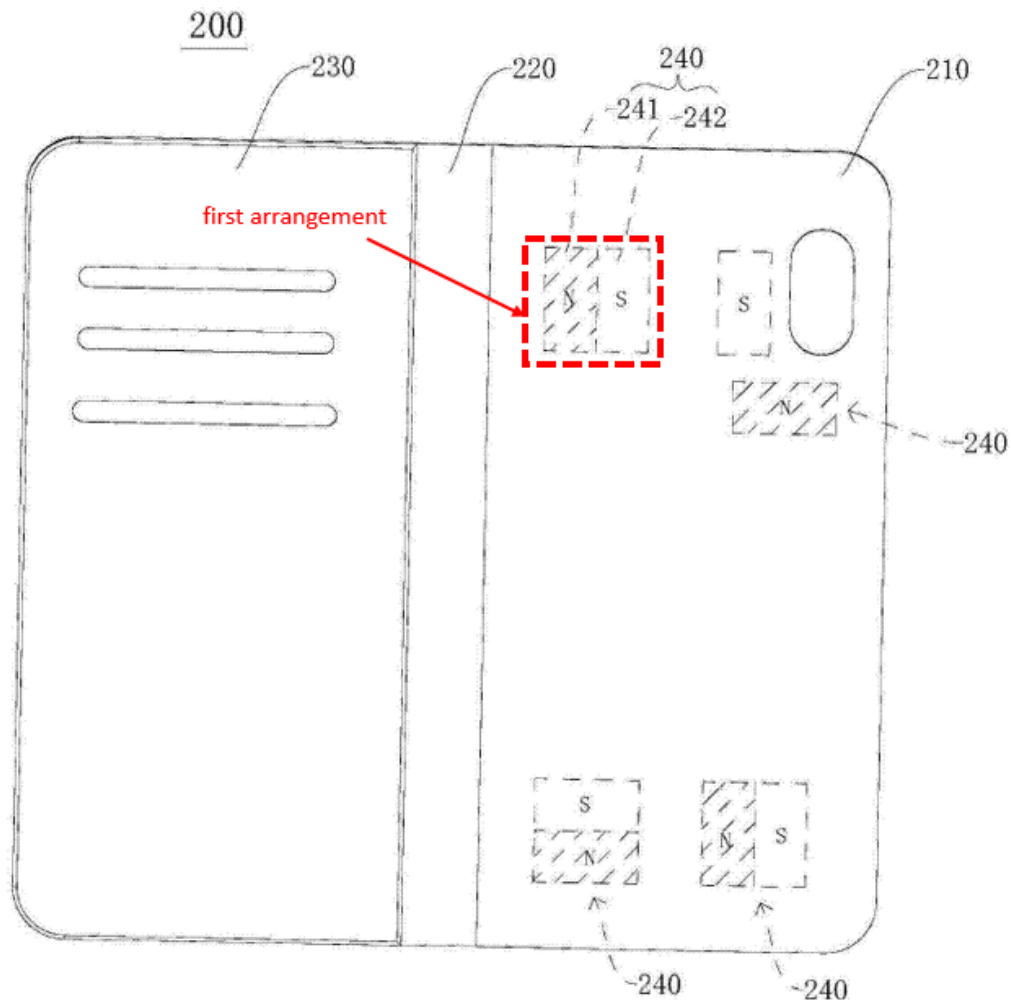
EX1008, FIGs. 2 and 4 (annotated).

285. Each second magnet group 240 includes a magnet 241 disposed “with the N pole” “facing upward,” and a magnet 242 disposed with “the S pole” “facing upward.” EX1008, ¶30. Considering magnets 241 and 242 together in a group,

such a group teaches the claimed “a first arrangement of magnetic material.”

Magnet 241 teaches a “first region exposing a first polarity of magnetic field at the device side surface” as recited in claim element [1.B]. And magnet 242 teaches a “second adjacent region exposing an opposite polarity magnetic field at the device side surface.”

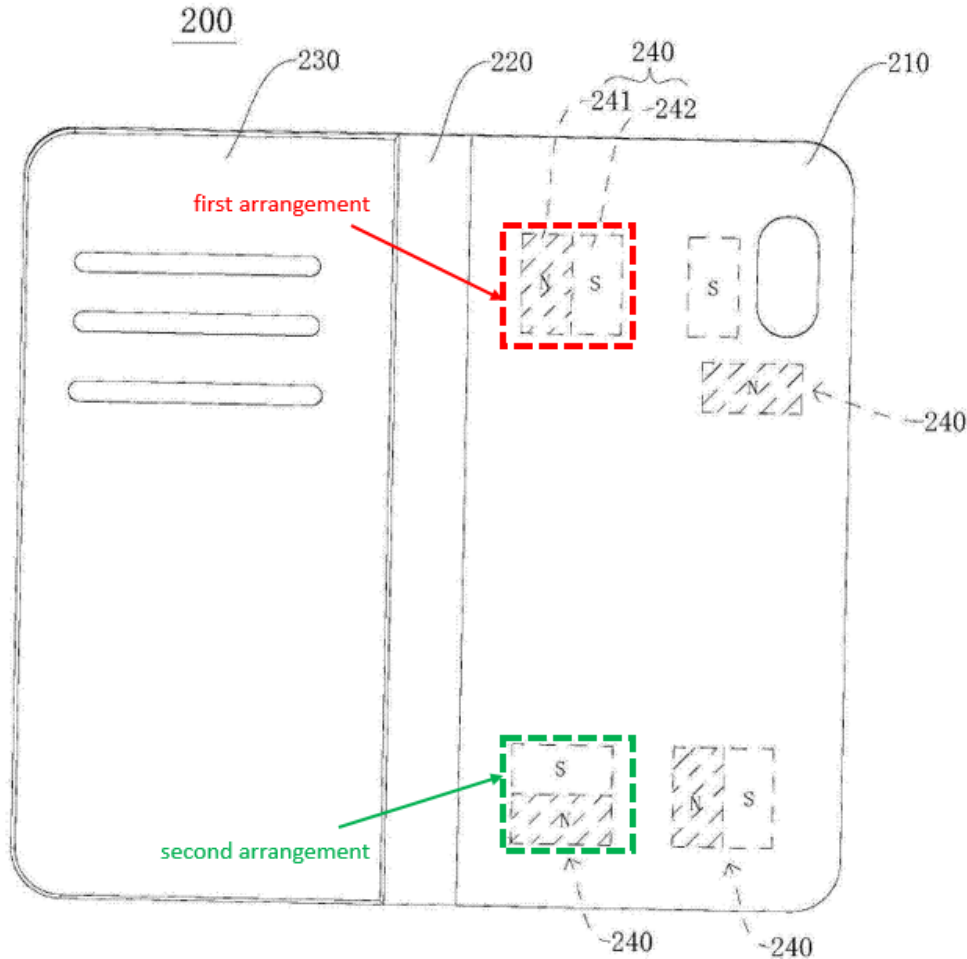
286. As I have annotated below, Figure 4 depicts the claimed “first arrangement.” For example, the top-left magnet group 240 (highlighted below in red) teaches the claimed “first arrangement.”



EX1008, FIG. 4 (annotated).

- d. **[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface**

287. Zhu discloses [1.C] for reasons similar to those that I explained with reference to claim element [1.B]. For example, Zhu's magnet groups 240 teach arrangement of magnetic materials. EX1008, FIG. 4, ¶30; *see also* EX1008, ¶¶8, 13, 17. With reference to claim element [1.B], the top-left magnet group 240 can be considered as and teach the claimed "*first arrangement*." For claim element [1.C], any of Zhu's other magnet groups teaches the claimed "*second arrangement of magnetic material*." For example, as I have annotated below, Figure 4 from Zhu depicts a bottom-left magnet group 240 which would disclose the claimed "*second arrangement*."



EX1008, FIG. 4 (annotated).

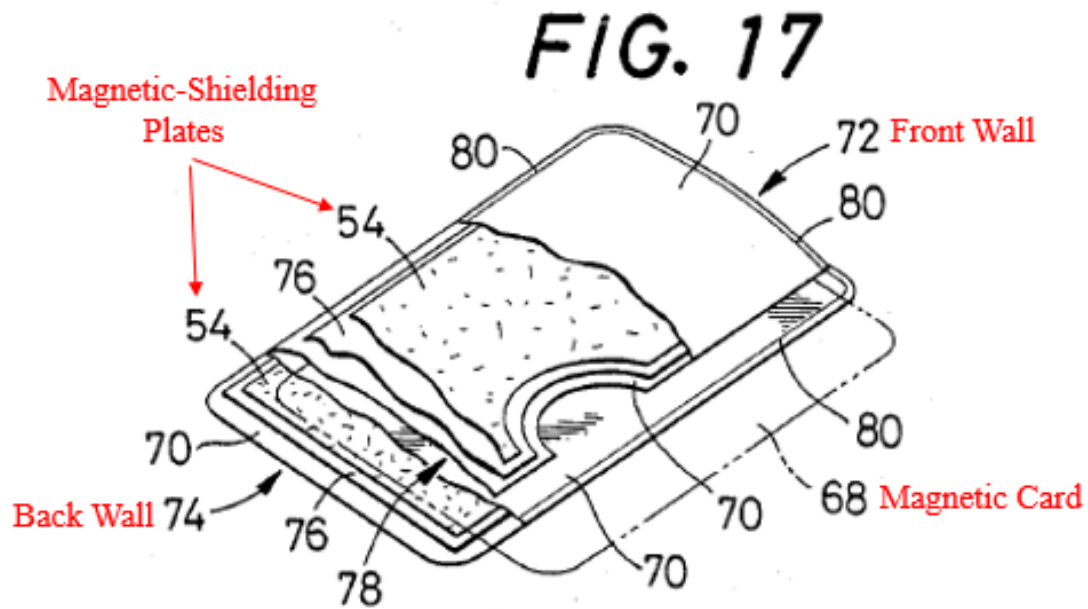
288. Similar to the explanation that I provided with reference to claim element [1.B], the second arrangement taught by Zhu would also include two regions that expose opposite polarity magnetic fields to each other at the device side surface. EX1008, ¶30; *see also* EX1008, ¶¶8, 13, 17. Namely, one magnet in the second arrangement (e.g., “S”) teaches a “*first region exposing a first polarity of magnetic field at the device side surface.*” And the other magnet in the second arrangement (e.g., “N”) teaches a “*second adjacent region exposing an opposite*

polarity magnetic field at the device side surface.” In this manner, Zhu teaches the claimed “*second arrangement*” for reasons similar to those that I provided for claim element [1.B]. *See* Section XVII.B.1.c.

e. [1.D] a ferromagnetic shield between the first and second arrangements and the compartment

289. As I explained in Section XVII.A, the combination of Zhu, Kinshi, and Goto renders obvious claim element [1.D]. At the outset and as I explained with reference to claim elements [1.A]-[1.C], the Zhu-Kinshi wallet teaches the claimed first and second magnetic arrangements in view of the magnets located on back plate 210 and also teaches the claimed the compartment on panel 230. *See* Sections XVII.B.1.b-d. While Zhu and Kinshi do not explicitly recite a “*ferromagnetic shield*,” Goto provides this teaching, and a POSA would have been motivated to combine Goto with Zhu and Kinshi for the reasons that I previously presented. XVII.A.

290. Namely, as seen in Figure 17 (annotated below), Goto describes a magnetic-card holder that “is formed of a front wall 72 and a rear wall 74,” and inside each wall is “a magnetic shielding plate 54” that is “slightly smaller than the plane of” their respective walls. EX1012, 12:9-14. I have provided annotations below including an illustration of the cross-section of FIG. 17 (in Figure A) to better visualize each of the layers. EX1012, 12:1-27.



EX1012, FIG. 17 (annotated).

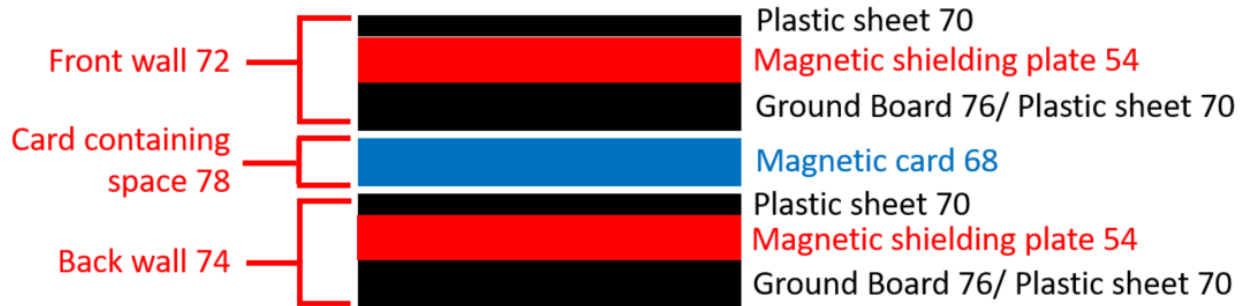


FIG. A: Annotated Cross-Section of EX1012, FIG. 17.

291. Goto explains that the magnetic-shielding plates 54 are made of “iron foil.” EX1012, Abstract, 3:9-40, 7:20-23, 11:53-55. A POSA would have understood that iron is an example of a “ferromagnetic” material, and thus Goto’s magnetic plate shielding, which uses iron, teaches the claimed “*ferromagnetic shield*.” See, e.g., EX1011, Abstract, 3:4-20 (describing a ferromagnetic shielding for cards made from iron); see also EX1030, ¶52 (describing a “ferromagnetic

material” as comprising “iron”). For example, “*Introduction to Electrodynamics*” by David. J Griffiths (Third Edition 1999) explains that iron is the most common example of a substance that is “ferromagnetic”:

Chapter 6

Magnetic Fields in Matter

6.1 Magnetization

6.1.1 Diamagnets, Paramagnets, Ferromagnets

If you ask the average person what “magnetism” is, you will probably be told about horse-shoe magnets, compass needles, and the North Pole—none of which has any obvious connection with moving charges or current-carrying wires. Yet all magnetic phenomena are due to electric charges in motion, and in fact, if you could examine a piece of magnetic material on an atomic scale you *would* find tiny currents: electrons orbiting around nuclei and electrons spinning about their axes. For macroscopic purposes, these current loops are so small that we may treat them as magnetic dipoles. Ordinarily, they cancel each other out because of the random orientation of the atoms. But when a magnetic field is applied, a net alignment of these magnetic dipoles occurs, and the medium becomes magnetically polarized, or **magnetized**.

Unlike electric polarization, which is almost always in the same direction as $\mathbf{E}$, some materials acquire a magnetization *parallel* to $\mathbf{B}$ (*paramagnets*) and some *opposite* to $\mathbf{B}$ (*diamagnets*). A few substances (called *ferromagnets*, in deference to the most common example, iron) retain their magnetization even after the external field has been removed—for these the magnetization is not determined by the *present* field but by the whole magnetic “history” of the object. Permanent magnets made of iron are the most familiar examples of magnetism, though from a theoretical point of view they are the most complicated; I’ll save ferromagnetism for the end of the chapter, and begin with qualitative models of paramagnetism and diamagnetism.

EX1033, 255.

6.4.2 Ferromagnetism

In a linear medium the alignment of atomic dipoles is maintained by a magnetic field imposed from the outside. Ferromagnets—which are emphatically *not* linear⁷—require no external fields to sustain the magnetization; the alignment is “frozen in.” Like paramagnetism, ferromagnetism involves the magnetic dipoles associated with the spins of unpaired electrons. The new feature, which makes ferromagnetism so different from paramagnetism, is the interaction between nearby dipoles: *In a ferromagnet, each dipole “likes” to point in the same direction as its neighbors.* The reason for this preference is essentially quantum mechanical, and I shall not endeavor to explain it here; it is enough to know that the correlation is so strong as to align virtually 100% of the unpaired electron spins. *If you could somehow magnify a piece of iron and “see” the individual dipoles as tiny arrows, it would look something like Fig. 6.25, with all the spins pointing the same way.*

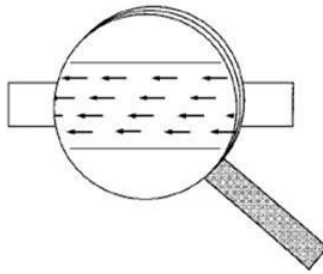


Figure 6.25

EX1033, 278.

292. With this understanding that Goto’s iron-based shielding is ferromagnetic, Goto explains several benefits from using the iron-based shielding:

The *electrodeposited iron foil obtained through such a process generally consists of high purity iron of not less than 99.97% purity*, which is, irrespective of its being an extremely thin foil, *very high in magnetic permeability and excellent in adsorption of magnet shielding of electromagnetic waves, and magnetism shieldability*. Since this kind of the electrodeposited iron foil is, in comparison with common steel sheet, higher in magnetic permeability, and allows lines of magnetic force to extend in the direction of the plane of the iron foil, *its composite is favourably provided with a high preventive capability*

against the influence of magnetism from an ordinary magnet, being synergistically supported by attenuation effect due to the distance of total thickness of the composite.

EX1012, 3:9-33.

293. In this manner, Goto's magnetic shielding plates 54 teach the claimed "*ferromagnetic shield*."

294. For the reasons that I previously explained, a POSA would have been motivated to modify the Zhu-Kinshi wallet to include Goto's magnetic-shielding plates in both the front and back of Zhu's panel 230 (as Goto teaches) to prevent magnetic damage when the mobile phone is removed and when the folio is folded back, respectively. *See* Section XVII.A. I have annotated an example of such a configuration below (designated as Figure G in my declaration).

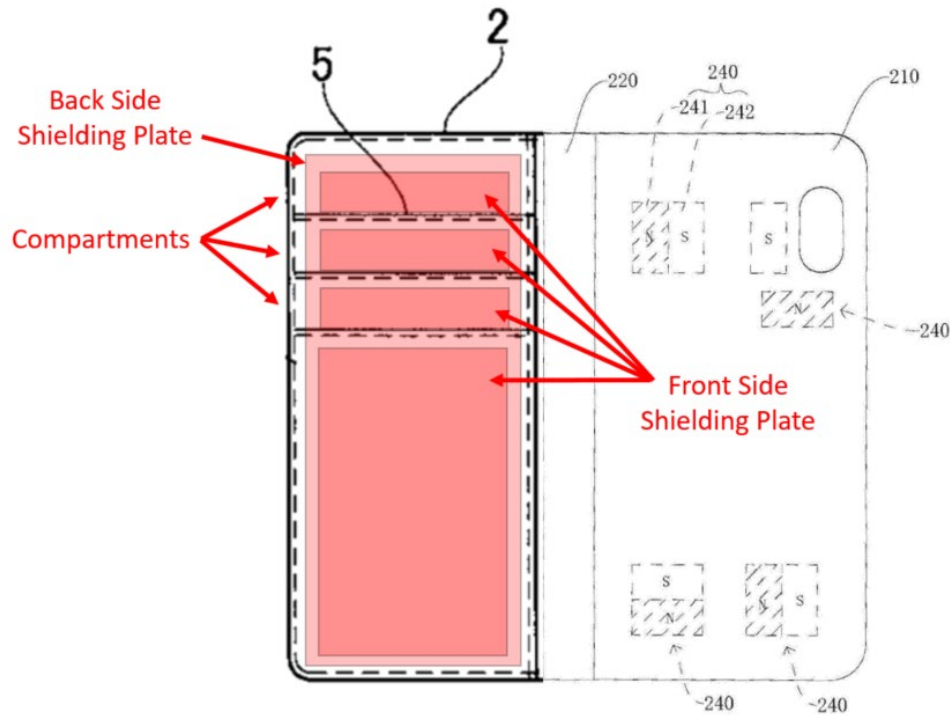
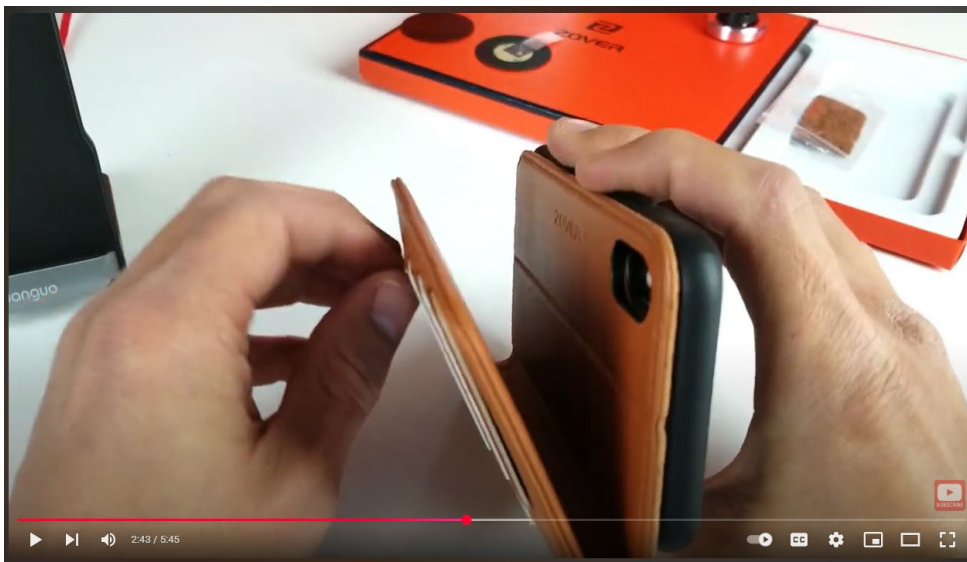
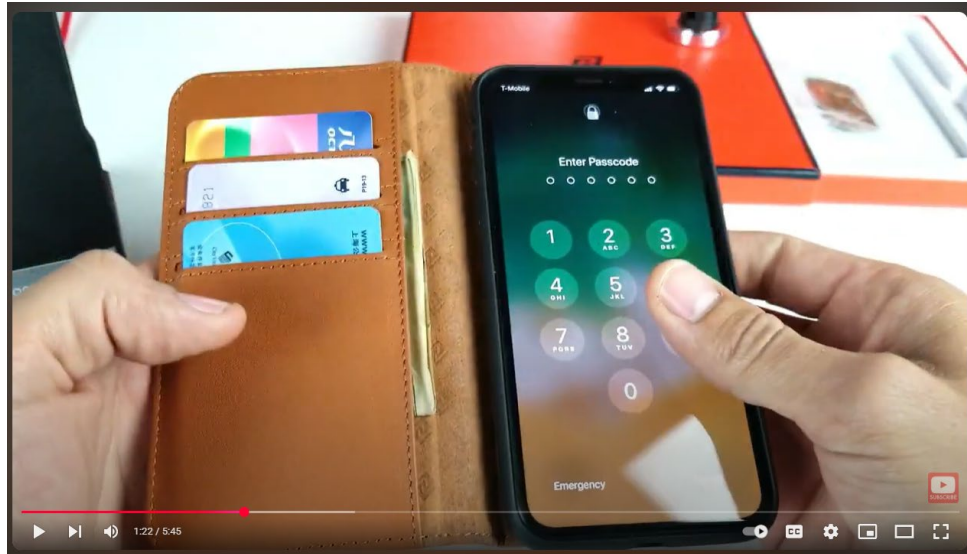


FIG. G: EX1010, FIG. 1; EX1008, FIG. 4 (combined and annotated to show insertion of Goto's magnetic-shielding plates).

295. When implementing Goto's magnetic shielding plates as I have annotated above, a POSA would have recognized that this shielding would have been positioned *"between the first and second arrangements and the compartment"* as recited in the claims. For example, implementing the front side shielding plate would position the shielding between the front of a cardholding pocket and between the magnet groups 240 (i.e., magnetic arrangements) located on Zhu's panel 230. For example, when the folio-cover is closed in the Zhu-Kinshi-Goto combination, the magnetic shielding would be located between the cardholding compartment and the magnet groups 240.

296. Similarly, implementing the back side shielding plate would also position the shielding between the back of the cardholding pockets and between the magnet groups 240 (i.e., magnetic arrangements) located on Zhu's panel 230. For example, when the folio-cover is folded backward—as I explained in Sections VI and XVII.A was commonly done—the shielding would also be located between the cardholding compartment and the magnet groups 240. I have provided example depictions of folding back the front cover in the images below:







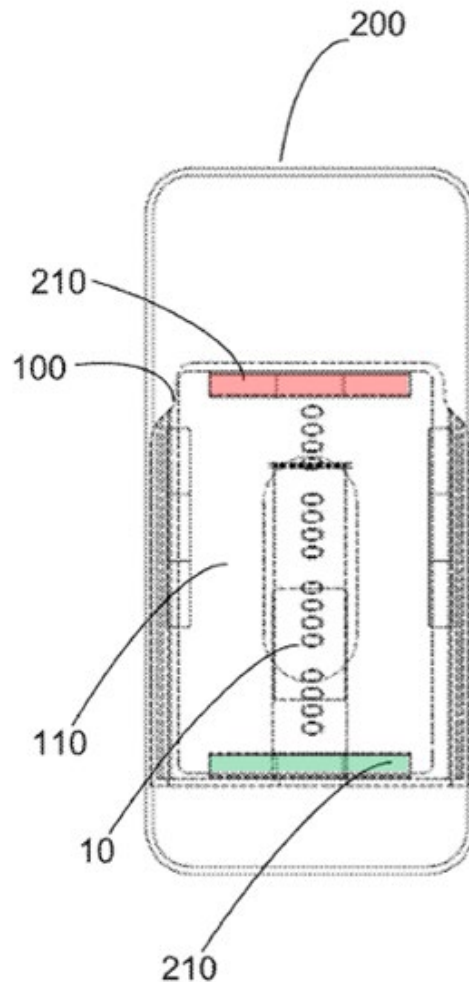
297. With the magnetic shielding implemented in the Zhu-Kinshi-Goto combination, when the folio cover is folded backward, the magnetic shielding would also be positioned between the cardholding pockets (i.e., claimed “*compartment*”) and between the magnet groups 240 (i.e., claimed *first and second magnetic arrangements*)

298. In this manner, a POSA would have viewed claim element [1.D] as obvious in view of the Zhu-Kinshi-Goto combination, would have been motivated to combine Zhu, Kinshi, and Goto to arrive at this configuration, and would have known how to form such a combination. *See* Section XVII.A.

f. [1.E.1] the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material

299. Zhu discloses or renders obvious [1.E.1]. Based on my review, the specification of the ’641 patent does not provide a definition for the claimed

“region of nonmagnetic material” physically separating the first and second arrangements. I note that during prosecution and on appeal, however, the applicant argued that Figure 16A provided support for this limitation. EX1002, 327. I have reproduced Figure 16A below, which shows two magnetic arrangements 210 separated by a portion of the surface of wallet 100. EX1001, 9:66-10:3.



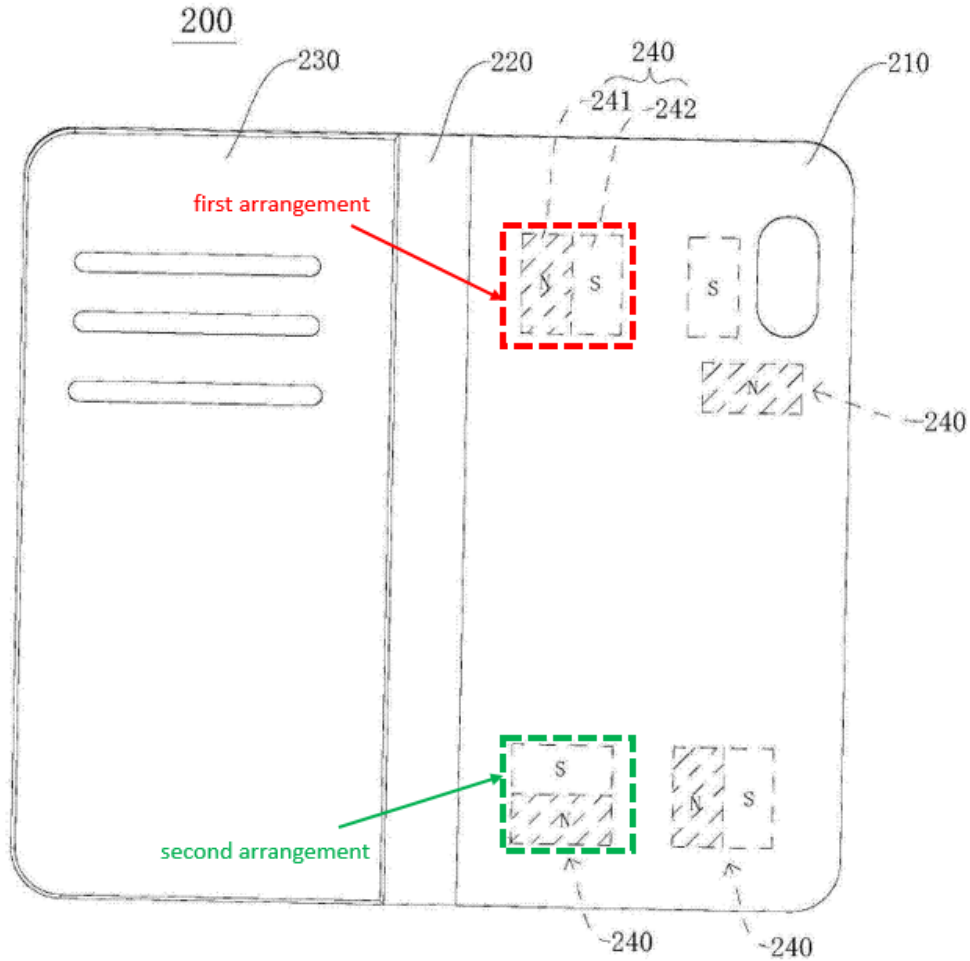
EX1001, FIG. 16A (annotated).

300. Upon examining the description corresponding to Figure 16A and the figure, this support does not appear to provide any explanation for physically

separating the magnetic arrangements using a “*region of nonmagnetic material.*”

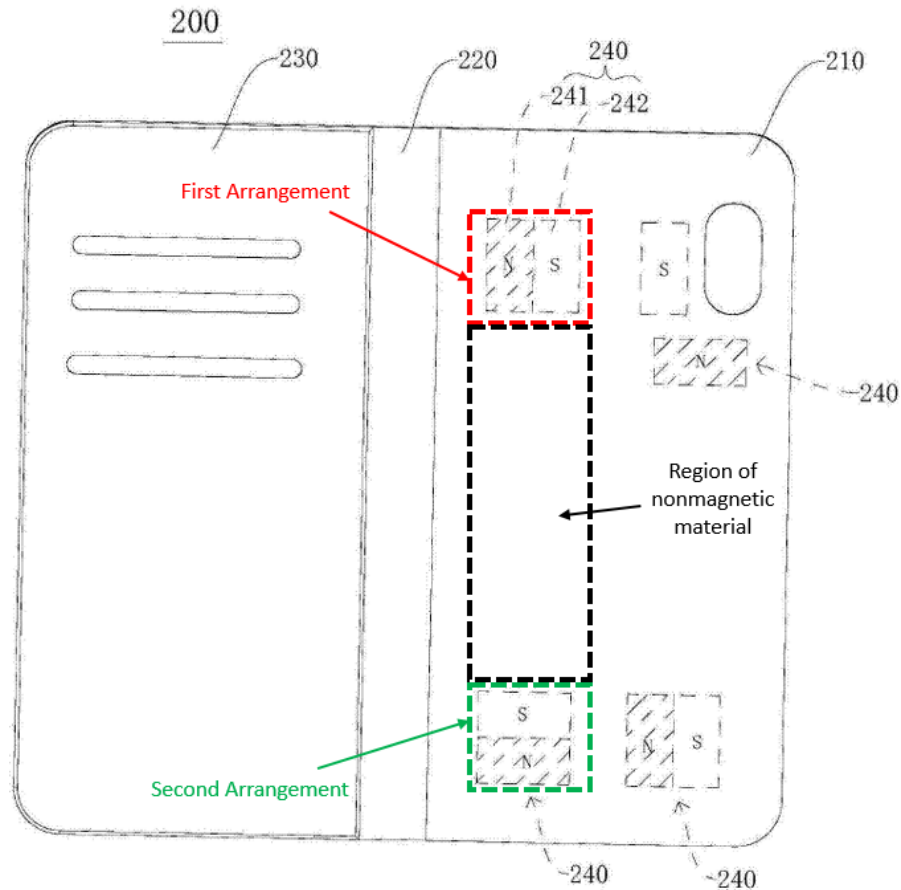
EX1001, 9:66-10:3. That is, this cited portion of specification does not appear to provide a reason or explanation as to why the claimed region should be nonmagnetic. *See, e.g.*, EX1001, 9:66-10:3 (describing FIGs. 16A and 16B). In view of this limited description, a POSA would have understood that two separated magnetic arrangements would have helped to constrain the orientation of the wallet, and that any separation between the magnetic arrangements that is not itself a magnet is sufficient for the claimed “*region of nonmagnetic material.*”

301. Regardless of the interpretation, Zhu describes and depicts a separation between magnetic arrangements using a region of nonmagnetic material. This discloses and/or renders obvious such a region. Zhu discloses or renders obvious such a region. As I explained with reference to claim elements [1.B] and [1.C], Zhu discloses magnet groups 240 that satisfy the claimed first and second arrangements. *See* Sections XVII.B.1.c-d. This can be seen in Figure 4 as I have annotated below:



EX1008, FIG. 4 (annotated).

302. As seen from Figure 4, there is a region between the first and second arrangements that does not include any magnets:



EX1008, FIG. 4 (annotated).

303. In view of the contrasting regions depicted in Figure 4, a POSA would have understood that the regions of back plate 210 that do not include magnets are nonmagnetic. As annotated above, there is a nonmagnetic region between the first and second magnetic regions on back plate 210. Otherwise, the magnets in the case would be attached to the back plate 210 itself instead of to the second magnet groups 240.⁶ See EX1008, ¶30. Thus, Zhu discloses or renders obvious a region of

⁶ Goto teaches wallets made from leather and plastic. EX1012, 11:48-55, 12:9-

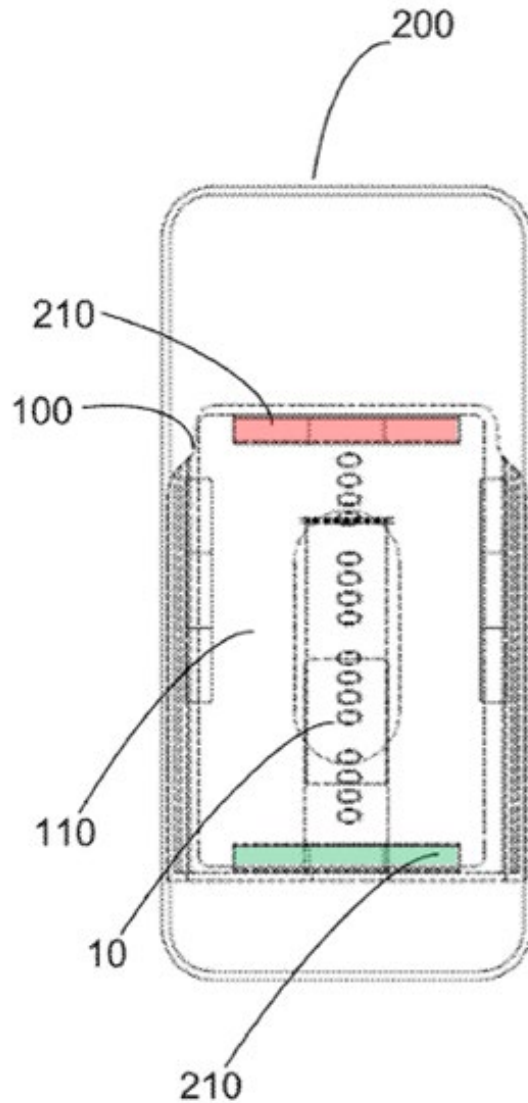
nonmagnetic material separating the first arrangement and the second arrangement, as claimed. Given the lack of any additional requirements in the '641 patent, a POSA would have understood Zhu to have disclosed this claim limitation.

304. Additionally, I note that any of the regions between any of Zhu's magnet groups 240 are also "nonmagnetic." For example, Zhu describes the mobile phone case of Figure 3 as a "rectangle," EX1008, ¶29, and the case of Figure 4 has the same rectangular shape. Zhu also describes the magnet groups in the case of Figure 3 as located in the corners, EX1008, ¶29, and the same is true of the case of Figure 2 and the cover of Figure 4. Like Figure 16A of the '641 patent, each of Zhu's second magnet groups 240 is separated from any other second magnet group 240 by a region of back plate 210. EX1008, ¶29, FIG. 4. In this manner, the regions between any of these magnet groups 240 located in the corners of back plate 210 also teach the claimed "*region of nonmagnetic material*."

- g. [1.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement**

19. If Patent Owner argues Zhu does not render this element obvious, it would have been obvious in view of Goto that Zhu's cover be made from leather or plastic because those were common wallet materials. *See* Section VI.A; EX1019, ¶157.

305. For reasons similar to claim element [1.E.1], Zhu discloses or renders obvious claim element [1.E.2]. I note that similar to claim element [1.E.1], the specification of the '641 patent does not describe this claim element or provide further elaboration on its meaning. I understand that during prosecution the applicant again solely relied on Figure 16A as providing support for this claim limitation. EX1002, 327.



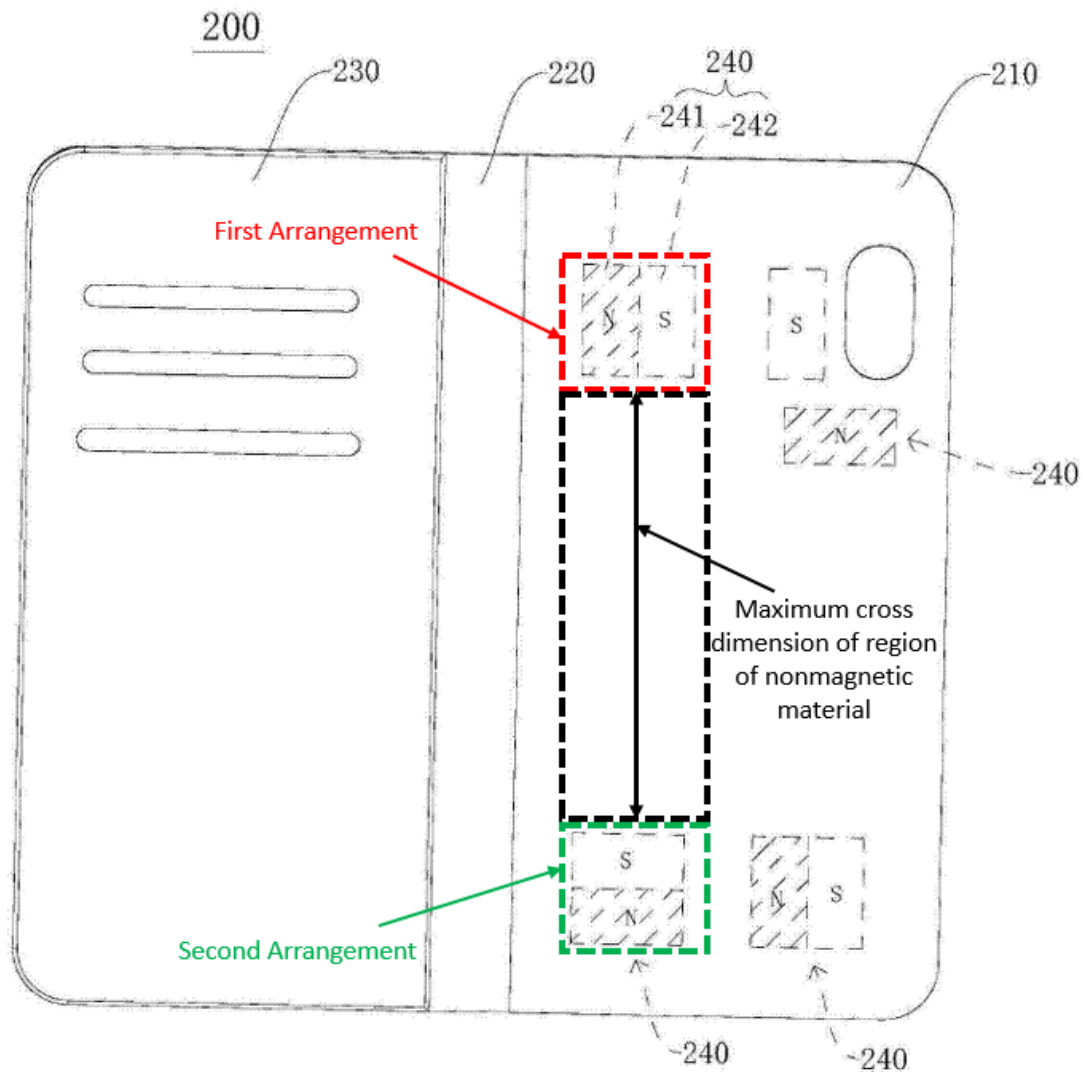
EX1001, FIG. 16A (annotated).

306. Figure 16A includes “electronic display device case magnets (device-side attachments) 210” which have been annotated above. EX1001, 9:66-10:3. Within each of these magnet groupings 210, Figure 16A shows that the magnets are touching or abutting one another. In this manner, the claimed “*distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” would be zero.

307. In view of Figure 16A and the lack of any distance between the “*immediately adjacent*” regions within a magnetic arrangement, claim element [1.E.2] would therefore be satisfied whenever two magnetic arrangements are “separated geographically” or simply are not abutting one another. EX1002, 266. That is, the claimed “*region of nonmagnetic material*” has a “*maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” whenever the two magnetic arrangements are “separated geographically” or simply are not abutting one another. EX1002, 266.

308. Based on this understanding and in view of the explanation I provided for claim element [1.E.1], Zhu’s “*region of nonmagnetic material*” also satisfies and teaches claim element [1.E.2]. Specifically, Zhu describes magnetic groups 240 being located at different corners of a rectangle. EX1008, ¶¶29-30. As I

explained with reference to claim element [1.E.1], this teaches a region of nonmagnetic material separating each magnetic group 240. *See* Section XVII.B.1.f. As seen in Figure 4, Zhu also depicts first polarity and opposite polarity regions for each magnet group 240 being immediately adjacent or abutting each other. EX1008, FIG. 4. When considered together, Zhu therefore shows that a maximum cross dimension of a region separating second magnet groups 240 from one another is larger than the separation between any two adjacent magnets 241 and 242 (which are located immediately adjacent to one another). I have further annotated Figure 4 below to show this relative distance.



EX1008, FIG. 4 (annotated).

309. To the extent that Patent Owner argues that Figure 4 of Zhu cannot be relied on because Zhu does not disclose that the figures are drawn to scale, I disagree based on what a POSA would have understood when analyzing Zhu. Specifically, Zhu describes the magnet groups 240 as being located at corners of a rectangle, and thus provides relative dimensions. EX1008, ¶¶29-30. That is, a

POSA would have known that Figure 4 of Zhu shows back panel 210 as a rectangle having a length greater than its width (that is, two sides are longer than the other two sides, as shown). Second, the '641 specification does not describe the claimed “*maximum cross dimension*” of the “*region of nonmagnetic material*.” I understand that Patent Owner may not require a level of detail in prior art references that is not provided in its own specification. A POSA would have understood then that a “*region of nonmagnetic material*” is simply a region that does not include magnets. Zhu shows these features in the same manner as Figure 16A of the '641 patent allegedly does and in a manner that is similar to how the applicant described these claim features during prosecution. Thus, Zhu teaches the same configuration as the '641 patent.

310. Additionally, I understand this claim element was added during prosecution to address the Examiner’s interpretation of the first and second arrangements as including at least “parts of a single grouping of magnetic material” by indicating that the “first and second arrangement were separated geographically so as not to be part of the same grouping of magnetic material.” EX1002, 266. Zhu shows that the first and second arrangements are separated geographically, in the same manner as Patent Owner argued during prosecution. Thus, Zhu discloses or renders obvious claim element [1.E.2].

h. [1.F.1] the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device

311. The combination of Zhu and Kinshi renders claim element [1.F.1] obvious. For example, Zhu discloses that the “mobile phone clip 200 ... cooperates with the mobile phone case 100 ... to form a phone case assembly.” EX1008, ¶31. Here, “each magnet in the plurality of second magnet group[s] 240 interacts with a corresponding magnet in a corresponding first magnet group 140 to accurately position and fix the mobile phone clip 200 to the mobile phone case 100.” EX1008, ¶33. In view of this description, Zhu describes using first and second magnet arrangements to concurrently magnetically couple to a folio-case to a mobile device as recited in the claim. I note that the claim does not require that the wallet connects directly to the mobile device, and the ’641 patent discloses that the wallet may couple to the mobile device directly or to a case in which the mobile device is placed. EX1001, 2:2-4 (“The device-side attachment may be attached to a mobile device or part of a protective case for the mobile device.”). The applicant also explained during prosecution that the mobile device that is recited in the claim is not structurally required, but is recited to define “structural limitations on the wallet.” EX1002, 195; Section VIII. Accordingly, coupling a mobile device that is in a case (as described in Zhu) or that includes a plate affixed to its back surface (as described in Kinshi) satisfies the claim element [1.F.1].

312. When combined with Kinshi, the Zhu-Kinshi wallet magnetically couples to a mobile phone. That is, as I explained in Section XVII.A and depict below in Figure F of my declaration, the combination of Zhu and Kinshi teaches a folio-case with a wallet (Kinshi's plurality of pockets 5) that magnetically couples to a mobile device using Zhu's magnetic groups 240. EX1010, Abstract, ¶¶14, 15; EX1008, ¶¶8, 13, 17, 30.

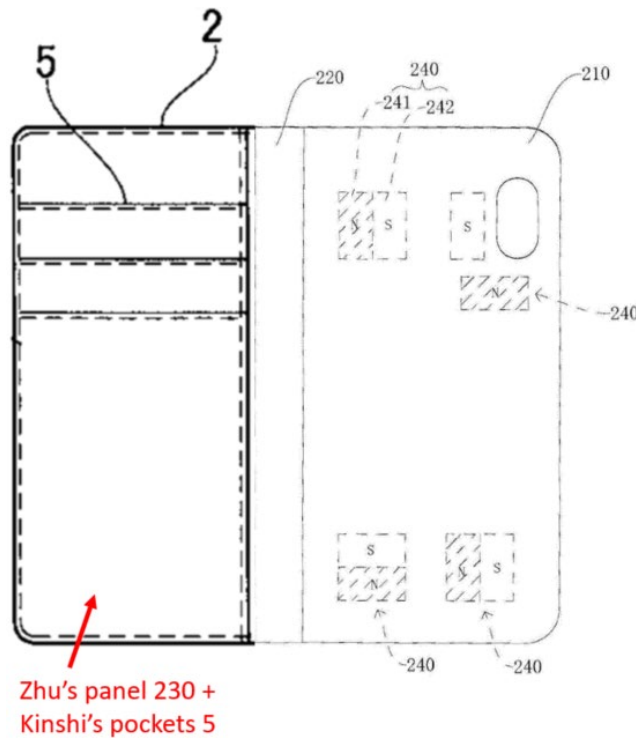


FIG. F: EX1010, FIG. 1; EX1008, FIG. 4 (combined; annotated).

313. Thus, the combination of Zhu and Kinshi teaches claim element [1.F.1].

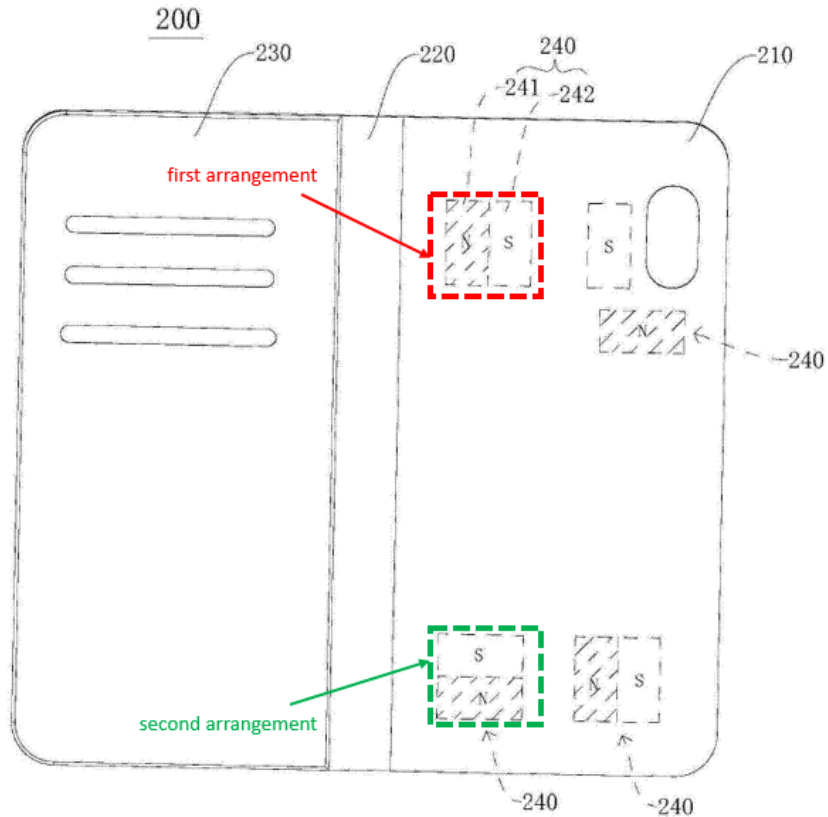
- i. **[1.F.2] the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.**

314. The combination of Zhu and Kinshi renders obvious [1.F.2]. Zhu discloses that its magnetic arrangements cause the mobile phone case and the cover to be “automatically and accurately positioned” when connected. EX1008, ¶¶4-6, 17, 34. Specifically, Zhu explains that the magnet groups aid in causing the mobile phone to be positioned in a particular orientation:

By setting the number of magnet groups, the arrangement direction of the magnets in each magnet group and the direction of the magnetic poles, the magnet groups not only function to attract and fix the mobile phone case and an connected object (such as a mobile phone clip), but also *can finely adjust the relative position of the connected object and the mobile phone case by using the magnetic force of unit magnets forming the magnet groups, so that the connected object and the mobile phone case are automatically and accurately positioned.*

EX1008, ¶17 (emphasis added).

315. For example, Figure 4 from Zhu depicts an arrangement of magnets that provides only one degree of symmetry when rotated about an axis normal to the plane of the page. That is, when a mobile phone having corresponding magnets is laid on top of back plate 210, the mobile phone will be specifically oriented based on the relative positioning and attraction of the magnets located on back plate 210.



EX1008, FIG. 4 (annotated).

316. For example, Figure 2 from Zhu depicts a corresponding arrangement of magnets on the side of the mobile device that would cause the back plate 210 to adopt a specific orientation when attached to the case in Figure 2. EX1008, ¶24.

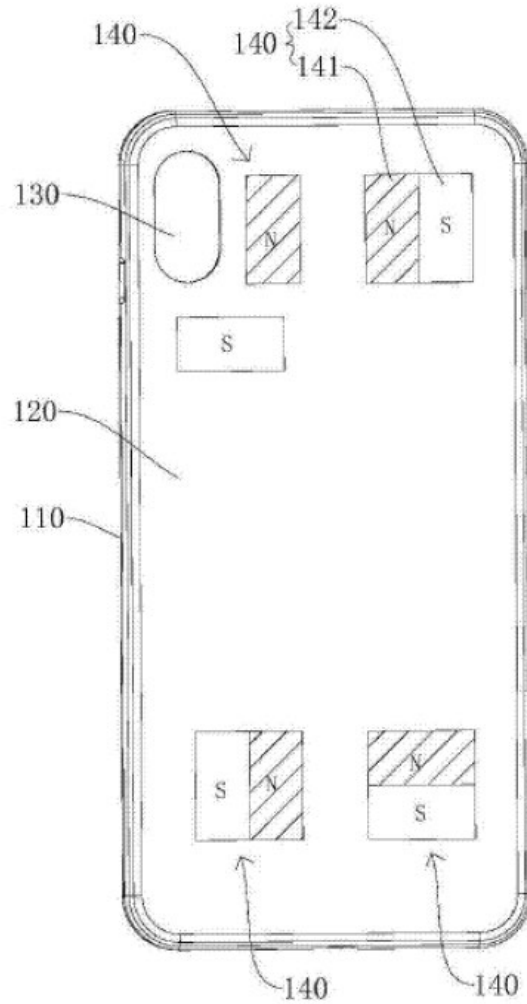


Fig. 2

EX1008, FIG. 2.

317. I note that as I explained in Section VI.B, it was well known in the art to use magnets to specifically align accessories to mobile devices. See, e.g., EX1019, ¶¶142-143, 257-258. For example, as Rothbaum explains, it was well known and common to “design a magnetic attachment system where a mobile electronic device case and an object for connection to the case will attach to one

another in a preferred way. While some designs will only allow attachment of the device case to the object in a single orientation or location, other configurations could be employed as well.” EX1019, ¶257. Zhu provides this same teaching based on the arrangement of the magnets depicted in Figure 4.

318. Zhu’s configuration of magnets located on back plate 210 would cause the attachment of Zhu’s cover to a mobile phone case to occur in a specific orientation as I previously explained. For example, as seen from Figures 2 and 4 from Zhu, this orientation would be a portrait orientation according to the mating and matching of the specific magnet polarities within the magnet groups 240 depicted in Figure 4. EX1008, ¶30; *see also* EX1008, ¶17. Accordingly, when combined with Kinshi, the combined Zhu-Kinshi wallet adopts a specific orientation on the mobile phone according to Zhu’s magnet arrangements. I understand that this interpretation is consistent with the applicant’s characterization provided during prosecution. EX1002, 194-195.

319. I also note that this teaching and understanding of the claimed “*specific orientation*” is consistent with dependent claim 7, which recites “*wherein the first and second arrangement permit coupling to the mobile device in exactly one orientation.*” The combination of Zhu and Kinshi render obvious both claim elements [1.F.2] and dependent claim 7.

2. Independent Claim 5

320. The combination of Zhu, Kinshi, and Goto teach all of the elements of claim 5 for the same reasons that I presented for claim 1. *See* Section XVII.B.1.

Notably, the elements recited in claim 5 are identical to those of claim 1 except for element [5.D]. I present these elements in the table below:

Independent Claim 1	Independent Claim 5
[1.P] A wallet for attachment to a mobile device comprising:	[5.P] A wallet for attachment to a mobile device comprising:
[1.A] a body defining a compartment and having a device side surface;	[5.A] a body defining a compartment and having a device side surface;
[1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[5.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[5.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and

[1.D] <i>a ferromagnetic shield between the first and second arrangements and the compartment;</i>	[5.D] <i>a metallic plate between the first arrangement and the compartment;</i>
[1.E.1] wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,	[5.E.1] wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,
[1.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and	[5.E.2] the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and
[1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[5.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[1.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[5.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

321. As seen in the table, claim element [1.D] recites “*a ferromagnetic shield between the first and second arrangements and the compartment*” while

claim element [5.D] more broadly recites “*a metallic plate between the first arrangement and the compartment.*” Goto teaches the claimed “metallic plate between the first arrangement and the compartment for the reasons that I explained with reference to claim element [1.D]. *See* Section XVII.B.1.e. Specifically, Goto’s magnetic-shielding plates are made of iron foil. EX1012, Abstract, 3:9-40, 7:20-23, 11:53-55. Iron—being a metal—therefore teaches the claimed “*metallic plate.*” When considered in combination with Zhu and Kinshi, Goto’s magnetic-shielding plate would also be located “*between the first arrangement and the compartment*” for the reasons presented with reference to claim element [1.D] as well. Thus, the Zhu-Kinshi-Goto combination teaches or suggests all the elements of claim 5 for the same reasons as I provided with respect to claim 1. *See* Section XVII.B.1.

3. Independent Claim 11

322. The combination of Zhu, Kinshi, and Goto teaches all of the elements of claim 11 for the reasons that I presented for claim 1 and as I further explain below. *See* Section XVII.B.1. I present a comparison of claim 11 to claim 1 below and emphasize the minor elements that differ:

Independent Claim 1	Independent Claim 11
[1.P] A wallet for attachment to a mobile device comprising:	[11.P] A wallet for attachment to a mobile device comprising:
[1.A] a body defining a compartment and having a device side surface;	[11.A] a body defining a compartment and having a device side surface;

[1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[11.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[11.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and
<i>[1.D] a ferromagnetic shield between the first and second arrangements and the compartment;</i>	<i>[11.D] wherein the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second arrangement; and</i>
[1.E.1] wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,	
[1.E.2] the region of nonmagnetic material having a maximum cross	

dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and	
[1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[11.E.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[1.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[11.E.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

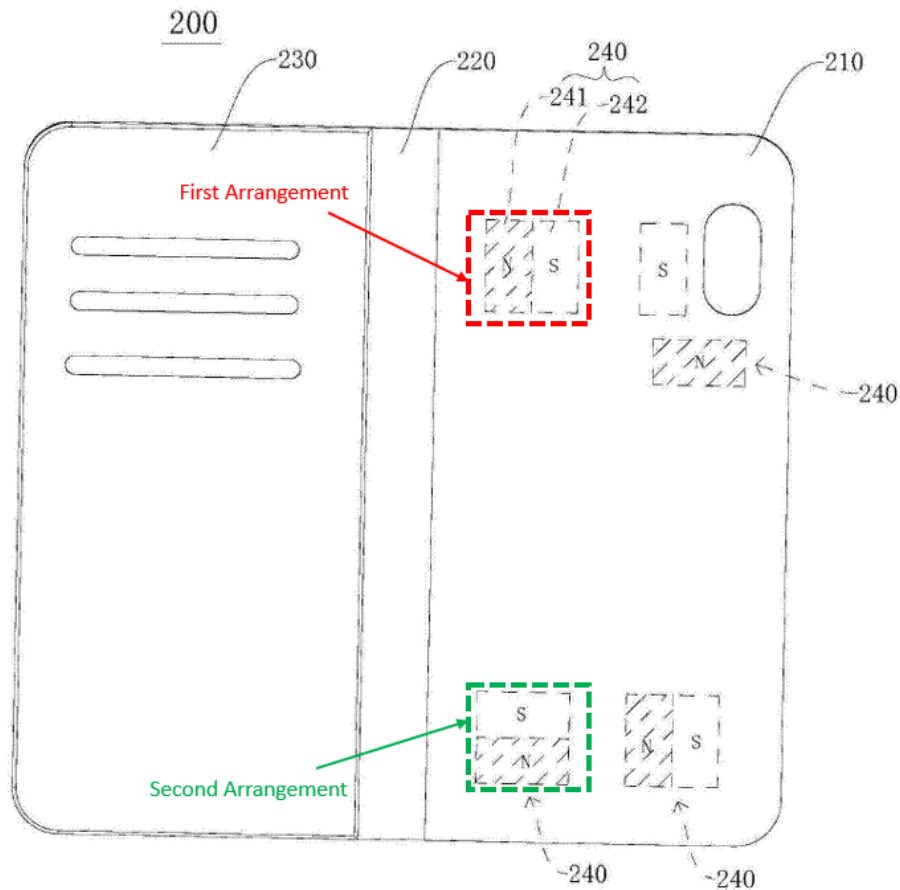
323. As seen from this table, claim elements [11.P]-[11.C], [11.E.1], and [11.E.2] of claim 11 are identical to elements [1.P]-[1.C], [1.F.1], and [1.F.2] of claim 1.

324. In terms of differences, claim 11 does not recite a “*region of nonmagnetic material*” or “*ferromagnetic shield*,” as recited in elements [1.D], [1.E.1], and [1.E.2]. Instead, claim element [11.D] states that “*the first magnetic arrangement has at least one of a different orientation or a different geometric*

pattern than the second arrangement.”^[7] For the reasons that I further explain below, Zhu teaches claim element [11.D].

325. For example, as I previously explained, Figure 4 of Zhu depicts four second magnet groups 240 positioned at corners of back plate 210. *See* EX1008, ¶30; *see also* EX1008, ¶¶8, 13, 17; Section XVII.B.1.c.

⁷ Based on my review of the prosecution history, I understand that the applicant relied on Figure 19 as allegedly providing specification support for claim element [11.D]. EX1002, 329. Figure 19, however, is directed to a “charging device 500” rather than a wallet. EX1001, 10:20-25. Figure 19 also does not depict different orientations or different geometric patterns as recited in claim element [11.D]. Rather, support for this element in the ’641 patent appears to be the same disclosure from Baca that is incorporated into FIGs. 43A-I.



EX1008, FIG. 4 (annotated).

326. Zhu discloses that “[t]he magnets 241 and 242 of at least one second magnet group 240 are arranged horizontally, and the magnets 241 and 242 of at least one second magnet group 240 are arranged vertically.” EX1008, ¶30. In fact, Zhu explains that “the arrangement direction only needs to meet the following conditions: *the magnets of at least one first magnet group are arranged horizontally, and the magnets of at least one first magnet group are arranged vertically.*” EX1008, ¶29 (emphasis added). In view of this statement, Zhu describes claim element [11.D] where “*the first magnetic arrangement has at least*

one of a different orientation or a different geometric pattern than the second arrangement.” Because Zhu describes and depicts a first magnet group being arranged horizontally with a second magnet group being arranged vertically, Zhu teaches magnetic arrangements having different orientations as recited in claim element [11.D]. EX1008, ¶29, FIG. 4.

C. Dependent Claims 2-4 and 6-7

1. Claim 2: The wallet of claim 1 wherein the body defines at least one content removal slot.

327. The Zhu-Kinshi combination renders claim 2 obvious. The Zhu-Kinshi wallet includes at least one pocket for storing a card such as a credit card or identification card. *See* Section XVII.B.1.b. Kinshi describes that the “openings of the pockets 5 are formed in a direction along the horizontal direction in FIG. 1 to allow cards to be slid in and out in the vertical direction.” EX1010, ¶15. As I previously explained, the combination of Kinshi’s “plurality of pockets 5 for storing cards” with Zhu’s panel 230 teaches the claimed “*compartment*” located on the claimed “*body*” and further teaches a “*content removal slot*” as recited in claim 2. EX1010, Abstract, ¶¶14, 15. For example, Kinshi’s “openings” in pockets 5 that “allow cards to be slid in and out” are slots by which content may be removed from a compartment. EX1010, ¶15. This therefore teaches the claimed “*content removal slot*” recited in claim 2.

2. **Claim 3: The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.**

328. The combination of Zhu and Kinshi renders claim 3 obvious. Zhu and Kinshi each describe that the mutual attraction of the magnets should be strong enough to hold the phone and wallet together. EX1008, ¶17; EX1010, ¶21. For example, Zhu states:

By setting the number of magnet groups, the arrangement direction of the magnets in each magnet group and the direction of the magnetic poles, *the magnet groups not only function to attract and fix the mobile phone case and an connected object (such as a mobile phone clip), but also can finely adjust the relative position of the connected object and the mobile phone case by using the magnetic force of unit magnets forming the magnet groups, so that the connected object and the mobile phone case are automatically and accurately positioned.*

EX1008, ¶17 (emphasis added).

329. Zhu discloses that the magnetic arrangements “accurately position and *fix* the mobile phone clip to the mobile phone case.” EX1008, ¶15.

330. Kinshi further states:

[H]olding panel 7 is *automatically secured in place on the base piece 3 by the mutual attraction (magnetic attraction) of the magnet* provided on the holding panel 7 and the magnet provided on the base piece 3 simply by placing the holding panel 7 near the surface of the

base piece 3, thereby enabling improved ease of handling when securing the mobile phone in the mobile phone case 1.

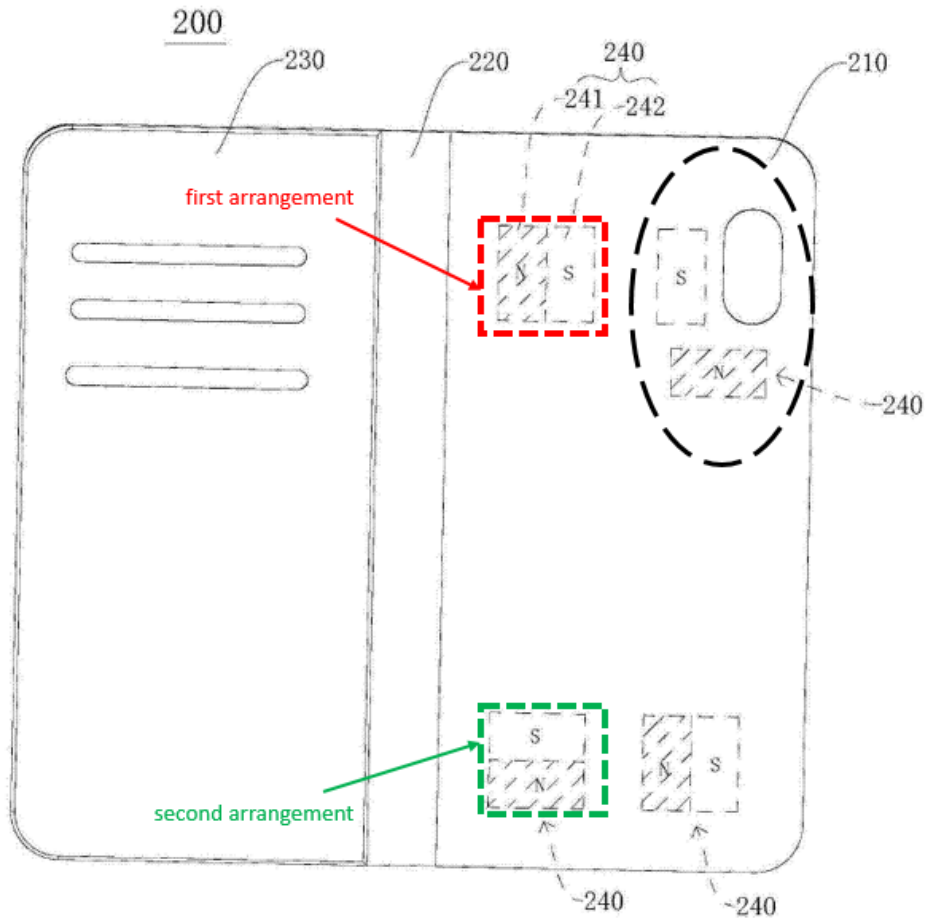
EX1010, ¶21 (emphasis added).

331. Kinshi discloses that a mobile phone is “secured in place” when coupled to its folio-style wallet via mutual magnetic attraction. EX1010, ¶7.

332. In view of these statements, Zhu and Kinshi describe using magnets having an attractive force “*sufficient to support a weight of the mobile device*” as recited in claim 3. A POSA would have understood and found obvious that the attractive force described in Zhu and Kinshi would have been sufficient to support the weight of a mobile device to prevent unintentional detachment from the wallet. *See* Section VI.B.

3. Claim 4: The wallet of claim 1 wherein a spacing between the first region and the second region in the first arrangement is less than 2 mm.

333. For reasons similar to those that I presented for claim element [1.E.2], Zhu renders claim 4 obvious. *See* Section XVII.B.1.g. Namely, as seen in Figure 4 from Zhu, back plate 210 includes three second magnet groups 240 that are formed without any space between adjacent magnets 241 and 242. EX1008, FIG. 4. Figure 4 also includes a fourth second magnet group 240 (shown in the black oval annotated below) that is formed with spacing between adjacent magnets 241 and 242 due to the presence of a lens hole (not numbered). *See* EX1008, ¶27.



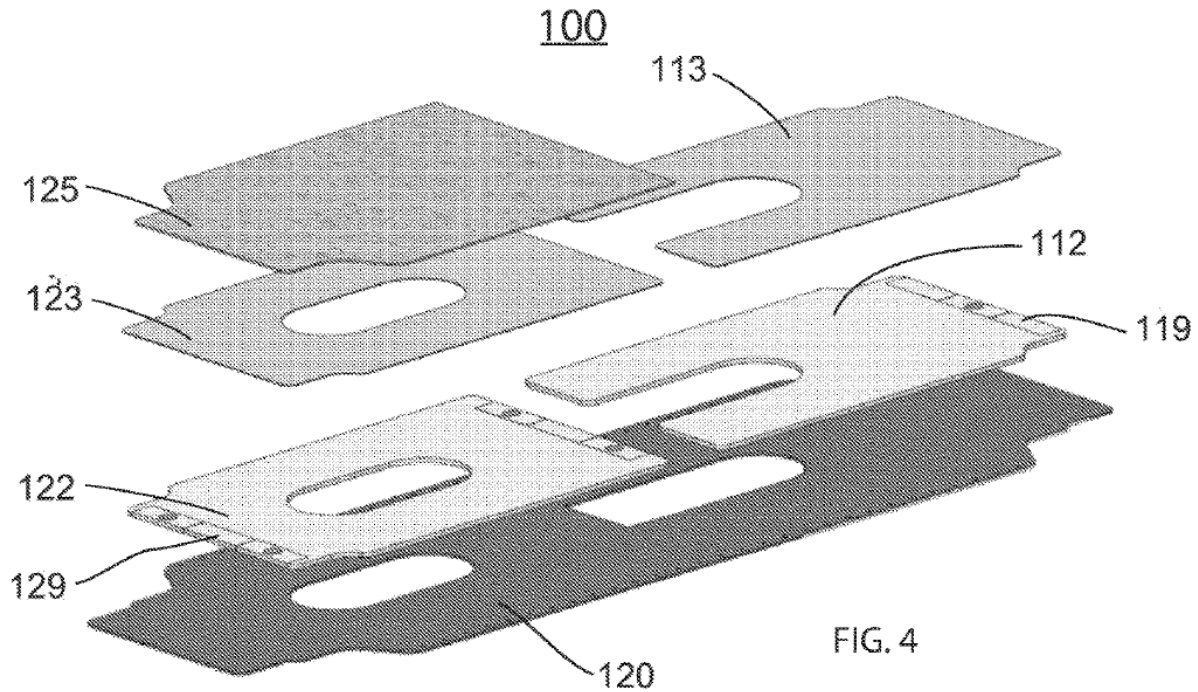
EX1008, FIG. 4 (annotated).

334. Examining the first and second arrangements that I have annotated above, it can be seen that magnets 241 and 242 in each group are directly abutting each other and are immediately adjacent to one another. When such magnets are abutting in this manner, the spacing between them is less than 2mm as recited in claim 4.

335. To the extent Patent Owner argues that Figure 4 from Zhu is insufficient to disclose or suggest specific lengths or distances, I would disagree.

Figure 4 of Zhu clearly illustrates two types of second magnet groups 240—several without any space between the constituent magnets 241 and 242 and one having space between the constituent magnets—and thus provides a sufficient disclosure for a POSA to estimate and discern relative positions between the two types of second magnet groups. This is especially true given that the claim simply requires that the distance be less than 2mm. When two magnets are depicted as abutting, this distance is less than 2mm.

336. Further, the specification of the '641 patent provides no description, let alone any criticality, for the claimed range of “less than 2 mm.” Claim 4 was added with the filing of the application that would become the '641 patent, without pointing to any support for the claim. *See* EX1002, 116. During prosecution, Patent Owner merely pointed to Figure 4 of the '641 patent as disclosing the claimed range. EX1002, 328. Figure 4—as I have reproduced below—shows magnetic arrangements (e.g., 119, 129) in which the magnets abut each other. These are the same as in Zhu. EX1008, FIG. 4, ¶27.



EX1001, FIG. 4.

337. I understand that Patent Owner may not hold the prior art to a different standard than it holds the claimed invention by requiring explicit disclosure of the claimed range. Additionally, I understand that Patent Owner may not require a level of detail in prior art references that is not provided in its own specification.

338. In view of the above, Zhu illustrates this claim element to the same standard that it is supported by the specification of the '641 patent. Accordingly, Zhu renders obvious this claim element.

4. Claim 6: The wallet of claim 1 wherein the device side surface is substantially planar and an attachment surface of the mobile device is also substantially planar.

339. Zhu and Kinshi both disclose claim 6. During prosecution, I understand that the applicant explained that planar is intended to distinguish from arcuate surfaces:

Regarding claim 7, the Office has taken issue with the term “substantially” planar. Applicant submits that “substantially” does not create any lack of clarity and such has consistently be held to be the case in prior precedent binding on the Office. Applicant notes that “planar” has a ideal geometric definition that is unachievable in the real world. Applicant intends to distinguish from arcuate surfaces having a significant radius of curvature and surfaces that have protrusive attachment features.

EX1002, 195 (highlighted).

340. Zhu describes back plate 210 as a plate, which indicates a flat sheet of material. EX1008, ¶30. This teaches a “*device side surface*” that is “*substantially planar*” as recited in claim 6. Zhu also describes forming “concave cavities” in which to dispose magnets in the body 110 of the mobile phone case to which mobile folio/clip 200 attaches. EX1008, ¶25. A POSA would have understood that such cavities allow the magnets to reside within the body 110 or be buried within body 110, which still provides a “*substantially planar*” surface. In Zhu, when a mobile device attaches to back plate 210, the mobile device is also substantially planar. EX1008, ¶31.

341. Kinshi describes forming each of base 3 and holding plate 7 out of a

“plurality of sheet-shaped magnets.” EX1010, ¶18. Forming these components using “sheet-like” structures also teaches “*substantially planar*” surfaces for a device side surface in the combined Zhu-Kinshi wallet cover as well as the attachment surface of a mobile device. *See* Section XVII.A.

5. Claim 7: The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly one orientation.

342. Zhu discloses or otherwise renders obvious claim 7 for the reasons that I provided with respect to claim element [1.F.2]. *See* Section XVII.B.1.i. As I previously explained, the configuration of magnets depicted in Figure 4 of Zhu has only one degree of rotational symmetry, which teaches one particular orientation when attaching a mobile device to back plate 210. EX1008, FIG. 4, ¶30; *see also* EX1008, ¶17; Section XVII.B.1.i. A POSA would have understood that this configuration permits coupling between Zhu’s folio/clip 200 and case 100 (containing a mobile device) in exactly one orientation. Indeed, as I previously explained, it was well known in the art to configure magnetic attachments in this way, so a POSA would have understood Zhu to also provide a similar teaching. *See* Section VI.B; EX1019, ¶¶142-143, 257-258.

XVIII. GROUND 2B: THE COMBINATION OF ZHU, KINSHI, GOTO, AND COX RENDERS OBVIOUS CLAIM 3.

343. Claim 3 recites “*The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary*

arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.”

344. The combination of Zhu, Kinshi, and Goto renders obvious a magnetically attachable wallet for a mobile device for the reasons that I previously explained. *See* Section XVII.B.1. Zhu and Kinshi each describe that the mutual attraction of the magnets should be strong enough to hold the phone and wallet together. EX1008, ¶17; EX1010, ¶21. For example, Zhu states:

By setting the number of magnet groups, the arrangement direction of the magnets in each magnet group and the direction of the magnetic poles, ***the magnet groups not only function to attract and fix the mobile phone case and an connected object (such as a mobile phone clip), but also can finely adjust the relative position of the connected object and the mobile phone case by using the magnetic force of unit magnets forming the magnet groups, so that the connected object and the mobile phone case are automatically and accurately positioned.***

EX1008, ¶17 (emphasis added).

345. Kinshi further states:

[H]olding panel 7 is ***automatically secured in place on the base piece 3 by the mutual attraction (magnetic attraction) of the magnet*** provided on the holding panel 7 and the magnet provided on the base piece 3 simply by placing the holding panel 7 near the surface of the base piece 3, thereby enabling improved ease of handling when securing the mobile phone in the mobile phone case 1.

EX1010, ¶21 (emphasis added).

346. In view of these statements, Zhu and Kinshi describe using magnets having an attractive force “*sufficient to support a weight of the mobile device*” as recited in claim 3.

347. To explicitly demonstrate that such magnetic attraction was well known in the art, Cox describes a similar technique directed to using magnets to attach an article to a protective case of a mobile device. EX1017, ¶52. For example, Cox describes using magnets that

produce enough attractive force between the article 340 and case 300 such that the two components do not unintentionally or undesirably separate after attachment therebetween due to, for example, the dropping of the components, jostling of the components in a pocket, backpack, or other container, or even through normal use of the components.

EX1017, ¶52. Cox also describes that the choice of magnets may

vary in strength in accordance with the size or weight of the article 340—heavier/larger articles 340, such as a satellite communication device or credit-card reader, may have larger/stronger/more magnets 350, while slimmer/lighter articles 340, such as a decorative plate, may have smaller/weaker/fewer magnets 350.

EX1017, ¶52. The choice of magnets may also “account for and defend against the placement and direction of anticipated forces.” EX1017, ¶52. Cox thus explicitly

describes using magnets that produce an attractive force that varies with the weight of the components and defends against anticipated forces. EX1017, ¶52. Namely, being able to vary the number of strength of the magnets used to account for varying weights teaches selecting a magnet that can sufficiently support the weight of a mobile device. EX1017, ¶52. In this manner and in view of Cox’s teachings, a POSA would have been motivated to and would have selected appropriate magnets in the Zhu-Kinshi-Goto wallet to provide “*an attractive force*” that is “*sufficient to support a weight of the mobile device*” as recited in Claim 3. Cox thus provides express motivation to modify the Zhu-Kinshi-Goto wallet. And POSA would have understood that different magnetic materials have different attractive forces, and would have reasonably expected success in applying Cox’s teachings to select appropriate magnets to achieve the predictable result of preventing unintentional separation for the Zhu-Kinshi-Goto wallet. EX1017, ¶52.

XIX. GROUND 2C: THE COMBINATION OF ZHU, KINSHI, GOTO, AND LAUDER RENDERS OBVIOUS CLAIM 4.

348. Claim 4 recites “*The wallet of claim 1 wherein a spacing between the first region and the second region in the first arrangement is less than 2 mm.*”

349. Zhu-Kinshi-Goto teaches a wallet clip/case that attaches using magnets. *See* Section XVII.B.1. In a similar endeavor of using alternating magnets to attach an accessory to a mobile device, Lauder describes that the spacing between adjacent magnets “is, of course, predicated upon the desired magnetic

properties of the magnetic field generated.” EX1018, 23:24-26.

350. Specifically, Lauder describes a magnetic mechanism for releasably attaching an accessory device to an electronic device. EX1018, Abstract, 1:25-27. Lauder’s mechanism includes a plurality of magnets disposed adjacent to each other on the electronic device (or the case thereof), and a corresponding plurality of magnets disposed on the accessory device. EX1018, 13:39-45, 16:63-17:10. Lauder further describes that, when magnets of opposite polarities are disposed next to each other, they may be “magnetically attached to each other,” so that the magnetic bond between the magnets may “maintain the integrity of the sequence of magnets in the magnetic assembly.” EX1018, 23:21-29.

351. Lauder further describes that “magnets having anti-aligned polarities,” such as those in Zhu, “can be magnetically attached to each other” to thereby “maintain the integrity of the sequence of magnets in the magnetic assembly.” EX1018, 23:26-30. Thus, Lauder explicitly teaches placing adjacent anti-aligned magnets (such as those of Zhu) into direct contact, which is “less than 2 mm,” as claimed. *See* Section XVII.C.3.

352. It would have been obvious to space the magnets in the magnetic assemblies of the Zhu-Kinshi-Goto wallet “less than 2mm,” as claimed. A POSA would have been motivated to implement Lauder’s teachings in the Zhu-Kinshi-Goto wallet for the reason stated by Lauder: to “maintain the integrity of the

sequence of magnets in the magnetic assembly.” EX1018, 23:26-30. POSAs would have had a reasonable expectation of success because they would have understood the properties of magnets, and the resulting magnetic arrangements (magnets being attached with no spacing) would have been predictable.

XX. GROUND 2D: THE COMBINATION OF ZHU, KINSHI, GOTO, AND HAYMOND RENDERS OBVIOUS CLAIM 9.

353. Claim 9 recites “*The wallet of claim 1 further comprising: a finger loop on a surface opposite the device side surface.*”

354. Haymond describes a technique for forming a finger tether strap in a pocket device to tether a cellular phone to a user. EX1015, Abstract, 1:17-22. Haymond’s pocket device 10 attaches to a cellular phone and includes a pouch 18 that is sized to hold a card (e.g., a credit or ID card). EX1015, 1:64-2:22. A finger tether strap is provided in a front surface of pocket device 10 by forming slots 36 and 38 in the outer panel 28 thereof. EX1015, 4:8-11, FIG. 1.

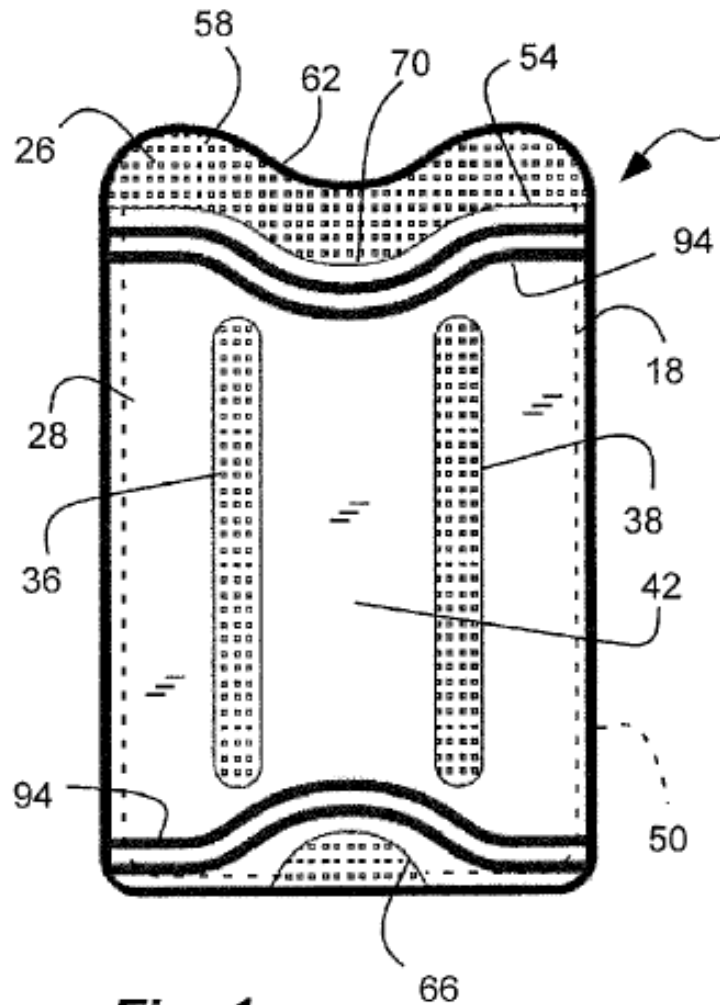


Fig. 1

EX1015, FIG. 1.

355. Haymond is analogous to Zhu, Kinshi, Goto, and the '641 patent because Haymond discloses a pocket device (e.g., a wallet) that attaches to a mobile device. EX1015, 1:18-22, 4:9-11. Haymond explains that it is desirable to “tether” such a wallet and mobile device to a user. EX1015, 1:40-44. A POSA would have understood that such a “tether” would prevent a user from dropping the

mobile phone either during use or in removing or a placing the mobile phone into a pocket. *See, e.g.*, EX1032, ¶¶4, 9-16 (describing the well-known use of a “universal finger loop which solves the obvious concern of dropping, damaging, or losing one’s cellular phone or portable electronic device by facilitating a secure grip during interaction”).

356. Haymond forms this “tether” by, for example, providing a “pair of slots” “in the outer panel” of a pouch of a pocket device, thereby “form[ing] a strap 42 in the outer panel 28” such that a “user’s finger 46 can be inserted under the strap 42 to tether the pocket 10, and thus the cellular phone 14, to the user’s finger.” EX1015, 4:8-11. Haymond further describes forming the pocket device “as a single, unitary, monolithic body” “made of silicone.” EX1015, 4:11-13.

357. A POSA would have been motivated to modify the Zhu-Kinshi-Goto wallet further in view of Haymond to include a finger strap for tethering the wallet (and thus the smartphone) to the user’s hand. EX1015, 1:18-22. Such a modification would result in adding a finger strap to the outer surface of the wallet and provide a secure mechanism to prevent damage caused by potentially dropping a smartphone. *See, e.g.*, EX1032, ¶¶4, 9-16 (describing the well-known benefits of attaching a “universal finger loop” onto a cellular phone). A POSA would have therefore been motivated to implement Haymond’s finger strap with the Zhu-Kinshi-Goto wallet to provide a more secure grip for a user. EX1032, ¶¶4, 9-16.

358. A POSA would have also known how to form this combination. For example, such a modification would include affixing Haymond's pocket device 10 to the outer surface of the wallet or adding a slot into the outer surface of the wallet. Such modification would result in a wallet for a mobile phone that includes a finger strap for tethering the wallet (and the mobile phone) to the user.

359. A POSA also would have had a reasonable expectation of success in modifying the wallet of Zhu-Kinshi-Goto further in view of Haymond. As I previously explained, Haymond provides a simple technique for forming a finger strap in the surface of a wallet such that it tethers a mobile phone to a user's hand. EX1015, 1:40-44. Such a modification merely amounts to using Haymond's known technique to improve a similar device ready for improvement. *See, e.g.*, EX1032, ¶¶4, 9-16. Alternatively, such a modification is merely combining known prior art elements to achieve the predictable result of a wallet for a handheld device that includes a finger strap. EX1032, ¶¶4, 9-16.

XXI. GROUND 2E: THE COMBINATION OF ZHU, KINSHI, GOTO, AND MITSUYAMA RENDERS OBVIOUS CLAIM 10.

360. Claim 10 recites “*The wallet of claim 1 wherein the body defines an opening into the compartment and wherein a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening.*”

361. As I explained with reference to Ground 1E, I understand that during

prosecution, the applicant characterized claim 10 and the tapering with reference to Figures 8B and 14A from the '641 patent. EX1002, 396-397; Section XVI.

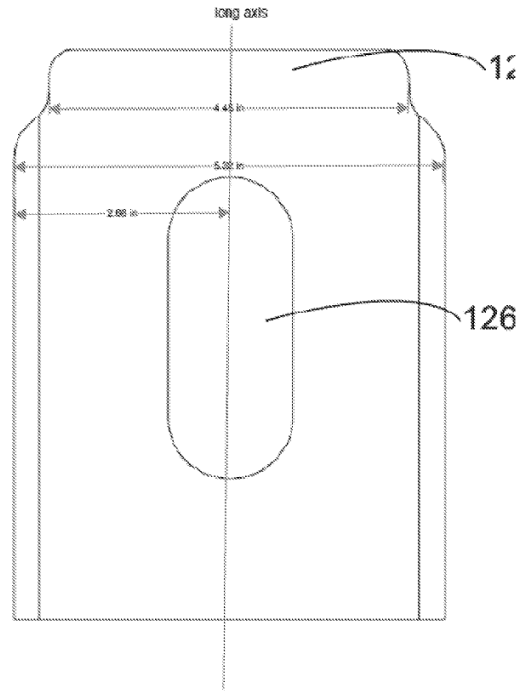
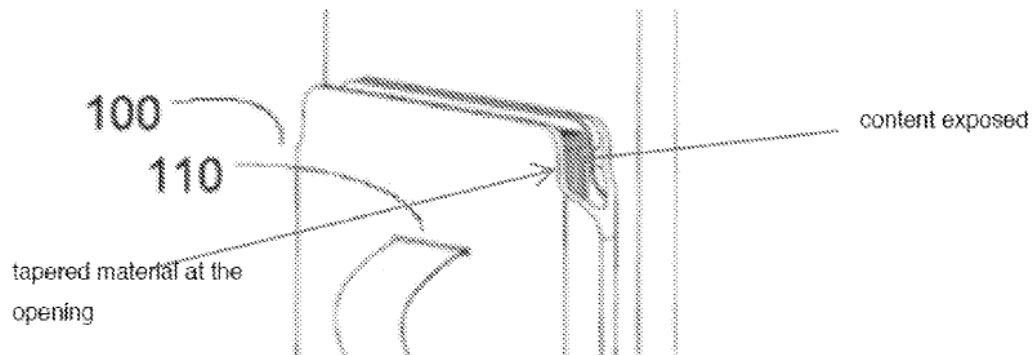


FIG. 8B

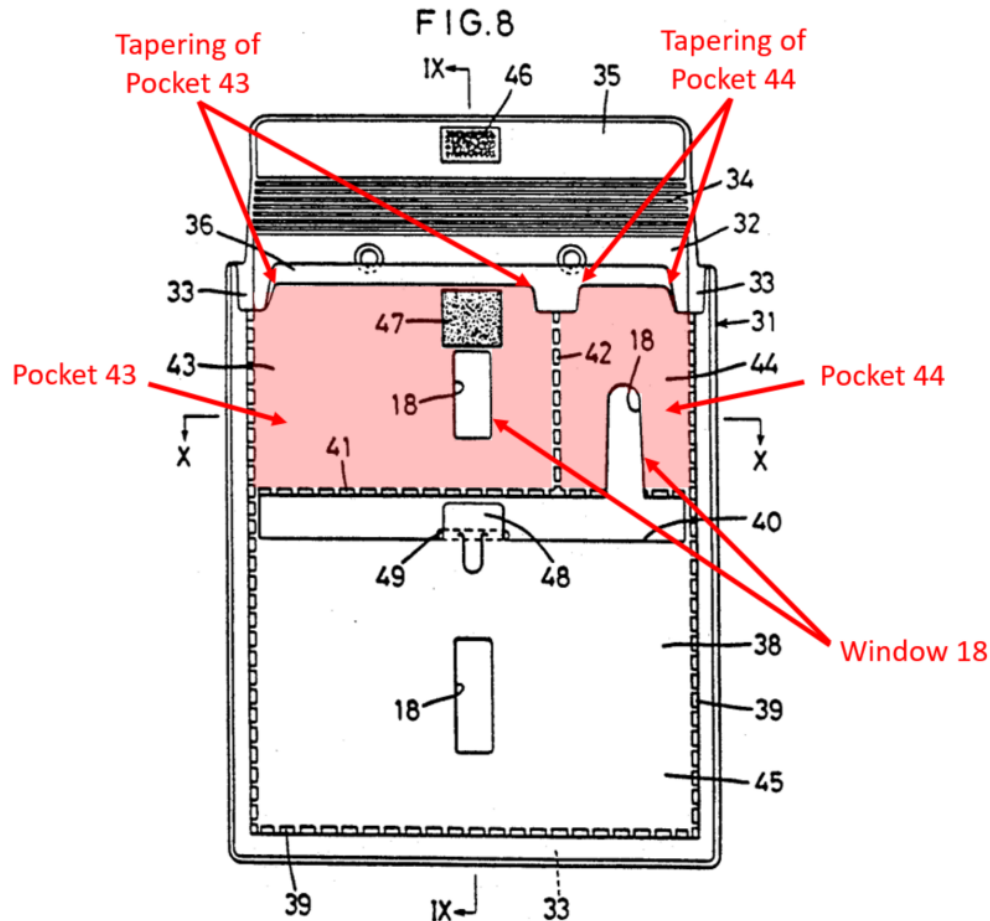
EX1002, 397.



EX1002, 398.

362. Mitsuyama teaches the same tapered opening for the reasons that I

previously explained.⁸ See Section XVI. Namely, Mitsuyama depicts the same tapered opening for pockets 44 and 43 as seen in Figure 8, which I have annotated below. EX1016, FIG. 8, 4:1-19.



⁸ I note that during prosecution, the Examiner indicated that “Mitsuyama discloses the use of a tapered corner cutout similar to the invention on a card holding structure.” EX1002, 377. While the applicant argued that the Examiner’s analysis was deficient, the Board did not address Mitsuyama during appeal. EX1002, 398, 457.

EX1016, FIG. 8 (annotated).

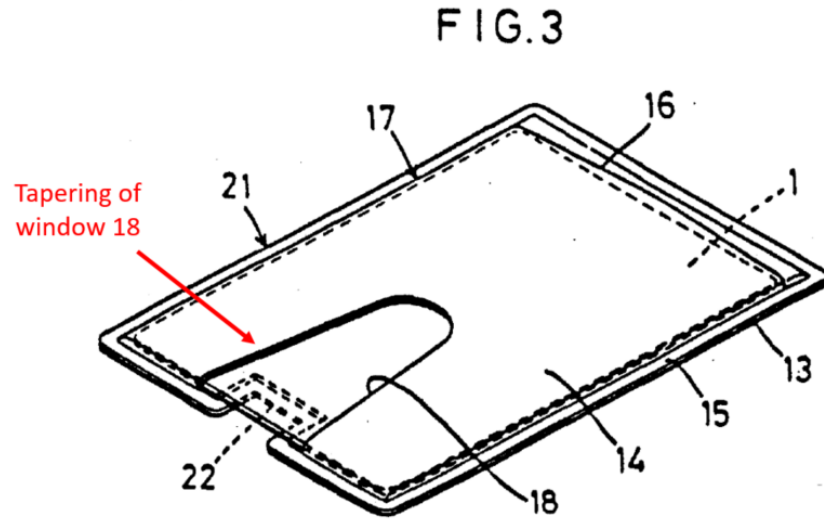
363. As seen in Figure 8, the pockets designated as pockets 44 and 43 include the same tapering described by the applicant and depicted in Figures 8A-8B of the '641 patent. EX1002, 397. For example, Mitsuyama's pocket 44 also includes rounded corners near the opening that expose the edge of a card when one is inserted. EX1016, FIG. 8, 4:1-19. In this manner, Mitsuyama's pockets 44 and/or 43 as depicted in Figure 8 teach "*an opening into the compartment*" and "*a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening*" as recited in claim 10.

364. In view of Mitsuyama's teachings, a POSA would have been motivated to modify one or more of the compartments in the Zhu-Kinshi-Goto wallet to include an opening that tapers along with a finger window, as taught by Mitsuyama. EX1016, FIG. 8, 4:1-19; *see also* EX1016, 1:26-35, 4:37-41. As Mitsuyama explains, such a design would have improved a user's ability to remove cards from a pocket, especially when "are numbed due to cold." EX1016, 1:31-35. For example, this would have allowed a user to more easily remove the cards from the top of a pocket. And a POSA would have known that such a modification would have merely amounted to changing Kinshi's openings on the plurality of pockets 5. The combination of Zhu, Kinshi, Goto, and Mitsuyama would realize a folio-style wallet for a mobile phone that includes a tapered opening extending

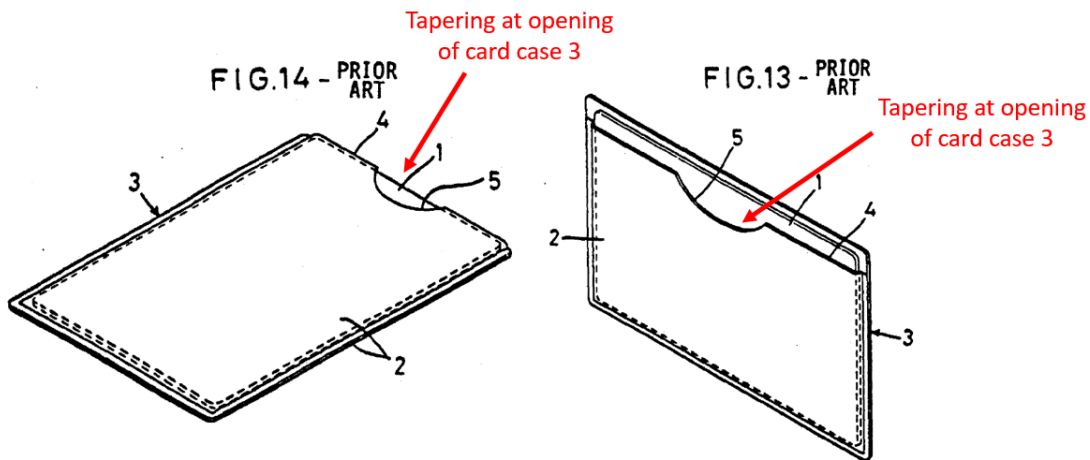
along a long axis of the wallet as recited in claim 10.

365. A POSA would have also had a reasonable expectation of success in modifying the folio/clip wallet of from the Zhu-Kinshi-Goto combination further in view of Mitsuyama to achieve the predictable result of a wallet having a tapered opening. Implementing Mitsuyama's known technique of including a tapered opening would have improved the usability of the wallet of Zhu-Kinshi-Goto by providing easier means to access and retrieve cards and bills contained in the plurality of pockets. As Mitsuyama explains, this would have been especially relevant to users whose "fingers are numbed due to cold." EX1016, 1:26-35, 4:37-41. In this manner, such a modification constitutes simply combining known prior art elements to achieve the predictable result of a wallet that includes a tapered opening for one or more pockets. EX1016, 1:26-35, 4:37-41.

366. As I previously explained in Section XVI, the openings depicted in Figures 3, 13, and 14 of Mitsuyama also provide an alternative way for teaching the elements of claim 10. EX1016, 1:11-25, 3:10-28.



EX1016, FIG. 3 (annotated).



EX1016, FIGs. 13-14.

367. Specifically, I note that the Board analyzed the Ippolito reference during appeal and indicated that Ippolito's tapered portion 18 as depicted as a semi-circle teaches the elements of claim 10. EX1002, 456-457. I have reproduced Ippolito's disclosure below:

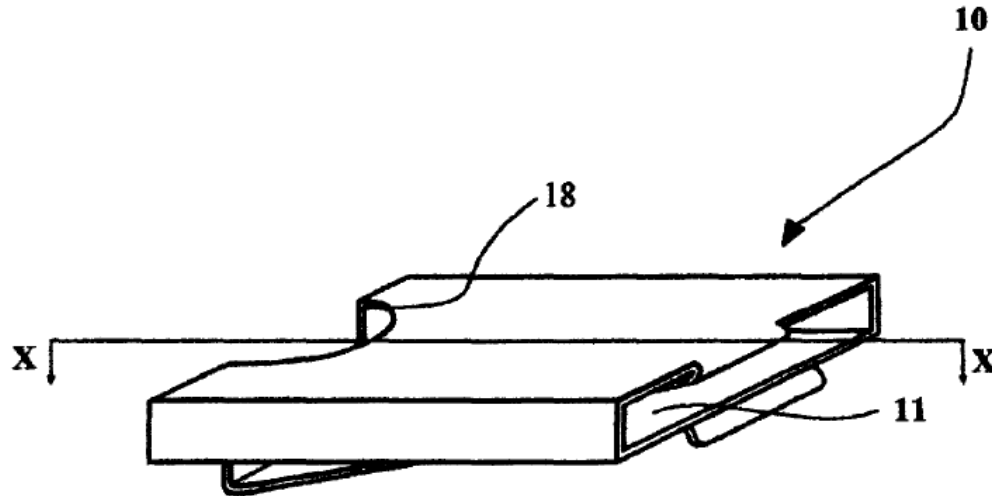


FIG. 1-A

EX1031, FIG. 1-A.

368. Based on Ippolito's disclosure, the Board indicated the following:

Appellant does not specifically address Ippolito's tapered portion 18 or the Examiner's reasons why a person of ordinary skill in the art would have combined Ippolito with the other references. Appeal Br. 15–16, 19. We agree with the Examiner that tapered portion 18 shown in Ippolito's Figure 1-A tapers from the outside edge of the semi-circle toward axis x-x which corresponds to the recited "long axis of the body." For these reasons, we sustain the rejection of claim 11.

EX1002, 457.

369. Based on the Board's explanation—and as seen from Figures 3, 13, and 14 from Mitsuyama as I have annotated above—Mitsuyama also teaches a semi-circle design that teaches the claimed "*material defining the opening [tapering] towards a long axis of the body,*" which also exposes content of the

compartment. That is, Mitsuyama's semi-circle design teaches the same design depicted in Ippolito and which the Board determined taught the tapering recited in claim 10. EX1002, 457; EX1031, FIG. 1-A. In this way, Figures 3, 13, and 14 from Mitsuyama provide an alternative teaching of the elements of claim 10. A POSA would have been motivated to implement any of these designs and would have also had a reasonable expectation of success when implementing any of these designs for the reasons that I previously explained.

370. Thus, the combination of Zhu, Kinshi, Goto, and Mitsuyama renders obvious "*The wallet of claim 1 wherein the body defines an opening into the compartment*" and "*wherein a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening*" as recited in claim 10.

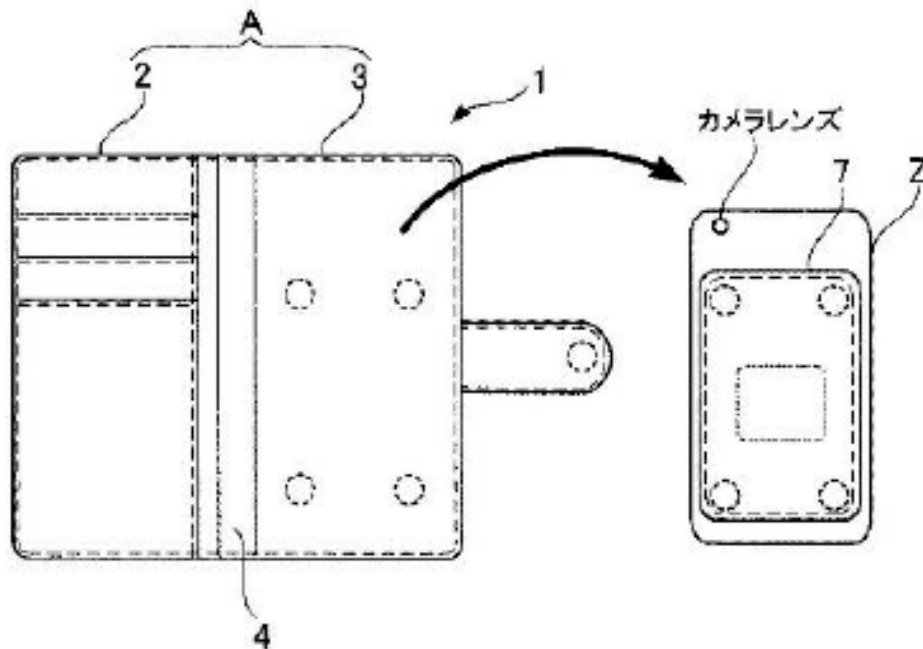
XXII.GROUND 3A: KINSHI RENDERS OBVIOUS CLAIM 11.

371. Kinshi discloses or renders obvious all the elements of claim 11.

A. [11.P]: A wallet for attachment to a mobile device, comprising:

372. I understand that a preamble for a claim is generally not limiting. Relatedly, I again note that during prosecution, the applicant explicitly indicated that the mobile device is not a structural requirement of the claims. EX1002, 195; Section VIII. Regardless of whether the preamble to claim 11 is limiting, a POSA would have found the preamble obvious in view of Kinshi's teachings.

373. As I previously explained in Section XI.D, Kinshi discloses “a mobile phone case comprising a cover piece and a base piece.” EX1010, ¶6. Kinshi’s base piece 3 includes a plurality of “base-side securing parts 81” (i.e., magnets). EX1010, ¶17. Cover piece 2 includes a “plurality of pockets 5 for storing cards.” EX1010, ¶15. A mobile phone Z attaches to the mobile phone case via holding panel 7 that includes a plurality of holding-panel-side securing parts 82” (i.e., magnets). EX1010, ¶18.



EX1010, FIG. 3.

374. Kinshi’s holding panel 7 attaches to mobile phone Z (or to a case on mobile phone Z) by an adhesive sheet 71. EX1010, ¶20. By this configuration, “when putting a mobile phone in the mobile phone case, the holding panel is automatically secured in place on the base piece by the mutual attraction (magnetic

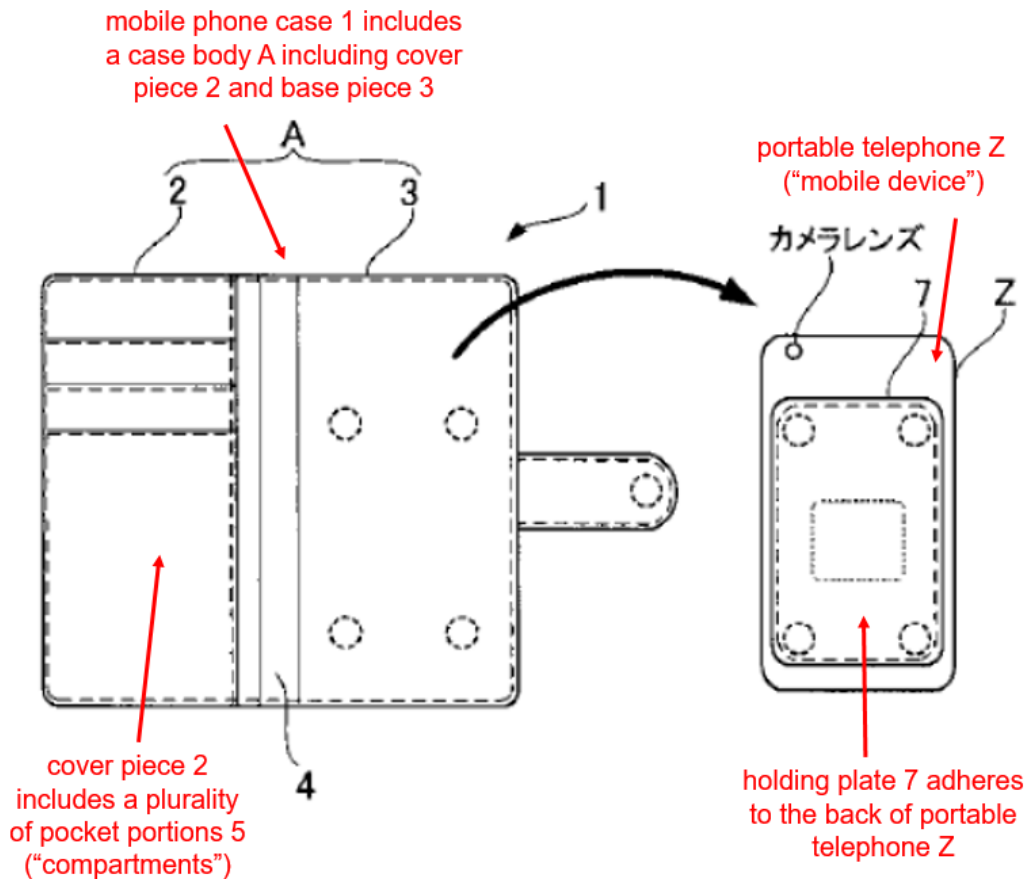
attraction)” of the magnets in the holding panel and in the base piece.⁹ EX1010, ¶7.

375. Accordingly, Kinshi’s mobile phone case including pockets 5 and magnets 81 teaches a “*wallet for attachment to a mobile device*” as recited in the preamble to claim 11.

B. [11.A]: a body defining a compartment and having a device side surface;

376. Kinshi teaches claim element [11.A]. For example, as I have annotated in Figure 3 below, cover piece 2 of Kinshi’s mobile phone case 1 includes a “plurality of pockets 5 for storing cards.” EX1010, ¶15. Each pocket 5 defines a compartment with an opening “to allow cards to be slid in and out in the vertical direction.” EX1010, ¶15. Kinshi’s mobile phone case also includes a base piece 3, to which a mobile phone Z is attached via a set of magnets. EX1010, ¶21.

⁹ While Kinshi provides magnets on holding panel 7, a POSA would have also found it obvious for such magnets to have been included in the mobile phone itself. *See, e.g.*, EX1006, ¶62. Regardless, whether the magnets are located on holding panel 7 or within a mobile phone is not relevant to the claims because the claims are structurally directed to a “wallet.” *See* Section VIII. As I previously explained, the applicant during prosecution explicitly stated that a mobile device is not a structural requirement of the claims. *See* Section VIII; EX1002, 195.



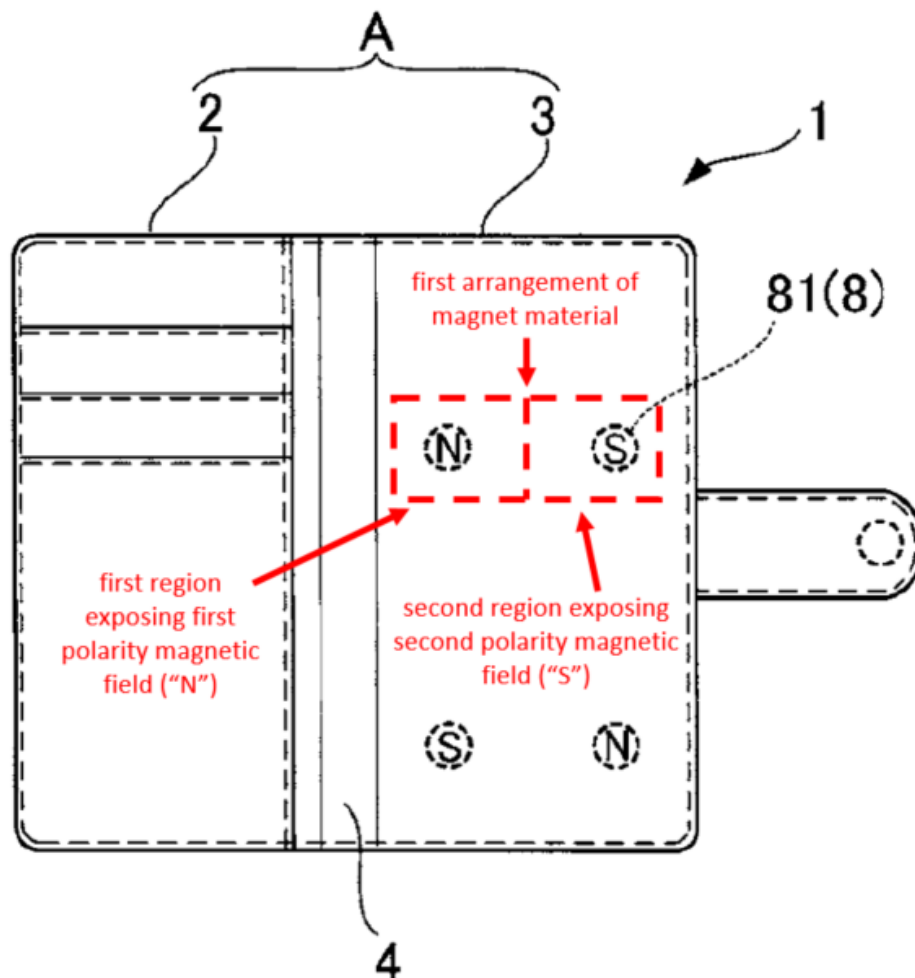
EX1010, FIG. 3 (annotated).

377. As depicted in Figure 3, Kinshi's mobile phone case 1 teaches the claimed "*body*" while the plurality of pockets 5 each correspond to and teach the claimed "*compartment*" defined by the body of case 1. EX1010, ¶15. Kinshi's base piece 3—which is a part of mobile phone case 1—additionally teaches the claimed body "*having a device side surface*" which couples to the mobile phone Z.

C. [11.B]: a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side

surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;

378. Kinshi discloses or renders obvious claim element [11.B]. As I have annotated below in Figure 4, Kinshi teaches a “*first arrangement of magnetic material*” which has a “*a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface.*”



EX1010, FIG. 4 (annotated).

379. As seen in Figure 4, Kinshi depicts a configuration of “base-side securing parts 81,” which are formed of magnets. EX1010, ¶26. Due to the rectangular shape of holding plate 7, the top two magnets are separated from the bottom two magnets, and thus the top two magnets constitute a first arrangement of magnetic material. EX1010, ¶26; *see also* EX1010, ¶17. The four base-side securing parts (magnets) 81 are further arranged clockwise to have alternating magnetic poles. EX1010, FIG. 4, ¶26.

380. In view the top two magnets depicted in Figure 4, Kinshi depicts the top left magnet as exposing a magnetic north pole while depicting the top right magnet as exposing a magnetic south pole. As I have annotated above, the top left N magnet area teaches “*a first region exposing a first polarity magnetic field at the device side surface*” while the top right S magnet area teaches “*a second adjacent region exposing an opposite polarity magnetic field at the device side surface.*” EX1010, ¶¶21, 23, 25-27.

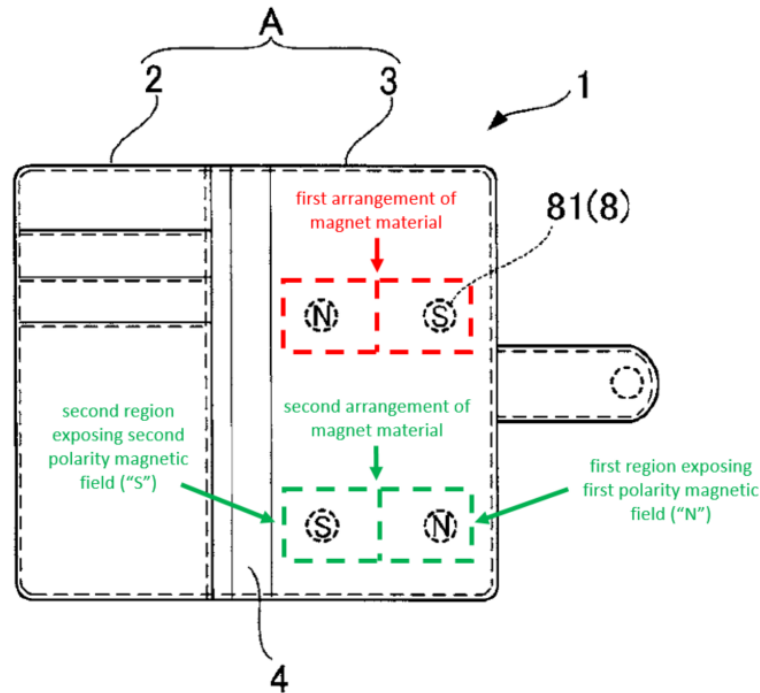
381. In this manner, Kinshi’s top two magnets of the four base-side securing parts 81 in base piece 3 create adjacent regions that expose a first polarity magnetic field at the device side surface (“N”) and the opposite polarity magnetic field at the device side surface (“S”). EX1010, ¶¶21, 23, 25-27.

382. To the extent that Kinshi does not expressly disclose the claimed adjacent regions, they would have been obvious. A POSA would have known that

Kinshi's magnets produce magnetic fields, forming regions surrounding the magnets ("N" and "S") that would be adjacent in Kinshi's Figure 4. EX1010, ¶¶21, 23, 25-27.

D. [11.C]: a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and

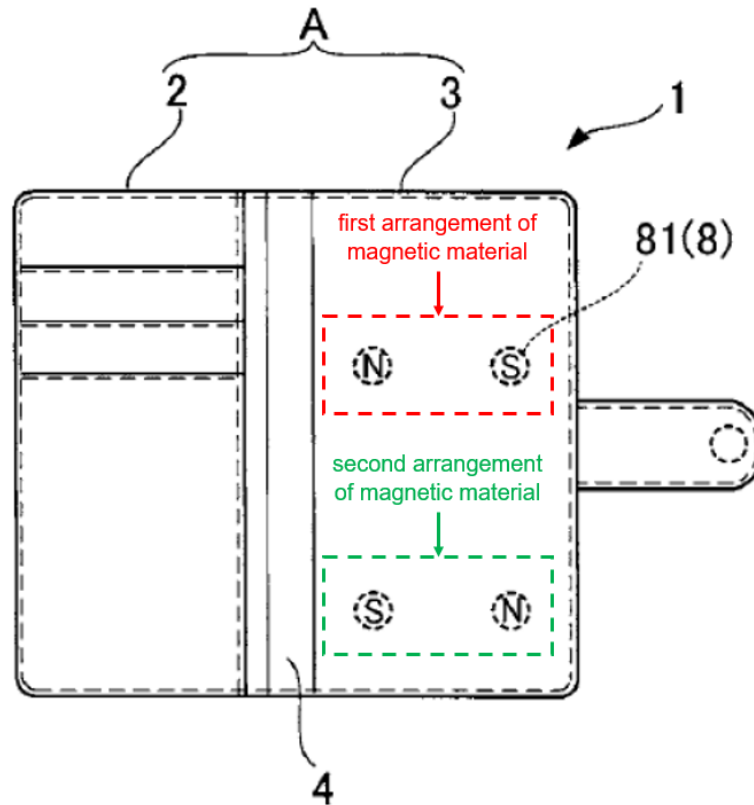
383. For reasons similar to those that I presented for claim element [11.B], Kinshi also discloses or renders obvious claim element [11.C]. As I have annotated in Figure 4 below, the bottom two magnets 81 located on base piece 3 teach the claimed "*second arrangement of magnetic material.*" EX1010, ¶26. As seen from the magnets indicating a north and south polarity, Kinshi also teaches the second arrangement having a "*first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface.*" EX1010, ¶26.



EX1010, FIG. 4 (annotated).

E. [11.D]: wherein the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second arrangement; and

384. In view of the explanation that I provided for claim elements [11.B] and [11.C], it can be seen that Kinshi also discloses claim element [11.D]. Specifically, as seen in Figure 4 and as I previously explained, Kinshi describes and depicts a top group of two magnets 81 (which teaches the claimed “*first arrangement*”) and a bottom group of two magnets 81 (which teaches the claimed “*second arrangement*”). See EX1010, ¶26.



EX1010, FIG. 4 (annotated).

385. As seen in Figure 4, the top and bottom groups of magnets have different orientations. For example, the top group (“*first arrangement*”) includes North-to-South magnet polarities going from left to right while the bottom group (“*second arrangement*”) has South-to-North magnet polarities going from left to right. See EX1010, ¶26. The bottom group can also be considered as having North-to-South magnet polarities going from right to left. Based on the different orientation of magnets and magnet polarities between the two groups of magnets, Kinshi teaches “*wherein the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second*

arrangement.”

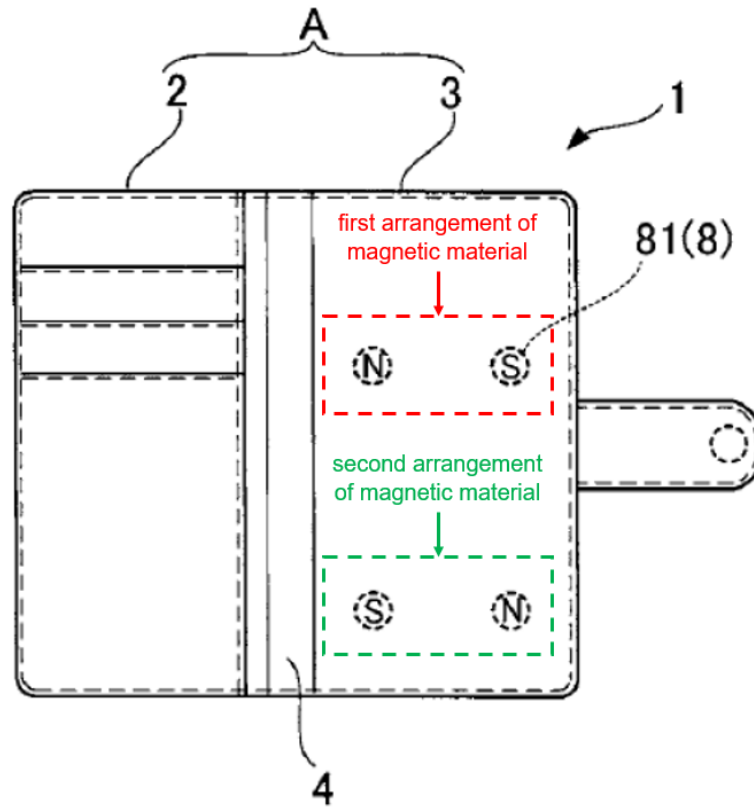
F. [11.E.1]: wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and

386. Kinshi discloses claim element [11.E.1]. Kinshi’s mobile phone case 1 is configured so that “holding panel 7 holding the mobile phone is detachably mounted to the base piece 3 by the magnetic force of magnets.” EX1010, ¶21. When the mobile phone is placed in mobile phone case 1, “the holding plate 7 is automatically secured in place on the base piece 3 by the mutual attraction (magnetic attraction) of the magnet[s] provided on the holding panel 7 and the magnet[s] provided on the base piece 3.” EX1010, ¶21.

387. In view of Kinshi’s description of attaching a wallet to a mobile phone, Kinshi’s magnets 81 concurrently couple to corresponding magnets in holding plate 7 attached to the mobile phone to hold the mobile phone in place with respect to the mobile phone case. Thus, Kinshi teaches “*wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device*” as recited in claim element [11.E.1].

G. [11.E.2]: wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

388. Kinshi discloses this claim element. As seen from Figure 4, Kinshi’s configuration of magnets 81 have 180° rotational symmetry about an axis extending out of the page.



EX1010, FIG. 4 (annotated).

389. That is, the magnets 81 allow for attaching a mobile phone Z to base piece 3 in one of two directions. Specifically, Kinshi’s magnets 81 and the corresponding configuration of magnets 82 in holding plate 7 allow for the mobile phone Z to attach to mobile phone case 1 in either the right-side up or upside-down directions, both portrait orientation. Because Kinshi’s magnet arrangements only allow for a mobile phone to be attached in one of these two directions, Kinshi teaches “*wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.*”

390. I note that this understanding of the claimed “*specific orientation*” as

corresponding to only two possible orientations is consistent with the specification of the '641 patent and dependent claim 8, which depends from claim 1 that recites the same language in element [1.F.2]. For example, I note that claim 8 further recites that “*the first and second arrangement permit coupling to the mobile device in exactly two orientations.*” As I further explain with reference to claim 8, Kinshi also teaches this as well.

391. Thus, Kinshi’s configuration of magnets 81 and corresponding magnets 82 cause the mobile phone Z and the mobile phone case 1 to adopt a specific orientation with respect to one another. Kinshi therefore teaches claim element [11.E.2].

XXIII. GROUND 3B: THE COMBINATION OF KINSHI AND GOTO RENDERS OBVIOUS CLAIMS 1-3, 5, 6, AND 8.

392. As I further explain below and with reference to claim 11, a POSA would have view claimed 1-3, 5, 6, and 8 as obvious in view of the combination of Kinshi and Goto.

A. A POSA Would Have Been Motivated to Combine Kinshi and Goto

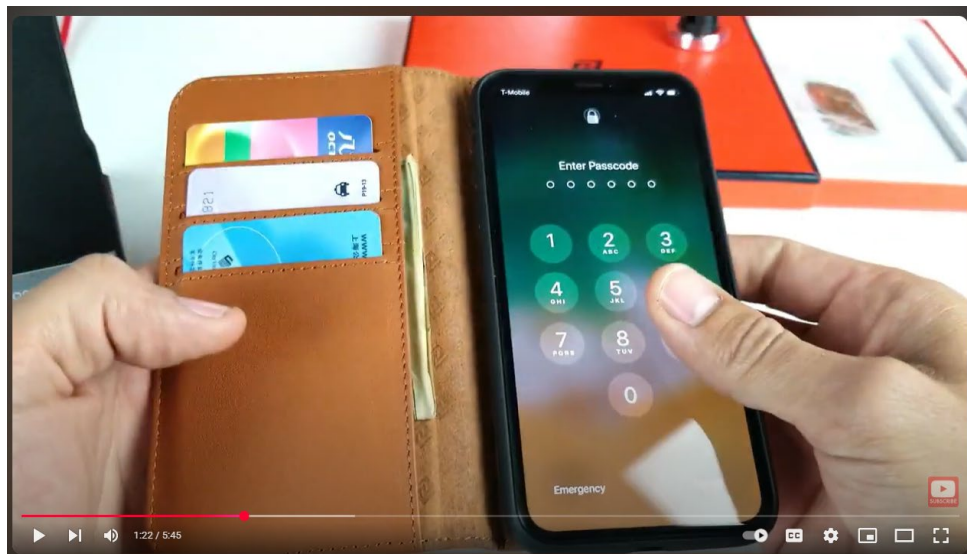
393. A POSA would have been motivated to modify Kinshi’s wallet to include Goto’s iron-foil, magnetic-shielding plates to avoid erasing data stored magnetically on cards for reasons similar to those that I provided in Section XVII.A. As I previously explained, it was well known in the art to provide protection for magnetic cards. *See* Section VI. In view of this understanding, a

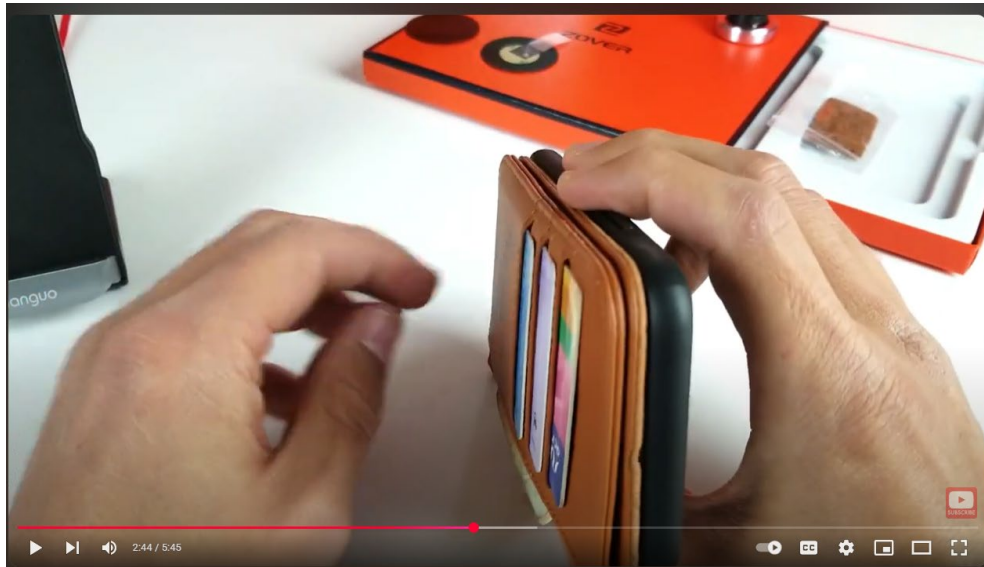
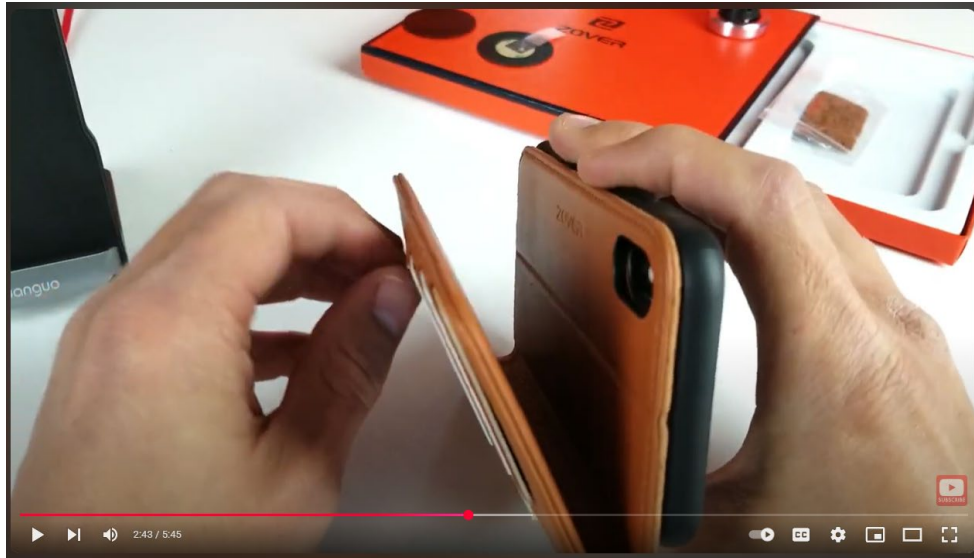
POSA would have been motivated to combine Kinshi and Goto to address the well-known problem of magnetic cards becoming corrupted, especially when exposed to magnetic fields. EX1027, 1:29-34. For example, such harmful magnetic fields could be caused by “magnetic clasps sometimes used in purses or wallets.” EX1027, 1:29-34. Similar to the other well-known solutions in the art, a POSA would have been motivated to combine Goto with Kinshi to address this problem. *See* Section VI.

394. As I previously explained, Goto teaches such shielding is needed because the data stored on magnetic cards may be negatively affected or become unusable when exposed to a magnetic field. EX1012, 2:14-21; *see also* Section XI.E. To avoid such damage, Goto discloses including magnetic-shielding plates made of iron foil embedded within the front and back walls of a “wallet” that holds cards. EX1012, 12:9-27.

395. Cards stored in Kinshi’s wallet would be susceptible to magnetic damage based on Kinshi’s description and use of magnets. EX1010, ¶¶23, 26-27. For example, Kinshi describes a scenario where a mobile phone may be removed from the wallet to take a photo. EX1010, ¶4. When the mobile phone is removed and the folio is closed, the cards could be exposed to the magnets in base piece 3 of Kinshi, exposing the cards to potential magnet damage. *See* Section VI.C. Additionally, even when the mobile phone is attached to the folio, it was common

for a user to fold the cover back (like bending the spine of a paperback novel)
when using the mobile phone while in the folio. I provided several depictions of
such an operation in Sections VI.A.2 amd XVII.B.1.e and also include example
depictions below:





396. When a user folds the cover back on Kinshi's wallet in this manner, the cards may become exposed the magnets in base piece 3 and potentially lead to corruption. *See* Section VI. Again, I note that this was a well-known problem in the art with well-known solutions prior to the '641 patent. *See* Section VI.

397. In view of the well-known solution and benefits provided by Goto, a POSA would have been motivated to modify Kinshi's wallet to include Goto's

magnetic-shielding plates in both the front and back of Kinshi's cover piece 2 (as Goto teaches) to prevent magnetic damage when the mobile phone is removed and when the folio is folded back, respectively. *See* Sections VI, XVII.A.

Implementing Goto's magnetic-shielding plates would have been a predictable modification that would have resulted in Kinshi's wallet having added protection for cards to prevent magnetic corruption or damage. *See* Sections VI, XVII.A. A POSA would have had a reasonable expectation of success in making this modification because it simply combines prior art elements (folio-style wallet and magnetic shielding) according to known methods to achieve the predictable result of protecting cards from magnetic damage. *See* Sections VI, XII.A. Further, the modification applies a known technique (magnetic shielding) to improve a similar folio-style wallet. That is, Goto describes an improvement to wallet technology, such as the wallet depicted and described in Kinshi. *See* Sections XI.D-E; *see also* EX1012, FIG. 16, 11:48-63 (describing a foldable wallet with Goto's magnetic shielding), 12:59-65 (describing the application of Goto's shielding to a wide range of pocket sizes).

B. Independent Claims 1 and 5

398. Independent claims 1 and 5 differ from claim 11 only in the recitation of a ferromagnetic shield or metal plate (claim elements [1.D] and [5.D], respectively), and in the recitation of a nonmagnetic region that separates the first

and second arrangement (claim elements [1.E.1]/[5.E.1] and [1.E.2]/[5.E.2]). I

have provided tables comparing the claims below.

Independent Claim 11	Independent Claim 1
[11.P] A wallet for attachment to a mobile device, comprising:	[1.P] A wallet for attachment to a mobile device, comprising:
[11.A] a body defining a compartment and having a device side surface;	[1.A] a body defining a compartment and having a device side surface;
[11.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[1.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[11.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[1.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and
[11.D] <i>wherein the first magnetic arrangement has at least one of a different orientation or a different</i>	[1.D] <i>a ferromagnetic shield between the first and second arrangements and the compartment;</i>

<i>geometric pattern than the second arrangement; and</i>	
	[1.E.1] <i>wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,</i>
	[1.E.2] <i>the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and</i>
[11.E.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[1.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[11.E.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[1.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

Independent Claim 11	Independent Claim 5
[11.P] A wallet for attachment to a mobile device, comprising:	[5.P] A wallet for attachment to a mobile device, comprising:

[11.A] a body defining a compartment and having a device side surface;	[5.A] a body defining a compartment and having a device side surface;
[11.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;	[5.B] a first arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface;
[11.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and	[5.C] a second arrangement of magnetic material having a first region exposing a first polarity magnetic field at the device side surface and a second adjacent region exposing an opposite polarity magnetic field at the device side surface; and
[11.D] <i>wherein the first magnetic arrangement has at least one of a different orientation or a different geometric pattern than the second arrangement; and</i>	[5.D] <i>a metallic plate between the first arrangement and the compartment;</i>
	[5.E.1] <i>wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material,</i>

	[5.E.2] <i>the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement; and</i>
[11.E.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and	[5.F.1] wherein the first and second arrangements, in use, concurrently magnetically couple the wallet to a mobile device and
[11.E.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.	[5.F.2] wherein the first and second arrangements cause the wallet to adopt a specific orientation on the mobile device.

399. As I will further explain below, the combination of Kinshi and Goto teaches claim elements [1.D] and [5.D]. I provide additional explanation below for why Kinshi also teaches claim elements [1.E.1], [1.E.2], [5.E.1], and [5.E.2]. Otherwise, Kinshi teaches claim elements [1.P]-[1.C] (and [5.P]-[5.C]) and [1.F.1]-[1.F.2] (and [5.F.1]-[5.F.2]) for the same reasons that I provided above for claim elements [11.P]-[11.C] and [11.E.1]-[11.E.2] of claim 11. *See* Section XXII.

1. [1.D] / [5.D]

400. Claim Element [1.D] recites “*a ferromagnetic shield between the first and second arrangements and the compartment.*” Similarly, Claim Element [5.D] recites “*a metallic plate between the first arrangement and the compartment.*”

401. The combination of Kinshi and Goto teaches these claim elements. Similar to the explanation I provided in Section XVII.B.1.e, the combined Kinshi-Goto wallet would implement Goto’s iron-foil, magnetic-shielding plates and embed these plates (1) in the front-side of cover piece 2 where pockets 5 are located to protect cards from magnets in base piece 3 when the phone is removed and the folio is closed, and (2) in the back-side of cover piece 2 to protect cards from magnets in base piece 3 when the folio is folded over. I have provided an example illustration of this combination below:

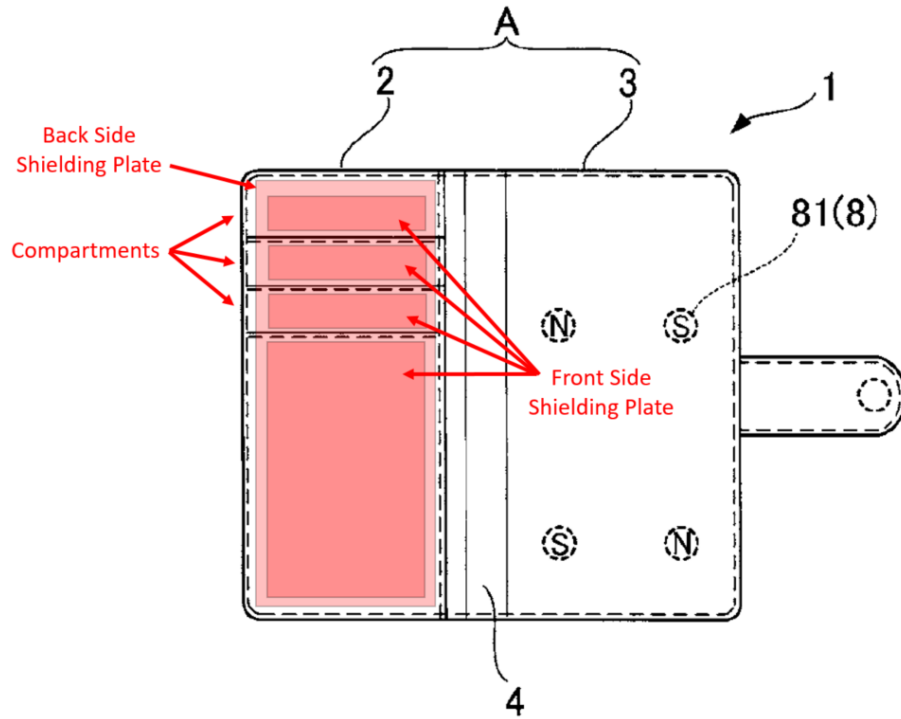


FIG. H: EX1010, FIG. 4 (annotated to show insertion of Goto’s magnetic-shielding plates).

402. As seen in the combination, Goto’s shielding plate when implemented on the front-side of Kinshi’s pockets would be positioned “*between the compartment and the first [and second magnetic arrangement[s],*” as claimed, when the phone is removed and the folio is closed. Additionally, the plate in the back-side would be positioned “*between the compartment and the first [and second magnetic arrangement[s],*” as claimed, when the folio is folded back. See Section VI.A. Providing a plate on the front *or* back surfaces teaches claim elements [1.D] and [5.D]. As I previously explained, Goto’s iron foil magnetic-shielding plates also teaches the “*ferromagnetic shield*” recited in claim 1 and the “*metallic plate*”

recited in claim 5. *See* Section XVII.B.1.e.

2. [1.E.1] / [5.E.1]

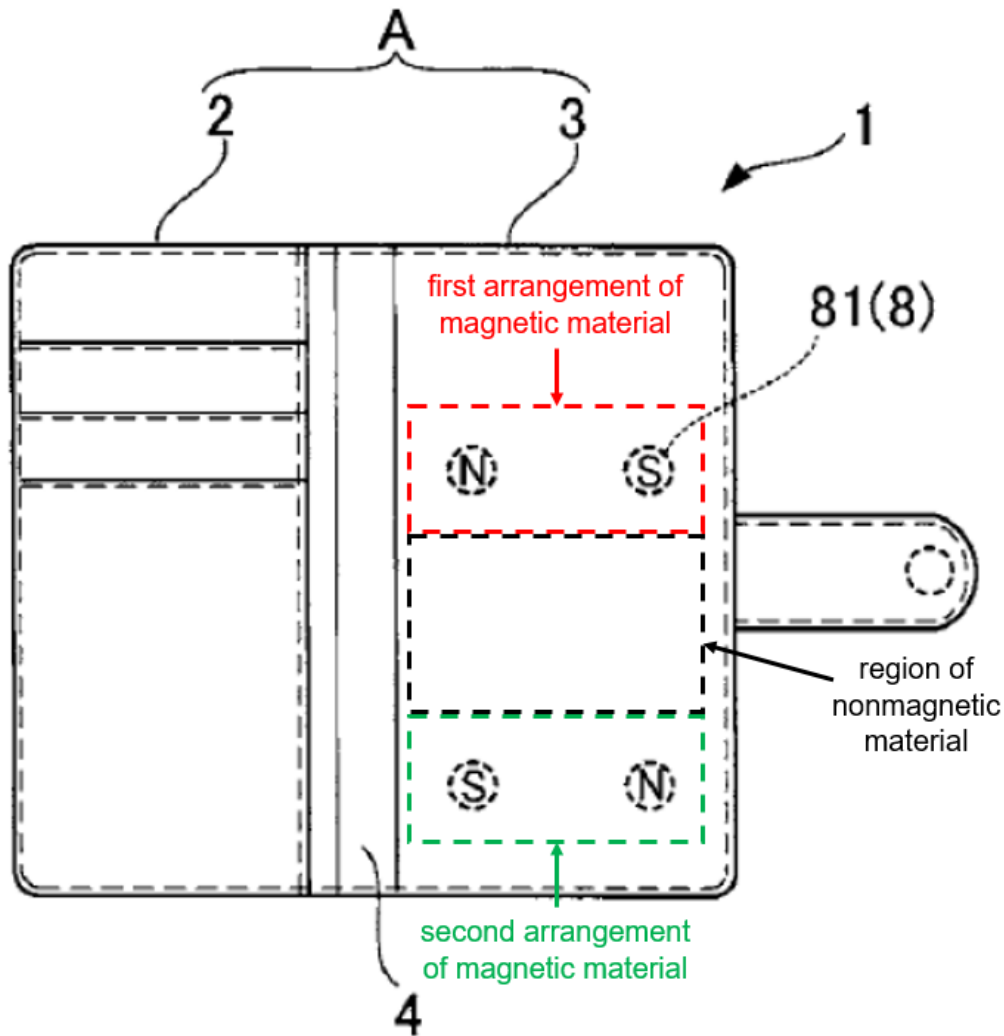
403. Claim Element [1.E.1] recites “*wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material.*” Similarly, Claim Element [5.E.1] recites “*wherein the first arrangement and the second arrangement are physically separated on the wallet by a region of nonmagnetic material.*”

404. Kinshi renders obvious this claim element. As I previously explained, a region is “nonmagnetic” when that region does not include magnets. *See* Section XVII.B.1.f-g. Kinshi describes a rectangular configuration of magnets wherein the top two magnets are spatially separated from the bottom two magnets. *See* Section XXII.C-D; EX1010, ¶¶14, 17, 26, FIG. 4.

405. As I have annotated below in Figure 4, Kinshi’s two arrangements of magnets are separated by a region (dashed black line) that does not include any magnets.¹⁰ Thus, Kinshi’s arrangements of magnets are physically separated by a

¹⁰ Goto teaches wallets made from leather and plastic. EX1012, 11:48-55, 12:9-19. Should Patent Owner argue Kinshi does not render this element obvious, it would have been obvious in view of Goto that Kinshi’s cover be made from leather or plastic because such materials were common for wallets. *See* Section VI.A;

region of nonmagnetic material, which teaches claim elements [1.E.1] and [5.E.1].



EX1010, FIG. 4 (annotated).

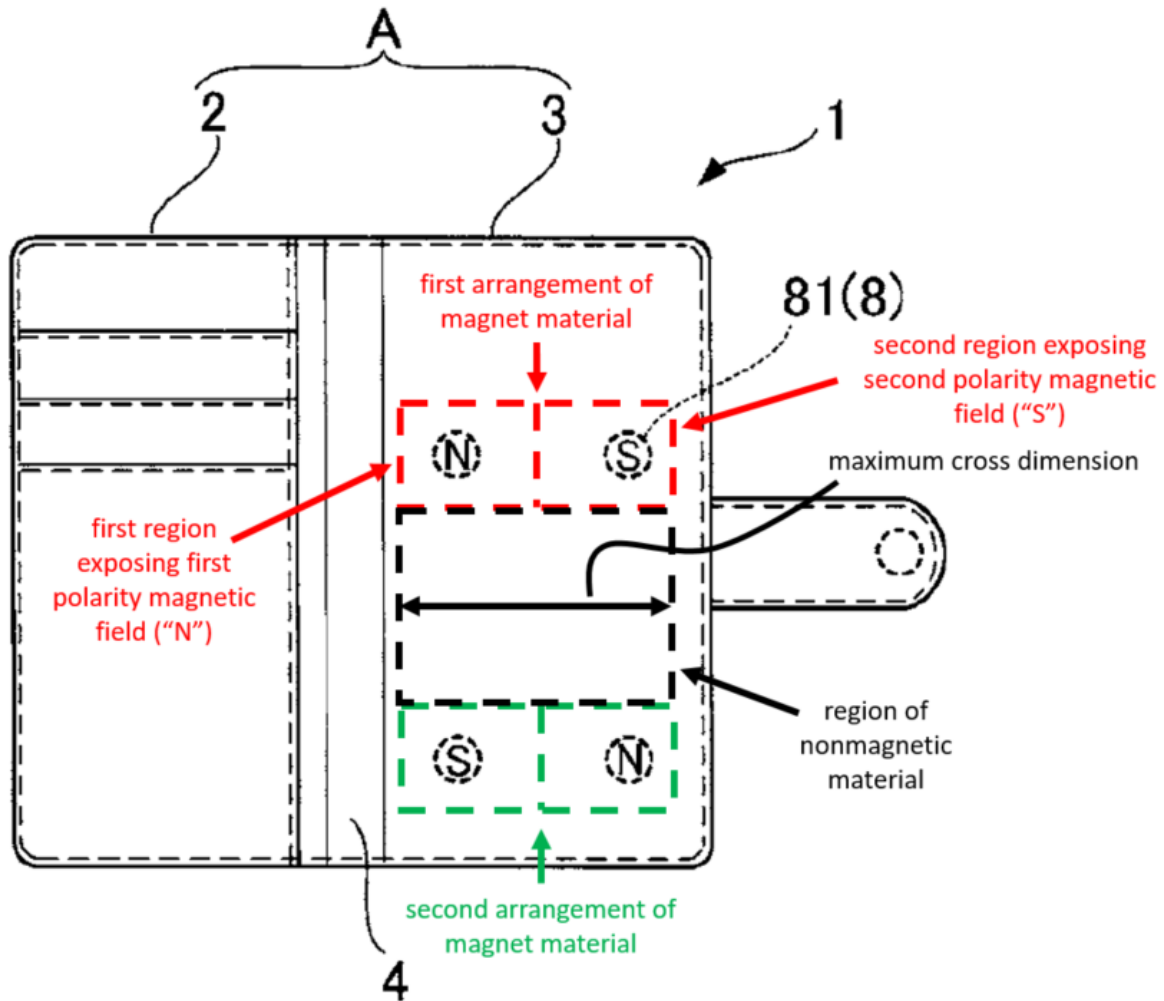
3. [1.E.2] / [5.E.2]

406. Claim Element [1.E.2] recites “*the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two*

EX1019, ¶157.

immediately adjacent first polarity and opposite polarity regions in the first or second arrangement.” Similarly, Claim Element [5.E.2] recites “the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement.”

407. Kinshi renders obvious this claim element. As I have annotated below, Figure 4 of Kinshi shows that a maximum cross dimension of the region of nonmagnetic material (in black below) is equal to an entire length of the first arrangement (in red below).



EX1010, FIG. 4 (annotated).

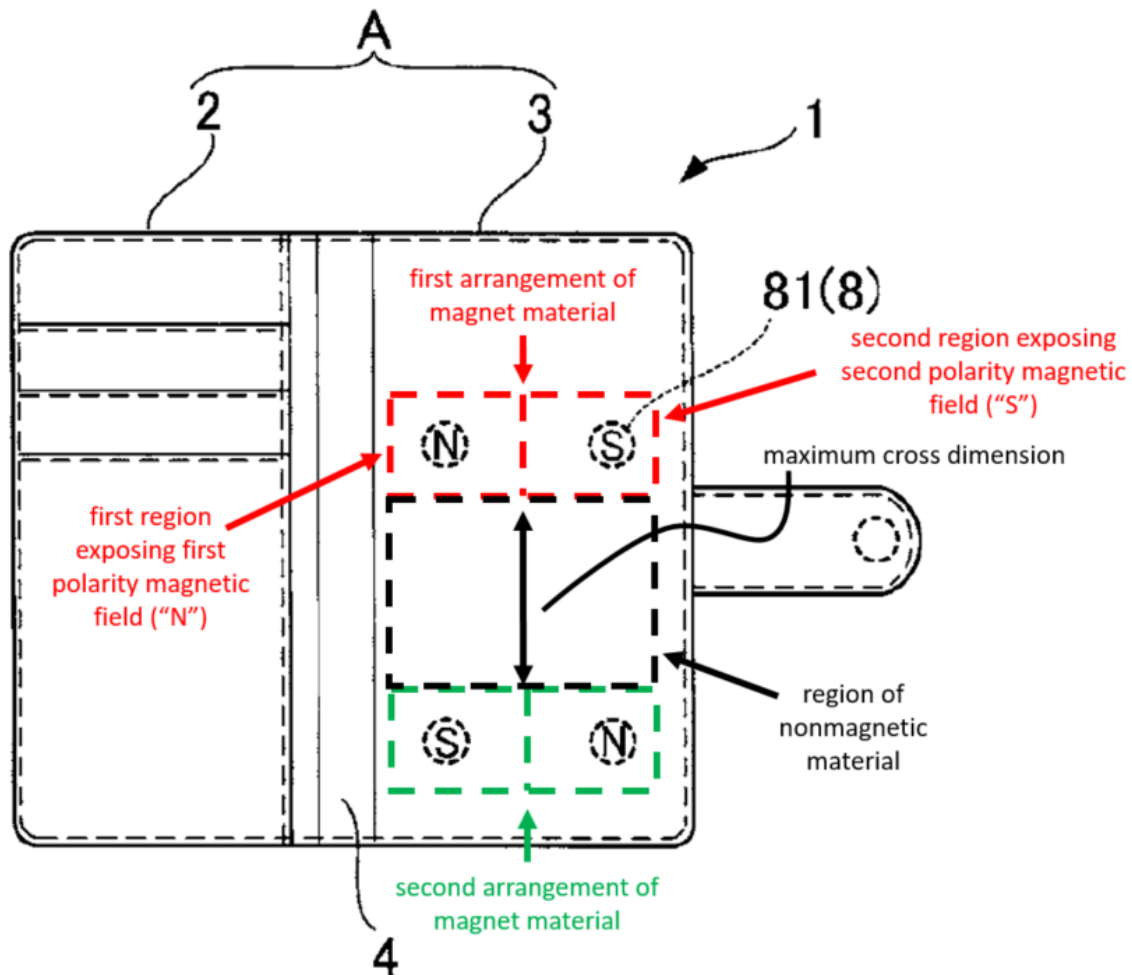
408. Based on this understanding, the cross dimension of the nonmagnetic material (in black) is greater than the spacing between the two magnets 81 and magnetic regions (defined surrounding the magnets) provided within the first arrangement (in red) as well as the spacing between the two magnets 81 and magnetic regions (defined surrounding the magnets) provided within the second arrangement (in green) as illustrated above. Based on this understanding, Kinshi teaches “the region of nonmagnetic material having a maximum cross dimension

greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement.”

409. To further elaborate on this understanding, Kinshi’s magnets 81 “are disposed at predetermined positions on the base piece 3 corresponding to the four corners of the holding panel 7.” EX1010, ¶18. Holding plate 7 is formed to have a rectangular shape, with holding-panel-side securing parts (magnets) 82 “respectively disposed at the four corners of the holding panel.” EX1010, ¶9. This configuration “makes it possible to create an arrangement whereby the holding panel is attracted to and automatically accurately positioned at a predetermined position on the base piece through the mutual attraction (magnetic attraction)” of the corresponding magnets. EX1010, ¶10. Given this rectangular configuration of magnets, FIG. 4 of Kinshi teaches that the region of nonmagnetic material has a maximum cross dimension (a length of the rectangle) that is greater than a distance between the immediately adjacent regions exposing opposite magnetic polarities (a width of the rectangle).

410. With this understanding, Kinshi also discloses “*the region of nonmagnetic material having a maximum cross dimension greater than a distance between any two immediately adjacent first polarity and opposite polarity regions in the first or second arrangement*” based on a top-to-bottom measurement of the rectangular nonmagnetic region as well. This cross-direction also demonstrates that

the distance is greater than two regions of magnets that are immediately adjacent as recited in the claim. In this manner, Kinshi also teaches this claim element under this interpretation as I have annotated below:



EX1010, FIG. 4 (annotated).

411. As I previously noted, to the extent that Patent Owner attempts to require a higher standard of disclosure for this claim element, such arguments are inconsistent with Patent Owner's own disclosure of this claim element as I previously explained. *See* Section XVII.B.1.g. Accordingly, Kinshi discloses or at

least renders this claim element obvious.

C. Dependent Claims 2-3, 6, and 8

1. Claim 2

412. Claim 2 recites “*The wallet of claim 1 wherein the body defines at least one content removal slot.*” Kinshi discloses Claim 2 for the reasons that I provided in Section XVII.C.1. For example, Kinshi describes that the “openings of the pockets 5 are formed in a direction along the horizontal direction in FIG. 1 to allow cards to be slid in and out in the vertical direction.” EX1010, ¶15.

2. Claim 3

413. Claim 3 recites “*The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.*” As I explained in Section XVII.C.2, Kinshi discloses that a mobile phone is “secured in place” when coupled to its folio-style wallet via mutual magnetic attraction. EX1010, ¶¶7, 21. In view of Kinshi’s description, a POSA would have understood and found it obvious that the attractive force described in Kinshi would have been sufficient to support the weight of a mobile device, otherwise the mobile device may unintentionally detach from the wallet. *See* Sections VI.B, XVII.C.2. Thus, Kinshi renders claim 3 obvious.

3. Claim 6

414. Claim 6 recites “*The wallet of claim 1 wherein the device side surface is substantially planar and an attachment surface of the mobile device is also substantially planar.*” Kinshi discloses Claim 6 for the reasons that I provided in Section XVII.C.4. For example, Kinshi describes forming each of base 3 and holding plate 7 out of a “plurality of sheet-shaped magnets.” EX1010, ¶18. Forming these components using “sheet-like” structures teaches “*substantially planar*” surfaces for a device side surface and for an attachment surface of a mobile device.

4. Claim 8

415. Claim 8 recites “*The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly two orientations.*” Kinshi discloses claim 8 for the reasons that I provided with respect to claim element [11.E.2] and as I further explain below. *See* Section XXII.G.

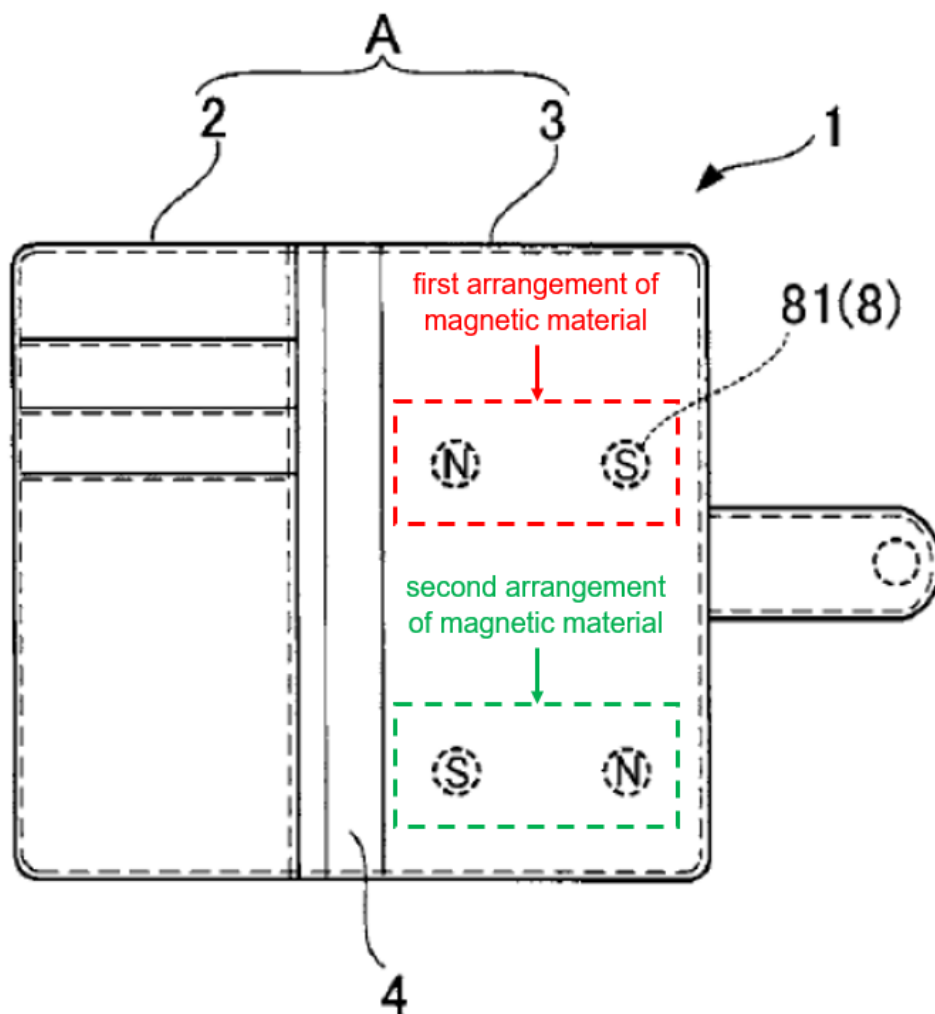
416. Kinshi explains that the four magnets 81 located on base piece 3 are disposed clockwise to have alternating north and south magnetic poles, and are disposed in configuration 82 on the holding panel 7 in a corresponding manner to connect the base piece to a mobile device. EX1010, ¶26, FIG. 4. For example, Kinshi explains:

As concerns the north and south magnetic poles of the four base-side securing parts 81 (magnets) disposed on the base piece 3 on the side

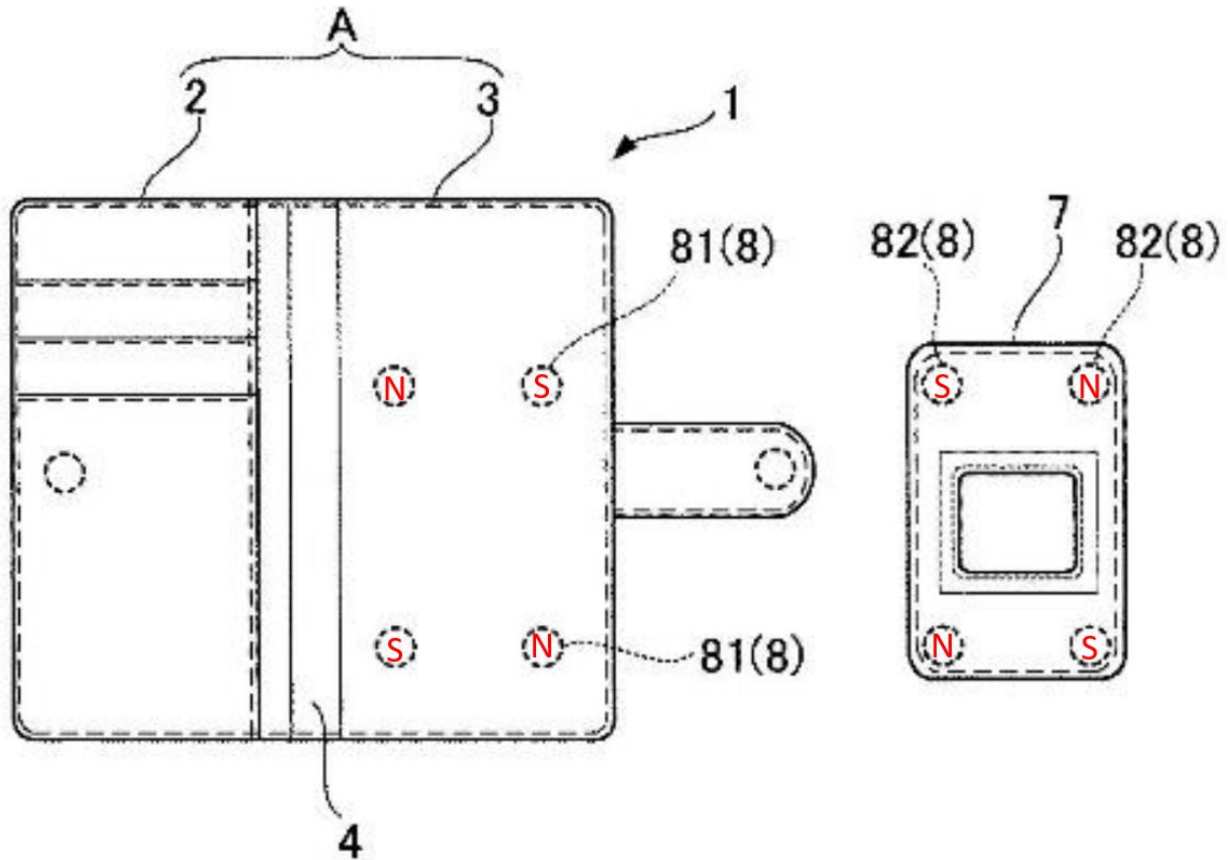
facing the holding panel 7 in the embodiment described above, *the base-side securing parts 81 (magnets) may be arranged*, for example, so that the magnetic poles of the base-side securing parts 81 (magnets) on the side facing the holding panel 7 *alternate in clockwise order between opposite polarities in the order south, north, south, and north starting from the upper-right base-side securing part 81, as shown in plan view, in FIG. 4*. When adopting such an arrangement of magnetic poles, the four holding-panel-side securing parts 82 (magnets) disposed on the holding panel 7 are arranged so that *the respective magnetic poles of the holding-panel-side securing parts 82 (magnets) on the side facing the base piece 3 are north, south, north, and south in corresponding order*. Adopting such a configuration causes the holding-panel-side securing parts 82 (magnets) provided at the four corners of the holding panel 7 to be more readily attracted to the corresponding base-side securing parts 81 (magnets) when the holding panel 7 holding the mobile phone is held near the central area of the base piece 3, thereby making it possible to automatically and more accurately dispose the four corners of the holding panel 7 at the appropriate predetermined mounting positions on the base piece 3.

EX1010, ¶26 (emphasis added).

417. This description can be seen in Figures 4 and 2, which depict magnets that orient the connection of a mobile device to base piece 3.



EX1010, FIG. 4 (annotated).



EX1010, FIG. 2 (annotated).

418. In view of Kinshi's teachings, a POSA would have understood that such an arrangement of magnets creates an arrangement having 180° rotational symmetry along an axis extending out of the page in FIG. 4. EX1010, ¶26. For example, as seen from these figures, when attaching or coupling holding panel 7 to base piece 3, the holding panel 7 holding the mobile device can be positioned in the right-side up orientation or the upside-down orientation. These are exactly two orientations that will align the magnets 81 and 82 based on their polarities. EX1010, ¶26. Thus, a POSA would have understood that Kinshi's configuration of

magnets permits coupling between the mobile phone case 1 and the mobile phone Z in exactly two orientations (either right-side up or upside-down).

419. Kinshi therefor teaches “*The wallet of claim 1 wherein the first and second arrangement permit coupling to the mobile device in exactly two orientations*” as recited in claim 8.

XXIV. GROUND 3C: THE COMBINATION OF KINSHI, GOTO, AND COX RENDERS OBVIOUS CLAIM 3.

420. Claim 3 recites “*The wallet of claim 1 wherein an attractive force between the first arrangement, the second arrangement and complementary arrangement of magnets associated with the mobile device are sufficient to support a weight of the mobile device.*”

421. Claim 3 would have been obvious over Kinshi-Goto in view of Cox for the same reasons that I explained with reference to modifying the Zhu-Kinshi-Goto wallet in view of Cox. *See* Section XVIII. Namely, Cox explicitly describes using magnets that produce an attractive force that varies with the weight of the components and defends against anticipated forces. EX1017, ¶52. Being able to vary the number and strength of the magnets used to account for varying weights teaches selecting a magnet that can sufficiently support the weight of a mobile device. EX1017, ¶52. In this manner and in view of Cox’s teachings, a POSA would have been motivated to and would have selected appropriate magnets in the Kinshi-Goto wallet to provide “*an attractive force*” that is “*sufficient to support a*

weight of the mobile device” as recited in Claim 3. Thus, the combination of Kinshi, Goto, and Cox teaches claim 3, and a POSA would have been motivated to combine Cox with Kinshi and Goto with the same reasonable expectation of success that I previously explained as well. *See* Section XVIII.

XXV.GROUND 3D: THE COMBINATION OF KINSHI, GOTO, AND LAUDER RENDERS OBVIOUS CLAIM 4.

422. Claim 4 recites “*The wallet of claim 1 wherein a spacing between the first region and the second region in the first arrangement is less than 2 mm.*”

423. Claim 4 would have been obvious over Kinshi-Goto in view of Lauder for the same reasons that I explained with reference to modifying the Zhu-Kinshi-Goto wallet in view of Lauder. *See* Section XIX. Namely, Lauder explains that “magnets having anti-aligned polarities,” such as those in Kinshi, “can be magnetically attached to each other” to thereby “maintain the integrity of the sequence of magnets in the magnetic assembly.” EX1018, 23:26-30. Lauder therefore teaches placing adjacent anti-aligned magnets (such as those of Kinshi) into direct contact, which is “*less than 2 mm*” as recited in claim 4.

424. A POSA would have been motivated to implement Lauder’s teachings in the Kinshi-Goto wallet for the reason stated by Lauder: to “maintain the integrity of the sequence of magnets in the magnetic assembly.” EX1018, 23:26-30. A POSA would have had a reasonable expectation of success based on simply adjusting the position of the magnets in Kinshi. Thus, a POSA would have viewed

claim 4 as obvious over the combination of Kinshi, Goto, and Lauder.

XXVI. GROUND 3E: THE COMBINATION OF KINSHI, GOTO, AND HAYMOND RENDERS OBVIOUS CLAIM 9.

425. Claim 9 recites “*The wallet of claim 1 further comprising: a finger loop on a surface opposite the device side surface.*”

426. Claim 9 would have been obvious over Kinshi-Goto in view of Haymond for the same reasons that I explained with reference to modifying the Zhu-Kinshi-Goto wallet in view of Haymond. *See* Section XX. Namely, Haymond describes a technique for forming a finger tether strap in a pocket device to tether a cellular phone to a user. EX1015, Abstract, 1:17-22, 1:64-2:22, 4:8-11, FIG. 1; Section XX. In this manner, claim 9 would have been obvious over Kinshi-Goto in view of Haymond for the same reasons as above regarding modifying the Zhu-Kinshi-Goto wallet in view of Haymond. Section XX.

427. A POSA would have been motivated to implement Haymond’s teachings in the Kinshi-Goto wallet to provide a secure mechanism to prevent damage caused by potentially dropping a smartphone. *See, e.g.*, EX1032, ¶¶4, 9-16 (describing the well-known benefits of attaching a “universal finger loop” onto a cellular phone). A POSA would have had a reasonable expectation of success adding Haymond’s finger tether strap to Kinshi because Haymond’s finger tether strap is already configured for use on a pocket device attached to a cellular phone. EX1015, 1:18-22, 4:8-11, FIG. 1. This is nothing more than a simple and

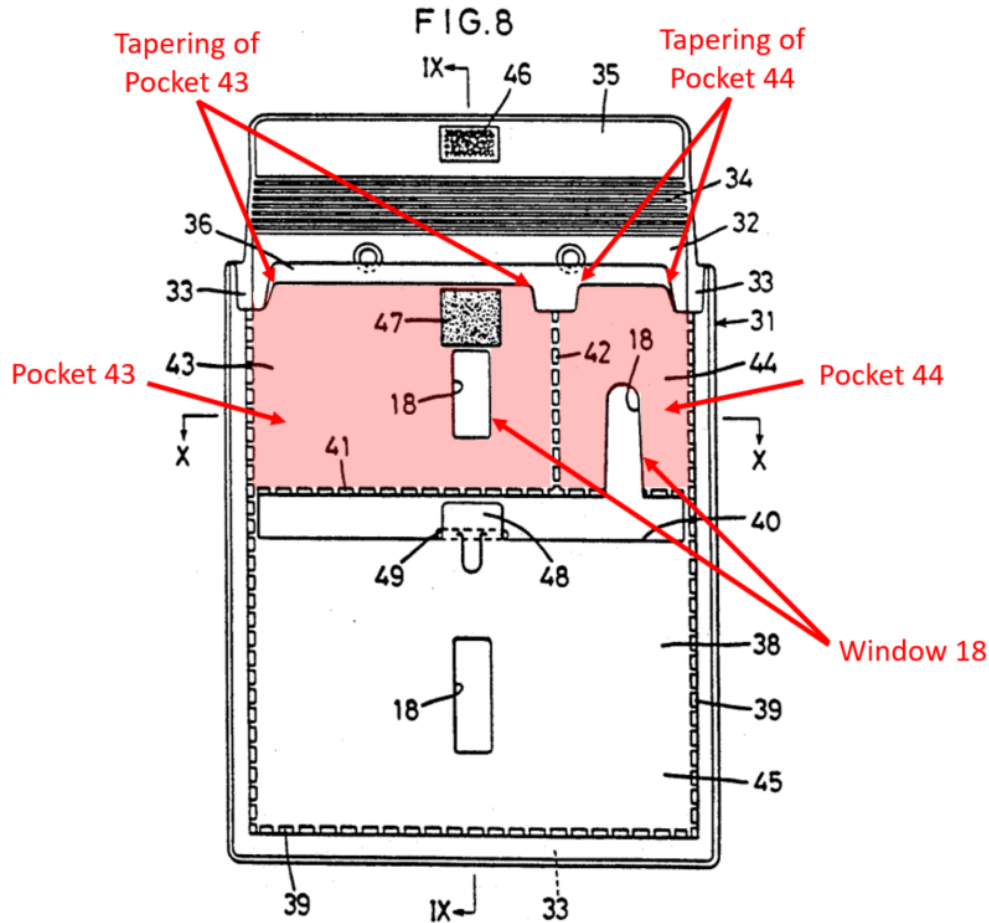
predictable modification to include a well-known feature. *See, e.g.,* EX1032, ¶¶4, 9-16.

428. Thus, a POSA would have viewed claim 9 as obvious over the combination of Kinshi, Goto, and Haymond.

XXVII. GROUND 3F: THE COMBINATION OF KINSHI, GOTO, AND MITSUYAMA RENDERS OBVIOUS CLAIM 10.

429. Claim 10 recites “*The wallet of claim 1 wherein the body defines an opening into the compartment and wherein a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening.*”

430. Claim 10 would have been obvious over Kinshi-Goto in view of Mitsuyama for the same reasons that I explained with reference to modifying the Zhu-Kinshi-Goto wallet in view of Mitsuyama. *See* Section XXI. Specifically, Mitsuyama describes card pockets tapered openings. EX1016, FIG. 8, 4:1-19.



EX1016, FIG. 8 (annotated).

431. As seen in Figure 8, the pockets designated as pockets 44 and 43 include the same tapering described by the applicant and depicted in Figures 8A-8B of the '641 patent. EX1002, 397. For example, Mitsuyama's pocket 44 also includes rounded corners near the opening that expose the edge of a card when one is inserted. EX1016, FIG. 8, 4:1-19. In this manner, Mitsuyama's pockets 44 and/or 43 as depicted in Figure 8 teach "*an opening into the compartment*" and "*a material defining the opening tapers towards a long axis of the body at the opening to expose a content of the compartment at the opening.*" Thus, claim 10 would

have been obvious over Kinshi-Goto in view of Mitsuyama for the same reasons as above regarding modifying the Zhu-Kinshi-Goto wallet in view of Mitsuyama.

Section XXI.

432. A POSA would have been motivated to modify the compartments in the Kinshi-Goto wallet to include tapered openings for card pockets, as taught by Mitsuyama. A POSA would have recognized that such a tapered opening would have improved a user's ability to remove cards from the wallet or from a pocket. As Mitsuyama explains, such a design would have improved a user's ability to remove cards from a pocket, especially when "are numbed due to cold." EX1016, 1:31-35. A POSA would have had a reasonable expectation of success combining Mitsuyama with Kinshi and Goto because Mitsuyama's tapered openings are already configured for compartments and pockets holding cards. EX1016, FIG. 8, 4:1-19; Section XXI.

433. Similarly, Figures 3, 13, and 14 of Mitsuyama also provide an alternative way for teaching the elements of claim 10 for the reasons that I previously explained. EX1016, 1:11-25, 3:10-28, FIGs. 3, 13-14; Section XXI. Namely, these figures also provide a semi-circle design, similar to the Ippolito reference, which the Board indicated also taught the claimed tapering. EX1002, 456-457; EX1031, FIG. 1-A. A POSA would have been motivated to implement any of these designs and would have also had a reasonable expectation of success

when implementing any of these designs for the reasons that I previously explained. Section XXI.

434. Thus, a POSA would have viewed claim 10 as obvious over the combination of Kinshi, Goto, and Mitsuyama.

XXVIII. OBJECTIVE INDICIA

435. I understand that Patent Owner submitted a declaration from Alejandro Baca during prosecution to support alleged commercial success and praise. EX1002, 241 (Patent Owner's arguments), 228-30 (declaration). I have been informed that in order to accord substantial weight to secondary considerations—such as commercial success and praise—in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims. That is, to demonstrate a nexus, the Patent Owner must demonstrate a legally and factually sufficient connection between the evidence and the patented invention.

436. Based on my review of the declaration, Patent Owner does not appear to have demonstrated this nexus at least because Mr. Baca's declaration does not establish a nexus to the claims. Although Mr. Baca described some alleged features of 1LSS' product, EX1002, 228-29 (¶4), his description does not include key elements such as the magnetic shielding of claims 1 and 5, or the different orientation/geometric pattern of claim 11. To the extent that Patent Owner presents objective indicia during this proceeding, I reserve the right to review and opine on

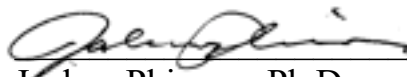
such evidence when presented.

XXIX. CONCLUSION

437. In signing this declaration, I recognize that the declaration will be filed as evidence in an *inter partes* review before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required, I will appear for cross-examination within the United States during the time allotted.

438. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed on this 24th day of July 2025, in Garden City, NY.


Joshua Phinney, Ph.D.