

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner

v.

CARDWARE INC.,
Patent Owner

IPR2025-01514
Patent 11,176,538

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER’S UPDATED EXHIBIT LIST

No.	Exhibit Description
2001	Memorandum for Director Institution of AIA Trial Proceedings, dated October 17, 2025
2002	Interim Director Discretionary Process <i>available at</i> https://www.uspto.gov/patents/ptab/interim-director-discretionary-process
2003	First Agreed Scheduling Order in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Mar. 6, 2025)
2004	Complaint in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Mar. 6, 2025)
2005	Order and Advisory in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Nov. 5, 2024)
2006	Order Denying Defendants’ Motion to Stay in <i>Quantum Imaging, LLC v. Sony Interactive Entm’t Inc.</i> , No. 1:23-cv-1212-ADA-DTG (W.D. Tex. Dec. 4, 2024) (Gilliland)
2007	Agreed Scheduling Order in <i>CardWare Inc. v. Apple Inc.</i> , No. 1:25-cv-00446-ADA (W.D. Tex. May 20, 2025)
2008	Complaint in <i>CardWare Inc. v. Apple Inc.</i> , No. 1:25-cv-00446-ADA (W.D. Tex. Nov. 4, 2024)
2009	Standing Order Governing Proceedings (OGP)—Patent Cases for cases before Judge Albright (dated Mar. 5, 2025)
2010	Report and Recommendation Denying The Defendants’ Motion to Dismiss in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Aug. 15, 2025)
2011	Order Adopting Report and Recommendation Denying The Defendants’ Motion to Dismiss in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Sept. 3, 2025)
2012	Order Denying the Defendant’s Motion to Transfer Venue to the Northern District of California in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Aug. 7, 2025)
2013	Claim Construction Order in <i>CardWare Inc. v. Apple Inc.</i> , No. 1:25-cv-00446-ADA (W.D. Tex. Aug. 29, 2025)
2014	Email from counsel for Petitioner to counsel for Patent Owner, dated Sept. 4, 2025
2015	Defendant Google LLC’s Invalidity Contentions in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Apr. 3, 2025)

No.	Exhibit Description
2016	Exhibit I to Defendant Google LLC’s Invalidity Contentions in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Sept. 18, 2025)
2017	DocketNavigator Time to Trial Statistics for Patent Cases in the Western District of Texas
2018	Defendants’ Notice of Subpoena to Google in <i>CardWare Inc. v. Samsung Elecs. Co., Ltd.</i> , No. 2:22-cv-00141-JRG-RSP (E.D. Tex. Feb. 2023)
2019	Letter from CardWare, Inc. to Google LLC dated October 10, 2023 “RE: Patent Portfolio of CardWare Inc.”
2020	Proof of Delivery to Apple Inc. for Letter from CardWare, Inc. to Google LLC dated October 10, 2023 “RE: Patent Portfolio of CardWare Inc.”
2021	Petition for <i>Inter Partes</i> Review of Pat. 10,339,520 in IPR2023-00210, by Petitioner Samsung Electronics Co., Ltd.
2022	Petition for <i>Inter Partes</i> Review of Pat. 11,176,538 in IPR2023-00219, by Petitioner Samsung Electronics Co., Ltd.
2023	Notice of Order Denying Institution in IPR2025-01145, IPR2025-01146, IPR2025-01147, IPR2025-01148, IPR2025-01149, IPR2025-01150, IPR2025-01151, IPR2025-01152
2024	Defendant Google LLC’s Objections to Claim Construction Memorandum and Order, Dkt. 105, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. Sept. 11, 2025)
2025	Defendant Google LLC’s Claim Construction Brief, Dkt. 58, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. May 22, 2025)
2026	Joint Claim Construction Statement, Dkt. 85, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. July 15, 2025)
2027 [New]	Defendant Google LLC’s Reply Claim Construction Brief, Dkt. 71, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. May 22, 2025)
2028 [New]	Plaintiff CardWare Inc.’s Responsive Claim Construction Brief, Dkt. 63, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. May 22, 2025)
2029 [New]	Plaintiff CardWare Inc.’s Sur-Reply Claim Construction Brief, Dkt. 83, filed in <i>CardWare Inc. v. Google LLC</i> , No. 7:24-cv-00278-DC-DTG (W.D. Tex. May 22, 2025)

No.	Exhibit Description
2030 [New]	Petitioner's Petition for <i>Inter Partes</i> Review in IPR2025-01361 (Paper 1)
2031 [New]	Certificate of Correction for the '538 Patent, dated May 10, 2022

I. INTRODUCTION

The Director should deny institution of the Petition (Paper 1) challenging claims 1-3, 5-6, 8-19, and 21-30 (“Challenged Claims”) of U.S. Patent No. 11,176,538 (“the ’538 Patent”). Petitioner both failed to comply with 37 C.F.R. § 42.104(b)(3) and to meet its burden of demonstrating a reasonable likelihood of success that its prior-art combinations render obvious any Challenged Claim

First, relevant to all Challenged Claims across both grounds, Petitioner failed to comply with 37 C.F.R. § 42.104(b)(3). Instead of proposing its own claim construction for certain limitations found in the challenged independent claims, Petitioner (without explanation) purports to adopt Patent Owner’s alleged interpretation. This approach fails to comply with Rule 42.104.(b)(3). *See Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 (Director Nov. 3, 2025) (precedential). Petitioner also asserts in the parallel district court case that certain claims contain indefinite terms for which the scope cannot be reasonably ascertained, but asserts here that “any reasonable construction [of these same terms] reads on the prior art” and its expert purports to apply the “ordinary and customary meaning” of the terms. That too is improper. *See Tesla, Inc. v. Intell. Ventures II LLC*, IPR2025-00340, Paper 18 (Director Nov. 5, 2025) (informative).

Second, for all Challenged Claims across both grounds, Petitioner’s proposed combinations fail to disclose using generated limited-use payment information “in

place of” issued payment information in connection with the payment transaction, as required by elements [1.g], [19.e], and [25.e] of independent claims 1, 19, and 25. Petitioner relies exclusively on Gomez for this requirement. Petitioner’s challenge, however, mixes and matches Gomez’s “manual” and “automatic” embodiments. The “manual” embodiment of Gomez is critical to and underlies Petitioner’s position regarding other claim elements (and overall obviousness theory) because it is the only Gomez embodiment that meets the limitation requiring that payment information is “display[ed]” and “selected.” But, unlike the “automatic” embodiment, Gomez never explains what information is transmitted to a merchant in connection with the “manual” embodiment, including whether that is actual payment information or something “in place of” it. In an earlier (now-denied) IPR Petition, Petitioner admits this, stating that Gomez “describes how a user may manually choose which of the actual credit/debit cards to use at the moment of a transaction” but “does not explicitly disclose how the selected actual credit/debit card payment information is communicated to the merchant and EPIC authentication server during a transaction.” EX2030, 53-54. All indications from Gomez suggest that in “‘Manual’ mode,” the *actual* payment information is transmitted in connection with the payment transaction (and nothing is “in place of” it). But regardless, Petitioner has failed to meet its burden on elements [1.g], [19.e], and

[25.e] and does not offer any reason why (or how) a POSITA would combine the Manual and Automatic mode disclosures from Gomez.

Third, Petitioner fails to show a reasonable expectation of success. Petitioner's argument consists of a single conclusory sentence, citing to its expert, who simply parrots the Petition verbatim, without evidence or analysis. And regardless, the combinations proposed by Petitioner are incompatible and unworkable. This, too, is dispositive of both grounds.

Fourth, applicable to claims 1-3, 5-6, and 8-18, Petitioner fails to show that a POSITA would have modified Gomez with Philips and Casey to receive a payment information request via an NFC interface. Gomez discloses a payment card designed to work with a traditional payment infrastructure and transaction flow including a magnetic stripe whereby "[n]o changes in the payment system infrastructure need be made by either the point-of-sale merchant or the card issuer." EX1007, 2:40-41. Yet, Petitioner's proposed combination ignores all this and requires the exact changes Gomez teaches against. Petitioner reimagines Gomez's payment card as a mobile device with touchscreen and other capabilities. But the mobile device would not work because Gomez envisions that the payment instrument would maintain magnetic stripe swiping capabilities.

Lastly, applicable to claims 19 and 21-30, Petitioner fails to show that a POSITA would have modified Gomez for similar reasons as claims 1-3, 5-6, and 8-18, as well as rework Gomez for completing online transactions on a single device.

For these reasons, as those are further explained below, because Petitioner has failed to show a reasonable likelihood of success that any Challenged Claim is unpatentable, Patent Owner respectfully submits that the Board should decline to institute.

II. THE '538 PATENT CLAIMS

When David Wyatt conceived of the invention claimed in the '538 Patent over a decade ago, there were “several different types of credit cards available in the marketplace.” EX1001, 1:32-33.

As the '538 Patent explains:

A first type of credit card is a conventional, standard piece of plastic with a magnetic strip, which is readily available and in wide commercial use. The advantage of this first type of credit card is that a large portion of the infrastructure for credit card transactions is built around this type of card, and consequently such a card works in a wide array of vendors' credit card machines, automated teller machines (ATMs), and other devices that support the present credit card and banking infrastructure.

EX1001, 1:33-41.

The claims of the '538 Patent generally relate to systems and methods for reducing fraud during payment transactions.

Independent claim 1 is illustrative and is directed to a method of performing a payment transaction via a near-field communication (NFC) interface of an electronic device. EX1001, 19:35-20:29 (claim 1). The method involves receiving a request for a transaction payment at an electronic device via an NFC interface. EX1001, 19:46-48. The electronic device then displays the payment request as well as at least a portion of an original account number (such as a traditional credit card number) “for a user selection.” EX1001, 19:49-53. The method then “retriev[es] from a memory [of the electronic device] a device-specific static limited-use payment information, associated with said selected payment method.” EX1001, 19:54-57. In other words, the user makes a “selection” from one of multiple payment methods, and then the claimed method retrieves a device-specific static limited-use number associated with that particular selected payment method. *See* EX1001, 19:54-57. The method further “dynamically generat[es] ... device-specific limited-use payment information, for said selected payment method” and combines it with the “static limited-use payment information, to generate a complete device payment information” that is used to complete a payment transaction. EX1001, 19:58-20:29.

Independent claim 19 is directed to a method of performing an online payment transaction via a wireless interface of an electronic device. EX1001, 22:62-23:34

(claim 19). The method of claim 19 involves receiving a request for a transaction payment at an electronic device via a wireless interface. EX1001, 22:64-67. A touch-screen display user-interface of the electronic device then displays the payment request, and, upon an authorizing of a valid device user, at least one user-selectable payment account option and a request for user approval of payment. EX1001, 23:1-7. The method further “generat[es] at least one limited-use numbers at said electronic device, and using said limited-use number in place of at least a portion of selected account issuer payment information” and “combining said at least one limited-use numbers, with said selected account information, to form a complete payment information.” EX1001, 23:11-17. This complete payment information is transmitted over a wireless interface of the electronic device to complete the online payment transaction. *See* EX1001, 23:30-32.

Claim 25—the third challenged independent claim—claims a non-transitory, computer-readable medium storing computer executable instructions for similarly performing an online payment transaction. EX1001, 24:49-25:15. In particular, the instructions cause one or more processors to “generate a device-specific limited-use payment information for use in place of at least a portion of said selected issuer payment account information on the device” and “form a complete combined device payment information from a dynamically generated portion and a statically generation portions stored in a memory of the device.” EX1001, 24:66-25:6.

The various cryptographic techniques of the '538 Patent drastically improve security vis-à-vis prior art while maintaining convenience and flexibility by allowing selection and use of different payment accounts.

III. PETITIONER'S ALLEGED PRIOR ART

Petitioner relies upon four references in its Grounds (*Gomez*, *Phillips*, *Casey*, and *Law*). In Ground 1A, Petitioner presents the combination of *Gomez*, *Phillips*, and *Casey* to challenge independent claims 1, 19, and 25 and dependent claims 2-3, 11-18, 21-22, 24, 26, and 28-30. In Ground 1B, Petitioner adds a fourth reference to the combination (*Law*) to challenge dependent claims 5-6, 8-10, 23, and 27.

Patent Owner provides in this Section III an overview of the references relevant to demonstrating in this Preliminary Response that Petitioner has failed to show a reasonable likelihood of success that any Challenged Claim is unpatentable. Patent Owner then explains in the following sections how Petitioner's Grounds using such references fail to demonstrate such a reasonable likelihood of success.

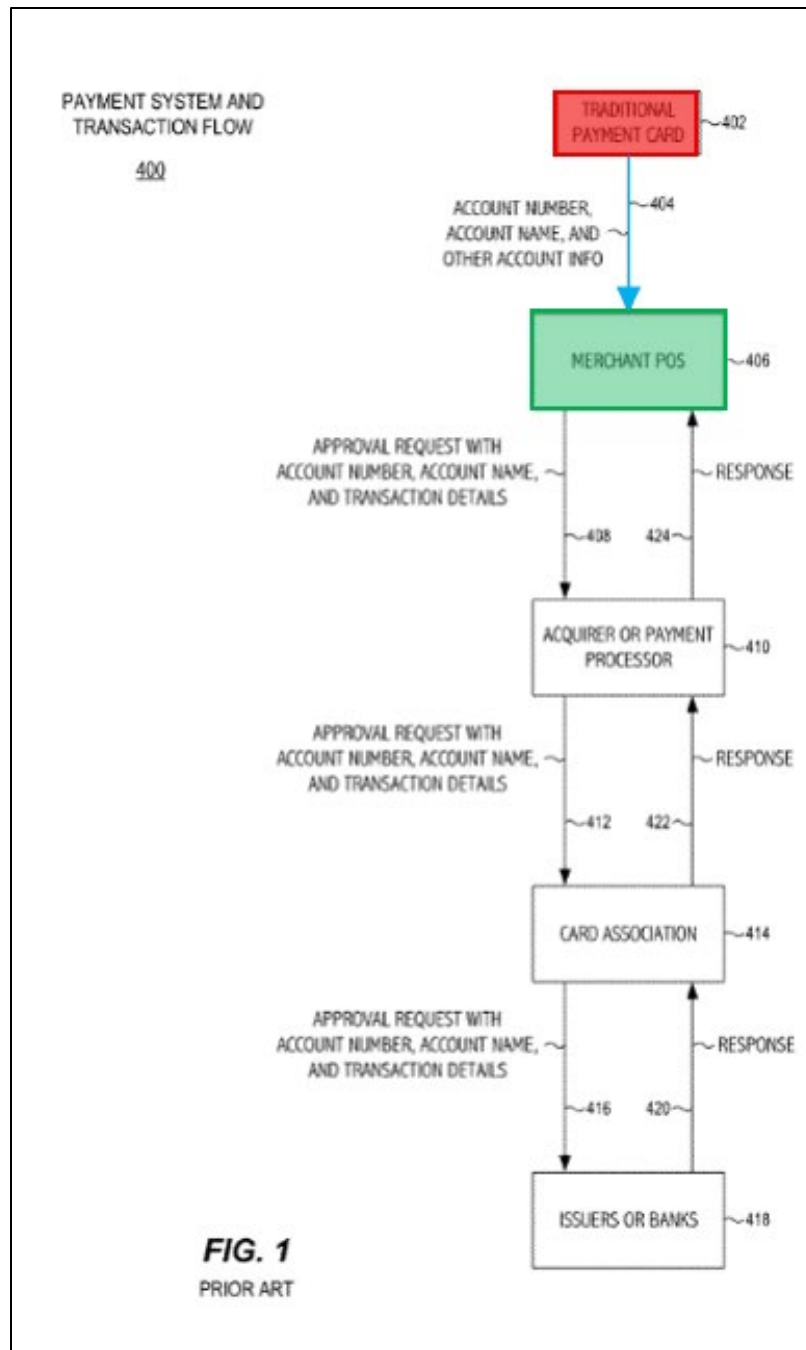
A. Gomez

U.S. Patent No. 9,600,808 ("Gomez") is directed to a more secure "payment card system" that can function within a pre-existing traditional payment system. *See, e.g.,* EX1007, Abstract, 1:58-2:44, 5:32-34, 5:67-6:2, FIGs. 1-2. Gomez, in its "Background," recognizes that "problems of fraud and identity theft that result from the use of payment cards, such as credit and debit cards, are increasing throughout

the world.” EX1007, 1:31-33. In its “Summary of Embodiments of the Invention,” Gomez discloses that “[p]ayment card transaction theft and fraud may be greatly reduced, if not virtually eliminated, in a payment card system that utilizes a secure authentication cryptogram which is generated uniquely for each attempted use of the payment card, and which expires within a short period of time thereafter.” EX1007, 1:58-63.

Gomez’s system is thus specifically designed to work within a pre-existing traditional payment system infrastructure, such that “[n]o *changes* in the payment system infrastructure need be made by either the point-of-sale merchant or the card issuer.” EX1007, 2:40-41;¹ *see also, e.g.*, EX1007, 2:42-45, 5:32-34, 5:67-6:2. “For example,” Gomez explains that “such a payment card [the “EPIC” payment card discussed below] may use a programmable magnetic stripe or contactless technology to provide *total compatibility* with existing POS equipment.” EX1007, 2:40-42. Gomez then discloses the “*traditional* payment system” in Figure 1 (EX1007, 3:65-67), which it labels “Prior Art” (*i.e.*, the pre-existing payment infrastructure that Gomez is expressly designed to work within, without any changes to existing the merchant POS or card issuer):

¹ Unless noted, all coloring and emphasis has been added.



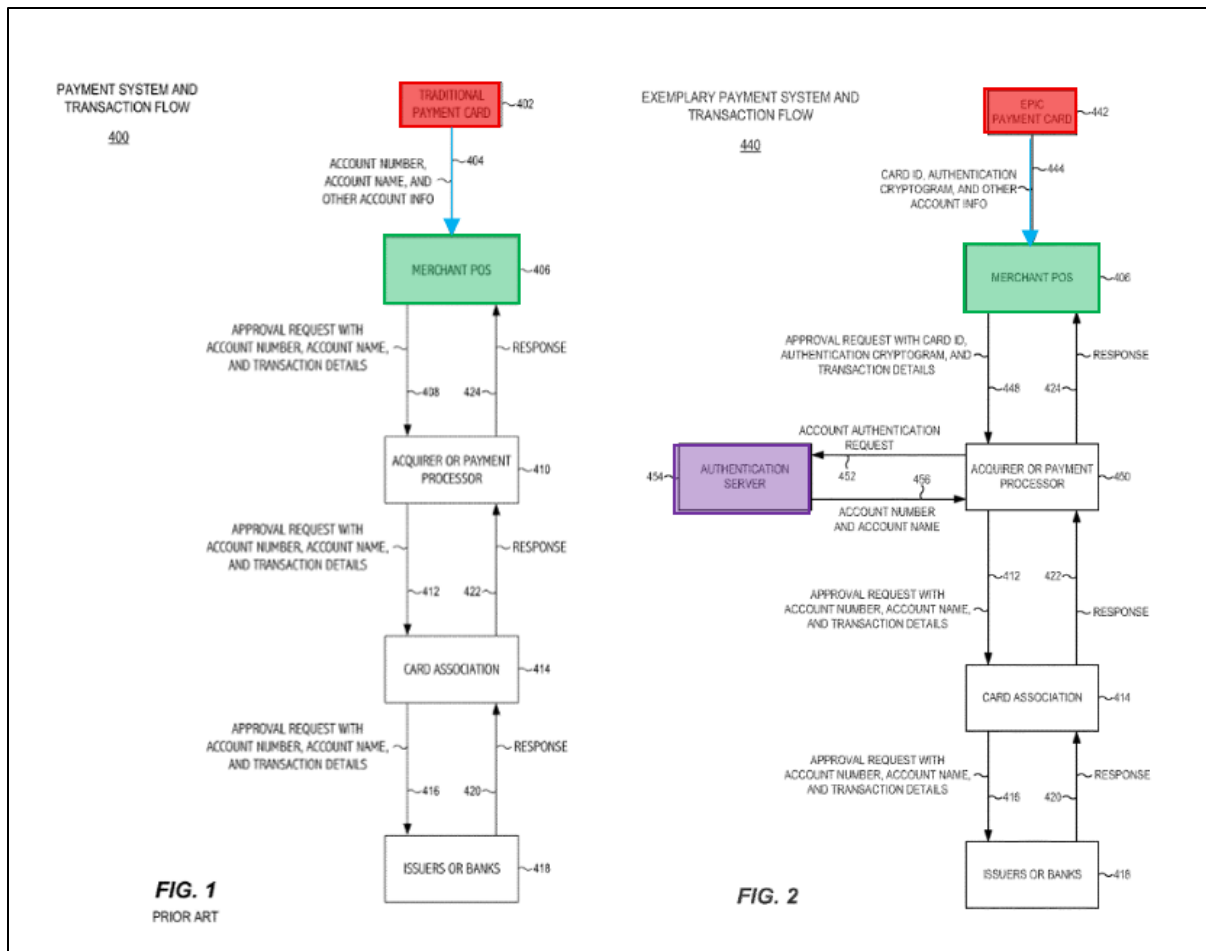
EX1007, FIG. 1. As can be seen in Figure 1, Gomez discloses a traditional “payment system and transaction flow,” with a “**traditional payment card 402**” that transmits to “**merchant POS 406**” “**account information 404**” “including the account number, security code, account name, expiration date.” EX1007, 3:65-4:7. Notably,

this is a ***one-way*** communication, *i.e.*, the payment card transmits information to the merchant POS, while the merchant POS does not send anything to the card. This is further evident by the bi-directional communication elsewhere in the Figure (request 408, response 424, etc.). *See also, e.g.*, EX1007, 4:8-63. That is, in the “traditional payment system” and “transaction flow” disclosed by Gomez (and depicted in Figure 1), a payment card sends information to the merchant POS, but not vice versa.

In its system, Gomez specifically makes no modifications to the merchant POS or card issuer systems to implement its “EPIC payment card.” Such EPIC payment card includes a rewritable magnetic stripe on which the static payment card identifying number may be encoded in the account number field and the authorization cryptogram may be encoded in the account name field. EX1007, 5:48-57, Abstract. It may additionally include NFC transmission. EX1007, 7:50-57, 14:3-11. The static number may be a “live” credit card number or may be “an identifying number for an EPIC account which is not itself a live payment card account, but to which are linked one or more live payment card accounts.” EX1007, 5:13-24. The EPIC payment card may be swiped through a POS terminal “just like a traditional magnetic stripe payment card.” EX1007, 5:29-34. Here too, Gomez teaches that “[s]ince all of the information is encoded using ***standard*** fields, a ***traditional POS*** terminal may be used ***without any required changes*** as a result of the encoding.” EX1007, 5:67-6:2; *see also* 14:3-11.

Account information communicated by swiping the card is communicated by the merchant to a payment processor or “acquirer,” which analyzes the account number to determine it corresponds to an EPIC account. EX1007, 5:64-6:12. The acquirer sends an account authentication request to an EPIC authentication server, which determines whether the cryptogram is valid and, if so, provides to the acquirer an actual payment card account number and account name to use for processing the transaction. EX1007, 6:23-27. The acquirer then uses that information to form an approval request to the card association corresponding to the actual payment card being used. EX1007, 6:39-47. The request is “essentially unchanged” from that used in a traditional payment system. EX1007, 3:65-67, 6:47-51.

Thus, as can be seen by comparing Figure 1 (a “traditional” “prior art” payment system) with Figure 2 (the system of Gomez), reproduced below, the transaction flow is largely the same (and the exact same as to **the merchant POS** and card issuer); the only change is that the payment processor communicates with an additional **authentication server** to obtain the account number and account name. EX1007, 3:18-23, 3:65-67, 5:48-50, FIGs. 1-2. That is, as noted above, and shown in the comparison of the two figures below, there are “[n]o changes in the payment system infrastructure need be made by either **the point-of-sale merchant** or the card issuer.” EX1007, 2:40-41; *see also, e.g.*, 2:42-45, 5:32-34, 5:67-6:2, 10:8-17, 14:3-11.



EX1007, FIGs. 1-2.

Gomez describes two alternative ways to configure and set up an EPIC account: “manual” and “automatic.” EX1007, 20:1-63. “The ‘Automatic’ option means that during a purchase transaction, the EPIC system defaults to the major credit card selection flow established by the customer.” EX1007, 20:15-18. “[I]f the currently selected credit card fails to authorize payment, the EPIC system will automatically move to the next available credit card for payment authorization of the same purchase transaction.” EX1007, 20:23-27. On the other hand, the “Manual” option provides a customer with the opportunity to manually select the actual credit

card that he/she wishes to use during a purchase transaction.” EX1007, 20:30-32. Per Gomez, “[t]his [manual] option is useful, for example, for a customer having a corporate credit card who needs the ability to choose which card to use at the moment of the transaction.” EX1007, 20:32-35. To enable the manual option, the EPIC card is fitted with a display and selection capability, such as a “membrane switch to scroll through available card accounts.” EX1007, 20:37-39. Importantly, Gomez does not say how a merchant, or, for that matter, the EPIC server, would know which underlying credit card is selected in manual mode. After all, the EPIC card itself does not have long-range communication capabilities (just NFC), and cannot communicate over a network. *See, e.g.*, EX1007, 21:5-12 (online payments only work when a vendor has “Epic Pay” on its website). The only possible explanation is that in Manual mode, the EPIC payment card transmits the real active credit card number.

Gomez also discloses that its EPIC card information can be entered on a computer for an online transaction via a vendor’s website, whereby no actual credit card information is displayed or made available to a merchant. EX1007, 21:5-20.

B. Phillips

U.S. Patent App. Pub. No. 2012/0310760 (“Phillips”) is directed to “the automatic selection of a payment card account for use in a purchase transaction,” where “a user configures her mobile device so that it will automatically select a

particular payment card account when certain predefined criteria are met.” EX1005, Abstract. A “payment circuit” on the device may store one or more card account numbers corresponding to payment card accounts that have been issued to the device owner. EX1005, [0023]. The payment card account numbers and related information are downloaded to the device from an issuer financial institution or service provider. EX1005, [0040].

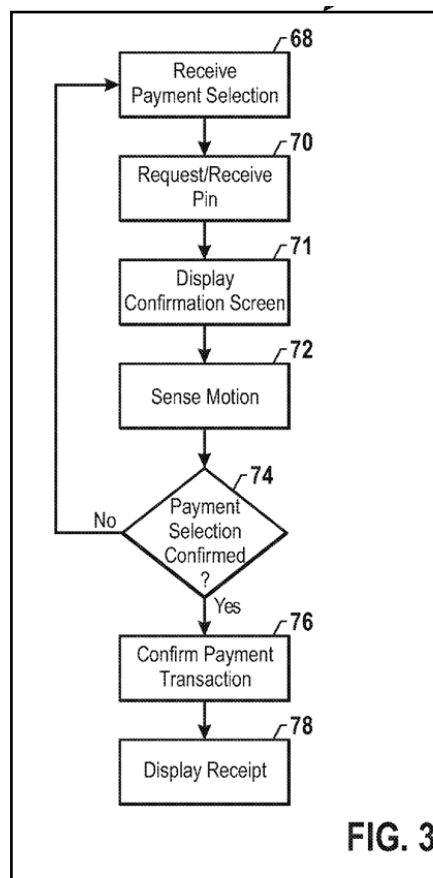
The device of Phillips is designed to perform contactless payment transactions. This process begins with the device user “tap[ing] 1004 her mobile telephone on a merchant proximity reader component located in the retail store.” EX1005, [0057]. When the shopper taps her phone, “it is exposed to an interrogation signal transmitted from the merchant proximity reader component.” EX1005, [0057]. “The interrogation signal stimulates the mobile telephone 100 to exchange wireless RF communications with the merchant proximity reader component” and a “merchant identifier” is sent to the mobile device. EX1005, [0057]. The mobile device then uses the “merchant identifier to attempt to automatically select a particular payment card account for use in a purchase transaction,” thereby allowing the device to identify the “store and to select the card account or payment product that the user has designated for payment transactions that involve that merchant.” EX1005, [0057]. The automatic payment card is then displayed on the display of the device and the user “user acknowledges 1012 in FIG. 10 that the automatically

selected card is correct by entering 1014 her personal identification number (PIN) by use of the numeric keypad 112 of the mobile phone 100.” EX1005, [0057]-[0059]. The shopper then taps her phone a second time on the merchant’s POS terminal “to consummate the transaction.” EX1005, [0059]. “Consummating the transaction may include the mobile phone wirelessly transmitting the selected payment card account number to the proximity/contactless reader, and exchanging other data between the reader and the contactless payment application/circuitry of the mobile phone. In accordance with some conventional practices, the mobile phone may cryptographically generate a dynamic security code (CVC3) for the transaction and transmit the dynamic security code to the reader.” EX1005, [0059].

C. Casey

U.S. Patent No. 8,255,323 (“Casey”) is directed to a “device[] for confirming payment transactions.” EX1006, Abstract. In Casey, a user performs an in-store transaction using a mobile device by first receiving “a request for payment as well as information for selecting a payment service and processing a payment transaction,” including a “handler identifier that specifies a payment service, electronic wallet application, or plug-in that may be used for the payment transaction.” EX1006, 8:59-64. The user makes a payment selection via the touch screen by accessing a wallet service, such as Google Checkout or Pay-Pal. EX1006, 8:34-38. The electronic wallet service “store[s] financial account information for

payment instruments, such as credit cards, debit cards, pre-paid or gift cards, checking accounts, and/or savings accounts, that may be presented to a user through the electronic device.” EX1006, 8:40-43. “Upon accessing a payment service or electronic wallet, the electronic device 10 may display account information and/or virtual representations of available payment instruments through the GUI 28 (FIG. 1) of the device.” EX1006, 9:9-12. The user selects the payment instrument, enters an identifier (such as a PIN) and swipes the screen to confirm the transaction. EX1006, 9:24-25, 49-52. Finally, a receipt is displayed that “identif[ies] the amount tendered, the payment recipient, and the payment instrument used to complete the payment transaction.” EX1006, 10:49-51.



EX1006, FIG. 3.

IV. LEVEL OF ORDINARY SKILL IN THE ART

For purposes of this Preliminary Response, Patent Owner does not challenge Petitioner's level of ordinary skill in the art.

V. ARGUMENT: THE PETITION FAILS TO SHOW A REASONABLE LIKELIHOOD OF SUCCESS

Petitioner failed to comply with 37 C.F.R. § 42.104(b)(3). But regardless, Petitioner fails to establish a reasonable likelihood of success as to any of the Challenged Claims. For Ground 1A, Petitioner relies on a combination of Gomez, Phillips, and Casey to challenge claims 1-3, 11-19, 21-22, 23-26, and 28-30 (of which claims 1, 19, and 25 are independent claims). For Ground 1B, Petitioner relies on a combination of Gomez, Phillips, Casey, and Law to challenge claims 5-6, 8-10, 23, and 27 (all dependent claims). For the reasons discussed below, both grounds fail.

A. The Petition Does Not Comply with 37 C.F.R. § 42.104(b)(3) Because Petitioner Does Not Explain Why it is Taking Different Claim-Construction Positions in Its IPR Petition and District Court or Using Patent Owner's Alleged Constructions

Petitioner "must set forth" in the Petition "[h]ow the challenged claim[s] [are] to be construed." 37 C.F.R. § 42.104(b)(3). The Director has explained that, to comply with Rule 42.104(b)(3), "when a petitioner advances different positions before the Board and a district court, that petitioner is *required* to explain why those different positions are warranted." *Tesla, Inc. v. Intell. Ventures II LLC*, IPR2025-

00340, Paper 18 at 3 (Director Nov. 5, 2025) (informative) (emphasis in original and citing *Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 at 3-5 (Director Nov. 3, 2025) (precedential)). Petitioner has failed to do so, meaning its Grounds 1A-1B challenge necessarily fail.

The situation here is analogous to both the Director’s Orders in *Revvo* Vacating the Decision Granting Institution, and Remanding to the Board for Further Proceedings after *Sua Sponte* Director Review (IPR2025-00632, Paper 20), as well as in *Tesla* Granting Director Review, Vacating the Decision Granting Institution, and Denying Institution of *Inter Partes* Review (IPR2025-00340, Paper 18).

Patent Owner explains below why Petitioner failed to comply with Rule 42.104(b)(3) for two independent reasons: (1) as in *Revvo*, Petitioner purports to adopt Patent Owner’s claim constructions instead of proposing its own constructions for claim terms in the challenged independent claims; and (2) as in *Tesla*, Petitioner asserts in district court that the scope of certain terms cannot be ascertained with reasonable certainty and thus certain challenged claims are indefinite but asserts here that those same terms should be given their plain and ordinary meaning.

1. Analogous to *Revvo*, Petitioner Also Purports to Apply Patent Owner’s District Court Positions

The situation here is like the Director’s Order in *Revvo*, IPR2025-00632, Paper 20. In *Revvo*, the petitioner “did not propose its own constructions for claim terms in the Petition, but instead accepted [the patent owner’s] proposed

constructions from the parties’ district court litigation.” *Id.* at 2. The petitioner asserted it complied with Rule 42.104(b)(3) “because Petitioner had adopted Patent Owner’s proposed constructions from the district court litigation.” *Id.* As the Director stated, “[s]imply noting that the petitioner is adopting a patent owner’s claim construction proposals from district court, however, is *not* a sufficient reason for advancing different positions in the two forums.” *Id.* at 5. The Director found that the petitioner’s bare statement that it “accepts Patent Owner’s proposed constructions” fails to comply with Rule 42.104(b)(3). *Id.*

That is analogous to Petitioner’s assertions here. Instead of applying the plain and ordinary meaning or explaining what Petitioner believes to be the proper construction, Petitioner relies on Patent Owner’s alleged interpretation—based in large part on a misrepresentation of Patent Owner’s preliminary infringement contentions in the parallel district court case (EX1042)—to explain why the prior art allegedly teaches various claim limitations. This is exemplified in the following table:

Limitation	Petitioner’s Assertion
[1.h]	<i>“In its infringement contentions, Patent Owner states</i> that the token and dynamic cryptogram are sent as complete payment information. EX1042, 32 (‘The payment token and accompanying cryptogram as

Limitation	Petitioner's Assertion
	passed to the POS'). <i>Consistent with that interpretation, Gomez discloses</i> that the static token and authentication cryptogram are sent as complete payment information. EX1003, ¶141.” Pet., 33.
[19.f]	“The Gomez-Phillips-Casey combination discloses this limitation. <i>See supra</i> [1.f]-[1.h]; EX1003, ¶173; <i>supra</i> IX.A.4.” Pet., 50 (referencing element [1.h]).
[25.f]	“The Gomez-Phillips-Casey combination discloses that the processor is operable to receive an approval and a denial confirmation from an online payment facility of the complete device payment information, and cause the display to visually convey a status of the online purchase transaction. <i>See supra</i> [1.j]-[1.k]; EX1003, ¶197.” Pet., 59-60 (referencing element [1.h]).

As the above table shows, as related to all three independent claims, Petitioner does not purport to rely on what it believes to be the plain and ordinary meaning, but rather on what it believes Patent Owner's construction to be.

Petitioner's expert—at the request of Petitioner's counsel—confirms that he was “asked to assume [Patent Owner's alleged interpretation] applies to [the] limitation” and then provides his opinion “[i]f that interpretation applies” for limitations in each independent claim. For example:

I understand from counsel that Patent Owner asserts that the token and dynamic cryptogram are sent as complete payment information as meeting [1.h]. ***I have been asked to assume that interpretation applies to this limitation. If that interpretation applies, Gomez***

discloses that the static token and authentication cryptogram are sent as complete payment information.

EX1003 ¶141 n.3 (emphasis added).

Petitioner's expert provides no independent analysis for the corresponding claim limitations in independent claims 19 and 25 (he simply references back to claim 1). EX1003 ¶¶173, 195. In other words, he “assumes [Patent Owner's alleged interpretation] applies” to those claims as well:

- “The Gomez-Phillips-Casey combination discloses this limitation. *See* above, [1.f]-[1.h].” EX1003 ¶173 (referencing [1.h] to assert the combination discloses [19.f]).
- “Gomez discloses this limitation. *See* above, [1.e]-[1.h].” EX1003 ¶195 (referencing [1.h] to assert Gomez discloses [25.f]).

As is apparent from the above, Petitioner and Petitioner's expert (at counsel's request) use Patent Owner's alleged claim interpretation for all three independent claims (claims 1, 19, and 25). That is improper and fails to comply with Rule 42.104(b)(3). *See Revvo*, IPR2025-00632, Paper 20 at 3-5. Institution should thus be denied.

2. Analogous to *Tesla*, Petitioner Asserts in District Court that the Scope of the Claims Cannot be Ascertained with Reasonable Certainty but Has No Issue Doing so in its IPR Petition

The situation here is also akin to the Director’s Order in *Tesla*, IPR2025-00340, Paper 18. In *Tesla*, the petitioner asserted in district court that a claim limitation (referred to as the “generating limitation”) “recited in independent claim 1 is indefinite because a person of ordinary skill in the art would not be able to determine the meaning and scope of that limitation with reasonable certainty,” which the patent owner opposed. *See id.* at 2-3. “In contrast, [the *Tesla* petitioner] argued in its Petition that the challenged claims should be given their plain and ordinary meaning.” *Id.* The petitioner argued it complied with 37 C.F.R. § 42.104(b)(3) “by providing a construction for the generating limitation, and by explaining that the different claim construction positions at the Board and in district court are warranted because Petitioner is statutorily prohibited from raising indefiniteness challenges in an *inter partes* review.” *Id.* at 2-3. The Director held that “Petitioner’s statement that it cannot raise indefiniteness challenges in an *inter partes* review is not a sufficient explanation” and “[i]ndeed, the statement amounts to an assertion that a petitioner should be permitted to raise inconsistent invalidity challenges in the two forums.” *Id.* at 3. In the Order vacating institution, the Director found that “[a]llowing a petitioner to advance a claim construction before the Board when that petitioner has made inconsistent indefiniteness arguments in district court fails to further, but

instead detracts from, the Office’s goal of ‘providing greater predictability and certainty in the patent system.’” *Id.* at 4 (quoting *Revvo*, IPR2025-00632, Paper 20 at 4-5 (quoting 83 Fed. Reg. 51,340, 51,342-43 (Oct. 11, 2018))).

The same thing (albeit worse) happened here.

Petitioner’s District Court Positions. Petitioner asserts in district court that various terms found in challenged dependent claims 9 and 27 (and by extension, dependent claim 10 which depends from claim 9) have “no reasonably certain meaning” rendering the claims indefinite. EX2025, 10-20 (Petitioner’s Opening Claim Construction Brief); EX2027, 8-14 (Petitioner’s Reply Claim Construction Brief, asserting same); *see also* EX2026, 1 (Joint Claim Construction Statement confirming it was Petitioner that proposed to construe the terms and asserts they are indefinite). Patent Owner disagreed and explained that these terms should be given their “plain and ordinary meaning.” EX2028, 10-19 (Responsive Claim Construction Brief); EX2029, 6-10 (Sur-Reply).

Petitioner’s IPR Positions. In its IPR petition, Petitioner asserts that “any reasonable construction reads on the prior art.” Pet., 8. Its expert notes his “understand[ing] that claim terms, in the absence of an express definition or disclaimer, are given their ordinary and customary meaning, as would have been understood by a POSITA at the time of the alleged invention,” and that “[i]n considering the meaning of the claims, however, ... one must consider the language

of the claims in light of ‘the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” EX1003 ¶¶81-82 (quoting 37 C.F.R. § 42.100(b)). He also asserts that he “applie[s] these principles in interpreting the Challenged Claims for purposes of my analysis in this Declaration.” EX1003 ¶83.²

Petitioner (and its expert) then proceed—without any mention that anything is allegedly indefinite or that the claim scope allegedly cannot be determined—to apply its alleged prior art to the claims. *See* Pet. (Grounds 1A-1B).

While Petitioner attaches the magistrate judge’s claim construction order and generically mentions it in passing (Pet., 8 (citing EX1046)), Petitioner omits that (i) it argues in district court that the claim scope cannot be ascertained rendering the claims indefinite, (ii) it is continuing to pursue its indefiniteness challenges in district court, and (iii) it has filed objections to the magistrate judge’s order, asking the court to revisit the determination rejecting Petitioner’s indefiniteness assertion for claims 9 and 27. EX2024, 5-8.³ Moreover, Petitioner has *not* withdrawn or otherwise agreed

² The expert also notes that he “understand[s] Petitioner does not assert that any claim terms require express construction in this proceeding.” EX1003 ¶84.

³ Petitioner’s expert—in applying the “ordinary and customary meaning” to the claims—does not mention or address any indefiniteness issues. Although he states

to not pursue its indefiniteness positions during the district court case or on appeal—further confirming that, regardless of the outcome of its IPR petition, it has (and will) continue to maintain entirely inconsistent and irreconcilable positions in parallel forums.⁴

And importantly, and even worse than in *Tesla*, Petitioner does **not** mention (let alone attempt to justify) that it has taken contradictory positions between fora. *See Am. Airlines, Inc. v. Intell. Ventures I LLC*, IPR2025-01055, Paper 11, 13 (PTAB Nov. 11, 2025) (“We also remind Petitioner’s counsel of their duty of candor and good faith to the Office during the course of a proceeding pursuant to 37 C.F.R. § 42.11. Patent Owner should not have been the first party to inform the Board as to Petitioner’s different claim construction positions in the two forums.”); *cf. Tesla*, IPR2025-00340, Paper 18 at 3 (“Here, Petitioner’s statement that it cannot raise indefiniteness challenges in an *inter partes* review is not a sufficient explanation.

he reviewed and is familiar with the “exhibits to the Petition” (EX1003 ¶28), he never mentions or considers Petitioner’s district-court claim construction positions or the magistrate judge’s order (EX1046) in his declaration. *See generally* EX1003.

⁴ Petitioner’s statement in the Petition that it “reserve[s] all rights to raise claim construction and other arguments in other venues” (Pet., 8 n.4) is telling and systemic of Petitioner’s ongoing inconsistent approaches across the forums.

Indeed, the statement amounts to an assertion that a petitioner should be permitted to raise inconsistent invalidity challenges in the two forums.”).

Accordingly, because Petitioner has taken (and continues to take) irreconcilable and unexplained claim-construction positions in parallel fora—alleging in district court that the scope of certain terms cannot be ascertained and are thus indefinite while in its IPR Petition seeking to apply the plain and ordinary meaning for those same terms—Patent Owner respectfully submits that Petitioner has failed to comply with Rule 42.104(b)(3) for this additional reason. *See Tesla*, IPR2025-00340, Paper 18 at 3; *Am. Airlines*, IPR2025-01055, Paper 11 at 11-13; *Revvo*, IPR2025-00632, Paper 20 at 3-5. Institution would thus be improper.

B. Gomez Does Not Teach Limited-Use Payment Information for Use “in Place of” Issued Payment Information (All Challenged Claims)

For Grounds 1A and 1B challenging claims 1-3, 5-6, 8-19, and 21-30 (*i.e.*, all Challenged Claims), the mixed-and-matched embodiments in Gomez that Petitioner relies upon (and Petitioner’s proposed combinations as a whole) fail to teach or render obvious using limited-use payment information “in place of” card issuer payment information, as required in elements [1.g], [19.e], and [25.e] in independent claims 1, 19, and 25. Elements [1.g], [19.e], and [25.e] recite:

- Element [1.g]: “using said limited-use payment informations in place of at least a portion of said selected original issuer-supplied payment information for the transaction”⁵
- Element [19.e]: “generating at least one limited-use numbers at said electronic device, and using said limited-use number in place of at least a portion of selected account issuer payment information”
- Element [25.e]: “responsive to receiving a valid user transaction payment approval, generate a device-specific limited-use payment information for use in place of at least a portion of said selected issuer payment account information on the device”

For this requirement, Petitioner relies on Gomez alone. Pet., 31-32, 50, 58-59. Petitioner argues that Gomez’s “authentication cryptogram (the limited-use payment informations) is used in place of the card issuer supplied payment information (the ‘actual credit card account number’ disclosed by Gomez) in that the authentication cryptogram is combined with the static EPIC account number and provided to the merchant rather than the issuer supplied payment information.” Pet., 32. However, Petitioner’s overall challenge mixes and matches the “manual” and “automatic” embodiments” in Gomez, which leads to multiple failures.

⁵ As per the Certificate of Correction. EX2031, 1.

1. Petitioner’s Theory Relies on Gomez’s “Manual” Embodiment, But This Embodiment Requires Use of the Actual (Real) Payment Card Information, as Petitioner Effectively Admits in its Petition

Petitioner’s theory is premised on Gomez’s “manual” selection embodiment whereby the actual credit card number must be used throughout the transaction (including initially transmitting it from the EPIC payment card to the merchant POS at the beginning of the payment transaction). For example, for element [1.d] (“displaying, on a display of the device, the request and at least a portion of an original static issuer-supplied payment account information associated with a selected payment method, for a user selection in paying the request”) Petitioner asserts:

Gomez discloses selecting a preferred payment method, from among multiple possible payment methods, for a payment request. EX1003, ¶¶132-135. Gomez discloses that a customer may establish an EPIC account consisting of one or more actual payment card accounts and the customer may then *select the desired account for a specific transaction*. EX1007, 20:2-59; EX1003, ¶132.

Pet., 25; *see also* Pet., 18-19 (asserting motivation based on manual selection in Gomez whereby “the user can ‘*manually* select the actual credit card that he/she wishes to use *during a purchase transaction*’” and that doing so allegedly provided

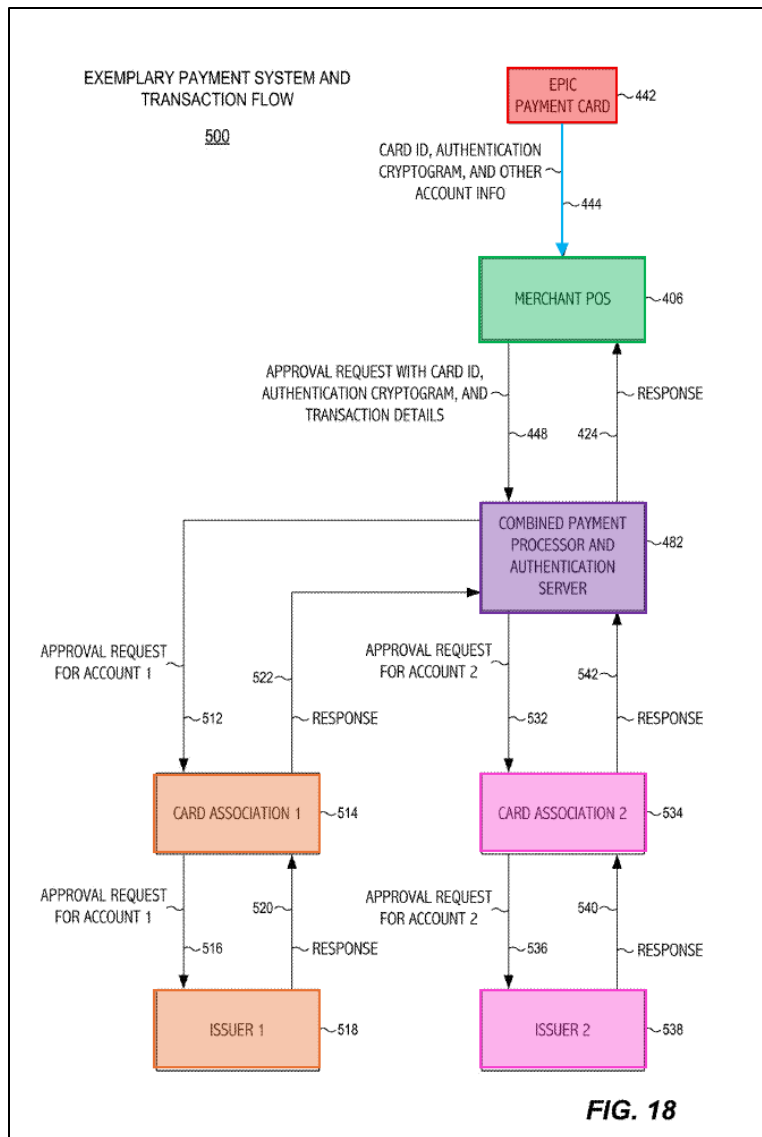
certain advantages), 29; *see also* 48-49 (referring to [1.d] for [19.b]-[19.d], [19.g]), 56 (referring to [1.d] for [25.b], [25.c]).

In other words, Petitioner's obviousness assertion is premised on the initial use of the "manual" selection embodiment to select a particular issued payment account during a particular transaction. This "manual" embodiment of Gomez is fundamentally different from the "automatic" embodiment in terms of how the underlying account information is selected, communicated, and used for payment.

Automatic Mode. In the "Automatic" embodiment, a user pre-selects their account priority through the EPIC system (*e.g.*, "online to link one or more actual payment card accounts with the EPIC account, including the preferred order that the authentication server should select the linked accounts to use for a given transaction"). EX1007, 20:1-6; *see also* EX1007, 20:7-29. That way, "during a purchase transaction, the EPIC system defaults to the major credit card selection flow established by the customer." EX1007, 20:16-18. More specifically, and with reference to Figure 18 below, in such "automatic" process, **account information 444** (including the EPIC card account number) is communicated from **EPIC payment card 442** to **merchant POS 406**, which then transmits the approval request 448 to **acquirer 482**. EX1007, 18:43-49; *see also* EX1007, 5:65-6:6. **Acquirer 482** "analyzes the account number conveyed in the inbound approval request 448 to determine the appropriate card association or entity to next process

the transaction approval request” by recognizing the EPIC card account number and “determin[ing] a first payment card account number (and corresponding actual account name) which is linked to the EPIC account.” EX1007, 18:50-59.

The request is then sent to **first card association 514** and then to **first issuer 518** for approval or denial. EX1007, 18:60-19:2. If approved, the transaction is processed using the first card; if denied, then an approval request automatically goes to the next priority card already linked to the account (**second card association 534** and **second issuer 538**), and so forth, until a card is approved or all cards are denied. EX1007, 19:4-34, 20:15-37. This process only works because the user pre-selected the “‘Automatic’ option mean[ing] that during a purchase transaction, the EPIC system defaults to the major credit card selection flow established by the customer” in advance (*e.g.*, “online” before the user is at a retailer). EX1007, 20:1-37.



EX1007, FIG. 18.

Manual Mode. Importantly, the “Manual” embodiment is different. In Manual mode, a user has the ability to select a payment account on-the-fly, right from the EPIC payment card itself “at the moment of the transaction.” EX1007, 20:30-42. Specifically, the user can select the payment account from a display and a selection capability, such as a membrane switch. EX1007, 20:30-42. “This option is

useful, for example, for a customer having a corporate credit card who needs the ability to choose which card to use at the moment of the transaction.” EX1007, 20:32-35. With this “manual” embodiment, Gomez is silent on how the merchant POS, the Authorization Server, or the EPIC system knows which payment account to use in the transaction or how the selected card payment information is communicated to the merchant and Epic authentication server during a transaction.

However, if the EPIC card account number (not the actual “live” credit card number) was transmitted by the payment card in connection with this “manual” selection process, there is no way the EPIC system would know which card the user selected “at the moment of the transaction.” Thus, the only possible explanation is that in Gomez the real account information is transmitted from the EPIC payment card to the merchant POS system during Manual mode operation. This is buttressed by Gomez’s disclosure elsewhere, for example, that “[t]he payment card number [used in the transaction] may represent a ‘live’ credit card number or other payment card account number....” EX1007, 5:19-20; *see also, e.g.*, EX1007, 2:19-21 (“The static payment card identifying number may represent a live (i.e., ‘actual’) credit card number or other payment card (e.g., debit card) account number”).

As such, because the display and selection for element [1.d] relied upon by Petitioner occur only in Gomez’s “Manual” mode, Gomez does not disclose element [1.g] under Petitioner’s theory because this element requires “using said limited-use

payment information in connection with the payment transaction *in place of* issued payment information associated with said selected issued payment account” (and similarly elements [19.e]/[25.e]). Alternatively, and at the very least, Petitioner cannot meet its burden on elements [1.g], [19.e], and [25.e], as it concerns the Manual mode embodiment. *See also* Section V.B.2, below.

Petitioner seems to recognize this because it does not rely on the Manual mode disclosure in connection with elements [1.g], [19.e], and [25.e]. Petitioner’s mixing and matching of embodiments is fatal to its challenge in both grounds. *See, e.g., Samsung Elecs. Co. Ltd. v. Mojo Mobility Inc.*, IPR2023-01100, Paper 11, 18-19 (PTAB Feb. 12, 2024) (denying institution where combination “appears unworkable and mixes incompatible features of the two different coil arrangements without sufficient explanation to justify their combination”); *PayPal, Inc. v. IOENGINE, LLC*, IPR2019-00930, Paper 16, 34 (PTAB Oct. 29, 2019) (denying institution where Petitioner “improperly mixes and matches two discrete embodiments”); *AT&T Servs. Inc. v. Innovative Sonic Ltd.*, IPR2024-01143, Paper 15, 33 (PTAB Feb. 11, 2025) (denying institution and finding Petitioner’s “conflicting arguments inconsistent and thus not persuasive”).

Petitioner does not give a reason why (or explain how) a POSITA would combine these different options (nor even address that these are separate embodiments with a separate transaction flow at all). Importantly, the specification

treats them as alternatives. A user either implements Manual mode or Automatic mode at any given time. EX1007, 20:1-63. If a user is in Automatic mode, there is no reason to display or select anything on or from a touch screen, as required by elements [1.d] and [1.e] (and similarly in [19.c]/[19.d] and [25.c]/[25.d]). Nor does Gomez disclose doing so in the Automatic Mode (such display and selection happens only in the Manual mode, EX1007, 20:30-35). If a user is in Manual mode, there is no disclosure in Gomez, about what gets communicated to the merchant during the transaction. All signs are that it is the *real* credit card number that must be transmitted from the EPIC payment card to the merchant POS in Gomez's Manual mode, which fails to meet element [1.g], [19.e], and [25.e].

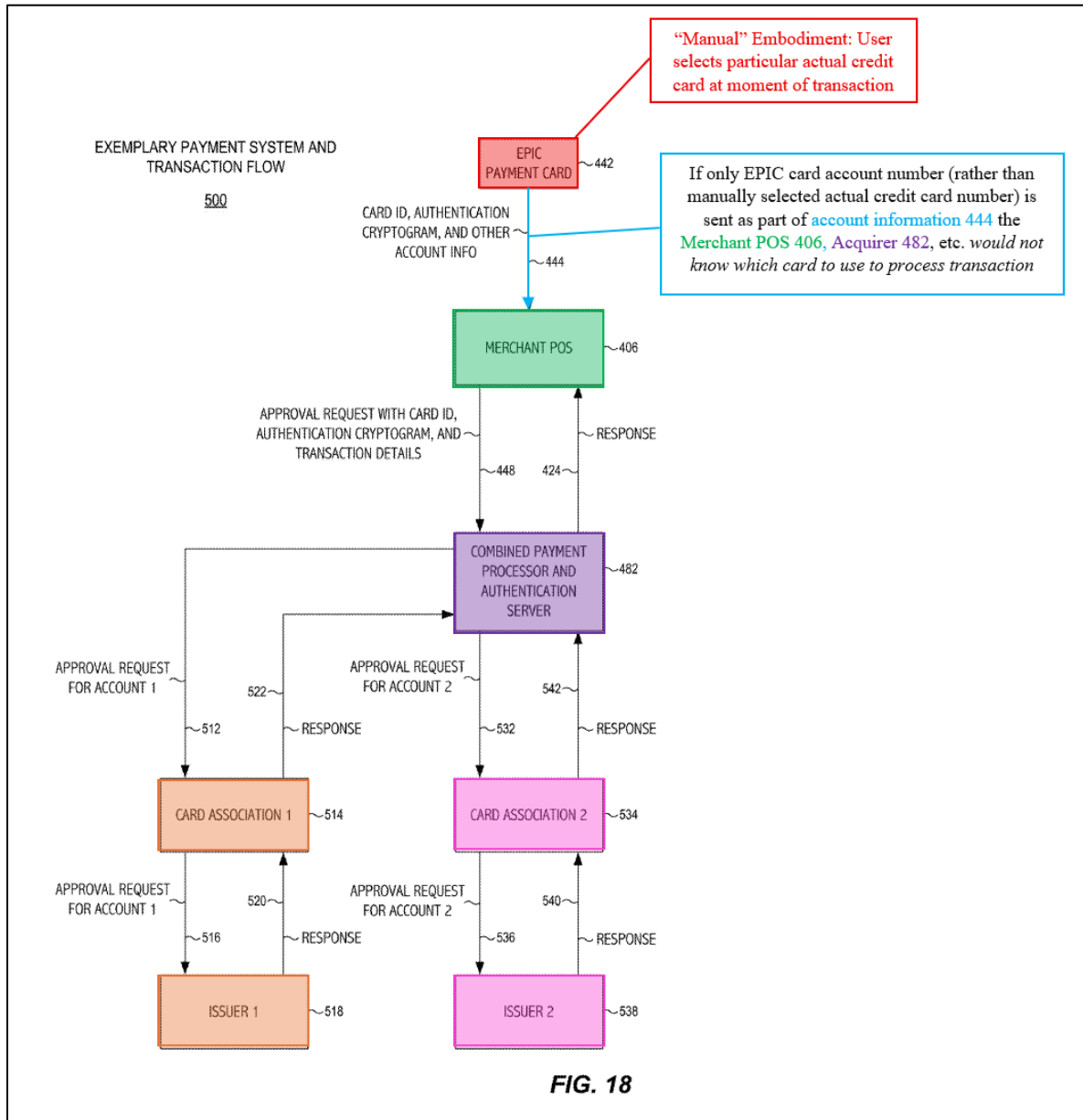
2. If Gomez Does Not Teach How the Selected Credit Card Number is Used Throughout the “Manual” Process, Petitioner’s Proposed Combination is Inoperative, Unworkable, and Unexplained

If Petitioner is correct that Gomez is not “explicit” in how the “manual” selection process “at the moment of a transaction” occurs as it asserted in a now-denied IPR petition challenging a patent related to the '538 Patent (EX2030, 53-54), Petitioner's theory would still necessarily fail. In this scenario, Petitioner provides no argument or evidence as to how its proposed combinations would involve both (i) selecting the particular credit card to use at the time of the transaction (as alleged for elements [1.d]/[1.e], [19.c]/[19.d], and [25.c]/[25.d]) and (ii) transmitting the

EPIC card account number and authentication cryptogram “in place of” the actual credit card number (as alleged for elements [1.g], [19.e], and [25.e]).

In such a scenario, Petitioner’s proposed combination would not function because the EPIC system would have no way of knowing which credit card was selected for use. Indeed, Petitioner’s challenge to all the claims includes ***no argument or evidence*** as to how the process would actually work. For example, if the user selected—“at the moment of the transaction”—the “actual credit card that he/she wishes to use during a purchase transaction” (EX1007, 20:30-35), but then only “payment card transmits the static EPIC number (i.e., static payment card identifying number) and the dynamically-generated authentication cryptogram to the point-of-sale (POS) terminal,” (Pet., 9), the actual credit card number selected would never be transmitted and thus ***not*** known to any other part of the system. This can be seen in reference to Figure 18 of Gomez, below. If a user selects a particular “actual credit card” using **EPIC payment card 442** “during a transaction at the moment of the transaction” (as Petitioner’s theory is premised on) but the **EPIC payment card 442** transmits only the EPIC card number (along with the authentication cryptogram) as part of **account information 444** to **merchant POS 406** then the actual credit card selected would never be known and the transaction could ***not*** proceed. The same is true in the other embodiments and figures in Gomez

(all of which necessitate that the card number would be transmitted to the merchant POS, as in, *e.g.*, Figures 2, 3, 16, and 17).



EX1007, FIG. 18 (red “Manual...” and blue “If only...” text boxes added for reference).

Thus, to the extent that it is determined that Gomez does not teach how the selected actual credit card is transmitted in the “manual” embodiment, Petitioner’s proposed combinations in both Grounds—starting with the “Manual” selection embodiment for elements [1.d]/[1.e], [19.c]/[19.d], and [25.c]/[25.d] and then switching to the “Automatic” embodiment for elements [1.g], [19.e], and [25.e])—would be inoperative, unworkable, and unexplained. Petitioner has thus failed to meet its burden to show how the proposed combination would meet all claim limitations under this scenario as well. *See, e.g., AT&T Servs.*, IPR2024-01143, Paper 15 at 33; *Samsung Elecs.*, IPR2023-01100, Paper 11 at 18-19; *PayPal*, IPR2019-00930, Paper 16 at 34.

C. Petitioner’s Conclusory Assertions of Reasonable Expectation of Success Fail (All Challenged Claims)

Petitioner’s reasonable-expectation-of-success assertions rest exclusively on a single sentence parroted—without evidence or analysis—by its expert.

In Ground 1A, Petitioner’s entire assertion that a POSITA would have a reasonable expectation of success consists of a one-sentence conclusion, citing to its expert, who repeats the same thing verbatim (omitting only the “furthermore”), without any evidence or explanation:

Petition (Paper 1) at 21	Expert Declaration (EX1003 ¶124)
A POSITA would have furthermore had a reasonable expectation of success	A POSITA would have had a reasonable expectation of success in

in modifying the mobile payment system of Gomez based on Phillips and Casey as they all are directed toward similar mobile payment systems with Phillips and Casey simply providing additional details on known user interfaces and security measures in similar technological environments. <i>Id.</i>	modifying the mobile payment system of Gomez based on Phillips and Casey as they all are directed toward similar mobile payment systems with Phillips and Casey simply providing additional details on known user interfaces and security measures in similar technological environments. <i>Id.</i> ⁶
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This conclusory assertion⁷—without any evidentiary support whatsoever—fails to meet Petitioner’s burden. *See, e.g., Solus Advanced Materials Co. Ltd. v. SK Nexilis Co., Ltd.*, IPR2024-01462, Paper 14, 17-18 (PTAB Apr. 25, 2025) (“Petitioner’s contention that implementing Dobashi’s RSm values into Hanafusa’s electrolytic copper foil is the application of known techniques to a known structure

⁶ The expert includes an “*Id.*” which appears to be a typographical resulting from a copy-and-paste of the Petition. *Compare* Pet., 21 (use of “*Id.*” refers to EX1003 ¶124 from prior sentence in Petition) *with* EX1003 ¶124 (use of “*Id.*” does not refer to anything).

⁷ Ground 1B (challenging certain dependent claims using the combination of Gomez, Phillips, Casey, and Law) relies on the same references and rationale for combining Gomez, Phillips, and Casey and thus fails for the same reasons.

to yield predictably results is similarly conclusory and lacking in persuasive explanation. *Such conclusory statements regarding the POSITA's alleged reasonable expectation of success are not sufficient* to support a finding of obviousness. Such assertions, lacking factual substantiation, are insufficient for evaluating reasonable expectation of success as part of an obviousness determination.”) (internal citation omitted); *see also, e.g., Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (Petitioner bears the “burden to demonstrate **both** that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, **and** that the skilled artisan would have had a reasonable expectation of success in doing so.”) (cleaned up); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (“To satisfy its burden of proving obviousness, **a petitioner cannot employ mere conclusory statements**. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.”).

This alone demonstrates—as a matter of law—that Petitioner has failed to show (and cannot show) a reasonable expectation of success based on its assertions in the Petition. Moreover, the lack of a reasonable expectation of success is even more apparent, given the incompatibility of the references, as explained herein.

D. A POSITA Would Not Have Sought to Modify Gomez with Casey or Phillips to Receive a Payment Request Via an NFC Interface; Gomez Teaches Away From and Expressly Discourages the Proposed Combination (Challenged Claims 1-3, 5-6, and 8-18)

Petitioner's proposed combinations do not teach or render obvious a device with elements [1.c]:

- Element [1.c] "receiving a request for a transaction payment at said electronic device via an NFC interface of the device"

For this element [1.c], Petitioner relies on the teachings of Phillips, Casey, and Gomez to argue that "Gomez discloses use of NFC for transmission or reception of information" and "Phillips and Casey disclose that, in the predictable combination, the electronic device can receive a request for a transaction payment via an NFC interface of the device." Pet., 24. Petitioner also asserts that Phillips generally details interactions between an NFC and a POS terminal, and Casey discloses displaying "received information" from an NFC tag or an SMS which may include a "request for payment." Pet., 11.

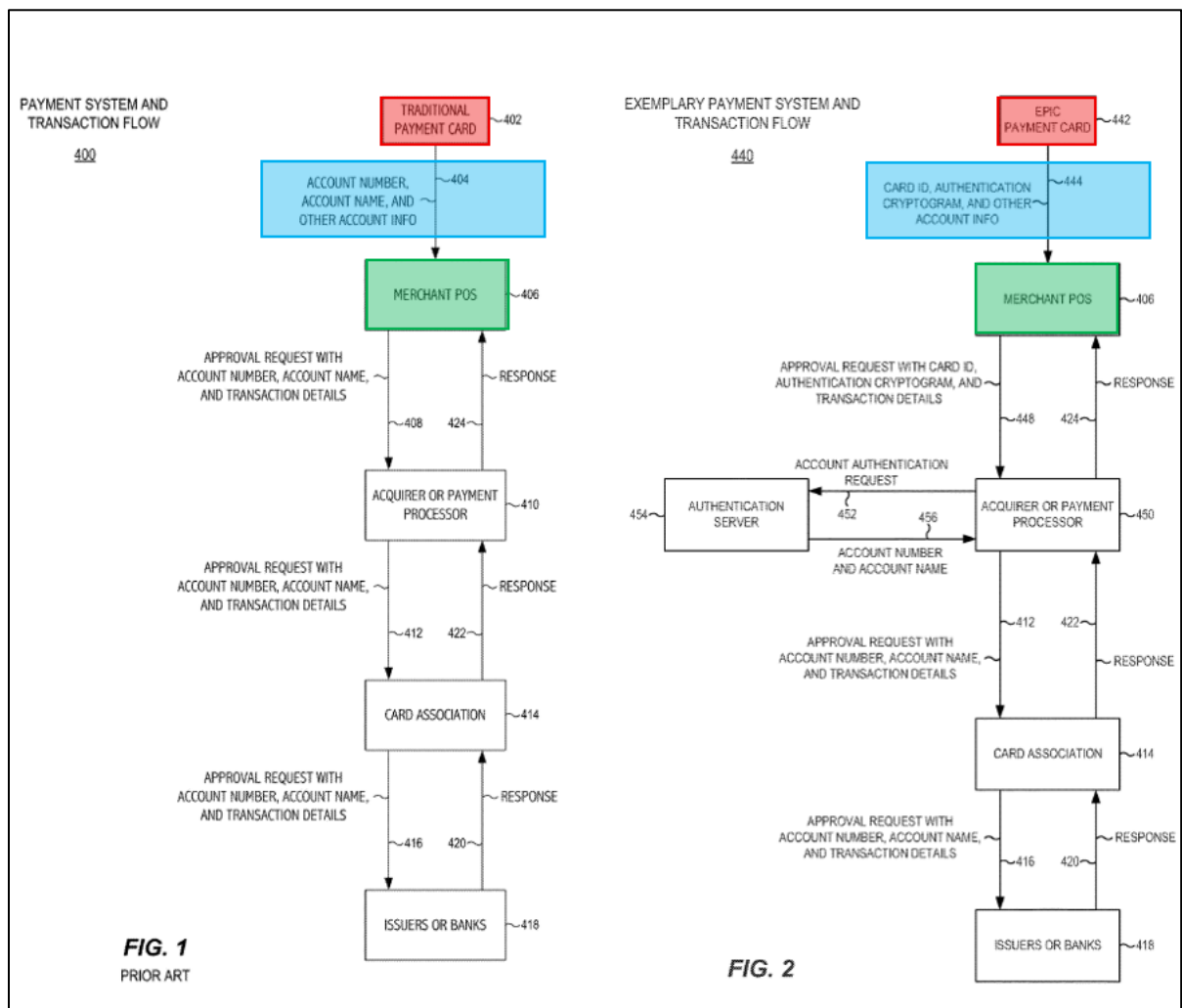
However, Petitioner's argument ignores Gomez's express teachings to *not* make the contemplated changes (and, in fact, not make *any* changes to the "traditional" system at the point-of-sale or card issuer). It also fails to appreciate the fundamental differences between Gomez, Phillips, and Casey. These missteps lead to several fundamental problems with Petitioner's proposed combinations.

First, as discussed above in Section III.A, the entire point of Gomez is that its “EPIC” payment card may be presented like a traditional credit card using a magnetic stripe and used in a “traditional” payment system without needing any changes in infrastructure by the point-of-sale merchant or the card issuer. Indeed, Gomez’s system is specifically designed to work within a pre-existing traditional payment system infrastructure, such that “[n]o *changes* in the payment system infrastructure need be made by either the point-of-sale merchant or the card issuer.” EX1007, 2:40-41; *see also, e.g.*, 3:65-4:7 (“FIG. 1 is a block diagram depicting a *traditional* payment system 400 and transaction flow related to purchase transaction approval at a retail merchant. A *traditional* payment card 402, such as a credit card or debit card, includes *a magnetic stripe* on which is permanently encoded certain account information.... This account information (labeled 404) is communicated to a merchant 406, such as by swiping the payment card 402 through a magnetic card reader on a point-of-sale (POS) terminal (not shown).”); 5:32-34 (“The card holder then *swipes* the payment card through a POS terminal at the merchant just like a *traditional* magnetic stripe payment card.”), 5:67-6:2 (“Since all the information is encoded using standard fields, a *traditional* POS terminal may be used *without any required changes* as a result of the encoding.”), 9:65-10:32 (“communicat[ing] using *traditional* POS terminal equipment and using *traditional* credit card field

limitations” including magnetic swipe), 14:3-11 (“*traditional* payment card system”).

This is further evident in the comparison of Figures 1 and 2 of Gomez. Figure 1, below left, “is a block diagram depicting a traditional payment system 400 and transaction flow related to purchase transaction approval at a retail merchant,” whereby “[a] **traditional payment card 402**, such as a credit card or debit card, includes a magnetic stripe on which is permanently encoded certain account information,” which “**account information (labeled 404)** is communicated to a **merchant 406**, such as by swiping the **payment card 402** through a magnetic card reader on a point-of-sale (POS) terminal (not shown).” EX1007, 3:65-4:7. Figure 2, below right, then retains all of these traditional features, including that “**EPIC payment card 442** includes a re-writable magnetic stripe” with “**account information 444**.” EX1007, 5:48-64. As in the traditional system (depicted in Figure 1), in Figure 2, “**account information 444** is communicated to the **merchant 406** by swiping the **payment card 442** through a magnetic card reader on a point-of-sale (POS) terminal (not shown).” EX1007, 5:64-67. As Gomez explains in reference to Figure 2 implementing its EPIC payment card, “[s]ince all the information is encoded using standard fields, a traditional POS terminal may be used *without any required changes* as a result of the encoding.” EX1007, 5:67-6:2. “The **merchant 406** combines the **account information 444** with transaction information, *as before*,

[i.e., as in the “traditional” system in Figure 1] and forms an approval request 448 which is communicated to an acquirer 450.” EX1007, 6:3-6. Notably, **merchant POS 406** requiring the magnetic card swipe of a payment card is designed to be the **same** in both the “traditional” “prior art” system in Figure 1 and the EPIC payment card system in Figure 2.



EX1007, FIGs. 1-2.

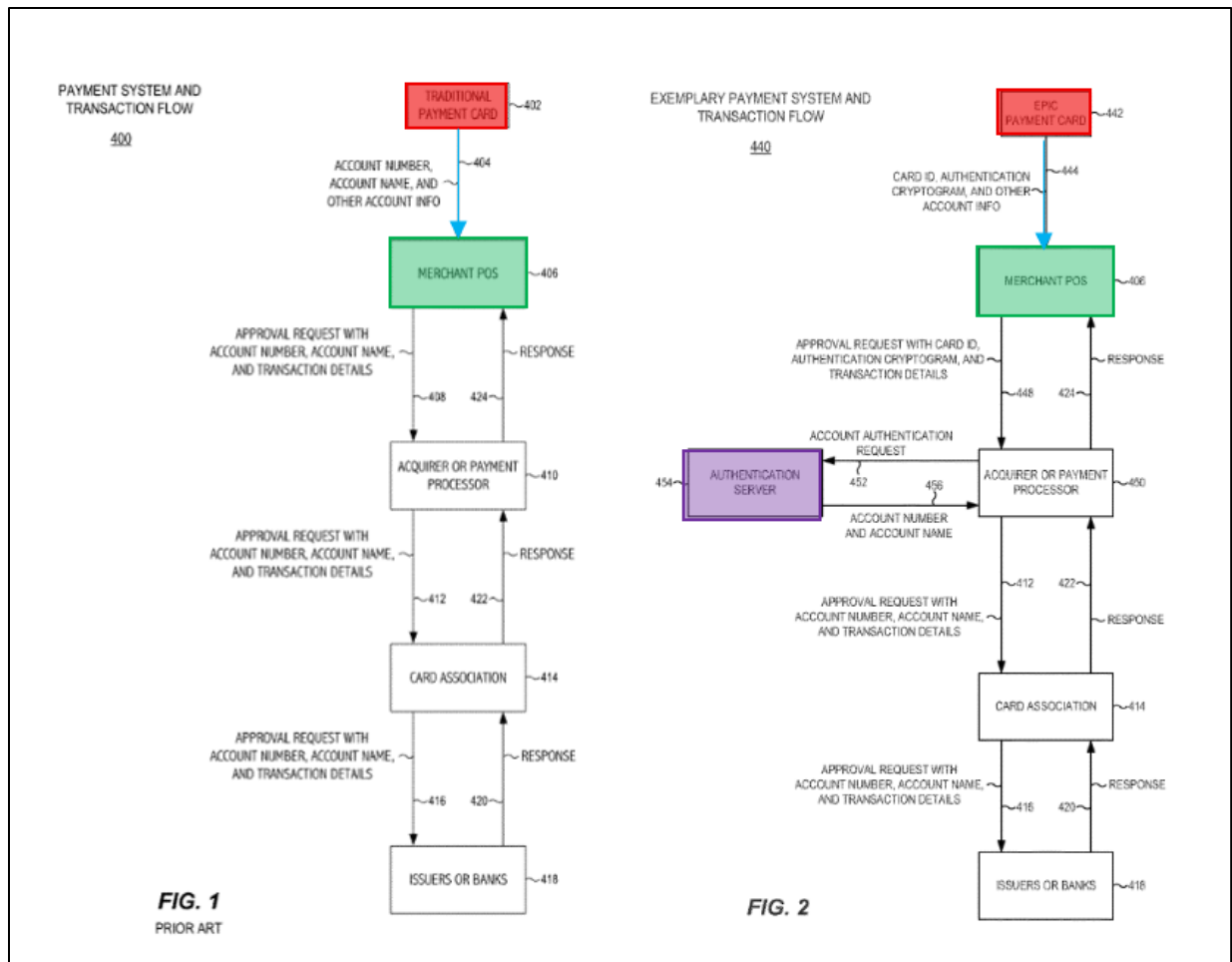
Yet, in Petitioner’s reimagined combination adding Phillips and Casey to Gomez would lose the traditional aspects of its EPIC payment card—including the

magnetic stripe capability necessary to remain compatible with “traditional” merchant POS systems disclosed in Gomez—by turning Gomez’s EPIC payment card into “a device having a touchscreen display, as taught by Phillips and Casey.” Pet., 13. There is no reasoned basis (and Petitioner provides none) for why a POSITA would seek to make such a combination, when it would require losing key compatibility with traditional systems.

Moreover, while Gomez mentions a mobile phone, it does so only in the context of a user setting up an EPIC account on the backend, not in connection with using the mobile phone as the EPIC payment card or otherwise that the mobile phone has any applicability to making a payment transaction at a traditional merchant POS. *See* EX1007, 20:44-59. If it was, in fact, obvious to turn the EPIC card into a mobile phone (it is not for the reasons explained in this section), then logically Gomez would have mentioned that in its disclosure. That Gomez does not only serves to further confirm a POSITA would not have done so, as it would require losing the core features necessary to traditional payment transactions at a merchant POS.

Second, as discussed above in this Section V.D and in Section III.A, Gomez specifically explains that the “traditional” system to which “no changes” at the **merchant POS** or the card issuer is depicted in its Figure 1, below. *See also* EX1007, 3:65-4:7. Also as discussed in Section III.A above, to ensure that its system remains completely compatible with traditional systems without change, Gomez

discloses only unilateral communication from the payment card *to* the traditional POS system as part of the traditional “transaction flow.” *See also* EX1007, 3:65-4:7. It never discloses any communication from the POS system to the card. This is evident, for example, in the comparison of the “prior art” “traditional” system disclosed in Figure 1 with the EPIC card system in Figure 2, where Gomez discloses that **the information** is sent from **the payment card** to **the merchant POS**, but the merchant POS does not send anything to the payment card. EX1007, 3:65-4:7, 5:13-34; *see also* Section III.A, above. This one-way communication is further confirmed by the bi-directional communication elsewhere (*e.g.*, approval requests and responses between the merchant POS and acquirer, the acquirer and card associations, etc.). *See* EX1007, FIGs. 1-2 (below).

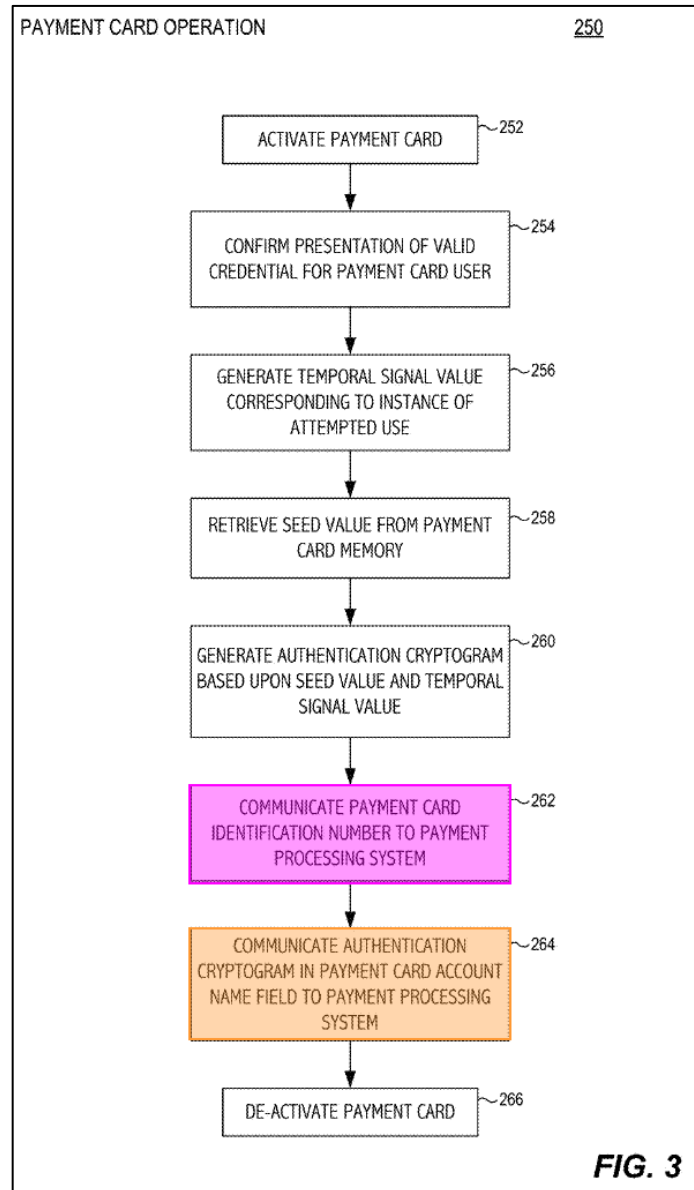


EX1007, FIGs. 1-2; *see also, e.g.*, FIGs. 16, 17, 18 (same one-way information flow from card to merchant POS).

Gomez confirms that in this traditional infrastructure for card swipe (and additionally contactless transactions) the same one-way communication flow occurs: transmitting the information from the card *to* the merchant POS as in traditional payment systems that Gomez is designed to work with, again “[n]o *changes* in the payment system infrastructure need be made by either the point-of-sale merchant or the card issuer.” EX1007, 2:40-41. For example, in addition to its

Figures 1 and 2 disclosure, as well as elsewhere (*e.g.*, Figures 16-18), Gomez discloses that the same one-way communication is used for both for magnetic swipe and NFC in Figure 3. Gomez discloses that “[a]t **step 262** [in Figure 3, below] the card communicates the payment card identifying number *to* the payment system.” EX1007, 7:49-50; *see also, e.g.*, 2:42-45 (Gomez’s “payment card may use a programmable magnetic stripe or contactless technology to provide total compatibility with existing POS equipment”). Per Gomez, “[i]n some embodiments this [*i.e.*, sending the payment card number to the **merchant POS**] may be accomplished using a magnetic stripe on the payment card,” and “[i]n some embodiments this [again, sending the payment card number to the **merchant POS**] may also be accomplished using near field communication (NFC)” EX1007, 7:50-54. Similarly, “[a]t **step 264** the card communicates the authentication cryptogram in a payment card account name field *to* the payment processing system” (*i.e.*, to the **merchant POS**). EX1007, 7:57-59; *see also* 14:3-11 (“Transactions are secured by an authentication cryptogram that is generated for each attempted use, and is preferably communicated in the account name field (*i.e.*, of a magnetic stripe on the card, in a NFC transmission, using an online web page, etc.) instead of the cardholder’s actual name. The authentication cryptogram is also preferably encoded using an alpha-numeric code, which may be communicated in the account name field of a traditional payment card system since that field allows alphabetic characters.”).

That is, Gomez *exclusively* discloses one-way communication, as in traditional systems (both card-swipe and contactless) and corresponding “transaction flow” that Gomez was expressly designed to work with, with “no changes.”



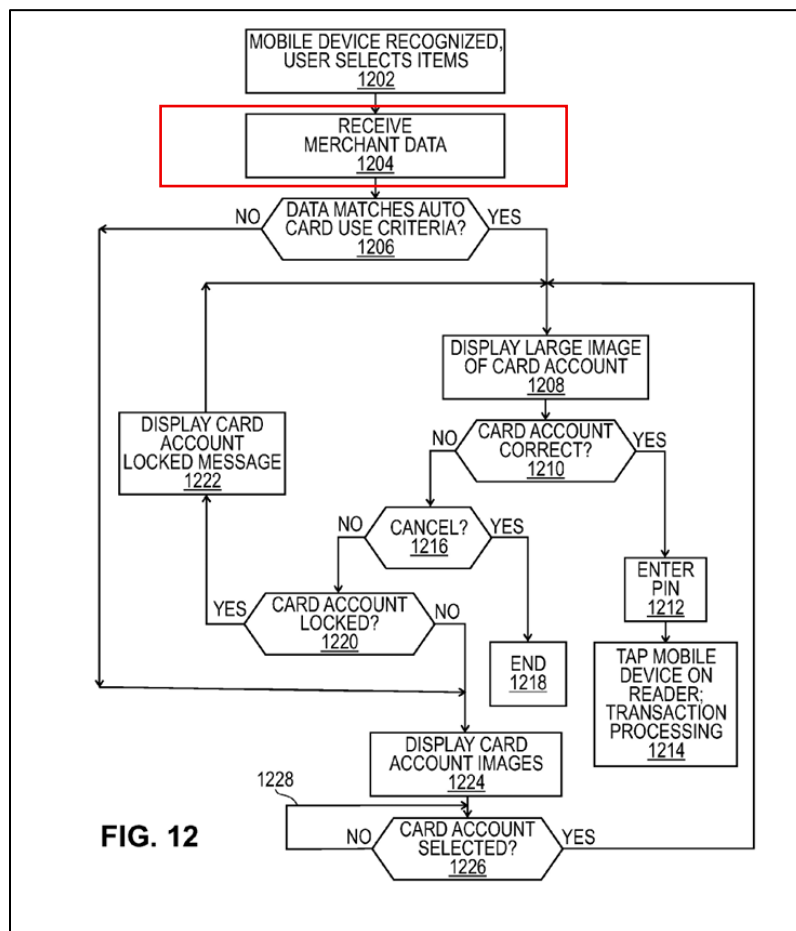
EX1007, FIG. 3; *see also* FIG. 4 (step 286).

Moreover, Gomez teaches that, as in a traditional transaction flow, payment information is communicated from the payment card to the merchant POS at the start of the process, once “the card is activated by the card user” and the user confirms a valid credential (*e.g.*, at steps 252 and 254 in Figure 3 above). EX1007, 6:65-7:16; *see also* 3:65-4:7, 5:48-6:2, 8:11-24, FIGs. 1-3.

In contrast, both Philips and Casey teach processes in which the recipient receives information from a merchant, selects the payment method (which is displayed on the device through a digital wallet), etc. *See* Section III.B-C, above; *see also, e.g.*, EX1005, [0057]-[0058], EX1006, 8:59-64.

For instance, the transaction flow of Philips can be seen in Figure 12, below, where there is *bi-directional* communication (**merchant data 1204**) between a “merchant proximity reader component” and the mobile device. EX1005, [0064]; FIG. 12. As Philips explains, once a customer has determined which merchandise to purchase, their device is “recognized” by a “merchant proximity reader component. EX1005, [0064]. “When the shopper brings her mobile telephone 100 into proximity with the merchant proximity reader component, it is exposed to an interrogation signal transmitted from the merchant proximity reader component which stimulates the mobile telephone 100 to exchange” information “including receiving a merchant identifier in the mobile telephone which can be used to attempt to automatically select a particular payment card account for use in a purchase transaction in that retail store.”

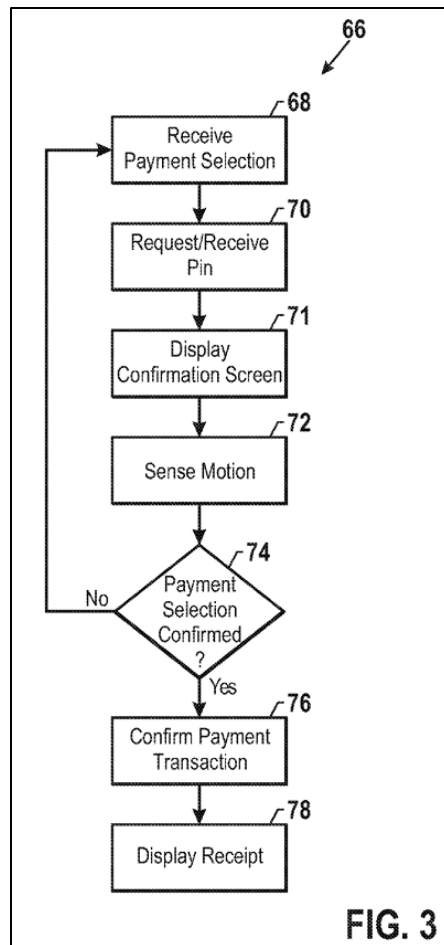
EX1005, [0064]. The wallet program “is initialized upon receipt of the merchant identifier to attempt to match that information to stored criteria information associated with a payment card account of the user.” EX1005, [0064]. The shopper then must either “acknowledge” that the “selected card is correct by entering 1212 her personal identification number (PIN)” or by choosing to cancel the transaction. EX1005, [0065]-[0066].



EX1005, FIG. 12.

Casey’s transaction flow, like Philips, is similarly incompatible with traditional payment infrastructures as disclosed by Gomez. To perform transactions, the device

of Casey displays a selection screen “in response to receiving information through the network device 50, the NFC device 44, or other input structure such as a camera, or bar code reader.” EX1006, 8:53-56. This “received information” includes “a request for payment as well as information for selecting a payment service and processing a payment transaction,” information about the “suitable payment methods,” and information regarding “supported devices, supported functionalities, and supported security protocols.” EX1006, 8:59-9:3. In response to receiving the information, the wallet application is launched. EX1006, 8:52-55. “A user may then select a payment instrument by tapping a corresponding graphical element on the touch screen 54 (FIG. 2) of the device 10” and entering a PIN, “password, or other type of identifier.” EX1006, 9:12-22. The user then confirms that the payment should be made by swiping across the screen of the device. EX1006, 9:20-24. Once, the device determines that the transaction was confirmed, it then sends the “payment information to the merchant” and “receive[s] and display[s] (block 78) a receipt for the payment transaction.” EX1006, 10:47-49.



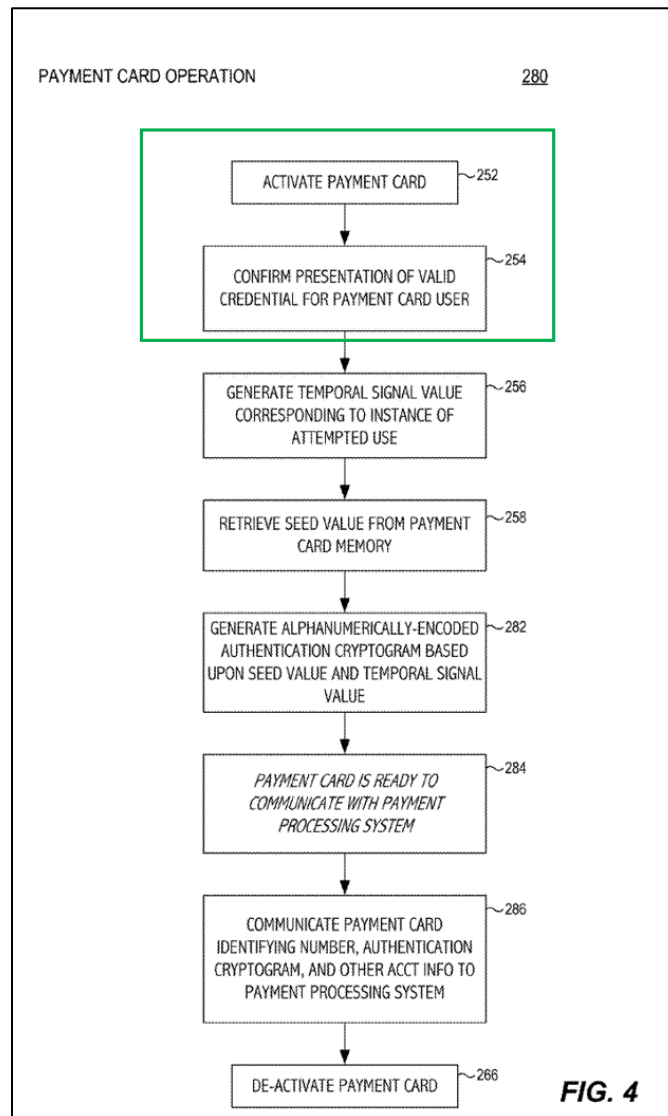
EX1006, FIG. 3.

Both Philips and Casey require receiving merchant data from a merchant device, which is a device (and process step) not present in the traditional payment transaction as per Gomez. Additionally, it is unclear, and unexplained, how Casey or Phillips could be made to be compatible with mag-stripe transactions. Applying Philips's and Casey's teachings to Gomez would require changes to payment system infrastructure, thereby defeating a primary benefit and necessary part of Gomez's system: "*[n]o changes in the payment system infrastructure* need be made by either the point-of-sale merchant or the card issuer." EX1007, 2:40-41. Indeed, Gomez's

statements that “*no changes*” are needed, and its EPIC payment card is designed “to provide total compatibility with existing POS equipment,” etc. (*see, e.g.*, EX1007, 2:40-45, 5:32-34, 5:67-6:2, 10:8-17, 14:3-11, FIGs. 1-2)—teachings Petitioner does not address—teach away from and expressly discourage a POSITA from looking to references that would require such changes to be made in modifying Gomez’s system. *See, e.g., DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.”) (quotation omitted); *Chemours Co. FC, LLC v. Daikin Indus., Ltd.*, 4 F.4th 1370, 1376-77 (Fed. Cir. 2021) (“This is particularly true in light of the fact that the Kaulbach reference appears to teach away from broadening molecular weight distribution and the known methods for increasing melt flow rate. Specifically, Kaulbach includes numerous examples of processing techniques that are typically used to increase melt flow rate, which Kaulbach cautions should *not* be used due to the risk of obtaining a broader molecular weight distribution.”) (emphasis in original).

Third, Phillip’s and Casey’s request for information would be, at best, redundant to Gomez’s system, wherein a user activates the EPIC card, the user is verified, and the card provides information to the POS terminal *without* a need for a

request from the terminal (as discussed above and evident by, for example, Gomez's Figure 3). Gomez, for example, requires the user to take two initial affirmative steps: (1) "[a]t step 252 the card is activated by the user" and (2) "[a]t step 254 the card confirms the presentation of a valid credential for the payment card user," such as through a PIN number or fingerprint sensor. EX1007, 6:65-7:16.



EX1007, FIG. 4.

Further, since the user already purposefully activated the EPIC payment card, verified a valid credential, and purposefully presented it to the POS terminal (*e.g.*, by swiping it through a magnetic card reader or presenting it in a contactless transaction), thereby signifying the user's desire to perform the transaction, it would be redundant (as well as add an unnecessary step that would only serve to complicate Gomez's system) to then require the user to accept or deny a request for information. But regardless, not only would it be redundant, here too it would require changes to the system, which again, Gomez teaches away from (and expressly discourages). *See, e.g.*, EX1007, 2:40-45, 5:32-34, 5:67-6:2, 10:8-17, 14:3-11, FIGs. 1-2; Section III.A, above.

Fourth, Petitioner argues that a POSITA would have modified Gomez based on Phillips and Casey because “[t]his modification would have improved the resulting system by allowing the user to better ensure that they are approving a payment transaction and transmitting payment information to a correct merchant terminal, which can prevent fraudulent transmittal of payment information to an incorrect terminal” and that “[s]uch a modification would also allow the user to visually review transaction data before approving (or denying) the transaction, allowing the user extra opportunity to change their mind regarding a transaction, and provide extra assurance that the user intends to initiate a payment transaction rather than having inadvertently opened a payment application.” Pet., 15-16. In support of its conclusory arguments,

Petitioner cites only to its expert, who does no more than repeat the same argument, essentially verbatim. EX1003 ¶117. Such argument (and the corresponding lack of evidence) should be afforded little weight. *See e.g., Precision Cancer Techs. Inc. v. Oncoustics Inc.*, IPR2025-00242, Paper 7, 15-16 (PTAB June 3, 2025) (“[W]e give [the expert’s] *ipse dixit* testimony little weight” because “[the expert’s] testimony lacks both technical reasoning and evidentiary support; it simply mirrors the statement in Petition.”); *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, 15-17 (PTAB Aug. 24, 2022) (precedential) (finding that conclusory testimony that “does not cite to any additional supporting evidence or provide any technical reasoning to support [that testimony] ... is entitled to little weight”); *AT&T Servs., Inc. v. Innovative Sonic Ltd.*, IPR2024-01143, Paper 15, 28, 38 (PTAB Feb. 11, 2025).

Regardless, as just explained, the system of Gomez already includes features whereby the user confirms intent to enter a transaction. Petitioner’s argument that the modification would provide “better” or “extra” assurance only serves to again confirm the redundancy of Phillips’s and Casey’s teachings were they to be applied to Gomez. Any incremental benefit, if any at all, from this asserted “extra” assurance would be outweighed by the additional steps imposed on the user, increasing the time and effort required to complete each transaction, especially compared to the traditional card swipe system or contactless payment in Gomez. For example, in the combination of Phillips and Casey with Gomez, a user—having already decided to make a transaction

and ready to pay the merchant—may have to further (1) activate the card, (2) provide an identifier so the recipient can connect to the device and transmit a request for transaction payment, and then (3) approve or deny the request on the device. A POSITA would not have made such a combination, which is cumbersome and repetitive for the user, particularly where Gomez states that its teachings, by themselves, can “greatly reduce[], if not virtually eliminate[]” theft and fraud. EX1007, 1:58-63.

E. A POSITA Would Not Have Sought to Modify Gomez to Perform Online Transactions on a Single Device (Challenged Claims 19 and 21-30)

Petitioner’s proposed combinations do not teach or render obvious independent claims 19 and 25 because they are missing the following limitations:

- Element [19.i]: “on receiving said user payment approval authorization input, *a transmitting by the wireless interface⁸ of the approved complete payment information for the online transaction.*”

⁸ The claimed “the wireless interface” refers to the “wireless interface of the electronic device” introduced in element [19.a] (“receiving an input signal *at an electronic device*, the input signal corresponding to a request for payment of *an online payment transaction by said electronic device, via a wireless interface of the electronic device.*”).

- Element [25.g]: “*wherein the communication interface is operable to transmit said complete device payment information from said electronic device to the recipient of the online purchase transaction.*”

Thus, Petitioner must show the electronic device transmits complete payment information for the online transaction. That is, the complete payment information must be for the online transaction, and transmitted by the same electronic device used throughout the claims. Petitioner fails to do so.

For these elements, Petitioner asserts the following:

Element	Petition
[19.i]	“The Gomez-Phillips-Casey combination discloses this limitation. <i>See supra</i> [1.a]-[1.b], [1.h]-[1.k], [19.g]-[19.h]; EX1003, ¶176; <i>supra</i> IX.A.4.” Pet., 51.
[25.g]	“The Gomez-Phillips-Casey combination discloses the communication interface is operable to transmit said complete device payment information from said electronic device to the recipient of the online purchase transaction. <i>See supra</i> [1.i]; EX1007, 21:4-36; EX1003, ¶196. Further, Casey discloses transmitting complete device payment information for an online payment transaction. EX1006, 11:50-14:36, 15:24-16:20, FIGS. 4-5, 8; <i>see also id.</i> , 3:14-16; <i>supra</i> [25.c]. Thus, a POSITA would have recognized that the Gomez-Phillips-Casey combination discloses transmission of complete device payment information from a device to the recipient of an online purchase transaction. EX1003, ¶196; <i>supra</i> IX.A.4.” Pet., 59.

Patent Owner addresses these claim elements, in turn.

As shown above, for [19.i], the issues for claim 19 and its dependents rise-and-fall on Petitioner’s cross-referencing. Initially, Petitioner’s cross-references span approximately 25 pages and include internal cross-references within. Petitioner’s approach is improper and forces the Director and Patent Owner to play detective with the record. *See Lenovo (United States) Inc. v. Litl LLC*, IPR2021-00800, Paper 7, 14 (PTAB Nov. 2, 2021) (“This approach of forcing the reader to follow a web of nested cross-references to find Petitioner’s arguments improperly shifts the burden of deciphering Petitioner’s arguments onto Patent Owner and the Board.”); *Samsung Elecs. Co., Ltd. v. Mojo Mobility Inc.*, IPR2023-01086, Paper 10, 16 n.8 (PTAB Feb. 13, 2024) (“Petitioner also cites to §§ IXA.1(a)-(j), which encompasses forty pages of the Petition. This type of broad citation utilizing internal cross-references does not add clarity to Petitioner’s contentions.”).⁹

Notwithstanding, Petitioner’s direct cross-references [19.i] do not discuss performing an *online transaction*. The only mention of doing anything “online” is in the cross-reference within a cross-reference ([19.i] cross-referencing [19.g] which

⁹ The citation to the expert declaration (EX1003 ¶176) adds nothing, as that paragraph simply parrots the Petition and likewise refers back to the same earlier claim elements.

in turn cross-references [1.d], and others). And even if all of the cross-references (both direct and internal) are considered, they confirm Petitioner's argument fails because they fail to disclose transmitting from the electronic device's wireless interface complete payment information for the online transaction.

The lone mention of "online" in Petitioner's [19.i]'s cross-references-within-cross-references is in Petitioner's discussion of [1.d]¹⁰ that "Casey also discloses displaying online purchase information including the merchant information and purchase amount." Pet., 27. For [1.d], Petitioner then asserts that "[i]t would have been obvious and a POSITA would have been motivated to modify Gomez in view of Phillips and Casey such that the electronic device could display a transaction payment request and at least a portion of an original static issuer-supplied payment account information associated with a payment method, for a user selection in paying the payment request." Pet., 29.¹¹

¹⁰ [1.d] requires "displaying, on a display of the device, the request and at least a portion of an original static issuer-supplied payment account information associated with a selected payment method, for a user selection in paying the request."

¹¹ [19.c] includes a similar limitation: "upon an authorizing of a valid device user, displaying at least one user-selectable payment account option, and requesting a user

In other words, Petitioner’s assertions regarding [19.i] are, at best, premised on the assumption that a POSITA would look to Casey and combine it with Gomez to display a user-selectable payment account number for an online transaction. But displaying such a user-selectable payment account number (as well as providing that information to the merchant) is exactly what Gomez teaches *not* to do for online transactions:

To make purchases online using an EPIC card, a customer may select “Epic Pay” from the available payment methods shown on the vendor’s web site, then enter his/her EPIC credentials (e.g., into an account authentication popup window). The customer may optionally select the desired credit card to use for the current transaction, but otherwise the EPIC card defaults to the pre-established credit card account selection order. If all such information is correct, a payment authorization code is generated and provided to the merchant to finalize the transaction. *At no time is the customer’s actual credit card information ever exposed on the screen, or available to the merchant. Rather, all credit card information is kept strictly confidential between EPIC and the actual credit card company authorizing the credit transaction, as described in the examples above.*

approval of payment, via the touch-screen display user-interface.” For [19.c], Petitioner also refers back to [1.a]-[1.d]. Pet., 50.

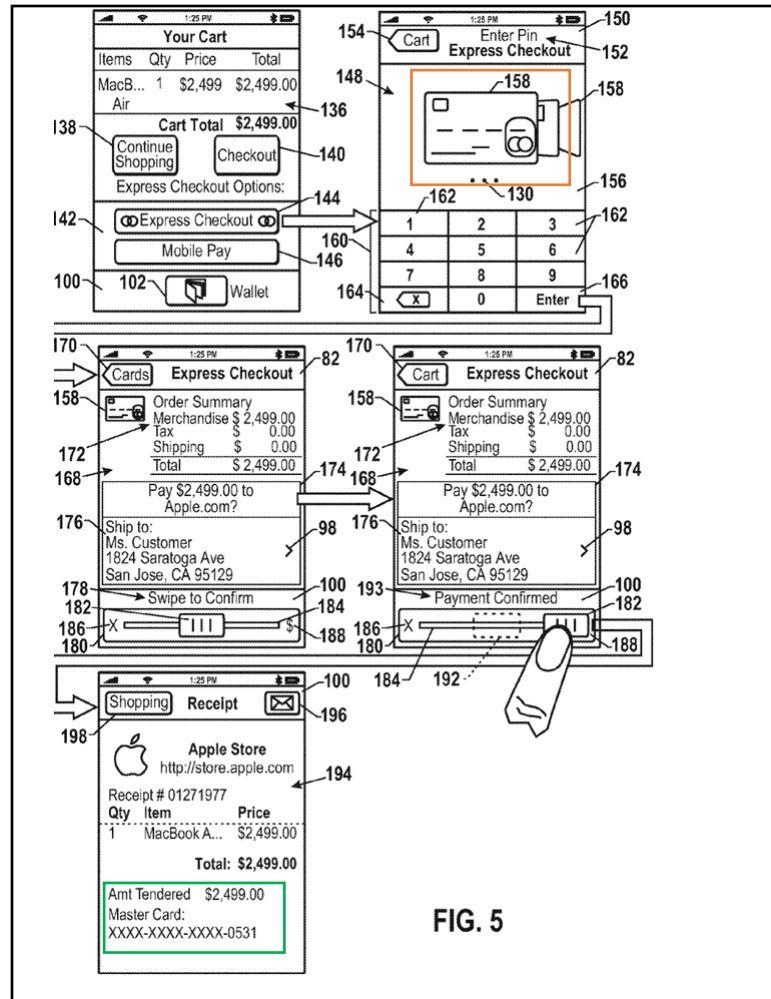
EX1007, 21:5-20.

Yet Petitioner’s proposed combination would result in exactly what Gomez teaches not to do. For example, Casey—which Petitioner points to for its “online” teachings—discloses an integrated system for online purchasing that relies on using one device to store, display, and transmit the payment credentials to the merchant. Indeed, Casey discloses displaying actual payment information during the transaction process and transmitting actual payment information to the merchant.¹²

In Casey, a user performs an online transaction through accessing a “shopping application.” EX1006, 11:1-5. The shopping application presents a purchasing screen which allows the user to access “an electronic wallet ... through the electronic device 10.” EX1006, 11:39-42. The wallet is configured to store, on the device, the “financial account information for payment instruments.” EX1006, 11:43. The user may select the payment instrument by “**select[ing] an image 158**” of a “payment instrument” and entering a PIN corresponding to that account. EX1006, 12:16-13:6. After confirming that the transaction should take place, “the device 10 may transmit

¹² Philips also discloses displaying actual credit card information. *See, e.g.*, EX1005, FIG. 8. Petitioner itself confirms that its position requires this, when asserting for [25.c] that Phillips discloses displaying, among other things, “the payment card account number.” Pet., 56.

payment information to confirm the payment transaction.” EX1006, 14:16-21. “The payment information” includes “financial account information.” EX1006, 14:21-24; *see also* 8:39-44 (“The electronic wallet or payment service may store financial account information for payment instruments, such as credit cards, debit cards, pre-paid or gift cards, checking accounts, and/or savings accounts, that may be presented to a user through the electronic device 10 upon accessing the electronic wallet or payment service.”). After the user confirms that the transaction should occur the “device 10 may display a receipt screen 194” which includes the “**payment instrument[] and other information related to the payment transaction.**” EX1006, 14:25-30. As such, Casey discloses one device that performs the entire transaction, including storing, displaying, and sending the actual payment information to the merchant.



EX1006, FIG. 5.

Petitioner's arguments for [25.g] fail for essentially the same reasons. Petitioner's assertions (quoted above) fail to disclose transmitting complete device payment information to the online transaction recipient. As shown above, Petitioner makes a similar assertion for [25.g] as it does in its buried cross-references for [19.i]. In particular, for [25.g], Petitioner's theory is again premised on using actual payment account numbers (in direct contrast to Gomez's teachings not to so). Petitioner asserts that "Casey discloses displaying online purchase information

including the merchant information and purchase amount,” and confirms that in Phillips “the payment card account number” is displayed for selection. Pet., 56.

These are not the only reasons Petitioner’s challenge fails.

For example, Gomez mentions “using an online web page” to enter the authentication cryptogram in the account name field instead of the cardholder’s actual name. EX1007, 14:3-7 (“Transactions are secured by an authentication cryptogram that is generated for each attempted use, and is preferably communicated in the account name field (i.e., of a magnetic stripe on the card, in a NFC transmission, using an online web page, etc.) instead of the cardholder’s actual name.”); *see also* 13:1-4 (“As another example, the generated authentication cryptogram may be displayed, which may be beneficial in facilitating an online transaction, as is described in greater detail below.”). Gomez further explains the process for using an EPIC card to make an online purchase, whereby “[t]o make purchases online using an EPIC card, a customer may select ‘Epic Pay’ from the available payment methods shown on the vendor’s web site, *then enter his/her EPIC credentials (e.g., into an account authentication popup window).*” EX1007, 21:5-20.

In other words, for an online transaction, Gomez discloses that the EPIC card information can be entered into a webpage (*i.e.*, a user logs into a computer and manually enters the information displayed on an EPIC card) in the same way that a user sets up the EPIC account in the first instance. *See* EX1007, 20:2-6. That does

not meet the claimed requirements that the device (alleged to be the EPIC card), among other things, both generates a complete device payment information and transmits that information to complete an online transaction. Combining all of this into a single device—as Petitioner contends—would leave the system vulnerable as it would unnecessarily expose payment account information including at the device and to the merchant via a website (contrary to the teachings of Gomez).

As another example, as discussed in Section V.D above, in Petitioner’s reimagined combination adding Phillips and Casey to Gomez would cause Gomez to lose the traditional aspects of its EPIC payment card—including the magnetic stripe capability necessary to remain compatible with “traditional” merchant POS systems disclosed in Gomez. There is no reasoned basis (and Petitioner provides none) for why a POSITA would seek to make such a combination, when it would require losing compatibility with traditional systems, which was key to Gomez. Similarly, also as explained in Section V.D, above, while Gomez mentions a mobile phone, it does so only in the context of a user setting up an EPIC account on the backend, not in connection with using the mobile phone as the EPIC payment card or otherwise that the mobile phone has any applicability to making a payment transaction a traditional merchant POS. This further confirms that it would not have been obvious to make the proposed modifications, as it would require losing the core features necessary to traditional payment transactions at a merchant POS.

Accordingly, Petitioner has failed to show a reasonable likelihood of success for its challenge to claims 19 and 21-30 for these additional reasons.

VI. CONCLUSION

Petitioner has failed to show a reasonable likelihood of success for any Challenged Claim. Institution should be denied.

Dated: December 15, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this paper complies with the type-volume limitation of 37 C.F.R. §42.24 (as determined by the Microsoft Word word-processing system used to prepare this paper) because it contains 12,773 words (including any words added to figures), excluding the parts of the paper exempted by 37 C.F.R. §42.24(a).

Dated: December 15, 2025

/Matthew G. Berkowitz/
Matthew G. Berkowitz (Reg. No. 57,215)

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, the undersigned certifies that on December 15, 2025 a copy of the foregoing document, along with any exhibits not previously served, were served by email to counsel for Petitioner:

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