

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

FINTIV, INC.,
Patent Owner.

IPR2023-00398
Patent 10,438,196 B2

Before MICHAEL R. ZECHER, GEORGE R. HOSKINS, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

HOSKINS, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Apple Inc. (“Petitioner”) has filed a Petition (Paper 2, “Pet.”) pursuant to 35 U.S.C. §§ 311–319 requesting to institute an *inter partes* review (“IPR”) of U.S. Patent No. 10,438,196 B2 (Ex. 1001, “the ’196 patent”), claims 1–22. Fintiv, Inc. (“Patent Owner”) has filed a Preliminary Response (Paper 6, “Prelim. Resp.”) opposing institution of review.

Applying the institution standard set forth in 35 U.S.C. § 314(a), which requires the Petition to demonstrate a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we institute, on behalf of the Director (37 C.F.R. § 42.4(a)), an *inter partes* review to determine whether Petitioner demonstrates by a preponderance of the evidence that the challenged claims are unpatentable, considering the sole ground asserted in the Petition.

II. BACKGROUND

A. *Real Parties-in-Interest and Related Proceedings*

Petitioner is the sole real party-in-interest for Petitioner. *See* Pet. 1. Patent Owner is the sole real party-in-interest for Patent Owner. *See* Paper 4.

The parties identify one district court case involving the ’196 patent: *Fintiv, Inc. v. PayPal Holdings, Inc.*, Case No. 6:22-cv-00288 (W.D. Tex.). *See* Pet. 1; Paper 4. Petitioner represents that “Petitioner is not a party to that case” and “the defendant in that case had no knowledge of this IPR prior to its filing.” Pet. 1.

Petitioner also identifies IPR2023-00399 as a related proceeding, because in that case Petitioner has challenged claims 1–22 of U.S. Patent

No. 9,208,488 B2, which issued from a parent application of the '196 patent.
See Pet. 1; Ex. 1001, code (63).

B. The '196 Patent

The '196 patent is titled “Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers.” Ex. 1001, code (54). It is “directed to performing a transaction using a third party mobile wallet.” *Id.* at code (57). Figure 1 (reproduced below) illustrates a monetary transaction system architecture in which embodiments of the '196 patent may operate. *Id.* at 3:4–5.

Platform Functional Architecture

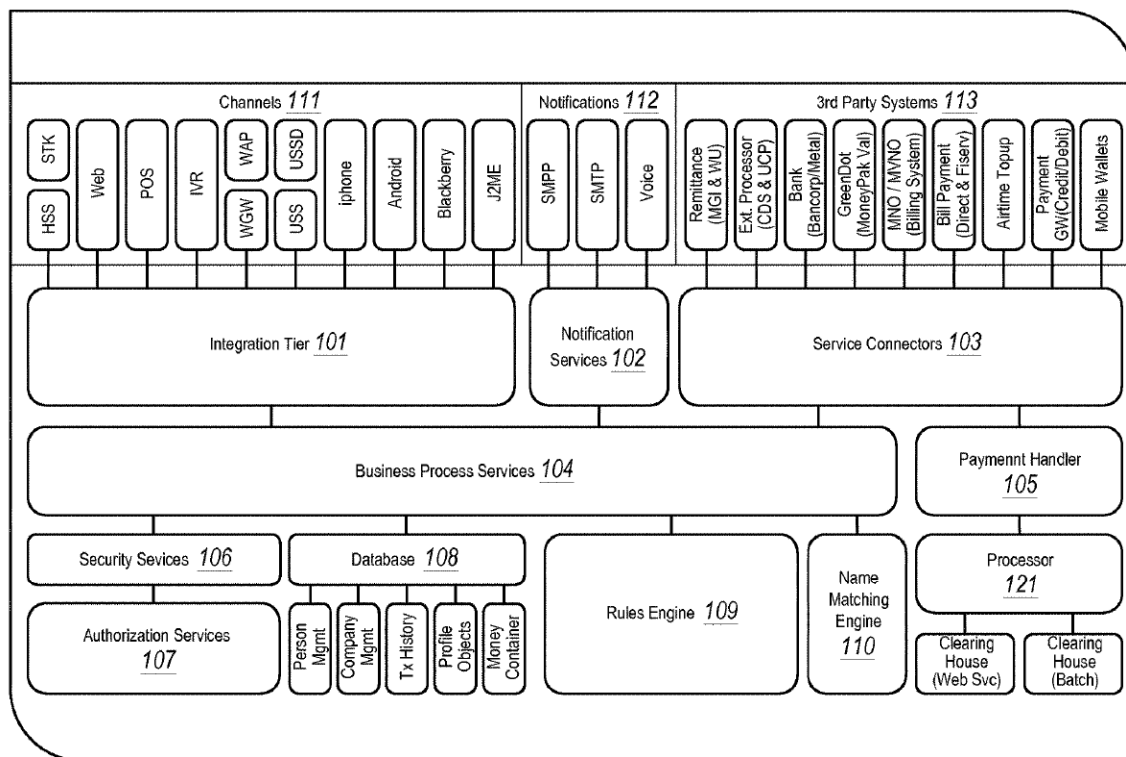


FIG. 1
Figure 1 of the '196 Patent.

Figure 1 illustrates an exemplary platform functional architecture that includes (among other things) integration tier 101, notification services 102, service connectors 103, payment handler 105, security services 106, authorization services 107, database 108, rules engine 109, channels 111, notifications 112, third party systems 113, and processor 121. *Id.* at 9:62–63, Fig. 1.

“Integration tier 101 is configured to manage mobile wallet sessions and maintain integrity of financial transactions,” and it can include “communication mechanisms to accept messages from channels 111.” *Id.* at 9:63–10:1; *see also id.* at Fig. 1 (showing various channels 111 including, for example, “Web,” “POS [point of sale],” “iphone,” and “Android”).

“Notification services 102 is configured to send various notifications through different notification channels 112, such as, for example, Short Message Peer-to-Peer (‘SSMP’) for Short Messaging Service (‘SMS’) and Simple Mail Transfer Protocol (‘SMTP’) for emails.” *Id.* at 10:7–13.

“Service connectors 103 are a set of connectors configure[d] to connect to 3rd party systems 113.” *Id.* at 10:14–15.

“Payment handler 105 is configured to wrap APIs^[1] of different payment processors, such as, for example, banking accounts, credit/debit cards or processor 121,” and “exposes a common API to facilitate interactions with many different kinds of payment processors.” *Id.* at 10:21–26.

“Security services 106 are configured to perform subscriber authentication” (*id.* at 10:27–28), and “[a]uthorization services 107 are

¹ The ’196 patent does not appear to define “API.” We understand it to mean “Application Program Interface.” *See* Ex. 1006 ¶ 48.

configured to perform client authorization, such as, for example, using a database-based Access Control List (‘ACL’) table” (*id.* at 10:28–30).

Database 108 manages accounts, transaction histories, and customer profiles. *Id.* at 10:31–37.

Rules engine 109 “enforce[s] business constraints, such as, for example, transactions and platform license constraints.” *Id.* at 10:41–43.

“Transaction processor 121 is configured to manage financial accounts and transactions,” and it “can be used to hold, load, withdraw and deposit funds to mobile wallet accounts.” *Id.* at 10:47–52.

C. The Claims of the ’196 Patent

Petitioner challenges all twenty-two claims of the ’196 patent, of which claims 1, 8, 16, 21, and 22 are independent. We reproduce illustrative claim 1 here, including Petitioner’s numbering and lettering reference scheme in brackets.

1. [1.0] A computing system for facilitating management of a mobile wallet, comprising:
 - [1.1] one or more processors;
 - [1.2] system memory;
 - [1.3] [A] an integration tier configured to manage mobile wallet sessions with a mobile device and [B] including web services communication mechanisms for interfacing with a mobile wallet application and [C] a plurality of different device types over a plurality of different communication channels, [D] the integration tier being configured to receive binary and text messages from a mobile device;
 - [1.4] [A] a notification services engine configured to interface with the integration tier and [B] to send a plurality of corresponding different types of messages over the different communication channels to different devices,

[C] including a customer's mobile device, to interface with a mobile wallet application installed on the customer's mobile device;

[1.5] service connectors that are each configured to connect the computing system to a different third party system;

[1.6] a payment handler that exposes a common API for interacting with different payment processors;

[1.7] a security services engine that performs subscriber authentication utilizing a database-based Access Control List (ACL);

[1.8] a rules engine configured to enforce constraints on financial transactions performed with the mobile wallet application, the mobile wallet application being associated with a mobile wallet account; and

[1.9] one or more computer-readable storage media having stored thereon computer-executable instructions which are executable by the one or more processors, to facilitate a transaction for a customer using the mobile wallet by causing the computing system to perform at least the following:

[1.10] [A] receive communication from the customer over one of the plurality of channels connected to the computing system, [B] the customer communication indicating that the customer desires to purchase an item at an agent terminal for a specified amount of funds using a specified payment method from a mobile wallet;

[1.11] return a secure, perishable purchase code to the customer over at least one of the plurality of channels connected to the computing system;

[1.12] [A] receive communication from the agent terminal over at least one of the plurality of channels connected to the computing system, [B] the agent terminal communication indicating that the purchase code has been presented to an agent;

[1.13] debit the mobile wallet by the specified amount of funds;

[1.14] credit an agent account by the specified amount of funds; and

[1.15] after selecting a particular channel included in the plurality of channels, send a notification communication from the computing system to the agent terminal using the particular channel, which is connected to the computing system, the notification communication providing a notification indicating confirmation of the processing of the transaction.

Ex. 1001, 23:60–24:52.

D. Asserted Prior Art

Petitioner relies principally on the three prior art references set forth in the table below. *See* Pet. 6–7 (summarizing Petitioner’s sole ground of unpatentability).

Name	Reference	Pub. Date	Exhibit No.
Dill	US 2009/0265272 A1	Oct. 22, 2009	1005
Vadhri	US 2010/0133334 A1	June 3, 2010	1006
Akashika	US 2009/0217047 A1	Aug. 27, 2009	1007

E. Asserted Ground

Petitioner’s sole ground of unpatentability is that claims 1–22 of the ’196 patent are unpatentable under 35 U.S.C. § 103(a)² as having been obvious over Dill, Vadhri, and Akashika. *See, e.g.*, Pet. 6–7.

F. Testimonial Evidence

Petitioner relies on the declaration testimony of Henry Houh, Ph.D. (Exhibit 1003). Patent Owner relies on the declaration testimony of Michael Shamos, Ph.D. (Exhibit 2001).

III. ANALYSIS OF PETITIONER’S PROPOSED GROUND

Petitioner argues claims 1–22 of the ’196 patent are unpatentable as having been obvious over Dill, Vadhri, and Akashika. *See, e.g.*, Pet. 6–7. Patent Owner opposes. *See* Prelim. Resp. *generally*.

We have reviewed the preliminary record, and we conclude Petitioner has demonstrated a reasonable likelihood of prevailing on its assertions as to at least claim 1.

A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is

² The first-inventor-to-file provisions of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“the AIA”), apply to any patent issuing from an application that contains or contained at any time a claim to a claimed invention that has an effective filing date on or after March 16, 2013. *See* AIA § 3(n)(1). Petitioner assumes the ’196 patent has a priority date in November 2011, so the pre-AIA versions of 35 U.S.C. § 102 and § 103 apply here. *See* Pet. 4. The Preliminary Response does not dispute Petitioner’s assumption. Thus, we refer to pre-AIA law here.

unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness, if made available in the record, which has not happened here. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner contends a person having ordinary skill in the art pertaining to the ’196 patent “would have had a working knowledge of mobile payment systems and techniques,” as well as “a bachelor’s degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software development with a basic knowledge of accounting.” Pet. 4; Ex. 1003 ¶¶ 21–23. Further according to

Petitioner: “Lack of work experience can be remedied by additional education, and vice versa.” Pet. 4; Ex. 1003 ¶ 22.

The Preliminary Response does not dispute this aspect of the Petition.

For purposes of this Decision, we determine a person of ordinary skill in the art “would have had a working knowledge of mobile payment systems and techniques” and “a bachelor’s degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software development with a basic knowledge of accounting,” as Petitioner proposes. Pet. 4. We are satisfied that this definition generally comports with the level of skill necessary to understand and implement the teachings of the ’196 patent and the asserted prior art. *See* Ex. 1003 ¶ 22; Ex. 2001 ¶¶ 33–35 (agreeing with this articulation of the level of ordinary skill).

To the extent the level of ordinary skill in the art is in dispute or makes a material difference in the obviousness analysis, the parties should brief their respective positions in this regard during trial.

C. Claim Construction

We interpret the ’196 patent claims “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b). This “includ[es] construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*

The Petition and the Preliminary Response raise several claim construction issues. We address each one here, to provide guidance to the

parties for the upcoming trial. If either party disagrees with our analysis, it should explain its position at trial.

1. “mobile device” (Claims 1, 8, 16, 21, and 22)

Each of the independent claims of the ’196 patent (claims 1, 8, 16, 21, and 22) recites “an integration tier configured to manage mobile wallet sessions with *a mobile device*.” Ex. 1001, 23:64–65, 25:40–41, 26:56–57, 27:35–36, 28:48–49 (emphasis added).

Patent Owner argues we should construe the term “mobile device” to mean a “physical device that is mobile, such as a phone or tablet.” Prelim. Resp. 8; Ex. 2001 ¶¶ 39–41. Patent Owner cites passages of the ’196 patent specification to support this argument. *See* Prelim. Resp. 8 (citing Ex. 1001, 11:32–33, 12:27–36); Ex. 2001 ¶¶ 40–41. Patent Owner proffers this claim construction because, according to Patent Owner, “the Petition (through its mappings [of the ’196 patent to Dill]) has implicitly raised the possibility that a ‘mobile device’ need not be a physical device, and need not even be mobile.” Prelim. Resp. 9–10 (citing Pet. 22–23, 33; Ex. 1005, Fig. 9); Ex. 2001 ¶¶ 39–41.

At this stage, we agree with Patent Owner’s understanding of the “mobile device” claim term. Patent Owner’s construction generally accords with the term’s plain and ordinary meaning and is supported by the ’196 patent specification. *See, e.g.*, Ex. 1001, 11:32–35, 12:27–36 (identifying a phone and a tablet as “mobile device” examples). We therefore apply Patent Owner’s construction in this Decision. Nonetheless, we disagree with Patent Owner’s argument that this construction leads to a

deficiency in the Petition’s contentions concerning Dill, for reasons provided in Section III.G.1(a) below.

In this Decision, for purposes of institution, we construe the term “mobile device” to mean a “physical device that is mobile, such as a phone or tablet.”

2. “*mobile wallet application*” (Claims 1, 8, 16, 21, and 22)

Claim 1 recites “an integration tier configured to manage *mobile wallet sessions with a mobile device* and including web services communication mechanisms for interfacing with *a mobile wallet application*.” Ex. 1001, 23:64–67 (emphases added).

Claims 8 and 16 each recite “an integration tier configured to manage *mobile wallet sessions with a mobile device on which a mobile wallet application is installed* and including web services communication mechanisms for interfacing with *the mobile wallet application*.” *Id.* at 25:40–44, 26:56–60 (emphases added).

Claims 21 and 22 each recite “an integration tier configured to manage *mobile wallet sessions with a mobile device* and including web services communication mechanisms for interfacing with *a mobile wallet application installed on computer readable media executable by the mobile device*.” *Id.* at 27:35–39, 28:48–52 (emphases added).

Patent Owner argues we should construe the term “mobile wallet application” to mean a “wallet application installed on a SIM card or elsewhere on a mobile device.” Prelim. Resp. 10; Ex. 2001 ¶¶ 42–43. Patent Owner contends this corresponds to an express definition of the term in the ’196 patent specification. *See* Prelim. Resp. 10 (citing Ex. 1001,

7:14–16); Ex. 2001 ¶ 42. Patent Owner asserts its proffered construction also is consistent with the ’196 patent claims and specification, taken as a whole. *See* Prelim. Resp. 10–11 (citing Ex. 1001, Fig. 2, 11:32–40, 12:27–33). Patent Owner suggests that applying its proffered construction leads to a deficiency in the Petition’s contentions concerning Dill. *See* Prelim. Resp. 11, 18–19; Ex. 2001 ¶¶ 43, 51–52.

At this stage, we agree with Patent Owner’s understanding of the “mobile wallet application” claim term. The ’196 patent specification states: “*As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device.*” Ex. 1001, 7:14–16 (emphases added). For purposes of institution, we conclude this is an express definition of the claim term “mobile wallet application.” We therefore apply Patent Owner’s construction in this Decision. Nonetheless, we disagree with Patent Owner’s argument that this construction leads to a deficiency in the Petition’s contentions concerning Dill, for reasons provided in Section III.G.1(b) below.

In this Decision, for purposes of institution, we construe the term “mobile wallet application” to mean a “wallet application installed on a SIM card or elsewhere on a mobile device.”

3. “*debit the mobile wallet*” (Claims 1, 8, 16, 21, and 22)

Claim 1 is directed to a “computing system for facilitating management of *a mobile wallet*,” in which the system can “*debit the mobile wallet* by [a] specified amount of funds.” Ex. 1001, 23:60–61, 24:43 (emphases added). The other independent claims also contain preambles that refer to facilitating management of a mobile wallet, and limitations that

refer to debiting or transferring funds from the mobile wallet. *Id.* at 25:5–6, 25:26–27 (claim 8); *id.* at 26:22–27, 26:43 (claim 16); *id.* at 27:31–32, 27:64–28:3, 28:10–18 (claim 21); *id.* at 28:44–45, 29:10–16, 29:23–25 (claim 22).

Petitioner asserts a person of ordinary skill in the art “would have understood that there are various types of mobile wallets: (1) where a mobile device holds value (such as on a secure chip) and (2) where the value is stored in an external account.” Pet. 5 (citing Ex. 1001, 9:26–36; Ex. 1011³ ¶¶ 9, 22); Ex. 1003 ¶¶ 39–44. Petitioner maintains that “[t]he ’196 patent refers to the first type of mobile wallet.” Pet. 5 (citing Ex. 1001, 9:26–30); Ex. 1003 ¶ 42. Further according to Petitioner, “[t]he ’196 patent does not provide technical details of how its mobile wallet is debited other than to say that ‘[t]he cloud-based transaction platform then debits the customer’s third party mobile wallet by the specified amount of funds to complete the purchase.’” *Id.* at 6 (quoting Ex. 1001, 2:40–42); Ex. 1003 ¶ 43. Petitioner adds that “the term ‘stored value’ in mobile wallets is well-known and refers to a value stored on a mobile device (such as in a secure memory).” Pet. 5–6 (citing Ex. 1011 ¶¶ 9, 22); Ex. 1003 ¶ 43. From the foregoing, Petitioner concludes the phrase “debit the mobile wallet by the specified amount of funds” in claims 1 and 16 must “include ‘*transferring the specified amount of funds from the stored value on a mobile device.*’” Pet. 6; Ex. 1003 ¶¶ 41, 44.

Patent Owner argues Petitioner “construes ‘mobile wallet’ as being limited to a type of mobile wallet where ‘a mobile device holds value[.]’”

³ Exhibit 1011 is US 2008/0167988 A1 to Sun et al. (“Sun”).

Prelim. Resp. 15 (citing Pet. 5–6); Ex. 2001 ¶¶ 48–50. Patent Owner asserts Petitioner’s claim construction applies to all of the independent claims of the ’196 patent (claims 1, 8, 16, 21, and 22), despite that the Petition refers only to claims 1 and 16, because all of these claims recite a “mobile wallet.” *See* Prelim. Resp. 15–16. Patent Owner then maintains we should deny institution because the Petition fails to establish that Dill discloses a mobile device that stores value, as Dill instead stores value in an account external to the mobile device. *See id.* at 15–18; Ex. 2001 ¶ 50.

We are not persuaded by Patent Owner’s argument, for two reasons. First, for purposes of institution, we disagree with Patent Owner’s characterization of Petitioner’s claim construction. The Petition states only that the ’196 patent “refers to” a type of mobile wallet where a mobile device holds value, and that the claims “include” transferring funds from a stored value on a mobile device. Pet. 5–6. Neither of those statements takes the position that the claims are “limited to” such an embodiment to the exclusion of other embodiments, as Patent Owner would have it. *See* Prelim. Resp. 15, 16.

Second, for purposes of institution, we determine that the term “mobile wallet” is a stored value account or prepaid access account that allows its owner to pay for goods and services. This construction is based on the ’196 patent specification’s express definition of this term, as cited in the Petition:

The term “mobile wallet” or “mobile wallet account” refers to a stored value account or prepaid access account (PPA) that allows the owner (or “subscriber”) to pay for goods and services on the mFS platform from his or her mobile wallet account.

Ex. 1001, 9:26–30 (cited at Pet. 5); *see also id.* at 6:43–48 (“mFS” refers to “mobile financial services”). Our construction is also consistent with the construction recently adopted by a district court. *See Fintiv, Inc. v. PayPal Holdings, Inc.*, Case No. 6:22-cv-00288, Dkt #60 (W.D. Tex.) (claim construction order; included in the record as Exhibit 3002).

We observe that Patent Owner does not address the proper construction of the term “mobile wallet.” *See* Prelim. Resp. 15–18 & n.1 (neither agreeing nor disagreeing with Petitioner’s alleged claim construction, and expressly “reserv[ing] the right to challenge” it). This is particularly notable because the district court provided its construction for the term “mobile wallet” several months before Patent Owner filed the Preliminary Response.⁴

Petitioner cites the ’196 patent description quoted above as supporting Petitioner’s claim construction. *See* Pet. 5 (quoting Ex. 1001, 9:26–30). We see nothing therein to suggest that the term “mobile wallet” should be construed as being limited to a mobile wallet where a mobile device stores value, to the exclusion of a mobile wallet where an external account stores value. Indeed, the ’196 patent’s express definition of “mobile wallet” goes on to state that in some embodiments, “*the mobile wallet balance is maintained by the mFS platform and value is exchanged within the mFS*

⁴ Although the district court issued its order on January 9, 2023, Patent Owner did not submit that order to the Board with its Preliminary Response, as instructed by the PTAB Consolidated Trial Practice Guide (Nov. 2019) (“CTPG”) (available at www.uspto.gov/TrialPracticeGuideConsolidated). *See* CTPG 47 (“Parties should submit a prior claim construction determination by a federal court or the ITC in an AIA proceeding as soon as that determination becomes available.”).

program as eMoney,” wherein “the mFS platform is integrated to an *external* card processor.” Ex. 1001, 9:30–36 (emphases added); *see also id.* at 6:43–60 (introducing the term “mobile financial services (mFS) platform”), 8:66–9:10 (introducing the term “eMoney”).

Petitioner’s citation to Sun does not demonstrate otherwise. Sun pertinently states: “Mobile communication devices used in the architecture described herein are characterized by secure memory usable for storing value and a controller which manages the secure memory.” Ex. 1011 ¶ 9. Also: “Another possible method for handling payment transactions in a system as described above changes the stored value represented by data on the mobile communication device according to the particular transaction.” *Id.* ¶ 22. These disclosures do not refer to the term “mobile wallet” or any similar term, so as to suggest that the ’196 patent’s use of that term should be construed to be limited to a mobile wallet where a mobile device stores value. Moreover, at best these disclosures indicate that Sun’s system requires its mobile devices to store value, without suggesting that all mobile payment systems must be so configured.

Petitioner states that “the term ‘stored value’ in mobile wallets is well-known and refers to a value stored on a mobile device (such as in a secure memory).” Pet. 5–6. However, the independent claims of the ’196 patent pertinently recite only a “mobile wallet”; they do not recite a “stored value.” Thus, the meaning of the term “stored value” appears to be irrelevant to the ’196 patent claims, based on the present record.

For the foregoing reasons, for purposes of institution, we construe the term “mobile wallet” to mean a stored value account or prepaid access account that allows its owner to pay for goods and services.

4. “*third party mobile wallet*” (Claims 21 and 22)

Claim 21 refers to a “mobile wallet transaction using a *third party mobile wallet*” that comprises at least one of: “a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a *third party mobile wallet*”; “a mobile wallet withdrawal in which funds are withdrawn from *the third party mobile wallet* and provided to the customer”; or “a mobile wallet deposit in which funds are deposited into *the third party mobile wallet*.” Ex. 1001, 28:4–17 (emphases added). Claim 22 contains a similar “third party mobile wallet” limitation. *Id.* at 29:17–25.

Patent Owner argues we should construe the term “third party mobile wallet” to mean a “mobile wallet provided by a provider other than the provider of the cloud-based transaction platform.” Prelim. Resp. 11; Ex. 2001 ¶¶ 44–46. Patent Owner contends this corresponds to an express definition of the term in the ’196 patent specification. Prelim. Resp. 12 (citing Ex. 1001, 7:14–20); Ex. 2001 ¶ 44. Patent Owner asserts the ’196 patent specification further contrasts between *third party* mobile wallet applications and *native* mobile wallet applications. *See* Prelim. Resp. 2–3, 4–5, 12 (citing Ex. 1001, code (54), 1:39–51, 7:5–10, 7:14–20, 11:33–43, 18:11–25). In particular, according to Patent Owner, the ’196 patent “improved upon prior art wallet system[s] that required all users of the system to have obtained their wallets from the same provider.” *Id.* at 5–6, 12 (citing Ex. 1001, Fig. 1, 6:61–64, 18:11–25); Ex. 2001 ¶ 45. Patent Owner argues Petitioner acknowledges this difference between third party and native mobile wallet applications. Prelim Resp. 12–13 (citing Pet. 64).

We generally agree with Patent Owner’s understanding of the term “third party mobile wallet.” The ’196 patent specification provides an express definition for this term:

With respect to the entire description of FIG. 6, and as explained above, the term “mobile wallet” encompasses not only mobile wallets owned or managed by the mobile wallet platform, but also third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms. *In contrast, the term “third party mobile wallet” refers only to third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms.* Accordingly, cloud-based transaction platform 601 may manage and process transactions using mobile wallets 605, which may be mobile wallets owned by cloud-based transaction platform 601 or mobile wallets owned by a third party mobile wallet provider.

Ex. 1001, 18:11–25 (emphases added); *see also id.* at 7:16–20 (providing corollary definition for a “third party” mobile wallet application). Thus, for purposes of this Decision, we determine that a “third party mobile wallet” must be owned or managed by an entity different than the one that owns or manages the “computing system” recited in claims 21 and 22.

Patent Owner’s proposed construction uses slightly different language than our construction. Patent Owner refers to “provid[ing]” the wallet (rather than owning or managing it) and to the “cloud-based transaction platform” (rather than the “computing system”). We have altered the construction for three reasons: (1) the ’196 patent specification’s definition refers to entities that “own[]” or “manage[]” the wallets; (2) claims 21 and 22 focus on the components and operation of the “computing system”; and (3) claims 21 and 22 refer to a “cloud-based transaction platform” only twice (and only in the context of the “plurality of communication channels

connected to the cloud-based transaction platform”). Nevertheless, we understand Patent Owner’s proposed construction to be substantially the same as our construction for purposes of evaluating Patent Owner’s arguments. In particular, even if we adopted the specific language used in Patent Owner’s proposed construction, we would still determine that Petitioner sufficiently shows that Dill teaches or suggests a third party mobile wallet for the reasons provided in Section III.H.1 below.

In sum, for purposes of institution, we construe the term “third party mobile wallet” as a mobile wallet that is owned or managed by an entity different than the one that owns or manages the “computing system” or “computer system” recited in the claims.

5. *Other Claim Terms*

Upon review of the arguments and evidence presented at this stage of the proceeding, we determine no further explicit constructions of any claim term is needed at the present time. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

D. *Summary of Dill*

Dill discloses systems and methods for money transfers. *See* Ex. 1005, codes (54) and (57). Dill particularly “relates to financial transfers utilizing a unique identifier to facilitate flexible payment options for the transaction.” *Id.* ¶ 2. Figure 9 of Dill, reproduced below, illustrates an

“exemplary system for making financial transfers according to one embodiment.” *Id.* ¶ 25.

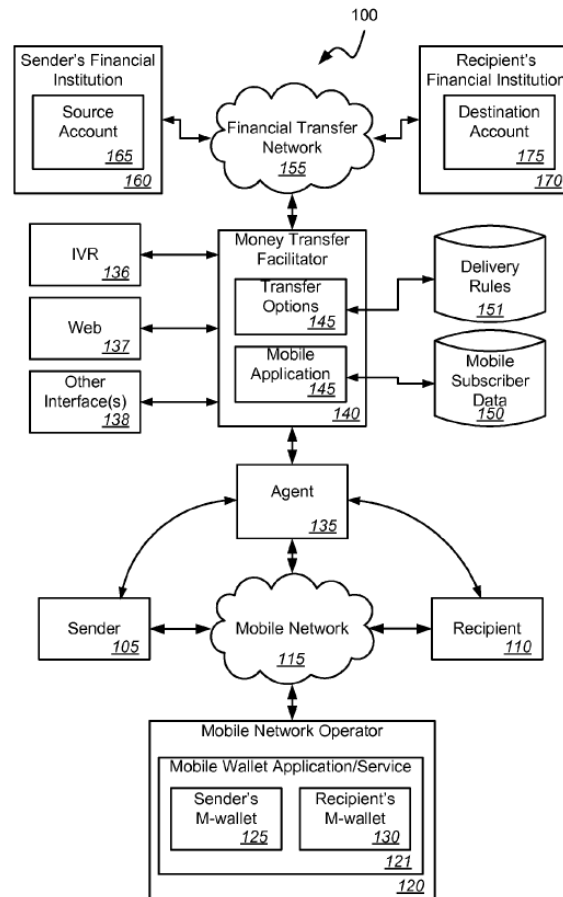


FIG. 9
Figure 9 of Dill.

Figure 9 illustrates system 100 that includes, among other things, sender 105 initiating a money transfer transaction (e.g., payment) to recipient 110 via mobile wallet application 121 of mobile network operator 120. *Id.* ¶¶ 49, 54; *see id.* ¶ 100 (stating that system 100 in Figure 9 “can comprise a system as described above with reference to [Figure 1] and can include some or all of the same components and may perform some or all of the same

functions”). Money transfer facilitator 140⁵ receives the money transaction information from mobile wallet application 121 via mobile network 115. *Id.* ¶ 100. Money transfer facilitator 140 is coupled to financial transfer network 155 such that it is capable of transferring money in accordance with the money transfer transaction between source account 165 in sender’s financial institution 160 and destination account 175 in recipient’s financial institution 170. *Id.* ¶ 49.

E. Summary of Vadhri

Vadhri discloses systems and methods for allowing access to a value holding account that “may hold anything considered valuable.” Ex. 1006, codes (54) and (57), ¶¶ 1–2. Figure 5 of Vadhri, reproduced below, illustrates a network diagram of “a client-server system, within which example embodiments may be deployed.” *Id.* ¶ 8.

⁵ Money transfer facilitator 140 includes two components that are both labeled using the same numerical identifier — transfer options module 145 and mobile application 145. *See* Ex. 1005 ¶¶ 50, 101, 102, and Fig. 9.

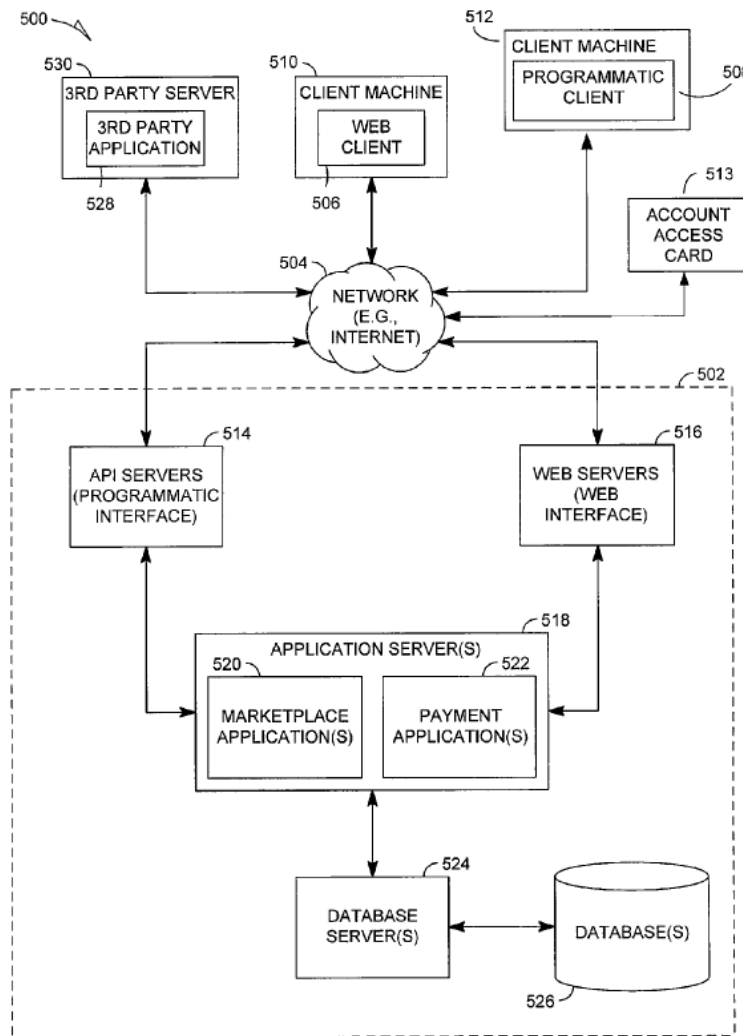


FIG. 5

Figure 5 of Vadhri.

Figure 5 illustrates client-server system 500 including networked system 502 that manages payment services between various applications and accounts.

Id. ¶¶ 47–50. Networked system 502 includes, among other things, “Application Program Interface (API) server 514” that provides a “programmatic interface” between programmatic client 508 (e.g., a “seller application” such as “eBay”) executing on client machine 512 and “marketplace and payment applications 520 and 522” hosted by application server 518. *Id.* ¶¶ 48, 50, 52.

F. Summary of Akashika

Akashika generally relates to “a service providing system, a service providing server and an information terminal device.” Ex. 1007 ¶ 3. More specifically, Akashika is directed to an access control system that promotes secure communications by protecting sensitive data such as “electronic money or important personal information.” *Id.* ¶¶ 7, 9. In one embodiment, Akashika discloses an “area management server” that includes “an access control list generation section generating an access control list.” *Id.* ¶ 17.

Figure 3 of Akashika, reproduced below, illustrates “an area management server according to [one] embodiment.” *Id.* ¶ 29.

FIG.3

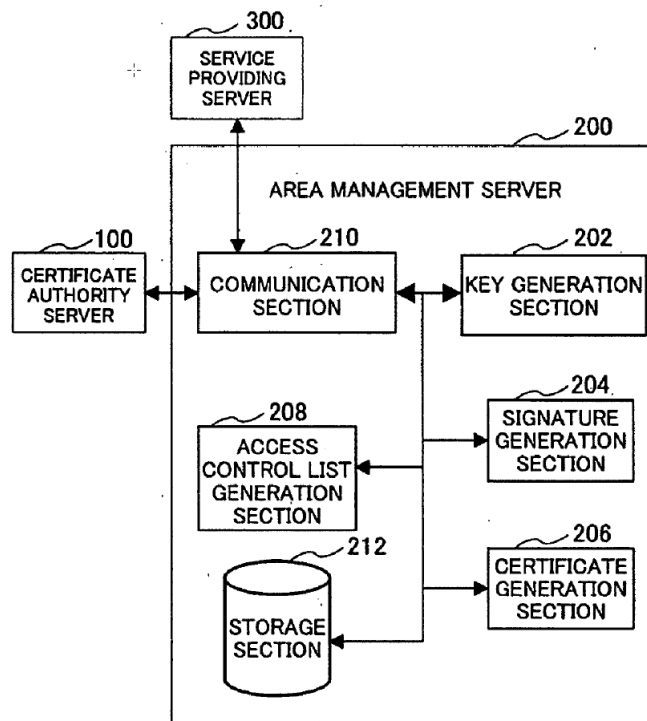


Figure 3 of Akashika.

Figure 3 illustrates certificate authority server 100, area management server 200, and service providing server 300. *Id.* ¶¶ 51, 52, 57, 58. Area management server 200 includes, among other things, “access control list

generation section 208 [that] generates an access control list” identifying “the scope of . . . access right[s]” to client device 400 (not shown in Figure 3 above). *Id.* ¶ 60. The access control list identifies “[t]he access right[s]” (e.g., “read permission, write permission, restriction on frequency of access”) permitted for a secure area. *Id.* ¶ 62.

G. Claim 1

Petitioner provides arguments and evidence in support of contending claim 1 is unpatentable as having been obvious over Dill, Vadhri, and Akashika. *See* Pet. 6–61; Ex. 1003 ¶¶ 45–212. Patent Owner opposes, on the basis that Dill does not disclose some of the claimed subject matter that Petitioner contends Dill discloses. *See* Prelim. Resp. 13–19, 23–31; Ex. 2001 ¶¶ 22, 48–52, 56–62.

We first address Petitioner’s contentions and Patent Owner’s opposition comparing the subject matter of claim 1 with Dill. Then we turn to Petitioner’s unopposed contentions relying on Vadhri and Akashika for the proposed obviousness of modifying Dill to practice the invention of claim 1. Ultimately we conclude Petitioner has demonstrated a reasonable likelihood of prevailing on its assertions as to claim 1.

1. Comparing Claim 1 with Dill

Petitioner argues Dill discloses the subject matter of claim 1, except that Dill’s computer system does not include “an API server” (for which Petitioner relies on Vadhri), “a secure, perishable purchase code” (for which Petitioner also relies on Vadhri), or “an access control list (ACL)” (for which Petitioner relies on Akashika). Pet. 6–7, 49; *id.* at 17–61; Ex. 1003 ¶¶ 65–212. Patent Owner challenges certain aspects of Petitioner’s reliance

on Dill as disclosing the subject matter recited in claim 1. *See* Prelim. Resp. 15–19, 23–31; Ex. 2001 ¶¶ 48–52, 56–62.

We have reviewed the unchallenged aspects of Petitioner’s reliance on Dill, and we conclude these contentions are sufficiently supported by the cited evidence to justify institution of review.⁶ *See* Pet. 17–61; Ex. 1003 ¶¶ 65–212.

We now turn to the aspects of Petitioner’s reliance on Dill that are challenged by Patent Owner.

a) Whether Dill Discloses a Mobile Device

Claim 1 recites “an integration tier configured to manage mobile wallet sessions with *a mobile device*.” Ex. 1001, 23:64–65 (emphasis added).

As noted in Section III.C.1 above, Patent Owner construes the “mobile device” claim term to mean a physical device that is mobile, such as a phone or tablet. Patent Owner then asserts the Petition’s mappings of this term to Dill’s disclosure rely on aspects of Dill’s system that are not physical devices, and that are not mobile. *See* Prelim. Resp. 9–10 (citing Pet. 22–23, 33; Ex. 1005, Fig. 9); Ex. 2001 ¶¶ 39–41.

⁶ Nonetheless, for purposes of institution, we do question whether the Petition has shown Dill’s transfer options module 145 teaches the claimed “notification services engine” required by claim 1. *See* Pet. 28–30; Ex. 1003 ¶¶ 103–107. In particular, the Petition relies on transfer options module 145 as corresponding to the “integration tier” of claim 1. *See* Pet. 21–23. The claim requires “a notification services engine configured to interface with the integration tier” (Ex. 1001, 24:4–5), and Petitioner does not appear to substantiate a contention that Dill’s transfer options module 145 interfaces with itself. *See* Pet. 28–30.

We disagree with Patent Owner’s reading of the Petition’s reliance on Dill. Patent Owner notes correctly that the Petition refers to Dill’s “mobile device 125, 130.” Prelim. Resp. 9 (quoting Pet. 33); *see* Pet. 33, 42, 50. Dill describes those elements as mobile *wallets* 125, 130 maintained by *mobile wallet application* 121. *See* Ex. 1005 ¶ 53, Fig. 9. Dill also states that, as is shown in Figure 9, “mobile network operator system 120 *can include and/or execute*” mobile wallet application 121. *Id.* ¶ 53 (emphasis added).

However, the Petition, when discussing the first instance of the term “mobile device” in claim 1, contends Dill discloses a mobile device configured to run mobile wallet application 121. *See* Pet. 22–23 (“Dill includes examples of transactions including depositing funds at the branch of an agent 135 *using the sender’s mobile device configured to run the sender’s mobile wallet 125.*” (emphasis added)); *see also id.* at 7 (arguing Dill’s “mobile device can execute a mobile wallet application” (quoting Ex. 1005 ¶ 10, citing Ex. 1005 ¶ 5)). As a result, the most reasonable understanding of the Petition is that the references to “mobile device 125, 130” refer to Dill’s description of a mobile device *executing* a mobile wallet application that maintains mobile wallets 125, 130. Consequently, for purposes of institution, we do not agree with Patent Owner’s reading of the Petition as being premised on Dill’s mobile wallets 125, 130 themselves being the “mobile device” of claim 1, or on Dill’s mobile network operator 120 as being the “mobile device” of claim 1.

For completeness and to help guide the parties’ efforts during trial, for purposes of institution, we agree with Patent Owner’s positions that Dill’s

mobile wallets 125, 130 are not themselves *devices* per claim 1, and that Dill’s mobile network operator 120 is not *mobile* per claim 1.

For the foregoing reasons, we conclude that even applying Patent Owner’s claim construction of the term “mobile device,” Petitioner’s contentions seeking to establish Dill discloses a mobile device are sufficiently supported by the evidence cited by Petitioner to justify institution of review.

b) Whether Dill Discloses a Mobile Wallet Application

The computing system of claim 1 comprises “an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with *a mobile wallet application*.” Ex. 1001, 23:64–67 (emphasis added).

Petitioner argues Dill discloses the claimed “integration tier” as transfer options module 145. *See* Pet. 21–23 (citing Ex. 1001, Fig. 1, 9:63–10:7; Ex. 1005, Figs. 5 and 9, ¶¶ 51, 53, 55, 77, 100–101); Ex. 1003 ¶¶ 81–86. Petitioner argues Dill discloses the claimed “mobile wallet application” as mobile wallet application 121. *See* Pet. 23, 24–25 (citing Ex. 1005, Figs. 5 and 9, ¶¶ 15, 33, 47, 51, 53–55, 57, 77, 101, 104); Ex. 1003 ¶¶ 83–85, 87–90.

Patent Owner objects that Dill’s mobile wallet application 121 cannot be the mobile wallet application of claim 1. *See* Prelim. Resp. 18–19; Ex. 2001 ¶¶ 51–52. Patent Owner argues the claimed mobile wallet application must be installed on a mobile device, per Patent Owner’s claim construction discussed above in Section III.C.2. *See* Prelim. Resp. 18; Ex. 2001 ¶ 51. By contrast, according to Patent Owner, Dill’s mobile wallet

application 121 is “located within” mobile network operator 120, rather than installed on a mobile device per Patent Owner’s claim construction. Prelim. Resp. 18–19 (citing Ex. 1005, Fig. 9); Ex. 2001 ¶ 52.

Patent Owner’s argument is unavailing at this stage. Dill states: “The mobile device *can execute* a mobile wallet application.” Ex. 1005 ¶ 10 (*cited at* Pet. 7, 22–23); *see also id.* ¶ 94 (describing “a cell phone or other mobile device executing the mobile wallet application 121”) (*cited at* Pet. 33); *id.* at claim 13 (reciting “a mobile device communicatively coupled with the mobile communications network and executing a mobile wallet application”). Neither Patent Owner nor Dr. Shamos addresses these disclosures in Dill that its mobile device *executes* a mobile wallet application. They also do not explain how these disclosures are different from the ’196 patent’s express definition of “mobile wallet application” as being *installed on* the mobile device. *See* Prelim. Resp. 18–19; Ex. 2001 ¶¶ 51–52. Thus, we disagree with the premise of Patent Owner’s argument, for purposes of institution. We conclude that resolution of this issue would benefit from further briefing during trial.

Thus, we conclude that even applying Patent Owner’s claim construction of the term “mobile wallet application,” Petitioner’s contentions seeking to establish Dill discloses a mobile wallet application are sufficiently supported by the evidence cited by Petitioner to justify institution of review.

c) Whether Dill Discloses a Mobile Wallet

Claim 1 is directed to a “computing system for facilitating management of *a mobile wallet*,” in which the system can “*debit the mobile*

wallet by [a] specified amount of funds.” Ex. 1001, 23:60–61 (preamble), 24:43 (body) (emphases added).

Patent Owner argues Petitioner “construes ‘mobile wallet’ as being *limited to*” a mobile device that holds value. Prelim. Resp. 15–16 (emphasis added). For reasons provided above, for purposes of institution, we disagree with Patent Owner’s characterization of Petitioner’s claim construction. *See* Section III.C.3 *supra*. As a consequence, we also disagree with Patent Owner’s further argument that we should deny institution because the Petition fails to establish that Dill discloses a mobile wallet, applying the claim construction Patent Owner attributes to the Petition. *See* Prelim. Resp. 16–18; Ex. 2001 ¶ 50.

We have construed the “mobile wallet” of claim 1 to mean a stored value account or prepaid access account that allows its owner to pay for goods and services. *See* Section III.C.3 *supra*.

Applying that construction, we conclude the Petition establishes Dill discloses a mobile wallet sufficiently to justify institution of review. In particular, Dill discloses mobile wallets 125 and 130 that are maintained by mobile wallet application 121 of mobile network operator 120, as is undisputed in the present record. *See* Ex. 1005, Fig. 9, ¶¶ 53–54; Pet. 18–19 (relying on Dill’s mobile wallets 125 and 130 as corresponding to the “mobile wallet” of claim 1); Prelim. Resp. 16–18 (stating Dill “teaches a mobile wallet where the value is stored in an account external to the mobile device rather than on the mobile device itself” because “the value associated with mobile wallets 125 and 130 are stored at the Mobile Network Operator 120”). Dill’s mobile wallets 125 and 130 are each a stored value account or prepaid access account that allow their respective owners to pay

for goods and services. That is, mobile wallet 125 of sender 105 comprises information related to the sender's mobile device, and one or more source accounts 165 associated with mobile wallet 125. *See* Ex. 1005 ¶¶ 49, 53. Mobile wallet 130 of recipient 110 comprises information related to the recipient's mobile device, and one or more destination accounts 175 associated with mobile wallet 130. *See id.*

For the foregoing reasons, we conclude Petitioner's contentions seeking to establish Dill discloses a mobile wallet are sufficiently supported by the evidence cited by Petitioner to justify institution of review.

d) Whether Dill Discloses an Integration Tier Configured to Manage a Mobile Wallet Session with a Mobile Device

The computing system of claim 1 comprises “an integration tier configured to manage mobile wallet sessions with a mobile device.” Ex. 1001, 23:64–65.

As discussed above, Petitioner argues Dill discloses the claimed “integration tier” as transfer options module 145. *See* Pet. 21–23; Ex. 1003 ¶¶ 81–86. In particular, according to Petitioner, Dill's money transfer facilitator system 140 (which includes transfer options module 145) “is configured to manage transactions with a mobile wallet” because “[s]ystem 140 is configured to ‘conduct[] money **transfer** transactions’” wherein transfer options module 145 is “‘communicatively coupled with the one or more interfaces 136–138’ that ‘can be adapted to receive transaction information for a money **transfer** transaction from a sender 105 through at least one [of] the interfaces 136–138” Pet. 22–23 (quoting Ex. 1005 ¶¶ 100–101, citing Ex. 1005, Fig. 9); Ex. 1003 ¶¶ 81, 83–86. Further according to Petitioner, “Dill includes examples of transactions including

depositing funds at the branch of an agent 135 using the sender's mobile device configured to run the sender's mobile wallet 125." Pet. 23 (citing Ex. 1005, Figs. 5 and 9, ¶¶ 51, 53, 55, 57, 77); Ex. 1003 ¶¶ 83–84.

Petitioner concludes "Dill's transfer options module 145 sends and receives transaction details between mobile wallets 125, 130 within a mobile wallet application 121 such that the mobile wallets 125, 130 are accessible to parties conducting the transaction." Pet. 23; Ex. 1003 ¶ 85.

Patent Owner argues Dill's transfer options module 145 does not correspond to the claimed integration tier, because the module does not "manage mobile wallet sessions with a mobile device." Prelim. Resp. 23; Ex. 2001 ¶ 56. Patent Owner asserts "the Petition equates managing a session with a mobile wallet" (as claim 1 requires) "with managing aspects of a financial transaction with a mobile wallet" (as Petitioner asserts Dill's transfer options module 145 does). Prelim. Resp. 23–24 (citing Pet. 21–23). According to Patent Owner, Petitioner "ignores the web environment in which the claimed session management limitation is recited (e.g., within an 'integration tier' that includes 'web services communication mechanisms')." *Id.* at 24; Ex. 2001 ¶ 57. In that environment, Patent Owner contends a person of ordinary skill in the art would distinguish between a "session" and a "financial transaction." Prelim. Resp. 24; Ex. 2001 ¶ 57. The difference in meaning drawn by Patent Owner is that "multiple transactions can occur during a session," but "multiple sessions cannot occur during a transaction." Prelim. Resp. 24; Ex. 2001 ¶ 57.

Patent Owner also asserts the Petition “fails to clearly articulate what is being mapped to the ‘mobile device’^[7] recited in the claimed ‘integration tier.’” Prelim. Resp. 24–25 (citing Pet. 22–23). Patent Owner posits that Petitioner may be mapping the claimed “mobile device” to either (1) interfaces 136–138 or (2) the sender’s mobile device configured to run the sender’s mobile wallet 125, and contends that either mapping is insufficient. *Id.* at 25–31.

Based on the present record, we conclude the Petition establishes Dill’s transfer options module 145 is an integration tier to manage mobile wallet sessions with a mobile device, sufficiently to justify institution of review. In particular, transfer options module 145 sends and receives transaction details between mobile wallets 125 and 130 within mobile wallet application 121, whereby each transaction corresponds to a mobile wallet session tied to the unique transaction identifier assigned by mobile network operator 120. *See* Ex. 1005 ¶¶ 100–102, 105.

Even assuming Patent Owner is correct that a person of ordinary skill in the art would have understood a “financial transaction” to be different than a “session” (*see* Prelim. Resp. 23–24 (citing Ex. 2001 ¶ 57)), Patent Owner’s argument is unavailing. The question is not whether the prior art is coextensive with the claim limitation, but rather whether the former teaches or suggests the latter. Dr. Shamos testifies that “an outcome of a ‘session’ may be that one or more ‘transactions’ occur,” and that “multiple

⁷ The Preliminary Response actually refers to the “mobile wallet device” here. However, that term does not appear in the pertinent “integration tier” limitation of claim 1 (Ex. 1001, 23:64–24:3), or elsewhere in claim 1 so far as we can discern.

transactions can occur during a session.” Ex. 2001 ¶ 57. This indicates a session may be associated with a single transaction, but it is unclear whether (or why) Patent Owner contends that managing a transaction in such a situation would not qualify as managing the session. If Patent Owner elects to advance this argument at trial, a construction of the term “session” (or the phrase “manage mobile wallet sessions”) would be beneficial to identify (and substantiate) the distinction sought to be drawn.

As to whether Petitioner fails to clearly map the claimed “mobile device” to Dill, we have already explained in Section III.G.1(a) above why we understand the Petition to contend that Dill discloses a mobile device configured to run a mobile wallet. *See, e.g.*, Pet. 7, 22–23. Contrary to Patent Owner’s understanding (*see* Prelim. Resp. 24–26), we do not understand the Petition to contend that Dill’s interfaces 136–138 teach the claimed “mobile device.” Rather, we understand the Petition to map the mobile device(s) of sender 105 and/or recipient 110 to the claimed “mobile device.” *See* Pet. 7, 22–23.

Addressing that possibility, Patent Owner asserts the Petition still is deficient. *See* Prelim. Resp. 29–31; Ex. 2001 ¶¶ 57–62. According to Patent Owner, “transfer options module 145 fails to ‘manage sessions’ for” the mobile device(s) of sender 105 and/or recipient 110 because sessions with those devices occur over mobile network 115 as managed by mobile network operator 120, not transfer options module 145. *See* Prelim. Resp. 29–30 (citing Ex. 1005, Fig. 9, ¶ 77); Ex. 2001 ¶ 60. Patent Owner

suggests Dill’s transfer options module 145⁸ is more analogous to the ’196 patent’s payment handler 105 (which *facilitates* mobile wallet sessions) than its integration tier 101 (which *manages* mobile wallet sessions). *See* Prelim. Resp. 30–31 (citing Ex. 1001, Fig. 1, 9:63–64, 10:24–26); Ex. 2001 ¶¶ 58–60. Patent Owner concludes that, although Dill’s mobile network operator 120 sends queries to and receives responses from transfer options module 145 during a mobile wallet session, this “in no way diminishes the fact that [mobile network operator 120] is in charge of managing the session with the mobile device.” Prelim. Resp. 31; Ex. 2001 ¶ 61.

Based on the present record, Patent Owner’s argument is unavailing. Patent Owner assumes that, if mobile network operator 120 has *some* role in the management of the mobile wallet transaction, then transfer options module 145 *cannot* manage the transaction, but this assumption is unsubstantiated. Indeed, Dr. Shamos testifies that “the session with the mobile device of a sender 105 is managed by Mobile Operator Network 120” (Ex. 2001 ¶¶ 60–61), but he does not explain why this means that transfer options module 145 would not be configured to manage mobile wallet sessions with a mobile device.

Patent Owner’s argument analogizing Dill’s transfer options module 145 to (at most) the ’196 patent’s payment handler 105 misses the mark. It does not matter which component of the ’196 patent specification is most similar to Dill’s transfer options module 145. The issue is whether

⁸ The Preliminary Response actually refers to “Dill’s Money Transfer Facilitator 145” here. We believe Patent Owner meant to reference Dill’s transfer options module 145 (i.e., the element Petitioner maps to the “integration tier” of claim 1), not Dill’s money transfer facilitator 140.

Dill's transfer options module 145 meets the requirements imposed by the claim. Patent Owner does not explain, and based on the present record we do not discern, any reason why the role of Dill's transfer options module 145 within Dill's overall system does not correspond to *managing* mobile wallet sessions, as recited in claim 1.

For the foregoing reasons, we conclude Petitioner's contentions seeking to establish Dill discloses an integration tier configured to manage a mobile wallet session with a mobile device are sufficiently articulated and supported by the evidence cited by Petitioner to justify institution of review.

2. *Motivation to Combine Dill with Vadhri and Akashika*

We now turn to Petitioner's unopposed contentions relying on Vadhri and Akashika for the proposed obviousness of modifying Dill to practice the invention of claim 1. Here, Petitioner contends a person of ordinary skill in the art would have been motivated to incorporate Vadhri's *API server* into Dill's payment handler, in order to provide a flexible system that may be used by different parties using different payment systems, and to ease programming implementation. *See* Pet. 13–14, 36–38 (citing Ex. 1005 ¶¶ 4, 49; Ex. 1006 ¶¶ 52, 56; Ex. 1008, 417); Ex. 1003 ¶¶ 55–57, 124–130. Petitioner also contends a person of ordinary skill in the art would have been motivated to incorporate Akashika's access control list in Dill's money transfer facilitator 140, to provide enhanced security for Dill's financial transactions. *See* Pet. 15–17, 38–41 (citing Ex. 1005 ¶¶ 4–7, 102–105; Ex. 1006 ¶ 56; Ex. 1007, Fig. 3, ¶¶ 5, 7, 17, 10, 62, 70, 117; Ex. 1009 ¶¶ 185–186); Ex. 1003 ¶¶ 60–61, 131–140. Petitioner moreover contends a person of ordinary skill in the art would have been motivated to incorporate

Vadhri’s use of temporary account codes as Dill’s transaction identifiers, to provide additional security in Dill’s system by limiting the amount of time that the code is available. *See* Pet. 48–50 (citing Ex. 1005, Fig. 3, ¶¶ 67, 69, 101; Ex. 1006, Fig. 2, ¶¶ 15, 22–23, 27, 46); Ex. 1003 ¶¶ 168–177.

Patent Owner does not presently dispute these contentions, and we conclude they are sufficiently articulated and supported by the evidence cited by Petitioner to justify institution of review.

3. *Conclusion as to Claim 1*

Based on the present record, we conclude Petitioner has provided sufficient argument and evidence in relation to the proposed obviousness of claim 1 over Dill, Vadhri, and Akashika, to demonstrate a reasonable likelihood that Petitioner would prevail with respect to this challenge at trial.

H. *Other Claims*

“When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Thus, pursuant to U.S. Patent and Trademark Office rules and policy implementing *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018), we “either (1) institute as to all claims challenged in the petition and on all grounds in the petition, or (2) institute on no claims and deny institution.” CTPG 5–6, 64. We “will not institute on fewer than all claims or all challenges in a petition.” *Id.* at 5, 64; *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1359–60 (Fed. Cir. 2018) (stating a decision to institute is “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Thus, because we have decided to grant institution on claim 1, we do the same for the claims 2–22. Nonetheless, we will address Patent Owner’s arguments concerning these claims separately from claim 1, to provide guidance to the parties for the upcoming trial. *See* CTPG 6, 64.

I. Claim 21

Petitioner provides arguments and evidence in support of contending claim 21 is unpatentable as having been obvious over Dill, Vadhri, and Akashika. *See* Pet. 6–17, 78–84; Ex. 1003 ¶¶ 45–64, 328–366. Patent Owner argues Petitioner fails to establish that Dill discloses the “third party mobile wallet” required by claim 21. *See* Prelim. Resp. 19–23; Ex. 2001 ¶¶ 53–55.

Claim 21 recites a “mobile wallet transaction using *a third party mobile wallet*,” wherein the transaction comprises at least one of: “a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to *a third party mobile wallet*”; “a mobile wallet withdrawal in which funds are withdrawn from *the third party mobile wallet* and provided to the customer”; or “a mobile wallet deposit in which funds are deposited into *the third party mobile wallet*.” Ex. 1001, 28:4–17 (emphases added).

Petitioner argues Dill discloses the claimed “third party mobile wallet” as mobile wallet 130 of recipient 110. *See* Pet. 47–48 (discussing limitation 1.10B), 79 (cross-referencing limitation 21.10B to limitation 1.10B), 81–82 (discussing limitation 21.10C); Ex. 1003 ¶¶ 165–167, 352–357. In particular, according to Petitioner, “Dill’s transaction services include receiving requests and corresponding payment from mobile wallets 125, 130,” “includ[ing] transfers from a sender mobile wallet 125 to

a [recipient] mobile wallet 130.” Pet. 47–48, 81 (citing Ex. 1005, Figs. 3–7 and 9, ¶¶ 57, 65, 69); Ex. 1003 ¶¶ 165–166, 352–355.

Patent Owner argues the claimed third party mobile wallet must be provided by a provider “*other than*” the provider of the cloud-based transaction platform, per Patent Owner’s claim construction discussed above in Section III.C.4 above. Prelim. Resp. 19–20; Ex. 2001 ¶ 53. According to Patent Owner, “[t]he Petition has omitted any attempt to map the ‘third party’ mobile wallet” of claim 21 to Dill. Prelim. Resp. 20–23 (citing Pet. 78–79, 81); Ex. 2001 ¶ 54. The Petition’s cross-reference to its claim 1 analysis does not help Petitioner, according to Patent Owner, because claim 1 does not recite a *third party* mobile wallet. Prelim. Resp. 20. Patent Owner then argues the Petition’s separate analysis of claim 21 “makes several conclusory assertions with respect to the ‘third party’ wallet limitation, none of which have merit.” *Id.* at 20–21 (discussing Pet. 81).

Patent Owner acknowledges the Petition’s citation to Dill’s paragraph 57, which states system 100 of Figure 9 “allows a money transfer facilitator 140 . . . to provide a structured settlement between *unrelated entities such as* the sending mobile wallet 125 and receiving mobile wallet 130.” Ex. 1005 ¶ 57 (emphasis added); *see* Prelim. Resp. 21–22. Patent Owner asserts “Dill’s reference to ‘unrelated entities’ fails to meet the claimed ‘third party’ mobile wallet limitation[.]” in claim 21 because “[t]he fact that Dill’s sender 105 and [recipient] 110 may be ‘unrelated’ does not mean that one of them provides a ‘third party’ mobile wallet, as claimed.” Prelim. Resp. 21; Ex. 2001 ¶ 55. In particular, according to Patent Owner, Dill’s “buyer and seller are considered ‘unrelated’ when a buyer transfers funds to a seller’s mobile wallet,” and “neither the buyer nor the seller is a

‘provider’ of a wallet.” Prelim. Resp. 21–22 (citing Ex. 1005, Fig. 1, ¶ 57); Ex. 2001 ¶ 55. Indeed, according to Patent Owner, Dill discloses that the sender’s mobile wallet 125 and the recipient’s mobile wallet 130 “are part of the same Mobile Wallet Service (121) that is maintained by the Network Operator (120).” Prelim. Resp. 22 (citing Ex. 1005, Fig. 1).

Dill’s paragraph 57 further states Dill’s system 100:

need not be a closed-loop system that allows mobile remittances only for consumers who are enrolled in the same mobile wallet system but rather allows entities that are unrelated to allow their enrolled consumers to send a mobile money transaction to a consumer either enrolled under another entity or not enrolled — in which case they are able to enroll in a mobile wallet service, pick up cash at a retail location of the money transfer facilitator or other cash retail outlet or designate a destination for receipt of the money transfer.

Ex. 1005 ¶ 57. Patent Owner contends this disclosure “teaches that a user can send money from their M-wallet to *a recipient who does not have an M-wallet*,” in which case the recipient “receives a cash payment by going to a retail location,” in contrast to claim 21 which requires the recipient to have a third party mobile wallet. Prelim. Resp. 22–23 (emphasis added).

For purposes of institution, we disagree with Patent Owner’s assertion that Dill only teaches mobile wallets 125, 130 that are part of the same mobile wallet service 121 and maintained by the same network operator 120. Dill expressly states that mobile wallets 125, 130 may be associated with different network operators. *See* Ex. 1005 ¶ 52 (“In some cases, the mobile network and mobile network operator of the sender 105 may be different from the mobile network and mobile network operator of the recipient 110.”). In addition, Dill appears to describe transactions between wallets 125, 130 that are associated with different mobile wallet systems:

It need not be a closed-loop system that allows mobile remittances only for customers who are enrolled in the same mobile wallet system but rather allows entities that are unrelated to allow their enrolled customers to send a mobile money transaction to a customer either enrolled under another entity or not enrolled

Id. ¶ 57 (*cited at* Pet. 23, 56, 81); *see, e.g., id.* ¶¶ 34 (determining whether the “recipient is a mobile subscriber for a mobile network operator with whom money transfer facilitator has a relationship and is enrolled in the operator’s mobile wallet”), 36 (“If the mobile network operator for the recipient has a relationship with the money transfer facilitator, a determination can be made as to whether the recipient is enrolled in a mobile wallet service of the mobile network operator.”).

Patent Owner’s arguments regarding sender 105 and recipient 110 being “unrelated” and its arguments regarding an unenrolled recipient are inapposite. We understand Petitioner to rely upon Dill’s disclosure that a sender may send a transaction to a recipient “enrolled under another entity” (Ex. 1005 ¶ 57; *see also id.* ¶ 38 (*quoted in* Prelim. Resp. 22–23)) and, in the alternative, to rely upon Dill’s disclosure that mobile wallets can be associated with a mobile network operator different than the provider of Dill’s financial transfer system. *See* Pet. 22–23. Patent Owner does not squarely address these contentions or the portions of Dill (quoted above) that appear to support them.

Patent Owner finally asserts “the Petition attributes the quotation — ‘a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party wallet’ — to [Dill],” but “this quote is from the ’196 Patent, *not from Dill.*” Prelim. Resp. 20–21 (quoting Pet. 81). We disagree with this characterization of the Petition. Patent Owner’s

quotation of the Petition in the Preliminary Response (at page 20) misleadingly alters the formatting in the Petition. The pertinent statement in the Petition is:

Dill’s financial transfer system includes transfers from a sender mobile wallet 125 to a [recipient] mobile wallet 130 (*“a mobile wallet transfer in which funds are transferred from the mobile wallet of the customer to a third party mobile wallet”*). APPL-1005, [0057]; APPL-1003, ¶354.

Pet. 81. This statement follows a convention used consistently throughout the Petition of discussing the disclosure of Dill in plain text, and identifying the ’196 patent claim language at issue in italicized text. *See* Pet. 2 (“Text in *italics* signifies claim language.”); *e.g., id.* at 18–19 (preamble 1.0, *“computing system for facilitating management of a mobile wallet”*), 19 (limitation 1.1, *“one or more processors”*), 20 (limitation 1.2, *“system memory”*), 23 (limitation 1.3A, *“integration tier configured to manage mobile wallet sessions with a mobile device”*), 25 (limitation 1.3B, *“an ‘integration tier’ that includes ‘web services communication mechanisms’”*), 26 (limitation 1.3C, *“communications channel”*), 29 (limitation 1.4A, *“notification services engine”*), 30 (limitation 1.4B, *“a plurality of corresponding different types of messages”*). The Petition clearly attributes these italicized passages to the ’196 patent claim language, not to Dill.

For the foregoing reasons, we conclude Petitioner’s contentions seeking to establish Dill discloses a third party mobile wallet are sufficiently supported by the evidence cited by Petitioner to justify institution of review.

2. Claims 2–20 and 22

Patent Owner does not address claims 2–20 and 22 apart from arguments we have already considered above in connection with claims 1

and 21. We therefore do not comment further on these claims in this Decision. *See* 37 C.F.R. § 42.108(a); CTPG 5–6, 64.

IV. CONCLUSION

For the above reasons, we determine the information presented in the record establishes there is a reasonable likelihood that Petitioner would prevail with respect to at least one claim of the '196 patent challenged in the Petition. Accordingly, we institute an *inter partes* review of claims 1–22 on all grounds (i.e., the sole ground) presented in the Petition.

At this preliminary stage, we have not made a final determination with respect to the patentability of the challenged claims or any underlying factual or legal issue. Our final determination will be based on the record as developed during the *inter partes* review. Any arguments for patentability that are not raised by Patent Owner in a timely-filed response may be deemed forfeited.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–22 of the '196 patent on all grounds (i.e., the sole ground) presented in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

IPR2023-00398
Patent 10,438,196 B2

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