

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

FINTIV, INC.,
Patent Owner.

IPR2022-00976
Patent 9,892,386 B2

Before MICHAEL R. ZECHER, LYNNE E. PETTIGREW, and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

ZECHER, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioner, Apple Inc. (“Apple”), filed a Petition requesting *inter partes* review (“IPR”) of claims 1–3 of U.S. Patent No. 9,892,386 B2 (Ex. 1001, “the ’386 patent”). Paper 2 (“Pet.”). Patent Owner, Fintiv Inc. (“Fintiv”), filed a corrected Preliminary Response. Paper 7 (“Prelim. Resp.”). We granted the parties authorization to file preliminary briefs that were tailored narrowly to address the non-exclusive list of six factors set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”) that we consider in determining whether to exercise our discretion to institute an IPR when there is a related district court case involving the same patent. Apple filed a Preliminary Reply (Paper 8 (“Prelim. Reply”)); however, Fintiv elected not to file a preliminary sur-reply.

Based on the authority delegated to us by the Director under 37 C.F.R. § 42.4(a), we may not institute an IPR unless the information presented in the Petition and any response thereto shows that “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). Taking into account Fintiv’s Preliminary Response, we conclude that the information presented in the Petition establishes that there is a reasonable likelihood that Apple would prevail in challenging at least one of claims 1–3 of the ’386 patent as unpatentable. Pursuant to § 314, we hereby institute an IPR as to these claims of the ’386 patent.

A. Related Matter

The parties indicate that the ’386 patent is the subject of the district court case captioned *Fintiv, Inc. v. PayPal Holdings, Inc.*, No. 6:22-cv-

00288 (W.D. Tex.) (complaint filed Mar. 17, 2022) (“Texas Action”).

Pet. 1; Paper 4 (Fintiv’s Mandatory Notices), 2.¹

B. Real Party in Interest

Apple identifies itself as the only real party in interest. Pet. 1.

Fintiv identifies itself as the only real party in interest. Paper 4, 2.

C. The ’386 Patent

The ’386 patent, titled “Monetary Transaction System,” issued from U.S. Patent Application No. 15/201,152 (“the ’152 application”), filed on July 1, 2016. Ex. 1001, codes (54), (21), (22). The ’152 application includes an extensive chain of priority that ultimately results in it claiming the benefit of U.S. Provisional Patent Application No. 61/493,064 (“the ’064 application”), filed on June 3, 2011. *Id.* at code (60), 1:6–19.

The ’386 patent generally relates to a “monetary transaction system for conducting monetary transactions between transaction system subscribers and other entities.” Ex. 1001, 1:37–38. Figure 2 of the ’386 patent, reproduced below, illustrates one embodiment of a monetary transaction system. *Id.* at 2:37–38.

¹ Fintiv’s Updated Mandatory Notices, filed in accordance with 37 C.F.R. § 42.8, do not include page numbers. Paper 4. We consider the Title page as page 1 and then proceed from there in numerical order.

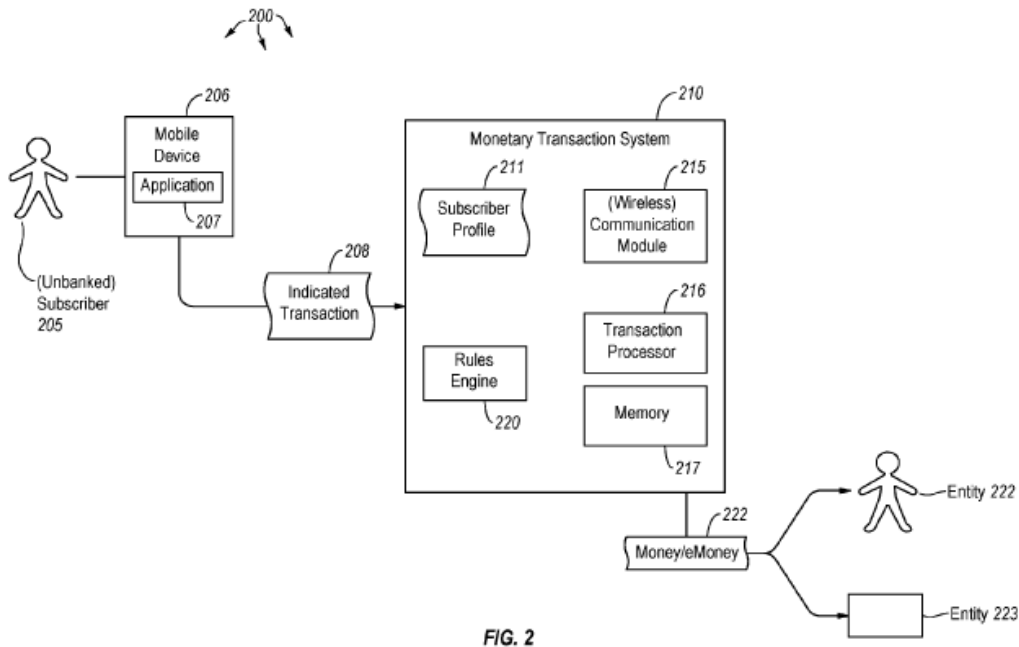


Figure 2, reproduced above, illustrates monetary transaction system 200 that includes first subscriber 205 using mobile device 206 that runs mobile wallet application 207 to conduct indicated transaction 208 with entity 222 or 223, which may be a second subscriber, a retail store, or an agent company. *Id.* at 14:27–64. Using mobile device 206 that runs mobile wallet application 207, first subscriber 205 sends indicated transaction 208 to transaction processor 216 in mobile wallet platform 210, which, in turn, may access subscriber profile information 211 about the first subscriber and consult rules engine 220 to determine whether the indicated transaction is permissible. *Id.*

D. Challenged Claims

Of the challenged claims, claims 1–3 are independent claims. Each of these three independent claims is directed to “[a] monetary transaction system for conducting monetary transactions between subscribers and other entities.” Ex. 1001, 30:54–55, 32:3–4, 33:34–35. The parties, however, appear to agree that these three independent claims differ in how the

monetary transaction is conducted (i.e., depositing in independent claim 1, withdrawing in independent claim 2, and transferring in independent claim 3). *Compare* Pet. 6, *with* Prelim. Resp. 7. Independent claim 1 is illustrative of the challenged claims and is reproduced below:

1. A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of:
 - an integration tier operable to manage mobile wallet sessions, the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels;
 - notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails;
 - business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects;
 - database services operable to store financial transaction details, store customer profiles, and manage money containers;
 - a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors;
 - a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce constraints including transaction constraints;
 - a security service operable to perform subscriber authentication;
 - at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system: wherein the at least one entity is the agent;
 - wherein the monetary transaction system is implemented to deposit funds at an agent branch, the funds being deposited

by a subscriber at the agent branch using a mobile device configured to run a monetary transaction system application, the monetary transaction system performing the following steps:

- receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system, the communication message being received by an API associated with the integration tier of the monetary transaction system, the communication message indicating that the subscriber desires to deposit a specified amount of funds into the subscriber's account;

- validating the status of the subscriber's account, wherein validating the status of the subscriber's account comprises communicating from the integration tier to the database services to query attributes of the subscriber's account;

- committing a pending transaction through the business process services, wherein the integration tier communicates a transaction commitment request to the business process services;

- receiving a confirmation from the business process services that the pending transaction has been committed;

- sending, through the notification services, a receipt notification to the mobile device; and

- upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services; and

wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services:

- ensuring, via the database services, that the subscriber has an active account;

- validating, through communication with the security services, one or more of a PIN number and an access control list;

- applying with the rules engine, velocity rules;

creating with the database services a new pending transaction history record;
holding funds from the agent account balance using the payment handler,
loading the funds to the subscriber account using the payment handler; and
updating, using the database services, a pending transaction history record to reflect the funds.

Id. at 30:54–32:2.

E. Asserted Prior Art References

Apple relies on the prior art references set forth in the table below.

Name²	Reference	Dates	Exhibit No.
Dill	US 2009/0265272 A1	published Oct. 22, 2009; filed June 3, 2009	1005
Vadhri	US 2010/0133334 A1	published June 3, 2010; filed Dec. 3, 2008	1006
Akashika	US 2009/0217047 A1	published Aug. 27, 2009; filed Nov. 18, 2008	1007
Hansen	US 2004/0230527 A1	published Nov. 18, 2004; filed Apr. 26, 2004	1008
Liao	US 7,865,141 B2	issued Jan. 4, 2011; filed June 7, 2007	1009

F. Asserted Grounds of Unpatentability

Apple challenges claims 1–3 of the '386 patent based on the asserted grounds of unpatentability set forth in the table below. Pet. 6, 8–109.

² For clarity and ease of reference, we only list the first named inventor.

Claims Challenged	35 U.S.C. §	Reference(s)
1, 3	103(a) ³	Dill, Vadhri, Akashika, Hansen
2	103(a)	Dill, Vadhri, Akashika, Hansen, Liao

Apple supports its arguments in the Petition with the testimony of Dr. Henry Houh. Ex. 1003 (Declaration of Dr. Houh in support of Petition). Fintiv supports its arguments in the Preliminary Response with the testimony of Michael I. Shamos, Ph.D. Ex. 2001 (Declaration of Dr. Shamos in support of Preliminary Response).

II. ANALYSIS

A. Discretionary Denial Arguments Under § 314(a)

Apple argues that the record does not support discretionary denial under § 314(a). Pet. 109–110; Prelim. Reply 1–5. In response, Fintiv argues that we should exercise our discretion under § 314(a) to deny institution. Prelim. Resp. 45–54.

Where, as here, a parallel district court case is pending involving the same patent, we follow the factors set forth in *Fintiv* in deciding whether to exercise our discretion to deny institution. Specifically, we weigh the following factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103, effective March 16, 2013. Because the ’386 patent claims the benefit of the ’064 application, which was filed before March 16, 2013, and neither party has argued that the provisions of the AIA apply, we apply the pre-AIA versions of the statutory bases for unpatentability. See Ex. 1001, codes (21), (22), (60), (63).

2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;

3. investment in the parallel proceeding by the court and the parties;

4. overlap between issues raised in the petition and in the parallel proceeding;

5. whether the petitioner and the defendant in the parallel proceeding are the same party; and

6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Fintiv, Paper 11 at 6. Recognizing that “there is some overlap among these factors” and that “[s]ome facts may be relevant to more than one factor,” we “take[] a holistic view of whether efficiency and integrity of the [patent] system are best served by denying or instituting review.” *Id.* On June 21, 2022, the Director of the U.S. Patent and Trademark Office issued several clarifications concerning the application of the *Fintiv* factors. See Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, issued June 21, 2022 (“Guidance Memo”).⁴ The Guidance Memo clarifies “the [Board’s] current application of *Fintiv* to discretionary institution where there is parallel litigation.” *Id.* at 2.

1. Factor 1—Whether the District Court Will Grant a Stay

Apple represents that PayPal Holdings, Inc. (“PayPal”) has not filed a motion to stay in the Texas Action. Prelim. Reply 1. *Fintiv* represents that,

⁴ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf

even if PayPal filed a motion to stay in the Texas Action, the presiding judge typically denies such a motion in view of a pending IPR. Prelim. Resp. 47.

“A judge determines whether to grant a stay based on the facts of each specific case as presented in the briefs by the parties.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (Decision Denying Institution) (designated informative). We decline to speculate how the district court in the Texas Action would rule on a motion to stay, if PayPal were to file such a motion, based on actions taken in different cases with different facts. Accordingly, this factor is neutral.

2. Factor 2—District Court Trial Date and Factor 5—Whether Petitioner and the Defendant in the District Court are the Same Party

Because the Petitioner here and the defendant in the Texas Action are different parties, the analysis of Factors 2 and 5 are interrelated. Accordingly, we address them together.

Beginning with Factor 2, although Fintiv and PayPal have entered a joint motion to amend the scheduling order that proposes a trial date of November 30, 2023, no trial date has been set in the Texas Action. Ex. 2007 (Joint Motion to Enter Agreed Scheduling Order), 8. The fact that no trial date has been set weighs against exercising our discretion to deny institution. *See Oticon Med. AB v. Cochlear Ltd.*, IPR2019-00975, Paper 15 at 23–24 (PTAB Oct. 16, 2019) (Decision on Institution) (designated precedential as to §§ II.B and II.C) (lack of trial date weighs against exercising discretion to deny institution, even when discovery is “well underway”).

Putting aside that no trial date has been set in the Texas Action, the Guidance Memo states that “[a] court’s scheduled trial date . . . is not by itself a good indicator of whether the district court trial will occur before the

statutory deadline for a final written decision,” and directs us to consider “the most recent statistics on median time-to-trial for civil actions in the district court in which the parallel litigation resides.” Guidance Memo 8–9, 9 n.12 (“[t]he most recent statistics” on median time-to-trial for civil actions in district court are *available at*: <https://www.uscourts.gov/statistics/table/na/federal-court-management-statistics/2022/03/31-1>). Both parties introduced evidence that the median time-to-trial for civil actions in the U.S. District Court for the Western District of Texas is somewhere between 27.2 months and 28.3 months. Prelim. Resp. 50 (citing Ex. 2006); Prelim. Reply 3 (citing Ex. 1016, 37). Because the complaint in the Texas Action was filed on March 17, 2022, the projected trial date for this proceeding using the median time-to-trial statistics for civil actions in the Western District of Texas would be somewhere between late June 2024 and early July 2024. Applying the principles articulated in the Guidance Memo, Factor 2 weighs against exercising our discretion to deny institution because the projected statutory deadline for issuing a final written decision in this proceeding will fall in November 2023.

Turning to Factor 5, Fintiv acknowledges that Apple is not a defendant in the Texas Action, but nevertheless argues that Apple did not include any discussion in the Petition as to “why addressing the same or substantially the same issues would not be duplicative” of the Texas Action. Prelim. Resp. 53 (citing *Fintiv*, Paper 11 at 14). Apple argues that “[it] is not a defendant and is not related to any defendant in the [Texas Action].” Prelim. Reply 5.

Based on the current record, Fintiv has not shown that Apple is sufficiently related to PayPal—the defendant in the Texas Action—so as to

weigh in favor of exercising our discretion to deny institution. There is nothing in the record to indicate that Apple exerts any control over the Texas Action or, for that matter, PayPal. Nor is there any evidence in the record that indicates Apple has any duty to indemnify PayPal in the Texas Action.

Accordingly, taking into account that Apple is not a party to the Texas Action, Factor 5 weighs against exercising our discretion to deny institution.

3. Factor 3—Investment by District Court and Parties

Fintiv argues that the parties in the Texas Action have already exchanged infringement contentions and they were scheduled to exchange invalidity contentions on August 25, 2022. Prelim. Resp. 51 (citing Ex. 2007). Fintiv also argues that the parties will have exchanged claim terms for construction and preliminary claim constructions before the projected date of the institution decision in this proceeding. *Id.* Apple argues that “there has been minimal investment in the invalidity issues in the [Texas Action],” which is still “in the early stages.” Prelim. Reply 4.

Although Fintiv represents that the parties have exchanged infringement and invalidity contentions, Fintiv readily admits that claim construction briefing will not be completed as of the projected time for entering the institution decision in this proceeding and it does not identify what discovery, if any, has been completed. *Fintiv* states that, “[i]f, at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution.” *Fintiv*, Paper 11 at 10. Here, the current record indicates that the district court has not made a substantial investment in the case, apart from considering the parties’ Joint Motion to Enter Agreed Scheduling Order that is Exhibit 2007. Accordingly, we consider the facts

that claim construction briefing has not been completed and discovery has not yet begun to lead us to weigh Factor 3 against exercising our discretion to deny institution.

4. Remaining Factor 4—Overlap Between Issues Raised in the Petition and District Court and Factor 6—Other Circumstances That Impact the Board’s Exercise of Discretion, Including the Merits

The remaining Factors 4 and 6, which include overlap of issues and an initial evaluation of the strength of the Petition’s merits, may impact the overall assessment. *Fintiv*, Paper 11 at 12–16. Under the particular circumstances present here, these two factors do not impact our analysis. For example, *Fintiv* argues that PayPal’s preliminary invalidity contentions were due in the Texas Action on August 25, 2022, and, therefore, they were unknown to *Fintiv* at the time of filing the Preliminary Response on August 24, 2022. Prelim. Resp. 52 (citing Ex. 2007). *Fintiv*, however, did not submit PayPal’s preliminary invalidity contentions into the IPR record. Without these preliminary invalidity contentions, we decline to speculate as to whether there is significant overlap between the issues raised in the Petition and those raised in the Texas Action. To the extent that the merits present a close call for the reasons given in the Preliminary Response, this generally would favor denying institution, but only when other factors favoring denial are present. *Fintiv*, Paper 11 at 15. As we discuss above, there are no other factors that weigh in favor of exercising our discretion to deny institution.

5. Balanced Assessment

Based on a holistic review of the *Fintiv* factors, we conclude that we should not exercise our discretion to deny institution. The facts that no trial

date has been set in the Texas Action, Apple is not the same party as the defendant in the Texas Action, and the district court and parties have invested minimally in the Texas Action all weigh against a discretionary denial. The relevance and weight of other factors on this record are small in comparison. Accordingly, we decline to exercise our discretion under § 314(a) to deny the Petition.

B. Discretionary Denial Arguments Under § 325(d)

Fintiv argues that the Petition should be denied under 35 U.S.C. § 325(d) because Dill is listed on the face of the '386 patent as having been considered during prosecution and, therefore, Fintiv implies that the first part of the framework set forth in *Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 10 (PTAB Feb. 13, 2020) (designated precedential) (“*Advanced Bionics*”) has been met. Prelim. Resp. 54.

We have the authority to deny a petition when “the same or substantially the same prior art or arguments previously were presented” in another proceeding before the Office. 35 U.S.C. § 325(d) (2018). A determination as to “[w]hether to deny institution of trial on the basis of 35 U.S.C. § 325(d) is a fact-dependent decision.” Patent Trial and Appeal Board Consolidated Trial Practice Guide November 2019, at 62.⁵

The question of whether a petition presents art or arguments that are “the same or substantially the same” as art or arguments previously presented to the Office may be resolved by reference to the factors set forth

⁵*Available at*
<https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>

in *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR 2017-01586, Paper 8 (PTAB Dec. 15, 2017) (designated precedential as to § III.C.5, first paragraph) (“*Becton, Dickinson*”). The precedential section of that decision sets forth the following factors for consideration:

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
- (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson, 17–18. Factors (a), (b), and (d) provide guidance as to whether the art or arguments presented in the petition are the same or substantially the same as those previously presented to the Office, whereas factors (c), (e), and (f) “relate to whether the petitioner has demonstrated a material error by the Office” in its prior consideration of such art or arguments. *Advanced Bionics*, Paper 6 at 10. “At bottom, this [two-part] framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* at 9.

When discussing the prosecution history of the ’386 patent, Fintiv states that “[t]he Examiner considered 541 separate references,” one of which was Dill, but the Examiner “did not issue a single prior art rejection.” Prelim. Resp. 7. Instead, the Examiner only issued two rejections based on

35 U.S.C. § 101—an issue foreclosed in an IPR. *See id.*; *see also* Pet. 4 (“The Examiner issued two Office Actions, rejecting the claims only on the basis of 35 U.S.C. § 101.” (citing Ex. 1002, 1606–12, 1366–71)). That is, the overlap between the art considered but not applied by the Examiner during prosecution of the ’386 patent and the art presented by Apple in the Petition is minimal because, although Dill may have been considered by the Examiner during prosecution, it is undisputed that the other four references that serve as the basis of the two obviousness grounds raised in the Petition (i.e., Vadhri, Akashika, Hansen, and Liao) were not before the Examiner during prosecution.

Advanced Bionics indicates that satisfying the first part of the framework is a prerequisite to reaching the second part of the framework. *See Advanced Bionics*, Paper 6 at 8, 10. As we explain above, we are not persuaded that the first part of the *Advanced Bionics* framework has been met. As a result, we need not reach whether Fintiv has met the second part of the *Advanced Bionics* framework. Accordingly, we decline to exercise our discretion under § 325(d) to deny the Petition.

C. Claim Construction

In an IPR based on a petition filed on or after November 13, 2018, such as here, claim terms are construed using the same claim construction standard as in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2019). That is, claim terms generally are construed in accordance with their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art, and the prosecution history pertaining to the patent at issue. *Id.* The ordinary and customary meaning of a claim term “is its meaning to the ordinary artisan after reading

the entire patent,” and “as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313, 1321 (Fed. Cir. 2005) (en banc).

Apple contends that “no claim term requires construction beyond its ordinary and customary meaning.” Pet. 5. Relying on the testimony of Dr. Houh, Apple asserts that “[a person of ordinary skill in the art] would apply the ordinary and customary meaning to all [claim] terms in [independent claims 1–3].” *Id.* (citing Ex. 1003 ¶ 43). In the Preliminary Response, Fintiv does not address claim construction. See Prelim. Resp.

Based on the preliminary record, there is no readily discernible controversy between the parties that requires us to construe any claim terms at this time. See *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe 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. Obviousness Over the Combined Teachings of
Dill, Vadhri, Akashika, and Hansen*

Apple contends that independent claims 1 and 3 of the ’386 patent are unpatentable under § 103(a) as obvious over the combined teachings of Dill, Vadhri, Akashika, and Hansen. Pet. 14–94. Apple contends that the teachings of Dill, Vadhri, Akashika, and Hansen account for the subject matter of each challenged claim, and provides reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. *Id.* Apple also relies on the testimony of Dr. Houh to support its positions. See Ex. 1003.

Based on the preliminary record, we determine that Apple has shown that there is a reasonable likelihood that it would prevail in challenging at least one of claims 1 and 3 of the '386 patent as unpatentable. We begin our analysis with the principles of law that generally apply to an asserted ground based on obviousness, followed by an assessment of the level of skill in the art, overviews of Dill, Vadhri, Akashika, and Hansen, and then we address the parties' contentions with respect to the challenged claims.

1. Principles of Law

A claim is unpatentable under § 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 skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations).⁶ *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966). We analyze the asserted grounds based on obviousness with the principles we identify above in mind.

2. Level of Skill in the Art

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art

⁶ In its Preliminary Response, Fintiv does not present arguments or evidence of secondary considerations. See Prelim. Resp.

at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991). The “person having ordinary skill in the art” is a hypothetical construct, from whose vantage point obviousness is assessed. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

Factors pertinent to a determination of the level of ordinary skill in the art include “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Envtl. Designs, Ltd. v. Union Oil Co. of Cal.*, 713 F.2d 693, 696 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1381–82 (Fed. Cir. 1983)). “Not all such factors may be present in every case, and one or more of these or other factors may predominate in a particular case.” *Id.* at 696–97.

For purposes of institution, there is sufficient evidence in the record that enables us to determine the knowledge level of a person of ordinary skill in the art. Relying on the testimony of Dr. Houh, Apple argues the following:

[a] person of ordinary skill in the art . . . in June 2011 would have had a working knowledge of mobile payment techniques pertinent to the ’386 patent, including software development in the field of mobile payment techniques. Such [a person of ordinary skill in the art] would have had a bachelor’s degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software

development. Lack of work experience can be remedied by additional education, and vice versa.

Pet. 4 (citing Ex. 1003 ¶¶ 21, 22).

Relying on the testimony of Dr. Shamos, Fintiv offers a slightly different assessment of the level of skill in the art, arguing the following:

[a person of ordinary skill in the art] as of the effective filing date of the '386 Patent would have had a bachelor's degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software development involving monetary transaction systems. Lack of work experience can be remedied by additional education, and vice versa.

Prelim. Resp. 7 (citing Ex. 2001 ¶ 34).

The level of skill in the art advanced by each party requires at least a Bachelor of Science degree in electrical engineering, computer science, or equivalent training. We do not discern a material difference between the industry experiences advanced by either party, nor does either party premise its arguments exclusively on its own industry experience. To the extent necessary, and for purposes of institution, we adopt Apple's assessment of the level of skill in the art because Dr. Houh's identification of relevant industry experience applicable to software development in the field of mobile payment techniques is consistent with the '386 patent and the asserted prior art. We note, however, that our obviousness analysis would be the same under either party's assessment.

3. Overview of Dill

Dill generally relates to “financial transfers” and, in particular, “to financial transfers utilizing a unique identifier to facilitate flexible payment options for the transaction.” Ex. 1005 ¶ 2. Figure 9 of Dill, reproduced

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

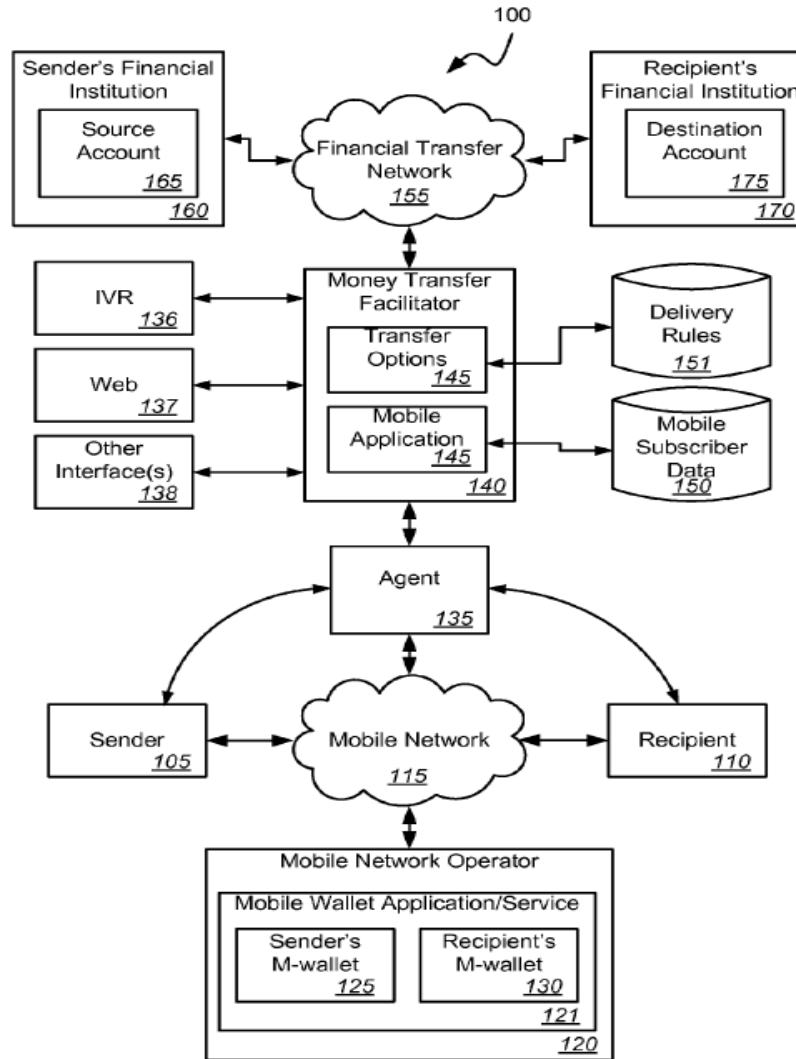


FIG. 9

Figure 9, reproduced above, 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.* ¶ 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 140 receives the money transaction information from mobile wallet application 121 via mobile network 115. *Id.* ¶ 100. Money transfer facilitator 140⁷ 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.

4. Overview of Vadhri

Vadhri generally relates to “value holding accounts” and, in particular, “to systems and methods for accessing a value holding account” that “may hold anything considered valuable.” Ex. 1006 ¶¶ 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.

⁷ Money transfer facilitator 140 includes two components that are both labeled using the same numerical identifier—transfer options module 145 and mobile application 145. Ex. 1005 ¶¶ 50, 101, 102, Fig. 9.

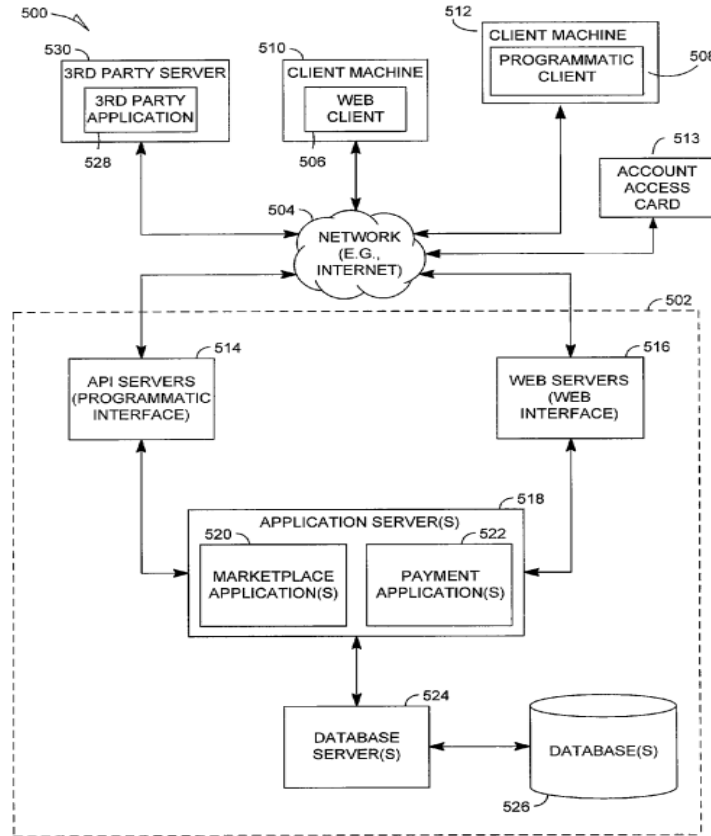


FIG. 5

Figure 5, reproduced above, illustrates client-server system 500 that includes 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.

5. Overview 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 the Akashika, reproduced below, illustrates “an area management server according to [one] embodiment.” Ex. 1007 ¶ 29.

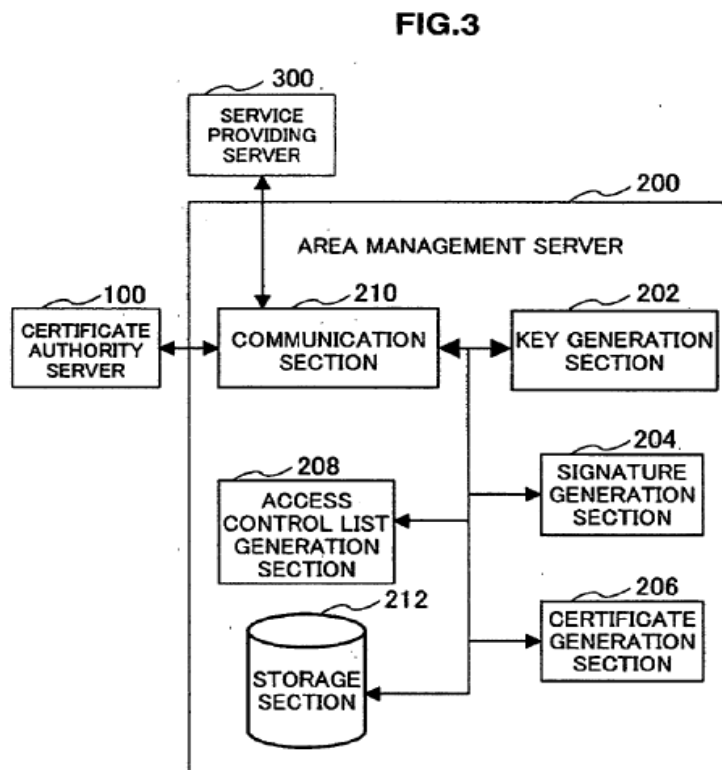


Figure 3, reproduced above, illustrates certificate authority server 100, area management server 200, and service providing server 300. *Id.* ¶¶ 51, 52, 57, 58. Area management server 200 includes, among other things, “access control list generation section 208 [that] generates an access control list” identifying “the scope of . . . access right[s]” to client device 400 (not reproduced 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.

6. Overview of Hansen

Hansen generally relates to “online money transfers” and, in particular, “to payment authentication for online money transfers.” Ex. 1008 ¶ 2. Figure 6A of Hansen, reproduced below, illustrates a block diagram of “a process for performing a money transfer” according to one embodiment. *Id.* ¶ 15.

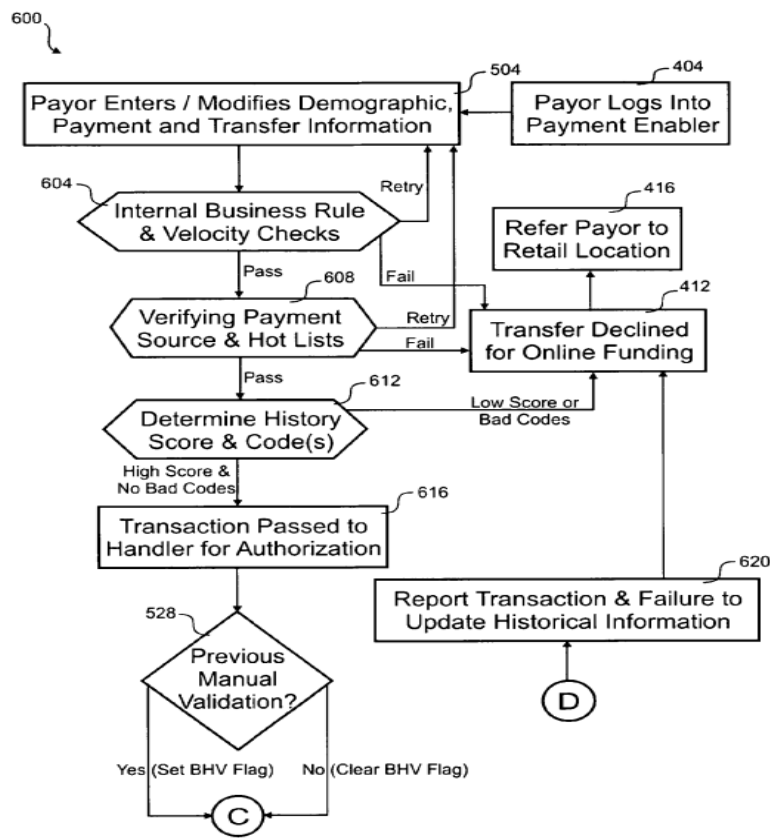


Fig. 6A

Figure 6A, reproduced above, illustrates process 600 for performing a money transfer. *Id.* ¶ 78. Process 600 includes, among other things, checking internal business rules along with velocity checks at step 604. *Id.*

Hansen discloses that “velocity checks could include a limit on the amount of a single transaction, a limit on the aggregate amount for various transactions over a time period, a limit on the number of transactions during a time period, etc.” *Id.*

7. *Claim 1*

For purposes of consistency and added clarity, we address each limitation of independent claim 1 in turn by relying on the bracketed annotations provided by Apple in the Petition. Pet. 113–16 (Claims App’x). The preamble of independent claim 1 recites limitation [1.0]—“[a] monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising one or more of.”⁸ Ex. 1001, 30:54–56. To the extent the preamble should be treated as limiting, Apple contends that Dill teaches limitation [1.0] because Figure 9 of Dill illustrates system 100 for conducting monetary transactions between subscribers, such as sender 105 and recipient 110, and other entities, such as agent 135 and financial institutions 160 and 170. Pet. 14–16 (citing Ex. 1005 ¶¶ 49, 51, 53, 100, Fig. 9; Ex. 1003 ¶¶ 73–76).

Independent claim 1 recites limitation [1.1.1]—“an integration tier operable to manage mobile wallet sessions.” Ex. 1001, 30:57–58. Apple contends that Dill teaches limitation [1.1.1] because Dill’s transfer options module 145 manages mobile wallet sessions when it sends and receives

⁸ The preamble of independent claim 1 recites, in relevant part, “the system comprising one or more of.” During trial, we encourage the parties to address what impact, if any, the “one or more of” language has on the limitations in the body of independent claim 1 that are entitled to patentable weight.

transaction details between mobile wallets 125 and 130 within mobile wallet application 121, and each transaction corresponds to a mobile wallet session tied to the unique transaction identifier assigned by mobile network operator 120. Pet. 16–19 (citing Ex. 1005, ¶¶ 100–02, 105, Fig. 9; Ex. 1003 ¶¶ 77–79).

Independent claim 1 recites limitation [1.1.2]—“the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels.” Ex. 1001, 30:58–61. Apple contends that the combination of Dill and Vadhri teaches limitation [1.1.2] because Dill discloses that transfer options module 145 “is communicatively coupled” to interfaces 136–138 and, therefore, includes multiple communication mechanisms for accepting messages from different channels. Pet. 18–20 (quoting Ex. 1005 ¶ 101) (citing Ex. 1005 ¶¶ 51, 101, Fig. 9; Ex. 1003 ¶¶ 80–83). Apple turns to Vadhri’s API server 514 that provides an interface with different services and functions in a marketplace to teach that communication APIs were well-known in the art. *Id.* at 20–21 (citing Ex. 1006 ¶¶ 1, 47–50, 52, 55, Fig. 5; Ex. 1003 ¶¶ 84, 85). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill’s transfer options module 145 to include a communication API to facilitate flexible communication with different parties, as taught by Vadhri, because Dill recognizes the need for flexible payment systems that may be used by different parties, and Vadhri’s API server 514 provides for increased flexibility by providing access to different services and functions in a marketplace through its API interface. *Id.* at 22–23 (citing Ex. 1005 ¶¶ 4, 49; Ex. 1006 ¶¶ 50, 52, 53; Ex. 1003 ¶¶ 86–88).

Apple contends that combining the teachings of Dill and Vadhri in this way would have been the combination of prior art elements (i.e., combining “Dill’s transfer options module 145 with Vadhri’s API interface”) according to known methods (i.e., “configuring a web interface to utilize a communication API, as taught by Vadhri”) to yield the predictable result of “expanding the types of services that Dill’s transfer options module 145 may communicate” (e.g., via web interface 137). Pet. 23–24 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶¶ 88, 89). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying Dill’s transfer options module 145 to include Vadhri’s API interface because “it was well-known to utilize APIs in payment systems” and “payment APIs were commonly used.” *Id.* at 24 (citing Ex. 1003 ¶¶ 88, 90).

Independent claim 1 recites limitation [1.2]—“notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services [(“SMS”)] and simple mail transfer protocol emails.” Ex. 1001, 30:62–65. Apple contends that Dill teaches limitation [1.2] because it discloses that mobile application 145 sends messages through different channels, including by email or SMS. Pet. 25–27 (citing Ex. 1005 ¶¶ 80, 104, Fig. 9; Ex. 1003 ¶¶ 92–95).

Independent claim 1 recites limitation [1.3]—“business process services operable to implement business workflows, including at least one of executing financial transactions, auditing financial transactions, invoking third-party services, handling errors, and logging platform objects.” Ex. 1001, 30:66–31:3. Apple contends that Dill teaches limitation [1.3]

because it discloses that money transfer facilitator 140 implements business workflows, including executing financial transactions (e.g., by delivering funds to destination account 175 of recipient's financial institution 170), auditing financial transactions (e.g., by assigning a unique transaction identifier to a money transfer transaction), invoking third-party services (e.g., by disclosing that money transfer facilitator 140 may include systems operated by Western Union), handling errors (e.g., by processing only transactions when sender 105's request has been verified), and logging platform objects (e.g., by looking up in a database whether sender 105 is registered and logging that information in the database). Pet. 27–31 (citing Ex. 1005 ¶¶ 34, 41, 49, 77, 78, 101, 105, Figs. 5 (step 520), 9; Ex. 1003 ¶¶ 96–101).

Independent claim 1 recites limitation [1.4]—“database services operable to store financial transaction details, store customer profiles, and manage money containers.” Ex. 1001, 31:4–6. Apple contends that Dill teaches limitation [1.4] because it discloses that mobile subscriber data 150 stores transaction details in the form of unique customer identifiers for structured settlements, it identifies entities/accounts based on mobile subscriber data, and it manages accounts based on the mobile subscriber data. Pet. 30–33 (citing Ex. 1005 ¶¶ 50, 57; Ex. 1003 ¶¶ 103–07).

Independent claim 1 recites limitation [1.5]—“a payment handler service operable to use APIs of different payment processors including one or more APIs of banks, credit and debit cards processors, bill payment processors.” Ex. 1001, 31:7–10. Apple contends that the combination of Dill and Vadhri teaches limitation [1.5] because Dill discloses that money transfer facilitator 140 processes transactions with numerous financial

institutions, including payment processors associated with banks, credit cards, debit cards, and payment services such as PayPal, eBay, Western Union, or bill payment. Pet. 33–34 (citing Ex. 1005 ¶¶ 49, 56, 71, 90, 103, Fig. 9; Ex. 1003 ¶¶ 108–11). Once again, Apple turns to Vadhri’s API server 514 that provides an interface with payment processors (e.g., marketplace and payment applications 520 and 522) to teach that communication APIs were well-known in the art. *Id.* at 36–37 (citing Ex. 1006 ¶¶ 47–50, 52, 55, Fig. 5; Ex. 1003 ¶¶ 112, 113). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill’s transfer options module 145 to include APIs of different payment processors, as taught by Vadhri, because Dill recognizes the need for flexible payment systems that may be used by different parties, and Vadhri’s API server 514 provides for increased flexibility by providing access to different services and functions in a marketplace through its API interface. *Id.* at 38–39 (citing Ex. 1005 ¶¶ 4, 49, 56, 71, 90, 103; Ex. 1006 ¶¶ 50, 52; Ex. 1003 ¶¶ 114–16).

Apple contends that combining the teachings of Dill and Vadhri in this way would have been the combination of prior art elements (i.e., combining “Dill’s money transfer facilitator 140 with Vadhri’s API programmatic interface”) according to known methods (i.e., “configuring a payment interface to utilize an API of different payment processors, as taught by Vadhri”) to yield the predictable result of “expanding the types of services with which Dill’s money transfer facilitator 140 would be configured to communicate.” Pet. 39 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 117). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying Dill’s money transfer

facilitator 140 to include Vadhri's APIs of different payment processors because "it was well-known to utilize APIs in payment systems." *Id.* (citing Ex. 1003 ¶ 118).

Independent claim 1 recites limitation [1.6]—"a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce constraints including transaction constraints." Ex. 1001, 31:11–14. Apple contends that Dill teaches limitation [1.6] because it discloses that transfer options module 145 gathers financial transaction statistics (e.g., information about a transaction such as amount, involved subscribers, and transaction conditions), and then uses the gathered financial transaction statistics to enforce delivery rules 151 that may place restrictions on delivery or impose restrictions from "various governmental and/or banking rules, service conditions, etc." Pet. 40–42 (quoting Ex. 1005 ¶ 104) (citing Ex. 1005 ¶¶ 77, 102, Fig. 9; Ex. 1003 ¶¶ 120–23).

Independent claim 1 recites limitation [1.7]—"a security service operable to perform subscriber authentication." Ex. 1001, 31:15–16. Apple contends that Dill teaches limitation [1.7] because it discloses mobile wallet application 121 executes mobile application 145 that verifies a subscriber using a personal identification number ("PIN"). Pet. 42–44 (citing Ex. 1005 ¶¶ 13, 94, Fig. 9; Ex. 1003 ¶¶ 124, 125).

Independent claim 1 recites limitation [1.8]—"at least one entity that is to be involved in the specified transaction, the at least one entity having a profile with the monetary transaction system: wherein the at least one entity is the agent." Ex. 1001, 31:17–20. Apple contends that Dill teaches limitation [1.8] because it discloses several entities that may be involved in a

transaction, including agent 135 who has a profile with system 100 by virtue of the agent's ability to issue a unique customer identifier to recipient 110. Pet. 45–47 (citing Ex. 1005 ¶¶ 33, 51, 52, 54, Fig. 9; Ex. 1003 ¶¶ 126–29).

Independent claim 1 recites limitation [1.9.1]—“wherein the monetary transaction system is implemented to deposit funds at an agent branch.” Ex. 1001, 31:21–22. Apple contends that Dill teaches limitation [1.9.1] because it discloses that sender 105 may complete a monetary transfer transaction by visiting the branch of agent 135, and it contemplates that one of the monetary transfer transactions includes “delivering funds to a bank account.” Pet. 48 (quoting Ex. 1005 ¶ 101) (citing Ex. 1005 ¶¶ 3, 33, 51, 52; Ex. 1003 ¶¶ 130–33).

Independent claim 1 recites limitation [1.9.2]—“the funds being deposited by a subscriber at the agent branch using a mobile device configured to run a monetary transaction system application, the monetary transaction system performing the following steps.” Ex. 1001, 31:22–26. Apple contends that Dill teaches limitation [1.9.2] because it discloses that sender 105 may deposit funds at the branch of agent 135 using the sender's mobile device configured to run sender's mobile wallet 125. Pet. 49–52 (citing Ex. 1005 ¶¶ 51, 53, 55, 77, Figs. 5 (step 515), 9; Ex. 1003 ¶¶ 134–38).

Independent claim 1 recites limitation [1.10.1]—“receiving a communication message from the mobile device over one of a plurality of channels connected to the monetary transaction system.” Ex. 1001, 31:27–29. Apple contends that Dill teaches limitation [1.10.1] because it discloses that money transfer facilitator 140 receives a request to initiate a money transfer transaction from the sender's mobile wallet 125 via mobile network

115 and agent 135. Pet. 52–53 (citing Ex. 1005 ¶¶ 51, 54, 101, Fig. 9; Ex. 1003 ¶¶ 139, 140).

Independent claim 1 recites limitation [1.10.2]—“the communication message being received by an API associated with the integration tier of the monetary transaction system.” Ex. 1001, 31:29–32. Apple contends that the combination of Dill and Vadhri teaches limitation [1.10.2] because, as it identifies above with respect to limitation [1.1.2], a person of ordinary skill in the art would have been motivated to modify Dill’s transfer options module 145 to use Vadhri’s API to receive transaction information from sender 105 or recipient 110. Pet. 54–55 (citing Ex. 1005 ¶¶ 100, 101, Fig. 9; Ex. 1006 ¶ 52; Ex. 1003 ¶¶ 141, 142).

Independent claim 1 recites limitation [1.10.3]—“the communication message indicating that the subscriber desires to deposit a specified amount of funds into the subscriber’s account.” Ex. 1001, 31:32–34. Apple contends that Dill teaches limitation [1.10.3] because it discloses that the sender’s mobile wallet application 125 initiates a transaction by sending a request to mobile application 145. Pet. 56–57 (citing Ex. 1005 ¶ 77, Fig. 5 (step 515); Ex. 1003 ¶ 143). Apple also argues that, as it identifies above with respect to limitation [1.9.1], Dill teaches that sender 105 may deposit funds into his/her account. *Id.* at 57 (citing Ex. 1005 ¶ 101; Ex. 1003 ¶¶ 144, 145).

Independent claim 1 recites limitation [1.10.4]—“validating the status of the subscriber’s account, wherein validating the status of the subscriber’s account comprises communicating from the integration tier to the database services to query attributes of the subscriber’s account.” Ex. 1001, 31:35–39. Apple contends that Dill teaches limitation [1.10.4] because it discloses

that money transfer facilitator 140, of which transfer options module 145 is a part, validates the status of the account owned by sender 105 or recipient 110 by determining whether the sender or recipient is enrolled in a mobile wallet with system 100, and then communicates with mobile subscriber data 150 to query attributes of the sender's or recipient's account. Pet. 58–59 (citing Ex. 1005 ¶¶ 34, 50, Fig. 9; Ex. 1003 ¶¶ 146, 147).

Independent claim 1 recites limitation [1.10.5]—“committing a pending transaction through the business process services.” Ex. 1001, 31:40–41. Apple contends that Dill teaches limitation [1.10.5] because it discloses a “mobile-to-mobile transaction” where mobile application 145 commits a pending transaction through money transfer facilitator 140. Pet. 60–61 (quoting Ex. 1005 ¶ 78) (citing Ex. 1005 ¶ 79, Fig. 5 (step 525); Ex. 1003 ¶¶ 148, 149).

Independent claim 1 recites limitation [1.10.6]—“wherein the integration tier communicates a transaction commitment request to the business process services.” Ex. 1001, 31:41–43. Apple contends that Dill teaches limitation [1.10.6] because it discloses that transfer options module 145 of money transfer facilitator 140 provides a notification of a transaction to recipient 110 and selects “one or more delivery options” for completing the transaction. Pet. 61–62 (quoting Ex. 1005 ¶ 101) (citing Ex. 1005 ¶ 49; Ex. 1003 ¶¶ 150, 151).

Independent claim 1 recites limitation [1.10.7]—“receiving a confirmation from the business process services that the pending transaction has been committed.” Ex. 1001, 31:44–46. Apple contends that Dill teaches limitation [1.10.7] because it discloses that mobile wallet application 121 receives a money transfer control number (“MTCN”) from money transfer

facilitator 140 “indicating that the transaction is available for payout.” Pet. 62–63 (quoting Ex. 1005 ¶ 80) (citing Ex. 1005 ¶ 79, Fig. 5 (step 545); Ex. 1003 ¶¶ 152–54).

Independent claim 1 recites limitation [1.10.8]—“sending, through the notification services, a receipt notification to the mobile device.” Ex. 1001, 31:47–48. Apple contends that Dill teaches limitation [1.10.8] because it discloses that mobile application 145 sends the MTCN to money transfer facilitator 140, which, in turn, sends the MTCN to mobile wallet application 121 that includes sender’s mobile wallet 125 and recipient’s mobile wallet 130. Pet. 63–64 (citing Ex. 1005 ¶ 80, Fig. 5 (step 550); Ex. 1003 ¶¶ 155, 156).

Independent claim 1 recites limitation [1.10.9]—“upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services.” Ex. 1001, 31:49–51. Apple contends that Dill teaches limitation [1.10.9] because it discloses, upon mobile wallet application 121 receiving the MTCN from money transfer facilitator 140, accessing and updating mobile subscriber data 150 with the “structured settlement” between sender 105 and recipient 110. Pet. 64–68 (quoting Ex. 1005 ¶ 57) (citing Ex. 1005 ¶¶ 50, 57, 80, Fig. 5 (steps 545, 550); Ex. 1003 ¶¶ 157–61).

Independent claim 1 recites limitation [1.11.1]—“wherein committing the pending transaction further comprises the following steps as orchestrated by the business process services.” Ex. 1001, 31:52–54. Apple contends that Dill teaches limitation [1.11.1] because, as it identifies above with respect to limitation [1.10.5], money transfer facilitator 140 commits the pending transaction. Pet. 68 (citing Ex. 1003 ¶ 162).

Independent claim 1 recites limitation [1.11.2]—“ensuring, via the database services, that the subscriber has an active account.” Ex. 1001, 31:55–56. Apple contends that Dill teaches limitation [1.11.2] because it discloses that, upon receipt of a money transfer request, money transfer facilitator 140 accesses mobile subscriber data 150 to determine whether sender 105 or recipient 110 has an account for the transfer of the specified funds. Pet. 68–69 (citing Ex. 1005 ¶¶ 34, 50; Ex. 1003 ¶¶ 163, 164).

Independent claim 1 recites limitation [1.11.3]—“validating, through communication with the security services, one or more of a PIN number and an access control list.” Ex. 1001, 31:57–59. Apple contends that the combination of Dill and Akashika teaches limitation [1.11.3] because Dill discloses that mobile wallet application 121 verifies a PIN entered by recipient 110. Pet. 69–70 (citing Ex. 1005 ¶¶ 13, 94; Ex. 1003 ¶ 165). Apple turns to Akashika’s access control list generation section 208 that generates an access control list capable of identifying, among other things, read permissions, write permissions, and restrictions on frequency of access to demonstrate that it was well-known to use an ACL to promote security of money transfer systems. *Id.* at 70–71 (citing Ex. 1007 ¶¶ 60, 62, 117; Ex. 1003 ¶¶ 166, 167). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill’s money transfer facilitator 140 to incorporate the benefits of Akashika’s ACL “to assist in authenticating users and limiting access to secure information of the subscribers.” *Id.* at 71 (citing Ex. 1003 ¶ 168). Apple further argues that a person of ordinary skill in the art would have understood that implementing Akashika’s ACL in Dill’s money transfer facilitator 140 would be an extension of using Dill’s unique customer identifiers to identify sender 105

and recipient 110 to promote or enhance security. Pet. 71–72 (citing Ex. 1005 ¶ 35; Ex. 1003 ¶ 169).

Apple contends that combining the teachings of Dill and Akashika in this way would have been the combination of prior art elements (i.e., combining “Dill’s money transfer facilitator 140 with Akashika’s [ACL]”) according to known methods (i.e., “configuring an interface to utilize an [ACL], as taught by Akashika”) to yield the predictable result of “limiting transactions to authorized users identified in the [ACL].” Pet. 72 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 169). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying Dill’s money transfer facilitator 140 to include Akashika’s ACL because “Dill utilizes secure information to authenticate subscribers,” such as unique customer identifiers for sender 105 and recipient 110. *Id.* (citing Ex. 1005 ¶ 35; Ex. 1003 ¶¶ 169, 170).

Independent claim 1 recites limitation [1.11.4]—“applying with the rules engine, velocity rules.” Ex. 1001, 31:60. Apple contends that the combination of Dill and Hansen teaches limitation [1.11.4] because, as identified above with respect to limitation [1.6], Dill’s transfer options module 145 enforces delivery rules 151. Pet. 73–74 (citing Ex. 1005 ¶ 102, Fig. 9; Ex. 1003 ¶¶ 172, 173). Apple turns to Hansen’s payment enabler 170 that enforces “internal business rules,” including “velocity checks” such as “a limit on the number of transactions during a time period,” to teach that velocity rules were well-known in the art. *Id.* at 75–76 (citing Ex. 1008 ¶¶ 22, 24, 78, Figs. 1, 6A (step 604); Ex. 1003 ¶¶ 174–76). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill’s money transfer facilitator 140, which includes transfer options

module 145, to enforce Hansen’s velocity rules that limit the number of transactions a subscriber may perform in a time period to promote additional security in the monetary transaction system. *Id.* at 77 (citing Ex. 1003 ¶ 178).

Apple contends that combining the teachings of Dill and Hansen in this way would have been the combination of prior art elements (i.e., “Dill’s money transfer facilitator 140 enforcing ‘velocity rules’ (e.g., time limits) on the sender 105 in the rules database 150”) according to known methods (i.e., “defining rules in the rule database 150, as taught by Dill, with rules specifying ‘a limit on the number of transactions during a time period,’ as taught by Hansen”) to yield the predictable result of “applying time-based rules for sender transactions.” Pet. 77 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 178). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying Dill’s money transfer facilitator 140, which, once again, includes transfer options module 145, to include Hansen’s velocity rules because Dill defines rules for sender 105. *Id.* at 77–78 (citing Ex. 1005 ¶ 102; Ex. 1003 ¶¶ 178, 179).

Independent claim 1 recites limitation [1.11.5]—“creating with the database services a new pending transaction history record.” Ex. 1001, 31:61–62. Apple contends that Dill teaches limitation [1.11.5] because, as it identifies above with respect to limitation [1.4], Dill’s money transfer facilitator 140 uses information in mobile subscriber data 150 to transfer money to recipient 110, updates the recipient’s balance, and creates a new MTCN record of the transfer. Pet. 78–79 (citing Ex. 1005 ¶¶ 57, 80, Fig. 5 (step 545); Ex. 1003 ¶¶ 180, 181).

Independent claim 1 recites limitation [1.11.6]—“holding funds from the agent account balance using the payment handler.” Ex. 1001, 31:63–64. Apple contends that Dill teaches limitation [1.11.6] because funds from the account for agent 135 are held for recipient 110 to pick up from the agent’s retail location. Pet. 79–80 (citing Ex. 1005 ¶ 51; Ex. 1003 ¶ 182). Apple further argues that, after notifying recipient 110 of the transfer, Dill discloses holding funds in the account of agent 135 and then releasing the funds after the recipient requests initiation of the transfer. *Id.* at 80–81 (citing Ex. 1005 ¶¶ 80–82, Fig. 5 (steps 550, 565, 570); Ex. 1003 ¶¶ 183, 184).

Independent claim 1 recites limitation [1.11.7]—“loading the funds to the subscriber account using the payment handler.” Ex. 1001, 31:65–66. Apple contends that Dill teaches limitation [1.11.7] because, upon receiving a transfer request, mobile application 145 of money transfer facilitator 140 transfers funds to destination account 175 of recipient 110 and then sends a notification message to the recipient’s mobile wallet application 130 indicating success or failure of the transfer. Pet. 81–82 (citing Ex. 1005 ¶¶ 81, 82, Fig. 5 (steps 565, 570); Ex. 1003 ¶¶ 185–87).

Independent claim 1 recites limitation [1.11.8]—“updating, using the database services, a pending transaction history record to reflect the funds.” Ex. 1001, 32:1–2. Apple contends that Dill teaches limitation [1.11.8] because, upon completion of a structured settlement between sender 105 and recipient 110, money transfer facilitator 140 uses information stored in mobile subscriber data 150 to transfer money to the recipient’s account and updates his/her balance accordingly. Pet. 83 (citing Ex. 1005 ¶¶ 57, 82; Ex. 1003 ¶¶ 188–90).

Based on the preliminary record, we discern no deficiency in Apple’s characterizations of Dill, Vadhri, Akashika, Hansen, and the knowledge in the art, or in Apple’s reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. In addition, for purposes of institution, we accept Dr. Houh’s testimony concerning the relevant teachings of Dill, Vadhri, Akashika, and Hansen. At this stage of the proceeding, Fintiv argues that the combination of Dill, Vadhri, Akashika, and Hansen does not teach numerous limitations recited in independent claim 1. Prelim. Resp. 24–41. We address these arguments in turn.

a. Limitation [1.1.1]—“an integration tier operable to manage mobile wallet sessions”

In its Preliminary Response, Fintiv contends that “Dill does not disclose ‘mobile wallet sessions’ at all.” Prelim. Resp. 24 (citing Ex. 2001 ¶ 76). Fintiv argues that Dill’s mobile wallets 125 and 130 are maintained by mobile network operator 120 and they “do not reside on subscriber devices.” *Id.* at 25. Instead, Fintiv argues that subscribers interact with Dill’s money transfer facilitator 140 by using websites and entering transaction information. *Id.* (citing Ex. 1005 ¶ 33). Fintiv further argues that Dill’s transfer options module 145 does not manage mobile wallets 125 and 130 that run on mobile wallet application 121, but rather “simply responds to their commands.” *Id.* at 25–26 (citing Ex. 1005 ¶ 66).

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.1.1.]. In connection with Figure 9 of Dill, 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. Ex. 1005 ¶¶ 100–02, 105. Therefore, contrary to Fintiv’s argument, Apple presents sufficient evidence that would support a finding that Dill’s transfer options module 145 is operable to manage mobile wallets 125 and 130 that run on mobile wallet application 121.

To the extent Fintiv argues that Dill does not teach limitation [1.1.1] because Dill’s mobile wallets 125 and 130 do not reside on the devices of sender 105 and recipient 110, we are not persuaded. See Prelim. Resp. 24–25. Fintiv’s argument is not commensurate in scope with independent claim 1, which merely requires “an integration tier operable to manage mobile wallet sessions.” See *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (explaining that limitations not appearing in the claims cannot be relied upon for patentability). Neither the plain language of independent claim 1 nor the specification of the ’386 patent explicitly requires mobile wallet applications to reside on subscriber devices. Ex. 1001, 30:57–58, 31:25–26 (claim 1), 6:55–7:9 (“Any of these applications (or any combination thereof),” including “a mobile wallet application,” “*may be provided on the user’s mobile device*” (emphasis added)), 12:58–61 (“The mobile wallet application is installed on a mobile device in the device’s memory, on a SIM [subscriber identity module] card . . . *or is otherwise accessible to the mobile device.*” (emphasis added)).

b. Limitation [1.1.2]—“the integration tier also including a communication application programming interface (API) and other communication mechanisms to accept messages from channels

In its Preliminary Response, Fintiv argues that, similar to limitation [1.1.1], Dill does not teach limitation [1.1.2] because Dill’s transfer options

module 145 does not constitute the claimed “integration tier” because it does not manage mobile wallet sessions. Prelim. Resp. 26. Based on the preliminary record, we are not persuaded by Fintiv’s argument for the same reasons we identify above with respect to limitation [1.1.1]. *See supra* Section II.D.7.a.

c. *Limitation [1.2]—“notification services operable to send notifications through different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails”*

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.2] because, although Dill teaches sending various notifications, these notifications “do not include the notifications of the ’386 Patent.” Prelim. Resp. 26–27 (citing Ex. 1001, 15:16–20; Ex. 2001 ¶¶ 82, 84). According to Fintiv, Dill fails to disclose “sending a notification to an unbanked subscriber.” *Id.* at 27 (citing Ex. 2001 ¶ 84).

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.2]. Dill discloses that mobile application 145 sends messages through different channels, including by email or SMS. Ex. 1005 ¶¶ 80, 104, Fig. 9. Apple, therefore, presents sufficient evidence that would support a finding that Dill’s mobile application 145 is operable to send messages through different channels, including by email or SMS.

To the extent Fintiv argues that Dill does not teach limitation [1.2] because mobile application 145 is not capable of sending notifications to “an unbanked subscriber,” we are not persuaded. Once again, Fintiv’s argument is not commensurate in scope with independent claim 1, which merely requires “notification services operable to send notifications through

different notification channels including one or more of short message peer-to-peer, short-message services and simple mail transfer protocol emails.”
See In re Self, 671 F.2d at 1348. Indeed, the plain language of independent claim 1 does not require sending notifications to “an unbanked subscriber.”
Ex. 1001, 30:62–65 (claim 1).

d. Limitation [1.4]—“database services operable to store financial transaction details, store customer profiles, and manage money containers”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.4] because, although mobile subscriber data 150 provides database services, they are not the type of “database services” required by independent claim 1. Prelim. Resp. 27 (citing Ex. 2001 ¶ 86). According to Fintiv, Dill’s mobile subscriber data 150 only stores account identifiers that serve to identify source and destination accounts 165 and 175, as well as mobile wallets 125 and 130. *Id.* at 27–28 (citing Ex. 1005 ¶¶ 50, 57; Ex. 2001 ¶ 87). Fintiv asserts that “[t]here is no disclosure in Dill that [m]obile [s]ubscriber [d]ata 150 stores financial transaction details or manages money containers.” *Id.* at 28.

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.4]. Dill discloses that mobile subscriber data 150 stores transaction details in the form of unique customer identifiers for structured settlements, it identifies entities/accounts based on mobile subscriber data, and it manages accounts based on the mobile subscriber data. Ex. 1005 ¶¶ 50, 57. Therefore, contrary to Fintiv’s arguments, Apple presents sufficient evidence that would support a finding that Dill’s mobile subscriber data 150 stores unique customer identifiers associated with subscriber profiles, but also is operable to store information

regarding structured settlements (i.e., the claimed “financial transaction details”) and manage accounts based on the mobile subscriber data (i.e., the claimed “manage money containers”).

e. Limitation [1.6]—“a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce constraints including transaction constraints”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.6] because transfer options module 145 enforcing delivery rules 151 does not mean that the transfer options module gathers “financial transaction statistics.” Prelim. Resp. 29–30 (citing 1001, 9:59–10:1, 13:46–51; Ex. 2001 ¶¶ 89–91). At best, Fintiv argues that Dill’s transfer options module 145 acquires information about a single transaction. *Id.* at 30. Fintiv asserts that gathering “[i]nformation about a single transaction is not ‘financial transaction statistics’ and Dill is devoid of any disclosure that transfer options module 145 uses ‘the gathered financial transaction statistics to enforce constraints including transaction constraints.’” *Id.*

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.6]. Dill discloses that transfer options module 145 gathers financial transaction statistics (e.g., information about a transaction such as amount, involved subscribers, and transaction conditions) and then uses the gathered financial transaction statistics to enforce delivery rules 151 that may place restrictions on delivery or impose restrictions from “various governmental and/or banking rules, services conditions, etc.” Ex. 1005 ¶ 104; *see also id.* ¶ 77 (disclosing “a ‘mobile-to-mobile’ transaction”), Fig. 9. In our view, the cited disclosures in Dill are not limited to gathering information about a single transaction, but include gathering transaction information about all the “mobile-to-mobile”

transactions that are executed by system 100. Dill also makes clear that the transaction information gathered about these “mobile-to-mobile” transactions is used to enforce certain constraints, such as restrictions on delivery. *Id.* ¶ 102. Apple, therefore, presents sufficient evidence that would support a finding that Dill’s transfer options module 145 enforcing delivery rules 151 includes gathering transaction information about multiple “mobile-to-mobile” transactions and using that transaction information to enforce constraints, such as restrictions on delivery.

f. Limitation [1.9.2]—“the funds being deposited by a subscriber at the agent branch using a mobile device configured to run a monetary transaction system application”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.9.2] because it discloses that subscribers interact with system 100 “by visiting websites, not by running any ‘mobile transaction system application’ on their mobile device.” Prelim. Resp. 30–31 (citing Ex. 2001 ¶ 94). Fintiv reiterates that, in connection with Figure 9 of Dill, mobile wallets 125 and 130 reside on mobile network operator 120, and not on the mobile device of sender 105 or recipient 110. *Id.*

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.9.2]. Similar to our discussion above with respect to limitation [1.1.1], neither the plain language of independent claim 1 nor the specification of the ’386 patent explicitly requires the “mobile transaction system application” to reside on subscriber devices. Ex. 1001, 30:57–58, 31:25–26 (claim 1), 6:55–7:9 (“Any of these applications (or any combination thereof),” including “a mobile wallet application,” “*may be provided on the user’s mobile device*” (emphasis added)), 12:58–61 (“The mobile wallet application is installed on a mobile

device in the device's memory, on a SIM card . . . *or is otherwise accessible to the mobile device.*" (emphasis added)). Dill discloses that sender 105 may deposit funds at the branch of agent 135 using the sender's mobile device configured to run sender's mobile wallet 125. Ex. 1005 ¶¶ 51, 53, 55, 77, Figs. 5 (step 515), 9. In our view, Apple presents sufficient evidence that would support a finding that Dill discloses the mobile device of sender 105 is configured to run sender's mobile wallet 125 or, at the very least, sender's mobile wallet 125 is otherwise accessible to the mobile device of sender 105.

g. Limitation [1.10.5]—"committing a pending transaction through the business process services"

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.10.5] because "Dill contains no discussion whatsoever of a 'pending transaction' or of 'committing' anything." Prelim. Resp. 31 (Ex. 2001 ¶¶ 95, 97). Fintiv further argues that, in connection with Figure 5 of Dill, step 525 discloses that money transfer facilitator 140 provides a "response" after "verifying the data in the sender's request," but Apple fails to explain how this "response 525" serves as any sort of commitment." *Id.* at 31–32 (quoting Ex. 1005 ¶ 78; Ex. 2001 ¶ 96).

Based on the preliminary record, we are not persuaded by Fintiv's argument that Dill fails to teach limitation [1.10.5]. Fintiv's argument is predicated on the notion that the claim term "committing" should be accorded a special definition. The claim term "committing," however, does not appear in the specification outside the claims. In our view, no explicit construction of this claim term is necessary beyond its ordinary and customary meaning of carrying out a pending transaction. Dill discloses a

“mobile-to-mobile” transaction where mobile application 145 commits or carries out a pending transaction through money transfer facilitator 140. Ex. 1005 ¶¶ 77–79, Fig. 5 (step 525). Apple, therefore, presents sufficient evidence that would support a finding that Dill’s mobile application 145 commits to or carries out a pending transaction.

h. Limitation [1.10.6]—“wherein the integration tier communicates a transaction commitment request to the business process services”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.10.6] because Apple fails to explain why transfer options module 145 providing a notification of a transaction to recipient 110 amounts to the claimed “transaction commitment request.” Prelim. Resp. 32–33 (citing Ex. 1005 ¶ 101; Ex. 2001 ¶ 100). According to Fintiv, transfer options module 145 communicating with recipient 110 is not the same as a communication between the claimed “integration tier” and “business process services.” *Id.* at 33 (citing Ex. 2001 ¶ 99).

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.10.6]. Dill’s transfer options module 145, which is part of money transfer facilitator 140, provides a transaction notification to recipient 110 and selects “one or more delivery options” for completing the transaction. Ex. 1005 ¶ 101; *see also id.* ¶ 49 (identifying the various components that make up system 100), Fig. 9. Apple, therefore, presents sufficient evidence that would support a finding that Dill’s transfer options module 145 communicates with money transfer facilitator 140 to, in turn, notify recipient 110 of a transaction.

- i. *Limitation [1.10.7]*—“*receiving a confirmation from the business process services that the pending transaction has been committed*”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.10.7] because money transfer facilitator 140 receiving confirmation of a transaction and initiating a money transfer by sending an MTCN to mobile wallet application 121 indicating that “the transaction is available for payment” merely indicates that the transaction is otherwise complete, but does not mean that it has been committed. Prelim. Resp. 33 (quoting Ex. 1005 ¶ 79) (citing Ex. 1005 ¶ 80; Ex. 2001 ¶¶ 101, 102).

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.10.7]. Similar to our discussion above with respect to limitation [1.10.5], Fintiv’s argument is predicated on the notion that the claim term “committing” should be accorded a special definition, but this claim term does not appear in the specification outside the claims and, in our view, no explicit construction of this claim term is necessary beyond its ordinary and customary meaning of carrying out a pending transaction. *See supra* Section II.D.7.g. Dill discloses that mobile wallet application 121 receives confirmation of a transaction and then sends an MTCN to money transfer facilitator 140, “indicating that the transaction is available for payout.” Ex. 1005 ¶ 80, Fig. 5 (step 545). Apple, therefore, presents sufficient evidence that would support a finding that Dill’s money transfer facilitator 140 receiving confirmation of a transaction and then initiating the transaction encompasses committing to or carrying out the pending transaction.

j. Limitation [1.10.8]—“sending, through the notification services, a receipt notification to the mobile device”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.10.8] because mobile application 145 does not communicate directly with a mobile device. Prelim. Resp. 32 (citing Ex. 2001 ¶¶ 103, 104). Instead, Fintiv argues that Dill discloses that a receipt is sent to mobile network operator 120, which, in turn, notifies recipient 110. *Id.* (citing Ex. 1005 ¶ 80, Fig. 5). Fintiv also argues that independent claim 1 requires sending a notification to the claimed “mobile device,” which, according to Fintiv, is the mobile device of sender 105 and not the mobile device of recipient 110. *Id.*

Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [1.10.8]. Dill discloses that mobile application 145 sends the MTCN to money transfer facilitator 140, which, in turn, sends the MTCN to mobile wallet application 121. Ex. 1005 ¶ 80. Dill discloses that mobile wallet application 121 is capable of communicating with both sender 105 and recipient 110 as evidenced by “sender 105 initiating a money transfer by sending 505 a request to a mobile wallet application 121” and “[t]he mobile wallet application 121 of the recipient 110 . . . receiving the notification from mobile application 145.” *Id.* ¶¶ 77, 81, Fig. 5 (steps 505, 550). In our view, Apple has presented sufficient evidence that would support a finding that Dill’s mobile application 145 is capable of sending notifications, such as a receipt notification, to both sender 105 and recipient 110 via mobile wallet application 121.

k. Limitation [1.10.9]—“upon receiving a confirmation of commitment from the business process services, committing the pending transaction to the database services”

In its Preliminary Response, Fintiv relies on essentially the same arguments presented above with respect to limitations [1.4] and [1.10.8] to argue that Dill does not teach limitation [1.10.9]. *Compare* Prelim. Resp. 34–35, *with id.* at 27–29, 34. Based on the preliminary record, we are not persuaded by Fintiv’s argument for the same reasons we identify above with respect to limitations [1.4] and [1.10.8]. *See supra* Section II.D.7.d., j.

Moreover, Dill discloses, upon mobile wallet application 121 receiving the MTCN from money transfer facilitator 140, accessing and updating mobile subscriber data 150 with the structured settlement between sender 105 and recipient 110. Ex. 1005 ¶¶ 50, 57, 80, Fig. 5 (steps 545, 550). In our view, Apple has presented sufficient evidence that would support a finding that mobile wallet application 121 receives the MTCN from money transfer facilitator 140 and then commits to or carries out the transaction by updating mobile subscriber data 150 to reflect the structured settlement between sender 105 and recipient 110.

l. Limitation [1.11.4]—“applying with the rules engine, velocity rules”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [1.11.4] because delivery rules 151 are only used to select a method of delivery. Prelim. Resp. 35–37 (citing Ex. 1005 ¶¶ 15, 16; Ex. 2001 ¶¶ 108–10). According to Fintiv, “there is no disclosure at all in Dill that delivery rules [151] . . . have any role in validating a transaction.” *Id.* at 37. Fintiv asserts that, “even if velocity rules were known in the art, . . . there would be no motivation to add them to a database whose purpose is to select delivery options.” *Id.*

Based on the preliminary record, we are not persuaded by Fintiv’s argument concerning limitation [1.11.4] because it attacks Dill in isolation. It is well-settled that “non-obviousness [cannot be established] by attacking references individually,” when, as here, Apple relies on the combined teachings of Dill and Hansen to teach limitation [1.11.4]. *In re Keller*, 642 F.2d 413, 426 (CCPA 1981). Instead, the test is what the combined teachings of Dill and Hansen would have taught or suggested to a person of ordinary skill in the art. *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991) (“The test for obviousness is what the *combined* teachings of the references would have suggested to one of ordinary skill in the art.” (emphasis added) (citing *Keller*, 642 F.2d at 425)).

That is, Apple relies on Dill’s transfer options module 145 to enforce delivery rules 151. Pet. 73–74 (citing Ex. 1005 ¶ 102, Fig. 9; Ex. 1003 ¶¶ 172, 173). Apple turns to Hansen’s payment enabler 170 that enforces “internal business rules,” including “velocity checks” such as “a limit on the number of transactions during a time period,” to teach that velocity rules were well-known in the art. *Id.* at 75–76 (citing Ex. 1008 ¶¶ 22, 24, 78, Figs. 1, 6A (step 604); Ex. 1003 ¶¶ 174–76). Apple then asserts that it would have been obvious to a person of ordinary skill in the art to modify Dill’s money transfer facilitator 140, which includes transfer options module 145, to enforce Hansen’s velocity rules that limit the number of transactions a subscriber may perform in a time period to promote additional security in the monetary transaction system. *Id.* at 77 (citing Ex. 1003 ¶ 178). In our view, Apple has presented sufficient evidence that would support a finding that Dill’s transfer options module 145 is capable of enforcing Hansen’s velocity rules.

m. Limitation [1.11.5]—“creating with the database services a new pending transaction history record”

In its Preliminary Response, Fintiv relies on essentially the same arguments presented above with respect to limitation [1.4] to argue that Dill does not teach limitation [1.11.5]. *Compare* Prelim. Resp. 37–39, *with id.* at 27–29, 24. Based on the preliminary record, we are not persuaded by Fintiv’s argument for the same reasons we identify above with respect to limitations [1.4] and [1.10.8]. *See supra* Section II.D.7.d.

Moreover, Dill discloses that money transfer facilitator 140 uses information in mobile subscriber data 150 to transfer money to recipient 110, updates the recipient’s balance, and creates a new MTCN record of the transfer. Ex. 1005 ¶¶ 57, 80, Fig. 5 (step 545). Apple, therefore, has presented sufficient evidence that would support a finding that Dill’s mobile subscriber data 150 stores more than just unique customer identifiers, but also stores transaction data, such as updates to the recipient’s balance and a new MTCN record of the transfer.

n. Limitation [1.11.8]—“updating, using the database services, a pending transaction history record to reflect the funds”

In its Preliminary Response, Fintiv relies on essentially the same arguments presented above with respect to limitations [1.4] and [1.11.5] to argue that Dill does not teach limitation [1.11.8]. *Compare* Prelim. Resp. 39, *with id.* at 27–29, 37–39. Based on the preliminary record, we are not persuaded by Fintiv’s argument for the same reasons we identify above with respect to limitations [1.4] and [1.11.5]. *See supra* Section II.D.7.d., m.

Moreover, Dill discloses that, upon completion of a structured settlement between sender 105 and recipient 110, money transfer facilitator 140 uses information stored in mobile subscriber data 150 to transfer money

to the recipient's account and updates his/her balance accordingly. Ex. 1005 ¶¶ 57, 82. Apple, therefore, has presented sufficient evidence that would support a finding that, upon completion of a transaction, Dill's mobile subscriber data 150 stores transaction data, such as updates to the recipient's balance.

o. Summary

In summary, Apple has shown a reasonable likelihood that it would prevail on its assertions that the subject matter of independent claim 1 would have been obvious over the combined teachings of Dill, Vadhri, Akashika, and Hansen.

8. Claim 3

Because Apple has demonstrated a reasonable likelihood of success in demonstrating that at least one claim of the '386 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. See 37 C.F.R. § 42.108(a) (2021). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of independent claim 3 under this asserted ground of obviousness. Nevertheless, because independent claim 3 includes some unique limitations, and Fintiv presents responsive arguments directed to independent claim 3, we address this independent claim separately.

With the exception of a few limitations, independent claim 3 includes the same limitations as independent claim 1. *Compare* Ex. 1001, 30:54–32:2, *with id.* at 33:34–34:59. For the most part, Apple's arguments and evidence with respect to independent claim 1 equally apply to independent claim 3. Pet. 84–86. We address the unique limitations of independent claim 3 in turn.

Independent claim 3 recites limitation [3.1.1]—“an integration tier operable to manage mobile wallet sessions and maintain the integrity of financial transactions.” Ex. 1001, 33:37–38. Apple contends that Dill teaches the additional limitation of “maintain[ing] the integrity of financial transactions” because it discloses that transfer options module 145 selects one or more delivery options for completing a transaction, which includes delivering funds to destination account 175 of recipient 110. Pet. 86 (citing Ex. 1005 ¶ 101). According to Apple, by transferring money from the account of sender 105 to the account of recipient 110, Dill’s transfer options module 145 is “operable to . . . maintain the integrity of financial transactions.” *Id.* (citing Ex. 1003 ¶¶ 196–98).

Independent claim 3 recites limitation [3.5.1]—“a monetary transaction system subscriber that has a profile with the monetary transaction system the subscriber profile stored in the database of the monetary transaction system.” Ex. 1001, 33:55–57. Apple contends that Dill teaches limitation [3.5.1] because it discloses that sender 105 and recipient 110 each amount to the claimed “subscriber” in “the monetary transaction system.” Pet. 87 (citing Ex. 1005 ¶ 51; Ex. 1003 ¶ 223). Apple further argues that Dill discloses storing profile information for sender 105 and recipient 110 in mobile subscriber data 150, which, according to Apple, corresponds to the claimed “database.” *Id.* at 88–89 (citing Ex. 1005 ¶ 50, Fig. 9; Ex. 1003 ¶¶ 223–25).

Independent claim 3 recites limitation [3.5.2]—“wherein the subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system.” Ex. 1001, 33:57–60. Apple contends that Dill teaches

limitation [3.5.2] because it discloses that sender 105 requests a transaction using its mobile wallet 125 and, upon completion of the transaction, money transfer facilitator 140 provides a structured settlement between sender 105 and recipient 110 to their mobile wallets 125 and 130, respectively. Pet. 89 (citing Ex. 1005 ¶ 57; Ex. 1003 ¶¶ 226, 227).

Independent claim 3 recites limitation [3.7]—“a rules engine operable to gather financial transaction statistics and use the gathered financial transaction statistics to enforce business constraints including transaction constraints.” Ex. 1001, 34:5–8. Apple relies on the same arguments and evidence it identifies above with respect to limitation [1.6] to argue that Dill teaches limitation [3.7]. Pet. 86. Apple also asserts that “the constraints are ‘business’ constraints (i.e., constraints relating to money transfer).” *Id.* (citing Ex. 1003 ¶ 205).

Independent claim 3 recites limitation [3.10.1]—“wherein the monetary transaction system is implemented to transfer funds using the mobile device configured to run a monetary transaction system application, including performing the following steps.” Ex. 1001, 34:15–19. Apple contends that Dill teaches limitation [3.10.1] because it discloses that money transfer facilitator 140 accesses the sender’s source account 165 and the recipient’s destination account 175 to transfer funds between these two accounts via financial transfer network 155. Pet. 90 (citing Ex. 1005 ¶ 49; Ex. 1003 ¶ 228). Apple further argues that Dill’s sender 105 uses his/her mobile device to interact with mobile wallet 125, which, in turn, interacts with mobile wallet application 121 to send a transfer request to money transfer facilitator 140. *Id.* at 90–92 (citing Ex. 1005 ¶ 53, Figs. 5 (step 515), 9; Ex. 1003 ¶¶ 229–32).

Independent claim 3 recites limitation [3.10.4]—“the communication message indicating that the subscriber desires to transfer a specified amount of funds from the subscriber’s account to a recipient.” Ex. 1001, 34:24–26. Apple contends that Dill teaches the claimed “subscriber desires to transfer a specified amount of funds from the subscriber’s account to a recipient” because it discloses that sender 105 initiates a transaction to send money from its source account 165 to destination account 175 of recipient 110. Pet. 92–93 (citing Ex. 1005 ¶ 51, Fig. 9; Ex. 1003 ¶ 233). Apple further contends that Dill teaches the claimed “communication message indicating” the desired transfer amount because it discloses that the sender’s mobile wallet 125 initiates a transaction by sending the request to mobile application 121. *Id.* at 93–94 (citing Ex. 1005 ¶ 77, Fig. 5 (step 515); Ex. 1003 ¶¶ 233, 234).

Based on the preliminary record, we discern no deficiency in Apple’s characterizations of Dill, Vadhri, Akashika, Hansen, and the knowledge in the art, or in Apple’s reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. In addition, for purposes of institution, we accept Dr. Houh’s testimony concerning the relevant teachings of Dill, Vadhri, Akashika, and Hansen. Apart from its arguments presented for independent claim 1, which we address above, Fintiv contends that the combination of Dill, Vadhri, Akashika, and Hansen does not teach limitation [3.10.1]. Prelim. Resp. 43. We address this argument below.

a. Limitation [3.10.1]—“wherein the monetary transaction system is implemented to transfer funds using the mobile device configured to run a monetary transaction system application, including performing the following steps”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [3.10.1] because “there is no disclosure that the mobile device runs a ‘monetary transaction system application’ that performs the recited steps” of independent claim 3. Prelim. Resp. 43. Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [3.10.1]. Similar to our discussion above with respect to limitations [1.1.1] and [1.9.2], neither the plain language of independent claim 3 nor the specification of the ’386 patent explicitly requires the “mobile transaction system application” to reside on subscriber devices. Ex. 1001, 33:37–39, 34:15–19 (claim 3), 6:55–7:9 (“Any of these applications (or any combination thereof),” including “a mobile wallet application,” “*may be provided on the user’s mobile device*” (emphasis added)), 12:58–61 (“The mobile wallet application is installed on a mobile device in the device’s memory, on a SIM card . . . *or is otherwise accessible to the mobile device.*” (emphasis added)). Dill discloses that sender 105 may transfer funds at the branch of agent 135 using the sender’s mobile device configured to run sender’s mobile wallet 125. Ex. 1005 ¶¶ 51, 53, 55, 77, Figs. 5 (step 515), 9. In our view, Apple presents sufficient evidence that would support a finding that Dill discloses the mobile device of sender 105 is configured to run sender’s mobile wallet 125 or, at the very least, sender’s mobile wallet 125 is otherwise accessible to the mobile device of sender 105.

b. Summary

In summary, Apple has shown a reasonable likelihood that it would prevail on its assertions that the subject matter of independent claim 3 would have been obvious over the combined teachings of Dill, Vadhri, Akashika, and Hansen.

E. Obviousness Over the Combined Teachings of Dill, Vadhri, Akashika, Hansen, and Liao

Apple also contends that independent claim 2 of the '386 patent is unpatentable under § 103(a) as obvious over the combined teachings of Dill, Vadhri, Akashika, Hansen, and Liao. Pet. 84–89, 95–109. Apple contends that the teachings of Dill, Vadhri, Akashika, Hansen, and Liao account for the subject matter of independent claim 2, and provides reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. *Id.* Apple also relies on the testimony of Dr. Houh to support its positions. Ex. 1003.

Based on the preliminary record, we determine that Apple has shown that there is a reasonable likelihood that it would prevail in challenging independent claim 2 of the '386 patent as unpatentable. We begin our analysis with a brief overview of Liao, and then we address the parties' contentions with respect to the challenged claims.

1. Overview of Liao

Liao generally relates to “a chipset for a mobile wallet system” and, in particular, “to a chipset implemented into a SIM card in a communication terminal,” which, in turn, communicates “with a contactless reader.” Ex. 1009, 1:17–20. Figure 3 of Liao, reproduced below, illustrates “a

preferred architecture of a chipset” according to one embodiment. *Id.* at 4:7–8.

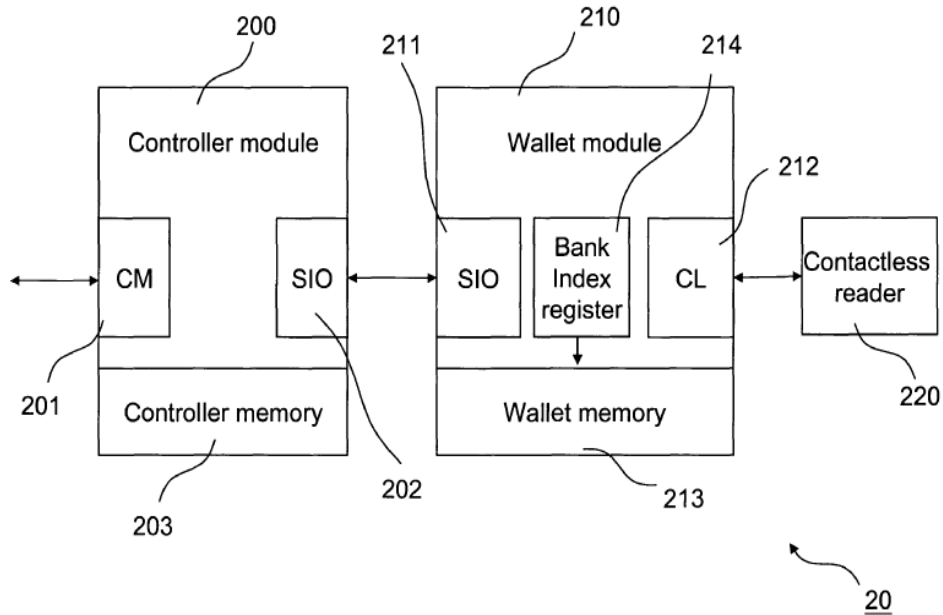


Figure 3 of Liao, reproduced above, illustrates chipset 20 that includes, among other things, mobile wallet application software running on controller module 200 to “withdraw money from a bank account.” Ex. 1009, 5:44–55.

2. Claim 2

Because Apple has demonstrated a reasonable likelihood of success in showing that at least one claim of the '386 patent is unpatentable, we institute on all challenged claims and all grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a). Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of independent claim 2 under this asserted ground of obviousness. Nevertheless, because independent claim 2 includes some unique limitations, and Fintiv presents responsive arguments directed to independent claim 2, we address this independent claim separately.

With the exception of a few limitations, independent claim 2 includes the same limitations as independent claims 1 and 3. *Compare* Ex. 1001, 30:54–32:2, *with id.* at 32:3–34:59. For the most part, Apple’s arguments and evidence with respect to independent claims 1 and 3 equally apply to independent claim 2. Pet. 84–86. We address the unique limitations of independent claim 2 in turn.

Independent claim 2 recites limitation [2.6]—“a mobile device configured to run a monetary transaction system application.” Ex. 1001, 32:27–28. Apple contends that Dill teaches limitation [2.6] because it discloses that sender 105 and recipient 110 each have a mobile device. Pet. 95 (citing Ex. 1005 ¶ 52; Ex. 1003 ¶ 235). Apple also argues that Dill discloses that sender 105 and recipient 110 use mobile wallets 125 and 130, respectively, both of which are examples of a “monetary transaction system application.” *Id.* at 95–96 (citing Ex. 1005 ¶ 53, Fig. 9; Ex. 1003 ¶¶ 236, 237).

Independent claim 2 recites limitation [2.12.1]—“wherein the monetary transaction system is implemented to withdraw funds at an agent branch using the mobile device configured to run a monetary transaction system application, including performing the following steps.” Ex. 1001, 32:51–54. Apple contends that the combination of Dill and Liao teaches limitation [2.12.1]. Pet. 96. More specifically, Apple argues that Dill teaches “the monetary transaction system is implemented . . . at an agent branch” because it discloses that sender 105 may complete a transfer by visiting the branch of agent 135 and paying the transfer amount. *Id.* at 96–97 (citing Ex. 1005 ¶¶ 33, 51; Ex. 1003 ¶ 238). Apple also argues that Dill contemplates a “withdraw” transaction because it discloses (1) delivering

funds to destination account 175 of recipient 110, and (2) making the funds available for pick up at the branch of agent 135. *Id.* at 97 (citing Ex. 1005 ¶ 101). Relying on the testimony of Dr. Houh, Apple asserts that a person of ordinary skill in the art would have understood that these two types of transactions involve withdrawing funds. *Id.* (citing Ex. 1003 ¶ 239).

Apple turns to Liao's mobile wallet application software running on controller module 200, which is used to withdraw money from a bank account, as evidence that withdrawing funds from an account associated with a mobile device user was well-known in the art. Pet. 97–98 (citing Ex. 1009, 5:44–55; Ex. 1003 ¶¶ 241–43). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill so that sender 105 or recipient 110 may withdraw funds because Dill's stated objective is to use mobile devices to conduct “money transfer services” and, as evidenced by Liao, using a mobile device to make a withdrawal is one type of “money transfer service[]” that would be desirable to provide “improved methods and systems for performing money transfers to facilitate flexible payment options for the transactions.” *Id.* at 98–99 (quoting Ex. 1005 ¶ 4) (citing Ex. 1003 ¶ 245).

Apple contends that combining the teachings of Dill and Liao in this way would have been the combination of prior art elements (i.e., combining “Dill's money transfer facilitation system with Liao's withdrawal using a mobile phone”) according to known methods (i.e., “withdrawing funds with a mobile phone, as taught by Liao”) to yield the predictable result of “permitting Dill's sender [105] (or [recipient 110]) to withdraw funds from her account.” Pet. 99 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 246). Apple asserts that a person of ordinary skill in the art would have had a reasonable

expectation of success in modifying Dill’s “money transfer” transactions to include a withdrawal of funds by sender 105 or recipient 110 because Liao teaches that the mobile device user employs “mobile wallet application software” to “withdraw funds from a bank account.” *Id.* (quoting Ex. 1009, 5:44–55) (citing Ex. 1003 ¶ 247).

Independent claim 2 recites limitation [2.12.4]—“the communication message indicating that the subscriber desires to withdraw a specified amount of funds from an account associated with the subscriber.” Ex. 1001, 32:60–63. Apple contends that the combination of Dill and Liao teaches limitation [2.12.4]. Pet. 100. More specifically, Apple argues that Dill teaches the “communication message indicating that the subscriber desires [to authorize a transaction for] a specified amount of funds” because it discloses that mobile wallet 125 of sender 105 initiates a transaction by sending a request, including the amount, to mobile application 145. *Id.* at 100–01 (citing Ex. 1005 ¶ 77, Fig. 5 (step 515); Ex. 1003 ¶ 249). Apple further argues that the combination of Dill and Liao teaches “withdraw[ing] . . . funds” at the branch of agent 135 because, as it identifies above with respect to limitation [2.12.1], a person of ordinary skill in the art would have been motivated to modify Dill so that sender 105 or recipient 110 may withdraw funds from an account associated with the sender or recipient, as taught by Liao. *Id.* at 101 (citing Ex. 1003 ¶ 250).

Independent claim 2 recites limitation [2.12.5]—“the communication comprising a secure, perishable code.” Ex. 1001, 32:63–64. Apple contends that the combination of Dill and Vadhri teaches limitation [2.12.5] because, as it identifies above with respect to limitation [2.12.4], Dill discloses the claimed “communication.” Pet. 101 (citing Ex. 1003 ¶ 251). Apple turns to

Vadhri’s temporary code 103 as evidence that a secure, perishable code was well-known in the art. *Id.* at 102 (citing Ex. 1006 ¶¶ 15, 46; Fig. 1; Ex. 1003 ¶¶ 252–53). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill so that the message of sender 105 includes a secure, perishable code, as taught by Vadhri, “to enhance security by limiting the amount of time that the transaction message is valid” and “to reduce the risk of fraud.” *Id.* at 103 (citing Ex. 1006 ¶ 15).

Apple contends that combining the teachings of Dill and Vadhri in this way would have been the combination of prior art elements (i.e., combining “Dill’s sender-initiated transfer request with Vadhri’s temporary code [103]”) according to known methods (i.e., “including the temporary code [103] in a communication, as taught by Vadhri”) to yield the predictable result of “reducing the risk of fraud by incorporating the temporary code [103] in the sender-initiated transfer request.” Pet. 103 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 254). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in modifying Dill’s sender-initiated transfer request to include Vadhri’s temporary code 103 because Vadhri discloses including the temporary code in a communication message, and the temporary code is used to “purchase goods and/or services.” *Id.* (quoting Ex. 1006 ¶ 46) (citing Ex. 1006 ¶ 23; Ex. 1003 ¶ 255).

Independent claim 2 recites limitation [2.12.6]—“determining that the transaction is valid and in progress.” Ex. 1001, 32:65–66. Apple contends that Dill teaches “determining the transaction is valid” because it discloses that, upon receiving a transaction request from sender 105, mobile application 145 verifies that the data in the request provided by mobile

wallet application 121 is valid. Pet. 104 (citing Ex. 1005 ¶ 78, Fig. 5 (steps 515, 520); Ex. 1003 ¶ 257). Apple also argues that Dill teaches “determining that the transaction is . . . in progress” because it discloses that, upon receiving a second request after a confirmation, mobile application 145 returns MTCN to mobile wallet application 121, indicating that the transaction is available for payout to recipient 110. *Id.* at 104–05 (citing Ex. 1005 ¶ 80, Fig. 5 (step 545); Ex. 1003 ¶¶ 258, 259).

Independent claim 2 recites limitation [2.12.7]—“wherein determining that the transaction is valid comprises validating the secure, perishable code and communicating from the integration tier to the database services to query attributes of the subscriber’s account.” Ex. 1001, 32:66–33:3. Apple contends that the combination of Dill and Vadhri teaches limitation [2.12.7]. Pet. 105. More specifically, Apple argues that, as it identifies above with respect to limitation [2.12.5], the combination of Dill and Vadhri teaches a communication message that includes a “secure, perishable code” and, as it identifies above with respect to limitation [2.12.6], Dill teaches “determining the transaction is valid.” *Id.* Apple also argues that, as it identifies above with respect to limitation [1.10.4], Dill teaches “communicating from the integration tier to the database services to query attributes of the subscriber’s account” because it discloses that validating the status of a subscriber’s account includes communications between transfer options module 145 and mobile subscriber data 150. *Id.* at 105–06.

Apple turns to Vadhri’s disclosure of validating temporary code 103/203 as evidence that validating a secure, perishable code was well-known in the art. Pet. 106–07 n.5 (citing Ex. 1006 ¶¶ 27, 45, Fig. 4 (step

406); Ex. 1003 ¶ 261). According to Apple, a person of ordinary skill in the art would have been motivated to modify Dill to determine that a transaction is valid by validating Vadhri's temporary code 103/203 because Vadhri discloses that temporary code 103/203 may be used to authorize the purchase of goods and/or services. *Id.* at 108–09 (citing Ex. 1006 ¶ 46).

Apple contends that combining the teachings of Dill and Vadhri in this way would have been the combination of prior art elements (i.e., combining “Dill’s transaction validation with account/subscriber information using Vadhri’s temporary code [103/203]”) according to known methods (i.e., “validating . . . temporary code [103/203], as taught by Vadhri”) to yield the predictable result of “validating a transaction based on account information, subscriber information, and a temporary code.” Pet. 109 (citing *KSR*, 550 U.S. at 401; Ex. 1003 ¶ 263). Apple asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in making this modification because Dill discloses validating a transaction by using a look-up operation to verify subscriber and account information and, along the same vein, Vadhri discloses associating temporary code 103/203 with a subscriber and an account. *Id.* (citing Ex. 1005 ¶ 78; Ex. 1006 ¶¶ 79, 80; Ex. 1003 ¶ 264).

Based on the preliminary record, we discern no deficiency in Apple’s characterizations of Dill, Vadhri, Akashika, Hansen, Liao, and the knowledge in the art, or in Apple’s reasoning as to why a person of ordinary skill in the art would have been prompted to combine the teachings of these references. In addition, for purposes of institution, we accept Dr. Houh’s testimony concerning the relevant teachings of Dill, Vadhri, Akashika, Hansen, and Liao. Apart from its arguments presented for independent

claims 1 and 3, which we address above, Fintiv contends that the combination of Dill, Vadhri, Akashika, Hansen, and Liao does not teach limitations [2.6] and [2.12.1]. Prelim. Resp. 44–45. We address these arguments below.

a. Limitation [2.6]—“a mobile device configured to run a monetary transaction system application”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [2.6] because “there is no disclosure that the mobile device is configured to run a ‘monetary transaction system application’ that performs the steps recited . . . in [independent] claim 2.” Prelim. Resp. 44 (citing Ex. 2001 ¶ 139). Based on the preliminary record, we are not persuaded by Fintiv’s argument that Dill fails to teach limitation [2.6]. Similar to our discussion above with respect to limitations [1.1.1], [1.9.2], and [3.10.1], neither the plain language of independent claim 2 nor the specification of the ’386 patent explicitly requires the “mobile transaction system application” to reside on subscriber devices. Ex. 1001, 32:6–8, 32:27–28 (claim 2), 6:55–7:9 (“Any of these applications (or any combination thereof),” including “a mobile wallet application,” “*may be provided on the user’s mobile device*” (emphasis added)), 12:58–61 (“The mobile wallet application is installed on a mobile device in the device’s memory, on a SIM card . . . *or is otherwise accessible to the mobile device.*” (emphasis added)). Dill discloses that sender 105 may transfer funds at the branch of agent 135 using the sender’s mobile device configured to run sender’s mobile wallet 125. Ex. 1005 ¶¶ 51, 53, 55, 77, Figs. 5 (step 515), 9. In our view, Apple presents sufficient evidence that would support a finding that Dill discloses the mobile device of sender 105 is configured to run sender’s mobile wallet 125

or, at the very least, sender's mobile wallet 125 is otherwise accessible to the mobile device of sender 105.

b. Limitation [2.12.1]—“wherein the monetary transaction system is implemented to withdraw funds at an agent branch using the mobile device configured to run a monetary transaction system application, including performing the following steps”

In its Preliminary Response, Fintiv contends that Dill does not teach limitation [2.12.1] because “[it] does not disclose a ‘mobile device configured to run a monetary transaction system application’ that performs the recited steps” in independent claim 2. Prelim. Resp. 44 (citing Ex. 2001 ¶ 141). Once again, Fintiv's argument is predicated on the notion that independent claim 2 requires the claimed “monetary transaction system application” to reside on “the mobile device.” Based on the preliminary record, we are not persuaded by Fintiv's argument for the same reasons we identify above with respect to limitation [2.6]. *See supra* Section II.E.2.a.

c. Summary

In summary, Apple has shown a reasonable likelihood that it would prevail on its assertions that the subject matter of independent claim 2 would have been obvious over the combined teachings of Dill, Vadhri, Akashika, Hansen, and Liao.

III. CONCLUSION

Taking into account Fintiv's Preliminary Response, we conclude that the information presented in the Petition demonstrates that there is a reasonable likelihood that Apple would prevail in challenging at least one of claims 1–3 of the '386 patent as unpatentable under § 103(a) as obvious. Accordingly, we institute an IPR as to all challenged claims and all the

grounds raised in the Petition. *See* 37 C.F.R. § 42.108(a). At this stage of the proceeding, we have not made a final determination with respect to the patentability of the challenged claims or the construction of any claim term.

IV. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), an IPR is hereby instituted as to all of the challenged claims and all of the grounds raised in the Petition; and

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

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