

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FANDUEL, INC.,
Petitioner,

v.

WINVIEW INC.,
Patent Owner.

IPR2022-01307
Patent 10,721,543 B2

Before HUBERT C. LORIN, MICHAEL R. ZECHER, and
FRANCES L. IPPOLITO, *Administrative Patent Judges*.

ZECHER, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Petitioner, FanDuel, Inc. (“FanDuel”), filed a Petition requesting an *inter partes* review (“IPR”) of claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of U.S. Patent No. 10,721,543 B2 (Ex. 1001, “the ’543 patent”). Paper 1 (“Pet.”). Patent Owner, WinView Inc. (“WinView”), elected not to file a Preliminary Response. *See* Ex. 1009 (Transcript of a conference call held with the parties on November 30, 2022), 8:3–9. We determined that the information presented in the Petition established that there was a reasonable likelihood that FanDuel would prevail with respect to challenging at least one of claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the ’543 patent as unpatentable. Pursuant to 35 U.S.C. § 314, we instituted this IPR on January 31, 2023, as to all challenged claims and all grounds raised in the Petition. Paper 6 (“Dec. on Inst.”).

During trial, WinView filed a Patent Owner Response (Paper 9, “PO Resp.”), FanDuel filed a Reply to the Patent Owner Response (Paper 12, “Pet. Reply”), and WinView filed a Sur-reply to the Reply (Paper 13, “PO Sur-reply”). In addition, an oral argument was held on November 2, 2023, and a transcript of the hearing is included in the record. Paper 20 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the ’543 patent. For the reasons we identify below, we hold that FanDuel has demonstrated by a preponderance of the evidence that all challenged claims are unpatentable.

A. Real Party in Interest (“RPI”)

FanDuel identifies itself and FanDuel Limited as RPIs. Pet. 2. WinView identifies WinView IP Holdings LLC and WinView Technology Inc. as RPIs. Paper 17, 1 (WinView’s Updated Mandatory Notices).

B. Related Matters

The parties indicate that the ’543 patent is the subject of the following two district court cases: (1) *WinView Inc. v. FanDuel, Inc.*, No. 3:21-cv-13807 (D. N.J.) (filed July 19, 2021); and (2) *WinView Inc. v. DraftKings, Inc.*, No. 3:21-cv-13405 (D.N.J.) (filed July 7, 2021). Pet. 2; Paper 17, 1. In addition to this Petition, the parties indicate that FanDuel filed a petition requesting an IPR of claims 1, 4, 7, 28–31, 49, 57, 68, and 81 of U.S. Patent No. 9,993,730 B2. *FanDuel, Inc. v. WinView Inc.*, IPR2022-01306, Paper 1 (PTAB July 25, 2022) (petition); Pet. 2; Paper 17, 1. WinView also identifies that DraftKings, Inc. filed a petition requesting an IPR of claims 1, 3, 4, and 6 of U.S. Patent No. 9,878,243 B2. *DraftKings, Inc. v. WinView Inc.*, IPR2022-01351, Paper 1, (PTAB Aug. 3, 2022) (petition); Paper 17, 1. Both of these related petitions were granted on January 31, 2023 (IPR2022-1306, Paper 7 (institution decision), IPR2022-01351, Paper 8 (institution decision)), and final written decisions addressing the challenged claims are entered concurrently herewith.

C. The ’543 Patent

The ’543 patent, titled “Method and System for Managing Client Resources and Assets for Activities on Computing Devices,” issued from U.S. Patent Application No. 16/216,885 (“the ’885 application”), filed on December 11, 2018. Ex. 1001, codes (54), (21), (22). The ’885 application includes an extensive chain of priority that ultimately results in it claiming

the benefit of U.S. Provisional Patent Application No. 60/692,356 (“the ’356 application”), filed on June 20, 2005. *Id.* at codes (63), (60), 1:8–46.

The ’543 patent generally relates to “distributed entertainment” and, in particular, to “utilizing a computing device where the entertainment corresponds to an event.” Ex. 1001, 1:50–54. According to the ’543 patent, “[a]lthough the ability to play games and enjoy other activities corresponding to current events on cell phones exists, there are a number of issues regarding coordinating the games across a nationwide network.” *Id.* at 2:8–11. Those issues include the following: (1) “cell phones and other computing devices have their own limitations,” such as “a limited amount of memory”; (2) due to the different protocols employed by various service providers, “[c]ell phone users are . . . sensitive to the time it takes to download the necessary data to play games or enjoy activities”; and (3) “[s]ervers of the entertainment provider . . . have limited resources yet must be able to ensure [that] potentially millions of simultaneous users have the necessary and proper software resident on their cell phones . . . to participate in scheduled interactive programs.” *Id.* at 2:18–34.

The ’543 patent purportedly addresses these and other issues by “implementing a distributed entertainment system wherein the entertainment system is directly correlated to live events or televised programs” with “differing timing and channels of television programs and separate state laws.” Ex. 1001, 2:46–50. The ’543 patent provides “model-specific software,” which it refers to as an “Activity Client.” *Id.* at 2:51–53. “The activity client is a program for managing activity information and data.” *Id.* at 3:1–2.

Figure 5, reproduced below, illustrates a block diagram of one embodiment of the invention disclosed in the '543 patent. Ex. 1001, 5:9–10, 10:15–16.

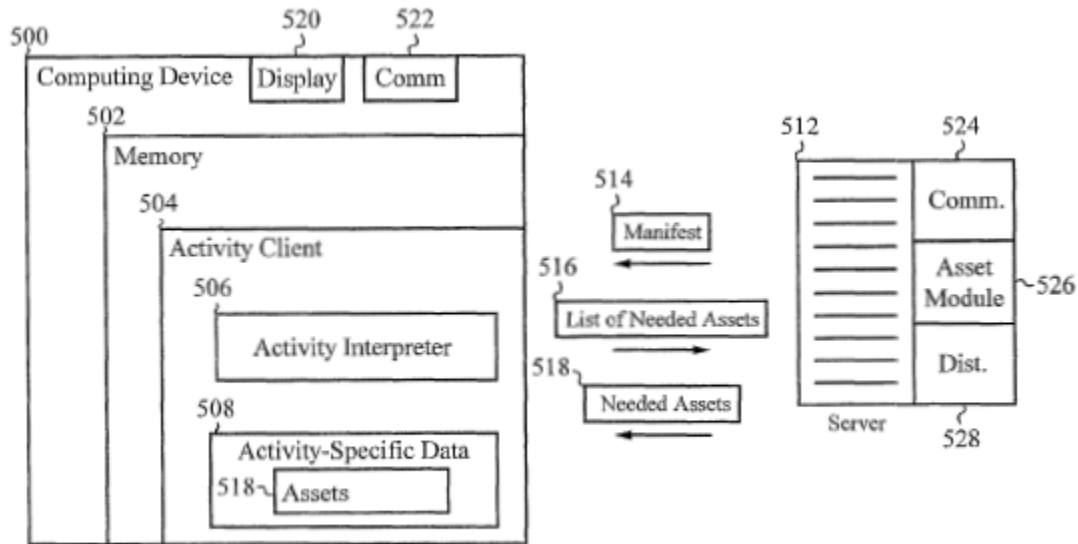


Fig. 5

Figure 5 illustrates computing device 500, such as “a set-top box, personal computer, gaming console, laptop computer, cell phone, PDA [personal digital assistant] or combination cell phone/mp3 device,” communicating with server 512. *Id.* at 10:16–31. Computing device 500 further includes memory 502 that stores, among other things, activity client 504 that receives “activity-specific data 508” containing “instructions for [the] specific computing device, the nature of the activity and the specific event.” *Id.* at 10:24–28. According to the '543 patent, the location of computing device 500 and any applicable state law requirements determines the location-specific activity information that may be available for download to activity client 504. *See id.* at 7:13–20, 7:28–32.

D. Challenged Claims

Of the challenged claims, claims 1 and 49 are independent claims. Independent claim 1 is directed to “[a] method of implementing a consumer service on a mobile web-connected computing device,” whereas independent claim 49 is directed to “[a] method of implementing a consumer service on a server.” Ex. 1001, 12:19–20, 15:3–4. Claims 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, and 43 directly or indirectly depend from independent claim 1. *Id.* at 12:43–14:57. Independent claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method of implementing a consumer service on a mobile web-connected computing device comprising:
 - loading a set of service related information located on a server related to a geographic location of the mobile web-connected computing device to an activity client, wherein the geographic location of the mobile web-connected computing device determines the set of service related information to be loaded from the server, wherein the set of service related information includes service related information relative to the geographic location of the mobile web-connected computing device, and further wherein as the geographic location of the mobile web-connected computing device changes, different service related information is presented through the activity client based on the geographic location;
 - selecting an option from the activity client from a list of available options;
 - downloading a set of service-specific information related to a selected option from a server to the mobile web-connected computing device; and
 - executing an application related to the selected option within the activity client on the mobile web-connected computing device.

Id. at 12:19–42.

E. Asserted Prior Art References

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

Name¹	Reference	Dates	Exhibit No.
Vänskä	US 7,072,672 B1	issued July 4, 2006; filed Nov. 1, 2002	1005
Barros	US 2004/0248653 A1	published Dec. 9, 2004; filed June 5, 2003	1006

F. Asserted Grounds of Unpatentability/Testimonial Evidence

FanDuel challenges claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the ’543 patent based on the asserted grounds of unpatentability set forth in the table below. Pet. 4, 13–71.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 9, 15, 16, 23, 27, 31–33, 41, 43, 49	102(e) ²	Vänskä
1, 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, 43, 49	103(a)	Vänskä
14, 20, 21	103(a)	Vänskä, Barros

FanDuel supports its arguments in the Petition with the testimony of Dr. Aviel D. Rubin. Ex. 1003 (Declaration of Dr. Rubin in support of Petition). FanDuel supports its arguments in the Reply with the testimony of Dr. Rubin. Ex. 1017 (Second Declaration of Dr. Rubin in support of Reply).

¹ For clarity and ease of reference, we only list the first named inventor.

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. §§ 102 and 103, effective March 16, 2013. Because the ’543 patent claims the benefit of the ’356 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).

WinView supports its arguments in the Patent Owner Response with the testimony of Prashant Shenoy, Ph.D. Ex. 2001 (Declaration of Dr. Shenoy in support of the Patent Owner Response).

II. ANALYSIS

A. Claim Construction

In this IPR, 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) (2021). 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, in view of the specification and the prosecution history pertaining to the patent at issue. *See 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).

In its Petition, FanDuel contends that, “[f]or purposes of this proceeding only, [FanDuel] does not believe any claim construction is necessary to resolve [its unpatentability] analysis.” Pet. 12 (citing Ex. 1003 ¶ 41). In its Patent Owner Response, WinView agrees with FanDuel by stating that “no [claim] terms require construction,” and that each claim term should be giving its ordinary and customary meaning. PO Resp. 11.

Based on the fully developed trial record, there is no controversy between the parties that requires us to construe any claim terms. *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))).

B. Anticipation by Vänskä

FanDuel contends that claims 1, 9, 15, 16, 23, 27, 31–33, 41, 43, and 49 of the ’543 patent are unpatentable under § 102(e) as anticipated by Vänskä. Pet. 13–67. FanDuel contends that Vänskä describes the subject matter of each challenged claim. *Id.* During trial, WinView contends Vänskä fails to describe certain limitations recited in independent claims 1 and 49. PO Resp. 13–32; PO Sur-reply 3–16. WinView does not address separately FanDuel’s arguments and evidence presented for dependent claims 9, 15, 16, 23, 27, 31–33, 41, and 43. *See* PO Resp. 13–32.

Based on the fully developed trial record, we determine that FanDuel has shown by a preponderance of the evidence that claims 1, 9, 15, 16, 23, 27, 31–33, 41, 43, and 49 of the ’543 patent are anticipated by Vänskä. We begin our analysis with the principles of law that generally apply to an anticipation ground, next we assess the level of skill in the art, followed by a brief overview of Vänskä, and then we address the parties’ contentions with respect to independent claims 1 and 49.

1. Principles of Law

To establish anticipation, “all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim.” *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). When evaluating a single prior art reference in the context of anticipation, the reference must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d 1475,

1480 (Fed. Cir. 1994) (quoting *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). “[T]he dispositive question regarding anticipation [i]s whether one skilled in the art would reasonably understand or infer from the [prior art reference’s] teaching’ that every claim element was disclosed in that single reference.” *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (second and third alteration in original) (quoting *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991)). We analyze this asserted ground based on anticipation with the principles stated above in mind.

2. *Level of Skill in the Art*

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.

Based on the fully developed trial record, we are able to determine the knowledge level of a person of ordinary skill in the art. Relying on the testimony of Dr. Rubin, FanDuel argues that “a person of ordinary skill in the art . . . as of June 20, 2005 [(the filing date of the ’356 application)], would typically have at least a bachelor’s degree, or equivalent, in Computer Science and several years of experience in software development.” Pet. 13

(citing Ex. 1003 ¶¶ 20, 21). In its Patent Owner Response, WinView does not address the level of ordinary skill in the art. *See* PO Resp.

Accordingly, we maintain our preliminary determination regarding the level of ordinary skill in the art. Dec. on Inst. 9–10. That is, we adopt FanDuel’s proposed assessment of the level of ordinary skill in the art because Dr. Rubin’s supporting testimony is consistent with the ’543 patent and the asserted prior art. We apply this assessment of the level of ordinary skill in the art in our anticipation and obviousness evaluations below.

3. Overview of Vänskä

Vänskä generally relates to “wireless communications systems” and, in particular, “to an apparatus and method for efficiently managing the memory of a mobile terminal.” Ex. 1005, 1:5–8. Figure 2 of Vänskä, reproduced below, illustrates a block diagram of an exemplary mobile terminal in accordance with one embodiment. *Id.* at 2:60–62, 6:46–48.

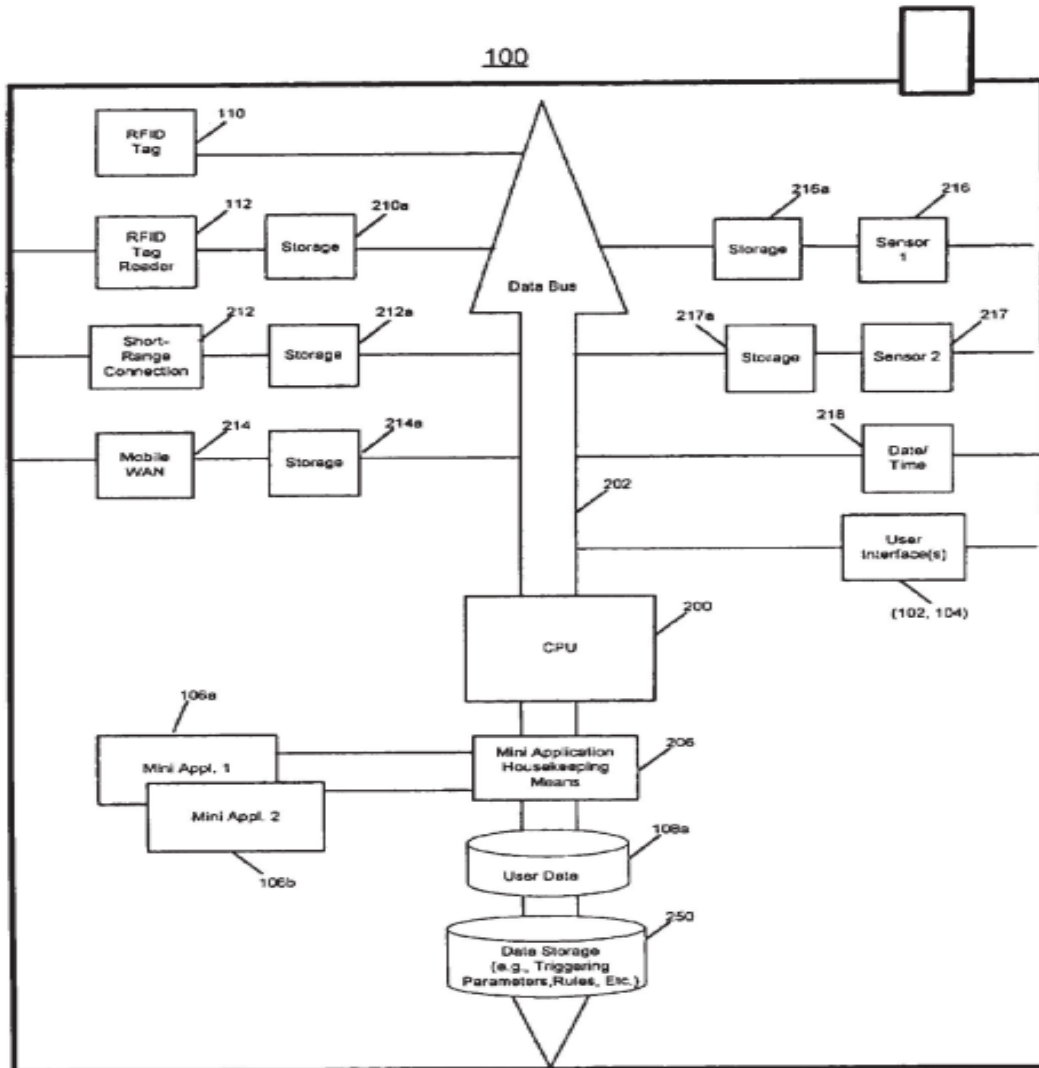


FIG. 2

Figure 2 illustrates mobile terminal 100 that includes, among other things, one or more disposable mini-applications 106a, 106b that have been downloaded from service provider 150 (not illustrated above) using short range connection 212 or mobile wide area network (“WAN”) connection 214. *Id.* at 7:4–8. Mobile terminal 100 also includes housekeeping means

206 that “comprise[s] a user interface to assist the user in downloading, activating, deactivating and deleting disposable mini-applications” 106a, 106b. *Id.* at 7:34–38.

Housekeeping means 206 . . . perform[s] various other housekeeping functions, such as interfacing disposable mini-applications with the operating characteristics of mobile terminal 100 and supervising and controlling data transfer and processing between input and output data of disposable mini-application 106a and input and output data of mobile terminal 100.

Id. at 7:39–45.

Although Vänskä describes the activity-specific services offered by the mini-applications 106a, 106b in the context of assisting a user with his/her shopping needs, Vänskä also discloses that its activity-specific services also apply to “attending a sporting event.” Ex. 1005, 7:63–8:1. Vänskä, however, makes clear that “[c]ommon to all . . . situations is that the user of mobile terminal 100 is at a physical location to which a disposable mini-application may relate.” *Id.* at 8:1–4. That is, “[s]ervice provider 150 may send . . . message[s] to mobile terminal 100 based on the user’s context, such as her location, a particular instant in time, her current or intended activity or the like, or even any combination thereof.” *Id.* at 8:44–47. Vänskä also discloses certain triggering conditions such that, “if the disposable mini-application is intended for use in a certain location, then the current location of the user may . . . trigger data that satisfies the location trigger parameter.” *Id.* at 9:33–36.

4. Claims 1 and 49

For purposes of consistency and added clarity, we address each limitation of independent claims 1 and 49 in turn by relying on the bracketed annotations provided by FanDuel in the Petition. Pet. iv, viii–ix. Beginning

with independent claim 1, the preamble recites [1-pre]—“[a] method of implementing a consumer service on a mobile web-connected computing device.” Ex. 1001, 12:19–20. To the extent the preamble should be treated as limiting, FanDuel contends that Vänskä describes the features of the preamble because it discloses mobile terminal 100 downloading disposable mini-applications from service provider 150, which, in turn, allow a user to perform one or more functions offered by the service provider. Pet. 14–17 (citing Ex. 1005, 2:61–62, 3:22–35, 3:52–4:9, 5:16–18, 6:5–8, 7:42–47, 7:59–8:4, 11:20–24, Fig. 1; Ex. 1003 ¶¶ 75–81). FanDuel argues that mobile terminal 100 communicating with service provider 150 over a wireless connection (e.g., mobile WAN 130) constitutes the claimed “mobile web-connected computing device.” *Id.* at 15 (citing Ex. 1005, Fig. 1; Ex. 1003 ¶ 77).

The first method step of independent claim 1 recites limitation [1-a-i]—“loading a set of service related information located on a server related to a geographic location of the mobile web-connected computing device to an activity client.” Ex. 1001, 12:21–23. FanDuel contends that Vänskä describes limitation [1-a-i] because it discloses downloading mini-applications 106a, 106b and associated information from service provider 150 to housekeeping means 206 of mobile terminal 100 based on the geographic location of the mobile terminal. Pet. 17–20 (citing Ex. 1005, 1:35–40, 3:32–41, 4:2–4, 8:29–30, 11:52–56, 11:62–12:1, 12:11–16, 12:23–27, 12:66–13:7; Ex. 1003 ¶¶ 83–86), 22–28 (citing Ex. 1005, 3:32–41, 3:52–58, 6:15–20, 7:34–49, 8:1–4, 8:44–47, 8:54–57, 9:33–36, 9:55–59, 11:14–25, 12:42–50, Fig. 2; Ex. 1003 ¶¶ 92–101). According to FanDuel, Vänskä’s housekeeping means 206 of mobile terminal 100 constitutes the

claimed “activity client” because, consistent with the ’543 patent, it is a “program for managing activity information and data.” *Id.* at 22–24 (quoting Ex. 1001, 3:1–2) (citing Ex. 1001, 4:10–11, 4:23–24, 6:26–27; Ex. 1005, 7:34–45, 9:55–59; Ex. 1003 ¶¶ 91, 92).

Independent claim 1 then recites limitation [1-a-ii]—“wherein the geographic location of the mobile web-connected computing device determines the set of service related information to be loaded from the server.” Ex. 1001, 12:24–27. FanDuel contends that Vänskä describes limitation [1-a-ii] because it discloses that the disposable mini-applications that service provider 150 presents to mobile terminal 100 for downloading are available based on the geographic location of the mobile terminal. Pet. 28–29 (citing Ex. 1005, 3:35–41, 8:1–4, 8:31–43, 8:44–46, 9:32–36; Ex. 1003 ¶¶ 102, 103).

Independent claim 1 further recites limitation [1-a-iii]—“wherein the set of service related information includes service related information relative to the geographic location of the mobile web-connected computing device.” Ex. 1001, 12:27–30. FanDuel contends that Vänskä describes limitation [1-a-iii] because it discloses that the disposable mini-applications provide service related information, such as “purchasing assistance to a user while the user is shopping,” “information, such as keywords, concerning [the] goods/services available” at a particular location, and “general information about [the] area . . . , such as a map of the area.” Pet. 29–30 (emphases omitted) (quoting Ex. 1005, 11:52–56, 12:23–27, 8:20–23) (citing Ex. 1005, 11:62–12:1, 12:66–13:7; Ex. 1003 ¶ 104). FanDuel further contends that service related information is relative to the geographic location of mobile terminal 100 because, when the mobile terminal

physically moves around a location such as a shopping mall, housekeeping means 206 continuously uses radio frequency-identification (“RF-ID”) tag comparison to determine the exact location of the mobile terminal relative to a particular store. *Id.* at 30 (citing Ex. 1005, 12:56–63; Ex. 1003 ¶ 105).

Independent claim 1 next recites limitation [1-a-iv]—“and further wherein as the geographic location of the mobile web-connected computing device changes, different service related information is presented through the activity client based on the geographic location.” Ex. 1001, 12:30–34. FanDuel contends that Vänskä describes limitation [1-a-iv] because it discloses that the availability of the disposable mini-applications downloaded on mobile terminal 100, each of which contains different sets of service related information, changes as the location of the mobile terminal changes. Pet. 32 (citing Ex. 1003 ¶ 108). As one example, FanDuel argues that Figure 3 of Vänskä illustrates a layout of a shopping mall or area 300 containing different stores that provide different service related information depending on whether mobile terminal 100 is detected as entering or exiting a service point associated with each store. *Id.* at 32–33 (citing Ex. 1005, 5:46–52, 7:59–63, 8:8–10, 8:16–20, 11:30–35, Fig. 3; Ex. 1003 ¶ 108). Stated differently, FanDuel argues that as mobile terminal 100 moves from store-to-store within area 300, mobile terminal 100 actively loads and deletes the disposable mini-applications associated with each store. *Id.* at 34 (citing Ex. 1005, 2:1–13, 11:46–51; Ex. 1003 ¶ 110).

The second method step of independent claim 1 recites limitation [1-b]—“selecting an option from the activity client from a list of available options.” Ex. 1001, 12:35–36. FanDuel contends that Vänskä describes limitation [1-b] because it discloses that housekeeping means 206 permits a

user to select one or more disposable mini-applications from service provider 150 for downloading and use, thereby providing a list of available options. Pet. 35–36 (citing Ex. 1005, 7:4–12, 11:43–51; Ex. 1003 ¶¶ 113, 114).

The third method step of independent claim 1 recites limitation [1-c]—“downloading a set of service-specific information related to a selected option from a server to the mobile web-connected computing device.” Ex. 1001, 12:37–39. FanDuel contends that Vänskä describes limitation [1-c] because it discloses that, after housekeeping means 206 permits a user to select one or more disposable mini-applications 106a, 106b from service provider 150, mobile terminal 100 then downloads and uses the selected disposable mini-application(s). Pet. 36–37 (citing Ex. 1005, 3:42–47, 3:59–64, 11:43–46, 11:62–12:4; Ex. 1003 ¶¶ 116, 117).

The last method step of independent claim 1 recites limitation [1-d]—“executing an application related to the selected option within the activity client on the mobile web-connected computing device.” Ex. 1001, 12:40–42. FanDuel contends that Vänskä describes limitation [1-d] because it discloses that mobile terminal 100 executes the disposable mini-applications that were selected by housekeeping means 206. Pet. 37 (citing Ex. 1003 ¶ 118). For example, FanDuel argues that, once Vänskä’s housekeeping means 206 activates disposable mini-application 106a, it begins executing on mobile terminal 100. *Id.* (citing Ex. 1005, 6:6–10, 10:8–12, Fig. 4 (step 410); Ex. 1003 ¶ 118). FanDuel also argues that, depending on which disposable mini-application was activated, Vänskä discloses that execution may comprise transferring data to and from mobile terminal 100, displaying data to the user, prompting the user for input, providing access to user data,

displaying choices for user selection, executing other applications, etc. *Id.* at 37–38 (citing Ex. 1005, 10:13–26).

Turning to independent claim 49, FanDuel contends that the limitations of this claim are essentially the same as the limitations of independent claim 1. Pet. 46. FanDuel argues that the only difference between these two independent claims is that independent claim 1 recites limitations from the perspective of a mobile terminal, whereas independent claim 49 recites limitations from the perspective of a server. *Id.* (citing Ex. 1003 ¶ 156).

The preamble of independent claim 49 recites [49-pre]—“[a] method of implementing a consumer service on a server comprising.” Ex. 1001, 15:3–4. To the extent the preamble should be treated as limiting, FanDuel contends that Vänskä describes the features of the preamble because it discloses mobile terminal 100 downloading disposable mini-applications from service provider 150, which, in turn, provide software necessary to provide a variety of services consumed by users (e.g., shopping and entertainment services). Pet. 47–49 (citing Ex. 1005, 3:22–25, 3:42–47, 3:52–4:9, 6:15–20, 7:59–8:3, Fig. 1; Ex. 1003 ¶¶ 160–163).

The first method step of independent claim 49 recites limitation [49-a-i]—“transmitting a set of service related information related to a geographic location of the mobile Internet-connected computing device to an application.” Ex. 1001, 15:5–7. FanDuel contends that Vänskä describes limitation [49-a-i] because it discloses downloading mini-applications 106a, 106b and associated information from service provider 150 to housekeeping means 206 of mobile terminal 100 based on the geographic location of the mobile terminal. Pet. 49–57 (citing Ex. 1005, 1:35–40, 3:1–2, 3:32–41, 4:2–

4, 6:26–27, 7:45–49, 7:55–59, 8:1–4, 8:16–26, 8:29–30, 8:44–47, 8:54–57, 9:33–36, 11:14–25, 11:52–56, 11:62–12:1, 12:11–16, 12:23–27, 12:42–50, 12:66–13:7, Figs. 2, 5; Ex. 1007 ¶¶ 24, 25; Ex. 1003 ¶¶ 165–167, 169–173, 176, 178, 180, 181). According to FanDuel, Vänskä’s housekeeping means 206 of mobile terminal 100 constitutes the claimed “application” because, consistent with the ’543 patent, it is a “program for managing activity information and data.” *Id.* at 53–54 (quoting Ex. 1001, 3:1–2) (citing Ex. 1001, 4:10–11, 4:23–24, 6:26–27; Ex. 1005, 7:34–45, 9:55–59; Ex. 1003 ¶¶ 174, 175).

Independent claim 49 then recites limitation [49-a-ii]—“wherein the geographic location of the mobile Internet-connected computing device determines the set of service related information to be transmitted.” Ex. 1001, 15:7–11. FanDuel contends that Vänskä describes limitation [49-a-ii] because it discloses that the disposable mini-applications that service provider 150 presents to mobile terminal 100 for downloading are available based on the geographic location of the mobile terminal. Pet. 58 (citing Ex. 1005, 3:35–41, 8:1–4, 8:31–43, 8:44–46, 9:32–36; Ex. 1003 ¶¶ 182, 183).

Independent claim 49 further recites limitation [49-a-iii]—“wherein the set of service related information includes service related information which is relative to and dependent on the geographic location of the mobile Internet-connected computing device.” Ex. 1001, 15:11–15. FanDuel contends that Vänskä describes limitation [49-a-iii] because it discloses that the disposable mini-applications and associated data provide service related information, such as “purchasing assistance to a user while the user is shopping,” “information, such as keywords, concerning [the] goods/services

available” at a particular location, and “general information about [the] area . . . , such as a map of the area.” Pet. 59 (emphases omitted) (quoting Ex. 1005, 11:52–56, 12:23–27, 8:20–23) (citing Ex. 1005, 11:62–12:1, 12:66–13:7; Ex. 1003 ¶ 184). FanDuel further contends that service related information is relative to the geographic location of mobile terminal 100 because, when the mobile terminal physically moves around a location such as a shopping mall, housekeeping means 206 continuously uses RF-ID tag comparison to determine the exact location of the mobile terminal relative to a particular store. *Id.* at 59–60 (citing Ex. 1005, 12:56–63; Ex. 1003 ¶ 185).

The second method step of independent claim 49 recites limitation [49-b-i]—“receiving a selection related to the consumer service.” Ex. 1001, 15:16. FanDuel contends that Vänskä describes limitation [49-b-i] because it discloses that housekeeping means 206 permits a user to select one or more disposable mini-applications from service provider 150 for downloading and use, thereby providing a list of available consumer services. Pet. 61–62 (citing Ex. 1005, 7:4–12, 11:43–51; Ex. 1003 ¶¶ 188, 189).

Independent claim 49 next recites limitation [49-b-ii]—“and further wherein as the geographic location of the mobile Internet-connected computing device changes, different service related information is presented within an application based on the geographic location.” Ex. 1001, 15:17–20. FanDuel contends that Vänskä describes limitation [49-b-ii] because it discloses that the availability of the disposable mini-applications downloaded to housekeeping means 206 that runs on mobile terminal 100, each of which containing different sets of service related information, changes as the location of the mobile terminal changes. Pet. 62 (citing

Ex. 1003 ¶ 190). As one example, FanDuel argues that Figure 3 of Vänskä illustrates a layout of a shopping mall or area 300 containing different stores that provide different service related information depending on whether mobile terminal 100 is detected as entering or exiting a service point associated with each store. *Id.* at 62–64 (citing Ex. 1005, 5:46–52, 7:59–63, 8:8–10, 8:16–20, 11:30–35, Fig. 3; Ex. 1003 ¶ 190). Stated differently, FanDuel argues that as mobile terminal 100 moves from store-to-store within area 300, mobile terminal 100 actively loads and deletes the disposable mini-applications associated with each store. *Id.* at 64 (citing Ex. 1005, 2:1–13, 7:62–8:1, 11:46–51, 12:1; Ex. 1003 ¶¶ 192, 193).

The third method step of independent claim 49 recites limitation [49-c]—“transmitting a set of selection information related to the selection from the server to the mobile Internet-connected computing device.” Ex. 1001, 15:21–23. FanDuel contends Vänskä describes limitation [49-c] because it discloses that, after housekeeping means 206 permits a user to select one or more disposable mini-applications from service provider 150, mobile terminal 100 downloads and uses the selected disposable mini-application. Pet. 65 (citing Ex. 1005, 3:42–47, 3:59–64, 11:43–46, 11:62–12:4; Ex. 1003 ¶¶ 195, 196).

The last method step of independent claim 49 recites limitation [49-d]—“receiving additional information based on a user’s execution of the application on the mobile Internet-connected computing device.” Ex. 1001, 15:24–26. FanDuel contends Vänskä describes limitation [49-d] because it discloses that mobile terminal 100 executes the disposable mini-application that was selected and activated by housekeeping means 206, and transmits additional information to service provider 150 during execution of the

selected mini-application. Pet. 65 (citing Ex. 1003 ¶ 197). For example, FanDuel argues that, once Vänskä's housekeeping means 206 activates disposable mini-application 106a, it begins executing on mobile terminal 100. *Id.* at 65–66 (citing Ex. 1005, 6:6–10, 10:8–18, Fig. 4 (step 410)). FanDuel also argues that, depending on which disposable mini-application was selected and activated by housekeeping means 206, Vänskä discloses that execution may comprise transferring user data from mobile terminal 100 to service provider 150, such as a “request [for] information on goods and/or services.” *Id.* at 65 (quoting Ex. 1005, 6:10–20) (citing Ex. 1003 ¶¶ 198, 199).

Notwithstanding WinView's arguments to the contrary, FanDuel has shown by a preponderance of the evidence that Vänskä describes all the limitations of independent claims 1 and 49. During trial, WinView contends that Vänskä fails to describe the following limitations: (1) “mobile web-connected computing device,” as recited in independent claim 1 and “mobile Internet-connected computing device,” as recited in independent claim 49; (2) “loading a set of service related information located on a server related to a geographic location of the mobile web-connected computing device to an activity client,” as recited in independent claim 1, and similarly recited in independent claim 49; and (3) “selecting an option,” as recited in independent claim 1, and similarly recited in independent claim 49. PO Resp. 13–32; PO Sur-reply 3–16. We address WinView's arguments in turn.

a. “mobile web-connected computing device” and “mobile Internet-connected computing device”³

In its Patent Owner Response, WinView contends that FanDuel fails to explain how Vänskä explicitly or inherently discloses a “mobile web-connected computing device” or “mobile Internet-connected computing device.” PO Resp. 13 (citing Pet. 14–38, 49–66). Using independent claim 1 as an example, WinView argues that mere capability to connect to the web is not sufficient, but an actual web connection to transmit and receive data is required to practice the claimed steps. *Id.* at 15 (citing Ex. 1001, 12:19–42, Ex. 2001 ¶ 45). WinView recognizes that Vänskä’s mobile terminal 100 is connected to both short-range wireless network 120 and mobile WAN 130 that facilitate connection to the web or Internet, but it argues that these two networks are not themselves the web or Internet. *Id.* (citing Ex. 2001 ¶¶ 46, 48). More specifically, WinView argues that one example of Vänskä’s mobile WAN 130 connection uses General Packet Radio Service (“GPRS”) that allows for the transmission of voice and data over a cellular network. *Id.* at 18 (citing Ex. 1005, 3:42–47; Ex. 2001 ¶ 36). According to WinView, although GPRS can facilitate a connection to the web or Internet, there is no assumption that it provides such a connection. *Id.* at 18–19 (citing Ex. 2001 ¶ 36). WinView asserts that, in the early 2000s, which is at or around the effective filing date of Vänskä, connections between a service provider and

³ WinView argues the claim terms “mobile web-connected computing device” and “mobile Internet-connected computing device” together and, therefore, treats them as coextensive terms. *See* PO Resp. 13–22; PO Sur-reply 3–14. For the purposes of analysis, we also treat these terms as being coextensive.

mobile terminal enabled direct transmission of data over a cellular network, but those transmission were not necessarily over the web or Internet. *Id.* at 19 (citing Ex. 2001 ¶ 36).

Moreover, WinView contends that Vänskä's service provider 150 does not transmit disposable mini-applications to mobile terminal 100 over the web or Internet because there is a lack of disclosure in Vänskä itself of any standard protocols of the Transmission Control Protocol /Internet Protocol ("TCP/IP") stack that would enable communication in this manner. PO Resp. 20 (citing Ex. 2001 ¶ 53); *see also id.* at 21–22 (arguing that Vänskä also does not disclose Hypertext Transfer Protocol ("HTTP") for web browsing). According to WinView, if Vänskä allowed transmitting and downloading of disposable mini-applications over the web or Internet, it would have disclosed the IP protocol that handles the addressing and routing of data packets across the web or Internet. *Id.* (citing Ex. 2001 ¶ 58). Without the addressing of an IP protocol, WinView asserts that Vänskä's disposable mini-applications could not be sent as data packets from service provider 150 to mobile terminal 100 over the web or Internet. *Id.* Bottom line, WinView asserts that Vänskä does not disclose "any of the browsers, servers, or protocols necessary for web [or Internet] connectivity." *Id.* at 20–21 (citing Ex. 2001 ¶ 53).

In its Reply, FanDuel contends that Vänskä describes a "mobile web-connected computing device" or "mobile Internet-connected computing device" because it states the following:

[m]obile terminal 100 may download a disposable mini-application from service provider 150 . . . over mobile WAN 130 (e.g., GPRS, GSM [Global System for Mobile Communications], etc.). In this regard, service provider 150

includes . . . WAN connection 157 for use in downloading a disposable mini-application to mobile terminal 100 over . . . mobile WAN 130, respectively.

Pet. Reply 11 (quoting Ex. 1005, 3:42–52) (alterations in original). Relying on evidence that explains the difference between GPRS and GSM protocols, FanDuel argues that Vänskä’s use of GPRS protocol when downloading disposable mini-applications over WAN provides connectivity to the Internet. *Id.* at 13–14 (citing Ex. 1005, 3:42–52; Ex. 1011, 1). As further support for its argument, FanDuel turns to the deposition testimonies of its declarant, Dr. Rubin, as well as WinView’s declarant, Dr. Shenoy, both of whom appear to agree that using GPRS to communicate over a WAN allows Internet communication. *Id.* at 14 (citing Ex. 2003, 52:16–24; Ex. 1015, 80:2–10). Based on the deposition testimonies from both declarants, FanDuel asserts that a person of ordinary skill in the art would have understood that Vänskä’s mobile terminal 100 constitutes the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device” because “it would have connectivity to the Internet via a cellular data network when downloading the disposable mini-applications over the WAN using GPRS.” *Id.* at 15 (citing Ex. 1017 ¶¶ 28–30); *see also id.* at 16 (arguing the same).

In its Sur-reply, WinView contends that FanDuel repeatedly argues in its Reply how Vänskä’s mobile terminal 100 and service provider 150 have networking capabilities, but FanDuel still fails to explain how Vänskä describes an actual connection to the web or Internet purportedly required by a “mobile web-connected computing device” and “mobile Internet-connected computing device.” PO Sur-reply 3–5 (citing Pet. Reply 7, 13–15). WinView acknowledges that FanDuel relies on Vänskä’s disclosure of

a connection between mobile terminal 100 and service provider 150 over mobile WAN 130 using GPRS to teach these disputed limitations, but WinView asserts that “having the networking capability to connect to the web or internet is not evidence of an *actual* connection.” *Id.* at 5–6 (citing Pet. Reply 11; Ex. 1005, 3:42–52). WinView also reiterates that a web connection or Internet connection requires certain web technologies (e.g., TCP/IP and HTTP), but Vänskä fails to teach any of those web technologies. *Id.* at 7.

Based on the fully developed trial record, we agree with FanDuel that Vänskä’s mobile terminal 100 describes the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device” because it connects to the Internet via a cellular data network when downloading the disposable mini-applications over mobile WAN 130 using GPRS. Pet. 15, 49–57; Pet. Reply 11–17. The relevant disclosure in Vänskä is reproduced below.

Mobile terminal 100 may download a disposable mini-application from service provider 150 over either a short range wireless network 120, such as a Personal Area Network (e.g., IrDA or Bluetooth PANs) or a wireless LAN (e.g. wireless IEEE 1394, IEEE 802.11, or Hiper LAN/2) or a mobile WAN 130 (e.g., GPRS, GSM, etc.). In this regard, service provider 150 includes a short range wireless connection 156 and/or WAN connection 157 for uses in downloading a disposable mini-application to mobile terminal 100 over short range wireless network 120 or mobile WAN 130, respectively.

Ex. 1005, 3:42–52 (emphases added). Based on this cited disclosure, we find that Vänskä discloses that mobile terminal 100 downloads disposable mini-applications from service provider 150 over mobile WAN 130 using, as one example, GPRS. There appears to be no dispute between the parties that

Vänskä operates in this way. *Compare* Pet. Reply 11 (quoting Ex. 1005, 3:42–52), *with* PO Sur-reply 5–6 (quoting the same). The dispute between the parties turns on whether Vänskä’s disclosure of mobile WAN 130 using GPRS provides Internet connectivity in a manner that results in a web or Internet connection required by the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device.” In our view, the evidence of record supports that it does.

When considering all the evidence of record that bears on this particular issue, the evidence demonstrates that it was well-known to a person of ordinary skill in the art that GPRS provides Internet connectivity. We address each piece of relevant evidence in turn. First, as evidence of the general background knowledge in the art, FanDuel introduced a document with its Reply that explicitly defines GPRS and, in particular, discusses the difference between using GSM and GPRS protocols. Ex. 1011. According to this document, “GPRS revolutionized GSM by providing real data capability and enabling emails and simple web browsing – albeit at speeds much slower than the current standard.” *Id.* at 1. This document further states that “GPRS provided . . . uninterrupted connectivity to the internet for mobile phones.” *Id.* FanDuel argues—and we agree—that this document is evidence that a person of ordinary skill in the art would have understood that GPRS provides Internet connectivity to mobile phones. *See* Pet. Reply 13.

Second, FanDuel’s declarant, Dr. Rubin, provides testimony demonstrating it was well-known to a person of ordinary skill in the art that GPRS provides Internet connectivity. During his deposition, the following exchange occurred between counsel for Win View and Dr. Rubin regarding Vänskä’s disclosure of using GPRS:

Q Where does it say [in Vänskä] that it connects to the internet?

A So WAN used this way, one of ordinary skill in the art would [have understood] that if you're using GPRS and GSM to communicate over a WAN that you are communicating over the internet. . . .

Q But my question is: Where in Figure 1 in this Vänskä reference does it explain that its connected to the internet?

A So I think while it doesn't use the word "internet," one of ordinary skill in the art, looking at a description of a mobile WAN, for example, GPRS and GSM, would [have understood] that that's connection to the internet.

Ex. 2003, 52:16–53:8. We credit Dr. Rubin's testimony in this regard because it is consistent with the document introduced by FanDuel in its Reply that explains how GPRS provides Internet connectivity to mobile phones.

Third, WinView's declarant, Dr. Shenoy, also shares the same view that it was well-known to a person of ordinary skill in the art that GPRS provides Internet connectivity. During his deposition, the following exchanged occurred between counsel for FanDuel and Dr. Shenoy regarding Vänskä's disclosure of using GPRS:

Q. So do you agree that at least the [Vänskä] reference does teach about the GPRS?

A. The [Vänskä] reference teaches GPRS, yes.

Q. And as we talked about earlier, the GPRS allows support for data functions to be processing over Internet connections; right?

A. The GPRS standard had the ability for devices to connect to -- have data connections to connect to the Internet.

Ex. 1015, 80:2–10. We also credit the testimony of Dr. Shenoy in this regard because, once again, it is consistent with the document introduced by FanDuel in its Reply that explains how GPRS provides Internet connectivity to mobile phones.

Lastly, during oral argument, counsel for WinView did not dispute that it was well-known to a person of ordinary skill in the art that GPRS provides Internet connectivity. The relevant exchange between counsel for WinView and the panel is reproduced below.

JUDGE ZECHER: Mr. Lim, do you dispute, I think, as I understand, [FanDuel] argued that GPRS at least supports data functions to be processed over internet connections. Do you dispute that it allows that?

MR. LIM: We don't dispute that it allows that. It enables it, a data and transmission. Yeah, we don't dispute. But we –

JUDGE ZECHER: Over the internet?

MR. LIM: Over the internet.

Tr. 24:24–25:7.

Given that controlling case law mandates that we must consider the explicit and inherent disclosures in Vänskä, “together with the knowledge of one of ordinary skill in the pertinent art” (*In re Paulsen*, 30 F.3d at 1480), we find that evidence of record supports a finding that Vänskä's mobile terminal 100 connects to the Internet via a cellular data network when downloading the disposable mini-applications over mobile WAN 130 using GPRS. Stated differently, Vänskä's mobile terminal 100 connects to the Internet via the mobile WAN 130 using GPRS and, therefore, describes the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device.”

We do not agree with WinView’s argument that FanDuel fails to explain how Vänskä discloses an actual or direct connection to the web or Internet purportedly required by the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device.” *See* PO Resp. 15–19; PO Sur-reply 3–6. Apart from the “mobile . . . computing device” being “web-connected,” the “loading,” “selecting,” and “downloading” steps of independent claim 1 do not require explicitly an actual or direct transmission of data over the web. *See* Ex. 1001, 12:19–42. Similarly, apart from the “mobile . . . computing device” being “Internet-connected,” the “transmitting” and “receiving” steps of independent claim 49 do not require explicitly an actual or direct transmission of data over the Internet. *Id.* at 15:3–26. The specification of the ’543 patent supports our view in this regard because it discloses that “the [computing] device connects via the cellular network and/or Internet to the service provider’s server.” *Id.* at 8:5–9, Fig. 1 (step 106); *see also id.* at 10:64–65 (stating that, when downloading the “Activity Client,” “the cell phone connects through the cellular network and Internet to a game server”).

Therefore, contrary to Win View’s arguments, the specification of the ’543 patent contemplates that the mobile computing device connects to the Internet via a cellular network—it does not require an actual or direct connection to the Internet. The method steps of independent claims 1 and 49 reflect this broad scope because, as we explain above, they do not require an actual or direct transmission of data over the web or Internet. Given the broad scope of the specification and the plain language of independent claims 1 and 49, we agree with FanDuel that Vänskä properly accounts for the claimed “mobile web-connected computing device” and “mobile

Internet-connected computing device” because it discloses that mobile terminal 100 connects to the Internet via the mobile WAN 130 using GPRS.

We also do not agree with WinView’s argument that, because Vänskä does not disclose any of the browsers, servers, or protocols necessary for web or Internet connectivity, it cannot disclose the claimed “mobile web-connected computing device” and “mobile Internet-connected computing device.” *See* PO Resp. 20–22, PO Sur-reply 7. WinView fails to recognize that, apart from a single instance in the specification that is labeled as an “example,” the ’543 patent also fails to disclose any browsers, servers, or protocols necessary for web or Internet connectivity. *See* Ex. 1001, 6:48 (“An example protocol implemented is TCP.”). Put simply, WinView seeks a level of detailed description in Vänskä that is not otherwise provided in the ’543 patent. We decline to impose such a heightened standard on Vänskä, especially when neither the specification nor the claims of the ’543 patent sufficiently describe the purported invention as requiring the use of browsers, servers, or protocols necessary for an actual or direct web or Internet connectivity.

b. “loading a set of service related information located on a server related to a geographic location of the mobile web-connected computing device to an activity client”

In its Patent Owner Response, WinView contends that the claimed “set of service related information . . . related to a geographic location of the mobile web-connected computing device” cannot be Vänskä’s disposable mini-application that is specific to a location, but instead must be data related to that location. PO Resp. 22 (citing Ex. 2001 ¶ 66). As support for its argument, WinView asserts that step 110 of Figure 1 of the ’543 patent

describes loading information into the Activity Client (i.e., a native application) executing on the mobile computing device, but this only occurs after downloading the Activity Client to the mobile computing device at step 104. *Id.* at 22–23 (citing Ex. 1001, 8:2–5, 8:14–20, Fig. 1 (steps 104, 110); Ex. 2001 ¶ 67); *see also id.* at 25–26 (arguing the same (citing Ex. 1001, 8:14–20; Ex. 2001 ¶¶ 67, 74)). According to WinView, this process illustrated in Figure 1 confirms that the claimed “service related information” is data and not the application itself. *Id.* at 23, 25. In addition, WinView contends that embedded data within an application does not constitute the claimed “service related information” because it is static data and not live or current event data that constantly changes based on location. *Id.* at 23–25 (citing Ex. 1001, 8:14–20; Ex. 2001 ¶¶ 67, 68, 72; Ex. 2003, 40:9–15, 40:17–41:1).

In its Reply, FanDuel contends that the claimed “service related information” would have been understood by a person of ordinary skill in the art as “*any* information related to service.” Pet. Reply 17 (citing Ex. 1017 ¶ 33). According to FanDuel, WinView’s declarant, Dr. Shenoy, confirms this understanding of the claimed “service related information.” *Id.* at 17–18 (citing Ex. 1015, 82:2–8, 82:12–13). FanDuel argues that WinView attempts to limit the “service related information” to just live or current data that cannot be embedded in an application. *Id.* at 18 (citing PO Resp. 22–23, Ex. 2001 ¶ 68). FanDuel, however, argues that none of these requirements are part of the challenged claims. *Id.* (citing Ex. 1001, 12:19–43; Ex. 1017 ¶ 34; Ex. 1015, 81:8–20). FanDuel argues that Dr. Shenoy conceded as much during his deposition. *Id.* at 18–19 (citing Ex. 1015, 82:14–21). FanDuel also argues that the claimed “service related

information” cannot be limited to live or current data because dependent claim 20 of the ’543 patent specifies that “the set of service related information comprises or is related to: . . . a taped event,” which is neither live nor current. *Id.* at 19 (citing Ex. 1001, 13:39–58) (alteration in original).

FanDuel further contends that, notwithstanding WinView’s attempt to import additional requirements that are not part of the challenged claims, Vänskä describes the claimed “service related information” because it discloses loading a disposable mini-application “***and all associated data*** to the mobile terminal [100].” Pet. Reply 19 (citing Ex. 1005, 1:35–40, 2:32–35, 8:29–30; Ex. 1003 ¶¶ 83, 85). As one example, FanDuel asserts that Vänskä describes “shopping mall mini-application 106a” that retrieves data (e.g., user ID 612, shoe size 614, price limit 616, brand name, etc.) that is loaded with this mini-application to formulate an inquiry sent to a shop. *Id.* at 19–20 (quoting Ex. 1005, 13:14–18) (citing Ex. 1005, 13:18–22, 13:25–33).

As an initial matter, there is no dispute between the parties that the claimed “service related information” would have been understood by a person of ordinary skill in the art as “*any* information related to services.” Pet. Reply 17. Indeed, WinView’s declarant, Dr. Shenoy, confirms our understanding in this regard because he was asked during his deposition whether “service related information is basically any information related to services; correct?” Ex. 1015, 82:9–11. His response was “[s]ervice related information is any information related to services, yes.” *Id.* at 82:12–13.

With this understanding of the claimed “service related information” in mind, we agree with FanDuel that Vänskä describes this disputed

limitation because it discloses loading a disposable mini-application and associated data to mobile terminal 100. Pet. 17–20, 49–52; Pet. Reply 17–22. Vänskä discloses that, “[b]efore a disposable mini-application may be used, it must first be downloaded to mobile terminal 100.” Ex. 1005, 8:29–30. As one example, Vänskä discloses downloading “disposable shopping mall mini-application [106a] . . . together with *keywords* (not shown) *associated with the service and/or goods offered by each shop.*” *Id.* at 12:11–23 (emphases added). When the disposable shopping mini-application 106a begins executing on mobile terminal 100, Vänskä discloses retrieving data (e.g., user ID 612, shoe size 614, price limit 616, brand name, etc.) from user storage 108a for inclusion into an inquiry. *Id.* at 13:14–22. This data is then used to formulate an inquiry that is transmitted from mobile terminal 100 to an appropriate shop (e.g., “Susan’s Shoes’ shop”). *Id.* at 13:23–29. Based on these cited disclosures, we find that, by downloading disposable shopping mini-application 106a together with any keywords associated with a service and/or goods onto mobile terminal 100, Vänskä describes the loading of “service related information” because the data loaded with or to disposable shopping mini-application 106a is information related to a shoe service (i.e., user ID 612, shoe size 614, price limit 616, brand name, etc.).

We do not agree with WinView’s argument that embedded data within Vänskä’s disposable mini-applications does not constitute the claimed “service related information” because it is static data and not live or current event data that constantly changes based on location. *See* PO Resp. 23–25. WinView’s argument in this regard is based on limiting the claimed “service related information” to live or current event data. We decline to

adopt this overly narrow view because neither the challenged claims, nor the specification of the '543 patent, support limiting this disputed limitation in this way. Indeed, dependent claim 20 of the '543 patent, which depends from independent claim 1, recites that “the set of service-related information comprises or is related to,” among other things, “a taped event.” Ex. 1001, 13:39–58. As FanDuel correctly argues in its Reply, “a taped event” is neither live nor current. *See* Pet. Reply 19.

c. “selecting an option”

In its Patent Owner Response, WinView does not agree with FanDuel that Vänskä describes the claimed “selecting an option” because it discloses selecting one or more disposable mini-applications to download and use. PO Resp. 29. Instead, WinView contends that this disputed limitation requires selecting an event or activity that has been previously downloaded as part of the service related information. *Id.* According to WinView, a person of ordinary skill in the art reading the claim term “option” together with “selecting an option” in the context of the specification of the '543 patent would have understood that the option is an event or activity selected from within a previously downloaded set of events or activities. *Id.* at 30 (citing Ex. 2001 ¶¶ 75, 76). As support for this argument, WinView directs us to the flowchart illustrated in Figure 1 of the '543 patent and, in particular, how the selection of an event to play in step 112 is an event or activity from the set of previously downloaded events and activities in step 110. *Id.* (citing Ex. 1001, 8:14–20, 8:24–27, Fig. 1 (steps 110, 112)). WinView also argues that steps 116 and 118 of Figure 1 of the '543 patent confirm this understanding because, in step 116, an activity interpreter resident on the Activity Client starts the activity and, in step 118, the activity

interpreter executes the activity in real-time, synchronized with the television programming or live event. *Id.* at 30–31 (Ex. 1001, Fig. 1 (steps 116, 118)); Ex. 2001 ¶ 78). Based on the aforementioned steps in Figure 1 of the ’543 patent, WinView asserts that the selected event cannot be an application selected for download and use. *Id.* at 31.

In its Reply, FanDuel contends that WinView’s argument that the claimed “selecting an event” requires selecting an event or activity that has been previously downloaded as part of the service related information amounts to importing additional limitations from the specification of the ’543 patent into independent claims 1 and 49. Pet. Reply 22. FanDuel argues that nowhere in independent claims 1 and 49, nor in the specification of the ’543 patent, does it suggest that the claimed “option” “cannot be an *additional* disposable mini-application that is presented to the user, that it *must* be an event or activity, or that the event or activity must be one that was previously downloaded.” *Id.* at 23 (citing Ex. 1017 ¶ 44). Instead, FanDuel asserts that a person of ordinary skill in the art would have understood that the claimed “selecting an option” is broad enough to encompass Vänskä’s disclosure of selecting one or more disposable mini-applications to download and use. *Id.* (citing Ex. 1005, 11:43–46; Ex. 1017 ¶ 45).

In its Sur-reply, WinView reiterates that Vänskä’s disclosure of selecting one or more disposable mini-applications to download and use does not describe the claimed “selecting an option” because the selection of another mini-application to download and use cannot be the selection of an option. PO Sur-reply 14. Once again, WinView relies on the flowchart illustrated in Figure 1 of the ’543 patent and, in particular, steps 110, 112,

114, and 116 to argue that the claimed “selecting an option” requires selecting an event or activity to be used by an application previously downloaded—not by a new application. *Id.* at 15–16 (citing Ex. 1001, 8:14–20, 8:24–31, Fig. 1 (steps 110, 112, 114, 116)). WinView asserts that, contrary to FanDuel’s argument, it is not importing limitations from the specification of the ’543 patent into independent claims 1 and 49 because, according to WinView, its interpretation of the claimed “selecting an option” is “derived from matching the very terms in the claim elements to the steps in Figure 1.” *Id.* at 16.

As an initial matter, we agree with FanDuel that the claimed “selecting an option” is broad enough to encompass the selection of one or more disposable mini-applications. *See* Pet. Reply 22–23. We find nothing in independent claims 1 and 49, nor in the specification of the ’543 patent, indicating this disputed limitation should be limited in any way. WinView relies on steps 110–118 found in the flowchart illustrated in Figure 1 of the ’543 patent to limit the claimed “selecting an option” to selecting an event or activity to be used by an application previously downloaded. The ’543 patent, however, describes Figure 1 as being “a flowchart of an embodiment of utilizing an ‘Activity Client’ to ensure a cell phone or other computer device is properly configured.” Ex. 1001, 4:65–67, 7:60–62. WinView does not direct us, nor can we find, specific language in independent claims 1 and 49 that would suggest these challenged claims should be limited to the embodiment illustrated in Figure 1.

With this in mind, we agree with FanDuel that Vänskä’s disclosure of selecting one or more disposable mini-applications to download and use describes the claimed “selecting an option.” *See* Pet. 35–38, 61–65; Pet.

Reply 22–23. Vänskä discloses that housekeeping means 206, which FanDuel argues constitutes the claimed “activity client,” “advise[s] the user of the other disposable mini-applications that are available and permit[s] the user to select one or more of them for downloading and use.” Ex. 1005, 11:43–46; *see also* Pet. 22 (arguing that housekeeping means 206 constitutes the claimed “activity client”). Once the user selects one or more mini-applications for download via mobile WAN 130 using GPRS, these mini-applications begin executing by performing a variety of functions, including generating outputs to and receiving inputs from mobile terminal 100. Ex. 1005, 3:42–47, 6:6–10, 10:8–12. Based on these cited disclosures, we find that, because Vänskä’s housekeeping means 206 permits the user to select one or more mini-applications for download and use on his/her mobile terminal 100, it performs the claimed function of “selecting an option.”

We do not agree with WinView’s arguments that the claimed “selecting an option” should be limited to selecting an event or activity to be used by an application previously downloaded. *See* PO Resp. 29–31; PO Sur-reply 14–16. As WinView admits in its Sur-reply, its interpretation of this disputed claim limitation is based on steps 110–118 found in the flowchart illustrated in Figure 1 of the ’543 patent. *See* PO Sur-reply 16 (“[WinView’s] interpretation is derived from matching the very terms in the claim elements to the steps in Figure 1.”). As FanDuel correctly argues, this is a classic example of importing limitations from the specification of the ’543 patent into independent claims 1 and 49. *See* Pet. Reply 22–23. We decline to limit the claimed “selecting an option” to these specific steps illustrated in Figure 1 of the ’543 patent for the following reasons: (1) as we explain above, Figure 1 is an exemplary embodiment; and (2) there is no

clear indication in the intrinsic record that the independent claims 1 and 49 were meant to be so limiting. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”).

d. Summary

In summary, FanDuel has demonstrated by a preponderance of the evidence that the subject matter of independent claims 1 and 49 is anticipated by Vänskä.

5. Claims 9, 15, 16, 23, 27, 31–33, 41, and 43

FanDuel also contends that dependent claims 9, 15, 16, 23, 27, 31–33, 41 and 43 of the ’543 patent are unpatentable under § 102(e) as anticipated by Vänskä. Pet. 40–46. FanDuel contends that Vänskä describes the subject matter of each challenged claim. *Id.*

Claim 9 directly depends from independent claim 1 and further recites “identifying a user status including identifying a current geographic location of the mobile web-connected computing device.” Ex. 1001, 12:65–67. FanDuel contends that Vänskä describes this additional limitation because it states “a disposable mini-application is preferably also associated with one or more conditions (such *as the physical location of the mobile terminal* [100]) for one or more of its downloading, activation and deactivation.” Pet. 40 (emphasis added) (quoting Ex. 1005, 3:35–41). In addition, FanDuel argues that Vänskä discloses continuously determining the physical location of mobile terminal 100 within a premises. *Id.* (citing Ex. 1005, 4:52–61, 5:21–30, 5:62–65). FanDuel, therefore, argues that Vänskä’s disclosure of identifying the user status, including identifying the current geographic

location of mobile terminal 100, describes this additional limitation. *Id.* (citing Ex. 1003 ¶¶ 128, 129).

Claim 15 directly depends from independent claim 1 and further recites “wherein the mobile web-connected computing device is a wireless device.” Ex. 1001, 13:21–22. FanDuel contends that Vänskä describes this additional limitation because it states that mobile terminal 100 “may be a hand-held wireless telephone, a mobile handset terminal, a personal digital assistant (‘PDA’), a portable computer or the like [that] includes storage 106 for one or more disposable mini-applications downloaded from a service provider 150, preferably over a wireless connection.” Pet. 40 (quoting Ex. 1005, 3:26–31) (alteration in original). FanDuel, therefore, argues that Vänskä’s mobile terminal 100 that communicates with service provide 150 over a wireless connection amounts to the claimed “wireless device.” *Id.* (citing Ex. 1003 ¶ 131).

Claim 16 directly depends from independent claim 1 and further recites “wherein the mobile web-connected computing device includes: a set-top box, a personal computer, a gaming console, a laptop computer, a cell phone, a PDA or a combination device.” Ex. 1001, 13:23–26. FanDuel contends that Vänskä describes this additional limitation because, once again, it states that mobile terminal 100 “may be a hand-held *wireless telephone*, a mobile handset terminal, *a personal digital assistant (‘PDA’)*, *a portable computer* or the like [that] includes storage 106 for one or more disposable mini-applications downloaded from a service provider 150, preferably over a wireless connection.” Pet. 40–41 (emphases added) (quoting Ex. 1005, 3:26–31) (alteration in original). FanDuel, therefore, argues that, because Vänskä’s mobile terminal 100 may be a wireless

telephone, a PDA, or a portable computer, it discloses the claimed “personal computer, . . . a laptop computer, a cell phone, a PDA or a combination device.” *Id.* at 41 (citing Ex. 1003 ¶ 133).

Claim 23 directly depends from independent claim 1 and further recites “wherein the user enters credit card information to be eligible to utilize the service.” Ex. 1001, 14:2–4. FanDuel contends that Vänskä describes this additional limitation because it states that the “triggering parameters” required to activate and use disposable mini-applications “may be based upon personal user data such as . . . credit/debit card information and the like.” Pet. 41 (emphasis omitted) (quoting Ex. 1005, 4:11–18) (citing Ex. 1005, 3:65–4:2). In addition, FanDuel argues that Vänskä discloses that the disposable mini-applications may require that “the recipient be a registered user of the service provider 150” and “housekeeping means 206 may enforce these restrictions by soliciting user compliance through a graphical user interface.” *Id.* (quoting Ex. 1005, 9:8–15; Ex. 1003 ¶ 135). FanDuel asserts that, because the triggering conditions to use Vänskä’s disposable mini-applications may require the user to enter “credit/debit card information,” and such registration requirements are enforced by housekeeping means 206, Vänskä describes this additional limitation. *Id.* (citing Ex. 1003 ¶ 136).

Claim 27 directly depends from dependent claim 9 and further recites “wherein identifying the user status includes identifying a residence or domicile of the user.” Ex. 1001, 14:14–16. FanDuel contends that Vänskä describes this additional limitation because, once again, it states that the “triggering parameters” required to activate and use disposable mini-applications “may be based upon personal user data such as . . . a user’s

name, **address**, phone number(s), gender, age, employer, hobbies, car model, car registration number, preferences (e.g. a preferred genre of books), loyalty card memberships, credit/debit card information and the like.” Pet. 43 (alteration in original) (quoting Ex. 1005, 4:11–18). FanDuel, therefore, asserts that Vänskä’s disclosure of identifying the user status, including identifying the residence or domicile (i.e., address) of the user, describes this additional limitation. *Id.* (citing Ex. 1003 ¶ 143).

Claim 31 directly depends from independent claim 1 and further recites “wherein the set of service related information is related to an event.” Ex. 1001, 14:24–25. FanDuel contends that Vänskä describes this additional limitation because it states that its system is applicable to the following:

service consumption situations . . . such as dining in a restaurant, staying at a hotel, watching a movie or play at a theater, **attending a sporting event**, listening to a concert, etc. Common to all these situations is that ***the user of mobile terminal 100 is at a physical location to which a disposable mini-application may relate.***

Pet. 44 (alteration in original) (quoting Ex. 1005, 7:63–8:4). FanDuel argues that, because Vänskä’s disposable mini-applications may be related to a sporting event, it describes the claimed “an event.” *Id.* (citing Ex. 1003 ¶ 145).

Claim 32 directly depends from dependent claim 31 and further recites “wherein the event comprises a live event.” Ex. 1001, 14:26–27. Relying on the same disclosure in Vänskä reproduced above with respect to dependent claim 31, FanDuel contends that, because Vänskä’s system is related to mobile terminal 100 being at a location (e.g., a sporting event), Vänskä describes that the event may comprise the claimed “live event.” Pet. 44 (citing Ex. 1005, 7:63–8:4; Ex. 1003 ¶ 147).

Claim 33 directly depends from dependent claim 32 and further recites “wherein the live event is viewed in person by the user physically attending a location corresponding to the event.” Ex. 1001, 14:28–30. Relying on the same disclosure in Vänskä reproduced above with respect to dependent claim 31, FanDuel contends that, because Vänskä’s system is related to mobile terminal 100 being at the physical location of the live event (e.g., a sporting event), Vänskä describes that the claimed live event “is viewed in person by the user physically attending a location corresponding to the event.” Pet. 45 (citing Ex. 1005, 7:63–8:4; Ex. 1003 ¶ 149).

Claim 41 directly depends from independent claim 1 and further recites “wherein the service comprises a location-based service.” Ex. 1001, 14:52–53. FanDuel contends that Vänskä describes this additional limitation because it discloses that disposable mini-applications may be presented and selected corresponding to a location-dependent service (i.e., location-based “service consumption situations that are a form of shopping such as dining in a restaurant, staying in a hotel, watching a movie or play in a theater, attending a sporting event, listening to a concert, etc.”). Pet. 46 (quoting Ex. 1005, 7:63–8:1). FanDuel also argues that Vänskä emphasizes that the services offered may vary, but “[c]ommon to all these situations is that the user of the mobile terminal 100 is at a physical location to which a disposable mini-application may relate.” *Id.* (quoting Ex. 1005, 8:1–4) (alteration in original). FanDuel, therefore, asserts that Vänskä’s mini-applications comprise the claimed “location-based service.” *Id.* (citing Ex. 1003 ¶ 153).

Claim 43 directly depends from independent claim 1 and further recites “wherein the service requires a payment to utilize.” Ex. 1001, 14:56–

57. FanDuel contends that Vänskä describes this additional limitation because it states that the “restrictions on downloading or subsequent use” of services (i.e., disposable mini-applications) may be “that the recipient pay a fee for the download.” Pet. 46 (quoting Ex. 1005, 9:6–14) (emphasis omitted). FanDuel, therefore, asserts that Vänskä contemplates submitting a payment to use a service. *Id.* (citing Ex. 1003 ¶ 155).

During trial, WinView does not address separately FanDuel’s arguments and supporting evidence as to how Vänskä describes the additional limitations of dependent claims 9, 15, 16, 23, 27, 31–33, 41, and 43. *See* PO Resp. 13–32; PO Sur-reply 3–16. We have reviewed FanDuel’s arguments and supporting evidence as to how Vänskä describes the additional limitations of these dependent claims, and we agree with and adopt FanDuel’s analysis. *See* Pet. 40–46. Accordingly, FanDuel has demonstrated by a preponderance of the evidence that the subject matter of dependent claims 9, 15, 16, 23, 27, 31–33, 41, and 43 are anticipated by Vänskä.

C. Obviousness Over Vänskä

FanDuel also contends that claims 1, 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, 43 and 49 of the ’543 patent are unpatentable under § 103(a) as obvious over the teachings of Vänskä. Pet. 13–67. FanDuel contends that the teachings of Vänskä account for the subject matter of these challenged claims, and provides reasoning as to why a person of ordinary skill in the art would have been prompted to modify the teachings of this reference. *Id.* During trial, with one exception, WinView relies on essentially the same arguments it presents above in response to the anticipation ground based on Vänskä to rebut FanDuel’s arguments and evidence explaining how

independent claims 1 and 49 would have been obvious over Vänškä.

PO Resp. 13–32; PO Sur-reply 3–16.

Based on the fully developed trial record, we determine that FanDuel has shown by a preponderance of the evidence that claims 1, 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the '543 patent would have been obvious over Vänškä. We begin our analysis with the principles of law that generally apply to an obviousness ground, and then we address the parties' contentions with respect to independent claims 1 and 49.

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, such as commercial success, long-felt but unsolved needs, failure of others, etc.).⁴ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze the asserted grounds based on obviousness with the principles identified above in mind.

⁴ During trial, WinView does not present arguments or evidence of secondary considerations. See PO Resp.

2. Claims 1 and 49

For the most part, FanDuel’s arguments and evidence explaining how Vänskä anticipates independent claims 1 and 49 equally apply to its explanation as to how Vänskä renders these same two independent claims obvious. Pet. 14–38, 46–66. We address FanDuel’s specific obviousness arguments in turn.

Beginning with independent claim 1, FanDuel contends that, to the extent that Vänskä’s downloading of disposable mini-applications to support consumer services (e.g., shopping) does not describe “loading a set of service related information . . . to an activity client,” this limitation would have been obvious to a person of ordinary skill in the art based on the full disclosure in Vänskä, together with the general background knowledge in the art. Pet. 20 (citing Ex. 1003 ¶ 87). As it identifies above with respect in independent claim 1, FanDuel argues that Vänskä discloses, as one example, that disposable mini-applications provide purchasing assistance related to shopping services. *Id.* According to FanDuel, a person of ordinary skill in the art would have understood from this disclosure in Vänskä, together with the background knowledge in the art, that Vänskä housekeeping means 206 of mobile terminal 100 also downloads any information for the services along with the disposable mini-application. *Id.*

FanDuel contends that Vänskä-II serves as evidence of the general background knowledge in the art. Pet. 21 (citing Ex. 1003 ¶ 88). FanDuel argues that Vänskä-II teaches that the downloading of the disposable mini-applications also includes the downloading of any associated data that would be used by the disposable mini-applications. *Id.* (citing Ex. 1007 ¶¶ 24, 25, 40, 42). As evidence of the general background knowledge in the art,

FanDuel then asserts that Vänskä-II confirms that Vänskä's downloading of disposable mini-applications, especially the one relating to shopping, includes downloading "any and all service related information used by the mini-applications in the form of data files and maps." *Id.* (citing Ex. 1003 ¶ 88).

FanDuel further contends that a person of ordinary skill in the art would have appreciated that Vänskä-II is "very relevant" to the implementation of Vänskä's system for the following reasons: (1) Vänskä-II was filed seven days after Vänskä; (2) Vänskä-II includes all three of the named inventors as Vänskä; (3) Vänskä-II relates to the management of the same consumer service applications as those disclosed in Vänskä; and (4) Vänskä-II refers back to Vänskä by incorporating its disclosure by reference. Pet. 21–22 (citing Ex. 1007, code (57), ¶ 23, Fig. 1). FanDuel, therefore, argues that a person of ordinary skill in the art would have looked to Vänskä-II for an in-depth understanding of Vänskä's system. *Id.* at 22 (citing Ex. 1003 ¶ 89). FanDuel then asserts that, based on Vänskä's disclosure, together with the general background knowledge in the art as evidenced by Vänskä-II, Vänskä teaches "loading a set of service related information . . . to an activity client," as recited in independent claim 1. *Id.* (citing Ex. 1003 ¶ 90).

Turning to independent claim 49, FanDuel contends that, to the extent that Vänskä's downloading of disposable mini-applications to support consumer services (e.g., shopping) does not describe "transmitting a set of service related information . . . to an application," this limitation would have been obvious to a person of ordinary skill in the art based on the full disclosure in Vänskä, together with the general background knowledge in

the art. Pet. 52 (citing Ex. 1003 ¶ 170). FanDuel then proceeds to rely on essentially the same arguments and evidence we identify above with respect to “loading a set of service related information . . . to an activity client,” as recited in independent claim 1, to explain how Vänškä, together with the general background knowledge in the art as evidenced by Vänškä-II, teaches “transmitting a set of service related information . . . to an application,” as recited in independent claim 49. *Compare id.* at 52–53, *with id.* at 20–22.

Notwithstanding WinView’s arguments to the contrary, FanDuel has shown by a preponderance of the evidence that Vänškä, together with the background knowledge in the art, teaches all the limitations of independent claims 1 and 49. During trial, with one exception that we address below, WinView relies on essentially the same arguments it presents above in response to the anticipation ground based on Vänškä to rebut FanDuel’s arguments and evidence explaining how independent claims 1 and 49 would have been obvious over Vänškä. PO Resp. 13–32; PO Sur-reply 3–16. For the same reasons we identify above in our analysis of independent claims 1 and 49, we do not agree with WinView’s arguments. *See supra* Section II.B.4.a–c.

a. Vänškä, together with the background knowledge in the art, teaches the claimed “service related information”

WinView contends that it would not have been obvious to a person ordinary skill in the art that Vänškä, together with the general background knowledge in the art, teaches the claimed “service related information.” PO Resp. 26. More specifically, WinView argues there would be no reasonable expectation of success in making this proposed combination because “the [claimed] service-related information is much more complex

live data that cannot be embedded.” *Id.* at 27. WinView asserts that the claimed “service related information” “is the current schedule of all available events, by name of event, [television] network and channel offered, duration of event, and nature of the prize.” *Id.* at 27–28 (quoting Ex. 1001, 8:14–20) (emphasis omitted). According to WinView, these types of live or current event data are “substantively different” from Vänskä’s disclosure of static data embedded in an application. *Id.* at 28 (citing Ex. 2001 ¶¶ 70, 71; Pet. 21; Ex. 2003, 40:17–41:1).

Based on the fully developed trial record, we do not agree with WinView’s argument because, once again, is based on limiting the claimed “service related information” to live or current event data. For the same reasons we identify in our analysis of independent claims 1 and 49 above, we decline to adopt this overly narrow view because neither the challenged claims, nor the specification of the ’543 patent, support limiting this disputed limitation in this way. *See supra* Section II.B.4.b. Indeed, as we explain previously, dependent claim 20 of the ’543 patent, which depends from independent claim 1, recites that “the set of service-related information comprises or is related to,” among other things, “a taped event.” Ex. 1001, 13:39–58. As FanDuel correctly argues in its Reply, “a taped event” is neither live nor current. *See* Pet. Reply 19.

b. Summary

In summary, FanDuel has demonstrated by a preponderance of the evidence that the subject matter of independent claims 1 and 49 would have been obvious over Vänskä.

3. *Claims 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, and 43*

FanDuel also contends that dependent claims 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41 and 43 of the ’543 patent are unpatentable under § 103(a) as obvious over Vänškä. Pet. 38–46. FanDuel contends that the teachings of Vänškä account for the subject matter of these challenged claims, and provides reasoning as to why a person of ordinary skill in the art would have been prompted to modify the teachings of this reference. *Id.*

At the outset, we note that FanDuel relies on the same arguments and evidence explaining how Vänškä describes all the limitations of dependent claims 9, 15, 16, 23, 27, 31–33, 41, and 43 to support its position that Vänškä also renders the additional limitations of these dependent claims obvious. *See* Pet. 40–46; *see also In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002) (“It is well settled that ‘anticipation is the epitome of obviousness.’”). Consequently, we need not repeat FanDuel’s analysis of dependent claims 9, 15, 16, 23, 27, 31–33, 41, and 43 under this asserted obviousness ground.

Claim 2 directly depends from independent claim 1 and further recites “downloading the activity client to the mobile device; and selecting and registering with a service provider.” Ex. 1001, 12:43–45. FanDuel contends that Vänškä teaches “downloading the activity client to the mobile device” because it states that “housekeeping means [i.e., activity client] may itself . . . be a disposable mini-application” and “a user of *mobile terminal 100 may download a housekeeping mini-application* that is ‘proprietary’ to that store and which controls the downloading, activation, deactivation and deletion of other disposable mini-applications that are available only in that store.” Pet. 38–39 (alterations in original) (quoting Ex. 1005, 11:26–36).

Based on this disclosure, FanDuel argues that Vänskä teaches downloading housekeeping means 206 that controls other mini-applications (i.e., a set of service related information) from service provider 150 to mobile terminal 100. *Id.* at 39 (citing Ex. 1003 ¶ 124). FanDuel further contends that Vänskä teaches “selecting and registering with a service provider” because it states that the disposable mini-applications may require that “the recipient be ***registered user of the service provider*** 150,” and the system “enforce[s] these restrictions by soliciting user compliance through a graphical user interface.” *Id.* (emphasis added) (quoting Ex. 1005, 9:8–15). Based on this disclosure, FanDuel argues that Vänskä teaches registering the user with service provider 150. *Id.* (citing Ex. 1003 ¶ 125).

Relying on the testimony of Dr. Rubin, FanDuel contends that it would have been obvious to a person of ordinary skill in the art that Vänskä’s disclosure of registering with different service providers 150 also includes actually “selecting” the service provider with whom the user seeks registration. Pet. 39 (citing Ex. 1003 ¶ 126). According to FanDuel, in the context of the shopping service offered by Vänskä, a person of ordinary skill in the art would have recognized that the user may register for a subset of stores that may be located in a shopping mall when mobile terminal 100 enters the shopping mall. *Id.* In this example, FanDuel asserts that the user would “select” the service provider from a plurality of service providers to register with to gain the use of its mini-application(s). *Id.*

Claim 24 directly depends from dependent claim 9 and further recites “wherein identifying the user status includes identifying an age, a location and credits status of a user.” Ex. 1001, 14:5–7. FanDuel contends that the ordinary and customary meaning of the claim term “credit status,” as would

have been understood by a person of ordinary skill in the art, “is a measure of a lender’s willingness to lend money to a particular person based on their ability to repay.” Pet. 42 (citing Ex. 1003 ¶ 138). FanDuel also argues that a person of ordinary skill in the art would have recognized that Vänskä identifies the credit status of the user based on the totality of information that is collected regarding the user. *Id.*

With this in mind, FanDuel contends that Vänskä teaches the additional limitation of dependent claim 24 because it states that the “trigger parameters” required to activate and use mini-applications “may be based upon personal user data such as . . . a user’s name, address, phone number(s), gender, age, employer, . . . credit/debit card information and the like.” Pet. 42 (quoting Ex. 1005, 4:11–18) (alterations in original). Based on this cited disclosure, FanDuel argues that, because Vänskä requires the user profile to include credit/debit card information, it would have been obvious to a person of ordinary skill in the art for Vänskä to identify user status not only based on the user profile that includes the user’s age and location (i.e., address), but also on the user’s credit status (i.e., the combination of the user’s employment and credit information). *Id.* (citing Ex. 1003 ¶ 139).

Claim 26 directly depends from dependent claim 9 and further recites “wherein identifying the user status includes verifying the existence of an account with the consumer service.” Ex. 1001, 14:11–13. FanDuel contends that Vänskä teaches this additional limitation because it states that the “disposable mini-application 106 that may otherwise be available for downloading *may nevertheless include restrictions on downloading or subsequent use.*” Pet. 43 (quoting Ex. 1005, 9:6–8). FanDuel argues that

Vänskä states that “[o]ne such restriction may be that the recipient be a registered user of the service provider 150.” *Id.* (quoting Ex. 1005, 9:8–14). Based on these cited disclosure, FanDuel asserts that it would have been obvious to a person of ordinary skill in the art that, because Vänskä “ensures that the recipient is a registered user, [it] verifies the existence of an account of the user to use the consumer service.” *Id.* (citing Ex. 1003 ¶ 141).

Claim 40 directly depends from independent claim 1 and further recites “identifying a user status including verifying the existence of a valid account with a service.” Ex. 1001, 14:49–51. Relying on the same disclosures in Vänskä reproduced above with respect to dependent claim 26, FanDuel contends that it would have been obvious to a person of ordinary skill in the art that, because Vänskä “is ensuring that the recipient be a registered user, [it] discloses identifying a user status including verifying the existence of a valid account with a service.” Pet. 45 (citing Ex. 1003 ¶ 151).

During trial, WinView does not address separately FanDuel’s arguments and supporting evidence as to how Vänskä, together with the background knowledge in the art, teaches the additional limitations of dependent claims 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, and 43. *See* PO Resp. 13–32; PO Sur-reply 3–16. We have reviewed FanDuel’s arguments and supporting evidence as to how Vänskä, together with the background knowledge in the art, teaches the additional limitations of these dependent claims, and we agree with and adopt FanDuel’s analysis. *See* Pet. 38–46. Accordingly, FanDuel has demonstrated by a preponderance of the evidence that the subject matter of dependent claims 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40 41, and 43 would have been obvious over Vänskä.

D. Obviousness Over Vänskä and Barros

FanDuel also contends that claims 14, 20, and 21 of the '543 patent are unpatentable under § 103(a) as obvious over the combined teachings of Vänskä and Barros. Pet. 67–71. FanDuel contends that the combined teachings of Vänskä and Barros account for the subject matter of these challenged claims, 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.* During trial, apart from its arguments presented for independent claim 1, Win View does not address separately FanDuel's arguments and evidence presented for dependent claims 14, 20, and 21. *See* PO Resp. 32.

Based on the fully developed trial record, we determine that FanDuel has shown by a preponderance of the evidence that claims 14, 20, and 21 of the '543 patent would have been obvious over the combined teachings of Vänskä and Barros. We begin our analysis with a brief overview of Barros, and then we address FanDuel's contentions with respect to these challenged claims.

1. Overview of Barros

Barros generally relates to “[a] system and method for enabling special features of an electronic game played on a mobile device.” Ex. 1006, code (57). Barros “provides a way to attract users to a store by enhancing their interactive experience while executing applications on their wireless devices.” *Id.* ¶ 11. For example, “[b]y being at a particular location, the user's strength in the game may increase significantly, or the game's scenario may change to offer more rewards.” *Id.* ¶ 26. That is, “[i]f the mobile device 202 is inside a store 208 when the user is playing a game,

the server 116 compares the mobile device's 202 physical location with the store's 208 coordinates," and "[i]f the server 116 detects the mobile device 202 is within a predefined vicinity of the store 208, the server 116 sends a special feature enabling signal via the wireless [communication] network to the mobile device 202, and the user's game is modified accordingly." *Id.* ¶ 27, Fig. 2.

2. Claims 14, 20, and 21

Claim 14 directly depends from independent claim 1 and further recites "wherein the application is selected from the group consisting of a game of skill or chance, a survey, a poll, an interactive activity, a location-dependent service, a music service, a game service, and web browsing service." Ex. 1001, 13:16–20. FanDuel contends that the combined teachings of Vänskä and Barros account for this additional limitation because Vänskä discloses presenting and selecting disposable mini-applications corresponding to a location-dependent service. Pet. 67 (citing Ex. 1005, 7:63–8:1). FanDuel argues that Vänskä emphasizes that the services offered may vary, but "[c]ommon to all these situations is that the user of mobile terminal 100 is at a physical location to which a disposable mini-application may relate." *Id.* (quoting Ex. 1005, 8:1–4) (alteration in original). Consequently, FanDuel asserts that, when Vänskä's housekeeping means 206 makes the disposable mini-applications available to the user and permits the user to select one or more of them for downloading and use, these applications are selected from a group consisting of "a location-dependent service." *Id.* at 67–68 (citing Ex. 1003 ¶ 203).

FanDuel contends that Barros teaches some of the additional members of the claimed "group" because it discloses "providing[a] user interactive

experience according to [the] user's physical location" and, in particular, providing "a way to attract users to a store [e.g., mall or shops] by enhancing their interactive experience while executing applications on their wireless devices." Pet. 68 (quoting Ex. 1006, code (54), then quoting Ex. 1006 ¶ 11) (third alteration in original). According to FanDuel, Barros teaches interactive experiences that include applications relating to games of skill or chance, or game services. *Id.* (citing Ex. 1003 ¶ 204).

Turning to rationale to combine, FanDuel contends that a person of ordinary skill in the art would have been motivated to combine the teachings of Vänskä and Barros because the proposed system would, among other things, allow "increas[ing] revenues for game developers by providing a venue for the game developers to get advertising revenues from merchants who want to make their stores part of the gaming experience for the users." Pet. 69 (quoting Ex. 1006 ¶ 26). FanDuel also argues that the proposed system would allow merchants to increase traffic within their stores. *Id.* (Ex. 1003 ¶ 207). For example, FanDuel asserts that Barros discloses that, "[w]hen playing a game, the user notices a sport equipment store . . . that provides special features to the game," the user is more likely to "enter[] the sport equipment store." *Id.* (quoting Ex. 1006 ¶ 37) (alterations in original). FanDuel further asserts that, when Barros's server detects that the user's mobile device is within a predefined location of the sport equipment store, it would "enable[] special features listed for the sport equipment store on the mobile device." *Id.* (quoting Ex. 1006 ¶ 37). Lastly, FanDuel contends that there would be a reasonable expectation of success in combining the teachings of Vänskä and Barros because there would be "[no] need to modify any physical or software configurations of the Vänskä's system in

order to incorporate Barros’[s] additional categories of applications.” *Id.* at 69–70 (citing Ex. 1003 ¶ 208).

Claim 20 directly depends from independent claim 1 and further recites the following:

wherein a service provider providing the set of service related information comprises or is related to:
a chance-based real-time sports prediction service,
a chance-based real-time sports wagering service,
a skill-based real-time prediction service,
an entertainment game-based service,
a television-related chance/skill wagering service,
multiple athletic contests taking place in a single day,
a partial athletic contest,
a taped event,
a televised athletic contest,
a weekly event,
a week-long event,
a competitive game show,
an awards program,
multiple contests,
athletic contests, or
simultaneously played electronic, video, computer, card, dice, trivia, word, math, and puzzle games.

Ex. 1001, 13:39–58. FanDuel contends that the combined teachings of Vänskä and Barros account for this additional limitation because they disclose that the set of service related information includes one or more of the enumerated services. Pet. 70 (citing Ex. 1003 ¶ 211). For example, FanDuel argues that Vänskä discloses “service consumption situations that are a form of shopping such as dining in a restaurant, staying in a hotel, watching a movie or play at a theater, attending a sporting event, listing to a concert, etc.” *Id.* (quoting Ex. 1005, 7:63–8:1). According to FanDuel, Vänskä’s disclosure of “attending a sporting event” encompasses at least the

claimed “partial athletic contest” or “athletic contests.” *Id.* In addition, FanDuel argue that Barros discloses at least the claimed “entertainment game-based service.” *Id.* (citing Ex. 1006 ¶¶ 26, 31; Ex. 1003 ¶ 211).

Claim 21 directly depends from independent claim 1 and further recites the following:

wherein the set of service related information relates to: a television-based event, a scheduled competition, a scheduled series of competitions, a sporting event, a real-time skill and chance-based sports prediction games, an event based on a video game, a computer game, an electronic game, a cell phone game, an entertainment show, a game show, an awards show, a reality show, a show, a game, a news show or a commercial contained in a broadcast.

Ex. 1001, 13:59–67. FanDuel contends that the combined teachings of Vänskä and Barros account for this additional limitation because they disclose that the set of service related information includes one or more of the claimed services. Pet. 71 (citing Ex. 1003 ¶ 213). For example, relying on the same disclosure in Vänskä reproduced above with respect to dependent claim 20, FanDuel argues that Vänskä teaches at least the claimed “scheduled competition,” “scheduled series of competitions,” “sporting event,” “entertainment show,” “show,” and “game.” *Id.* (citing Ex. 1005, 7:63–8:1; Ex. 1003 ¶ 213). In addition, FanDuel argues that, because Barros’s system relates to gaming functionalities based on the physical location of a mobile device, Barros teaches the claimed “event based on a video game,” “computer game,” “electronic game,” and “cell phone game.” *Id.* (citing Ex. 1006 ¶¶ 26, 31; Ex. 1003 ¶ 214).

During trial, WinView does not address separately FanDuel’s arguments and supporting evidence as to how the combined teachings of

Vänskä and Barros account for the additional limitations of dependent claims 14, 20, and 21. *See* PO Resp. 32. We have reviewed FanDuel's arguments and supporting evidence as to how the combined teachings of Vänskä and Barros account for the additional limitations of these dependent claims, and we agree with and adopt FanDuel's analysis. *See* Pet. 67–71. Accordingly, FanDuel has demonstrated by a preponderance of the evidence that the subject matter of dependent claims 14, 20, and 21 would have been obvious over the combined teachings of Vänskä and Barros.

III.CONCLUSIONS⁵

Based on the fully developed record, FanDuel has demonstrated by a preponderance of the evidence that claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the '543 patent are unpatentable. A summary of our conclusions is set forth in the table below.

⁵ Should WinView wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw WinView's attention to the April 2019 Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If WinView chooses to file a reissue application or a request for reexamination of the challenged patent, we remind WinView of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 9, 15, 16, 23, 27, 31–33, 41, 43, 49	102(e)	Vänskä	1, 9, 15, 16, 23, 27, 31–33, 41, 43, 49	
1, 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, 43, 49	103(a)	Vänskä	1, 2, 9, 15, 16, 23, 24, 26, 27, 31–33, 40, 41, 43, 49	
14, 20, 21	103(a)	Vänskä, Barros	14, 20, 21	
Overall Outcome			1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, 49	

IV. ORDER

In consideration of the foregoing, it is

ORDERED that claims 1, 2, 9, 14–16, 20, 21, 23, 24, 26, 27, 31–33, 40, 41, 43, and 49 of the '543 patent have been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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