

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RIDECO INC.,
Petitioner,

v.

VIA TRANSPORTATION, INC.,
Patent Owner.

IPR2022-00286
Patent 9,816,824 B1

Before PATRICK R. SCANLON, MICHAEL L. WOODS, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

MARSCHALL, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioner, RideCo Inc., filed a Petition for *inter partes* review of claims 1–20 of U.S. Patent No. 9,816,824 B1 (Ex. 1001, “the ’824 patent”). Paper 1 (“Pet.”). Patent Owner, Via Transportation, Inc., filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply (Paper 10, “Reply”) and Patent Owner filed a Preliminary Sur-reply (Paper 11, “Sur-reply”).

Under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a), we have authority to institute an *inter partes* review if “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). After considering the Petition, the Preliminary Response, and the evidence of record, we determine the information presented shows a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one of the challenged claims of the ’824 patent. Accordingly, we institute an *inter partes* review of claims 1–20 of the ’824 patent on the grounds asserted in the Petition.

II. BACKGROUND

A. Real Parties-In-Interest and Related Matters

Petitioner identifies itself and Transit Labs Inc. as real parties-in-interest. Pet. 76. Patent Owner identifies itself as its sole real party-in-interest. Paper 4, 2.

Petitioner identifies one district court proceeding involving, or relating to, the ’824 patent: *Via Transportation, Inc. v. RideCo Inc.*, Case No. 6:21-CV-00457-ADA (WDTX) (“district court litigation”). Pet. 76.

Patent Owner does not identify any additional related proceedings. Paper 4, 2.

B. Overview of the '824 Patent

The '824 patent generally relates to “continuously updatable computer-generated routes with continuously configurable virtual bus stops for passenger ride-sharing of a fleet of ride-sharing vehicles.” Ex. 1001, 1:24–26. One aspect of the '824 patent’s technology involves a user request for a ride from a pickup location to a dropoff location, and then having the system select suitable “virtual bus stops” that correspond to said locations. *Id.* at 1:37–2:2. The '824 patent describes a virtual bus-stop as “a location . . . safe for at least one passenger pickup (i.e., the location to which passenger(s) being directed to go to be picked up by a designated vehicle (e.g., bus, van, car, etc.)) and/or at least one passenger dropoff.” *Id.* at 8:58–63.

The system can also identify suitable vehicles for completing the user’s requested route using GPS data to determine the “current vehicle location data for a plurality of ride-sharing vehicles traveling within the at least one geographic locale.” Ex. 1001, 2:5–10. The system and method outlined by the '824 patent can also include additional features and steps, such as dynamically selecting and assigning a plurality of optimal virtual bus stops and routes for vehicles that will be simultaneously servicing multiple ride-sharing requesting passengers based on various parameters. *Id.* at 2:25–61. The '824 patent further discusses dynamically updating and displaying optimal routes on the screens of electronic devices associated with passengers and vehicles. *Id.* at 2:53–3:4. As the '824 patent explains, “the term ‘dynamic(ly)’ means that events and/or actions can be triggered and/or occur without any human intervention.” *Id.* at 8:25–27.

Figure 5 of the '824 patent is reproduced below.

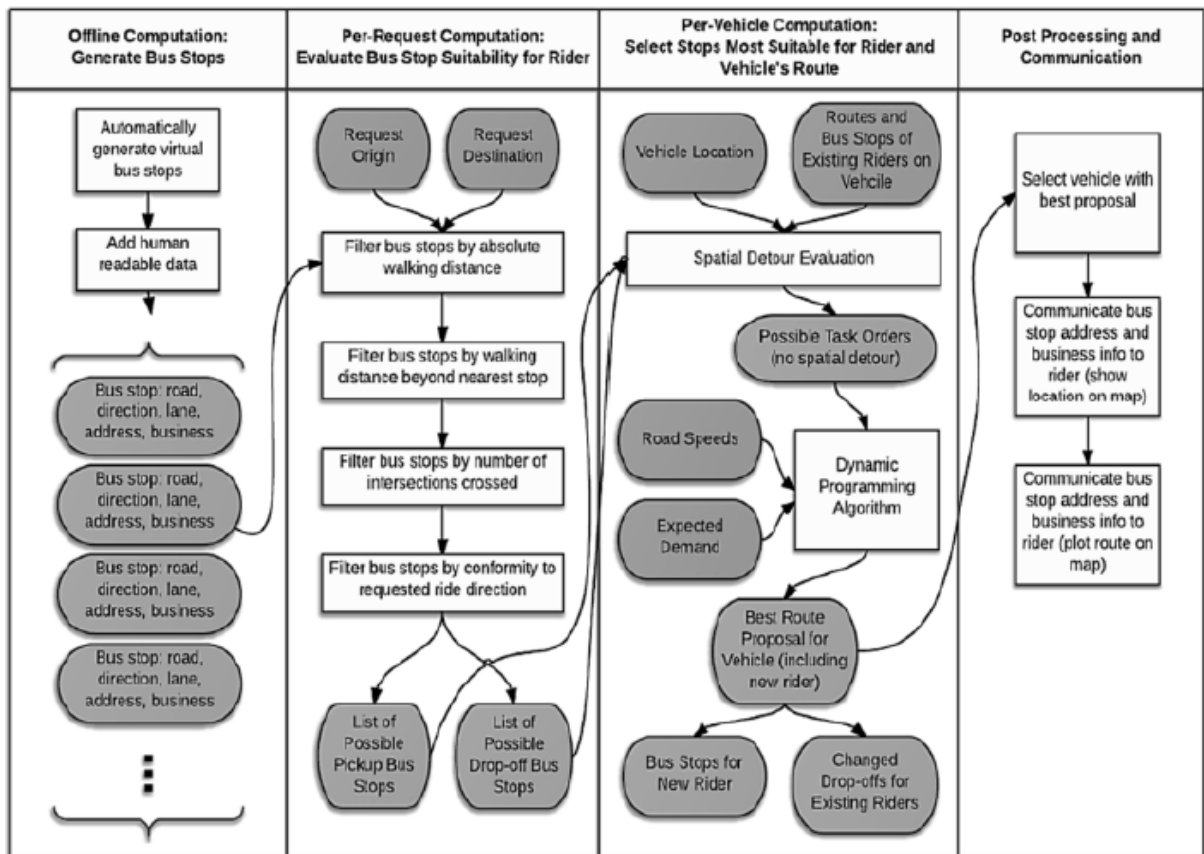


FIG. 5

Figure 5 depicts the steps the system may take in greater detail. As shown above in Figure 5 and detailed in the '824 patent, the patent teaches a multistep process by which the system will dynamically select appropriate virtual bus stops, routes, and vehicles for a plurality of rideshare-requesting passengers. For example, “the exemplary computer transportation systems of the present invention are further configured to determine which of the virtual bus-stops among the grid of virtual bus-stops are candidate[s] for boarding and/or disembarking based on at least one of” several parameters and factors. Ex. 1001, 9:13–17. The '824 patent additionally explains that the system can be “further configured to choose a single boarding virtual

bus-stop and/or single disembarking virtual bus-stop . . . , where the chosen boarding virtual bus-stop and/or disembarking bus-stop are based on at least one of” several parameters and factors. *Id.* at 9:37–45.

C. Challenged Claims

Petitioner challenges claims 1–20 of the ’824 patent. Claims 1 and 2 are independent and similar to each other in language and scope, with claim 1 directed to a system and claim 2 directed to a method. Ex. 1001, 30:45–32:11. Claims 3–14 depend directly from claim 2, and claims 15–20 depend directly from claim 1. *Id.* at 32:12–34:17. Claim 1, which is directed to the ’824 patent’s disclosed system, is illustrative and reproduced below:

1. A computer-implemented transportation system, comprising:
 - a non-transient memory, electronically storing particular computer executable program code; and
 - at least one computer processor which, when executing the particular program code, is configured to perform at least the following operations:
 - receiving a ride-sharing request from a first electronic computing device operated by a user, wherein the ride-sharing request includes origin location data identifying a user-identified origin point and destination location data identifying a user-requested destination point;
 - receiving current vehicle location data for a plurality of ride-sharing vehicles traveling within a geographic locale, wherein the current vehicle location data includes global positioning system (GPS) data generated by at least one GPS component of at least one second electronic computing device associated with each ride-sharing vehicle;
 - accessing a memory that stores locations of a plurality of virtual bus stops associated with the geographic locale, wherein each virtual bus stop corresponds to a geographic location point within the

geographic locale at which a user can be picked up or drop-off by a ride-sharing vehicle;

accessing current ride-sharing data representative of current routes of the plurality of ride-sharing vehicles and current virtual bus stops associated with a plurality of passengers who are currently riding in the plurality of ride-sharing vehicles;

determining from among the plurality of ride-sharing vehicles a particular vehicle which can pick up the user, wherein at a time of determining, the particular ride-sharing vehicle is carrying other passengers along an existing route schedule and wherein the determining the particular vehicle is based on at least a portion of the current ride-sharing data including the current virtual bus stops, the current vehicle location data, the origin location data, and the destination location data;

assigning the particular vehicle and a pair of associated virtual bus stops for picking up and dropping off the user requesting a ride, the virtual bus stop for picking up the user being at least a block away from the point of origin of the user;

updating the existing route schedule of the particular vehicle by inserting the pair of the assigned virtual pick-up bus stop and virtual drop off bus stop into the existing route schedule; and

causing to electronically display on a screen of the at least one second electronic computing device associated with the vehicle an updated route including the pair of virtual bus stops assigned to the user.

Id. at 30:45–31:31.

D. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–20 are unpatentable based on the following grounds (Pet. 6–7):

Claims Challenged	35 U.S.C. §	References
1–3, 6, 7, 12, 13, 16, 19, 20	103	Lambert, ¹ Poykko, ² McCall ³
4, 5, 8, 17, 18	103	Lambert, Poykko, McCall, Lerenc ⁴
9–11, 14, 15	103	Lambert, Poykko, McCall, Sweeney ⁵

Petitioner also relies on the Declaration of Mr. Scott Andrews. *See* Ex. 1003.

III. ANALYSIS

A. Discussion of Discretion Under 35 U.S.C. § 314(a)

Patent Owner argues that we should deny institution under § 314(a) based on the advanced stage of the related district court litigation. Prelim. Resp. 25–36; Sur-reply 4. Petitioner disagrees. *See* Pet. 70–75; Reply 4.

In Petitioner’s Reply, “Petitioner stipulates if the Board institutes the Petition on the same grounds presented, then it will not seek resolution in the district court of any ground of invalidity raised in the Petition or that could have been raised in the Petition.” Reply 4. The language of Petitioner’s stipulation tracks that used in *Sotera Wireless, Inc. v. Masimo Corp.*,

¹ US 9,679,489 B2, issued June 13, 2017 (Ex. 1004, “Lambert”).

² US 2008/0270204 A1, published Oct. 30, 2008 (Ex. 1005, “Poykko”).

³ US 2013/0096827 A1, published Apr. 18, 2013 (Ex. 1006, “McCall”).

⁴ US 2014/0324505 A1, published Oct. 30, 2014 (Ex. 1007, “Lerenc”).

⁵ US 2015/0161554 A1, published June 11, 2015 (Ex. 1008, “Sweeney”).

IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential as to § II.A).⁶

The Director recently issued a Memorandum setting forth an Interim Procedure for Discretionary Denials that addresses “*Sotera* Stipulations.” See *Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation* (USPTO June 21, 2022)⁷ (“Interim Procedure”), at 7–8. According to the Interim Procedure,

When a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition, it mitigates concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB. See *Sotera*, Paper 12 at 18–19. With such a stipulation, if an IPR or PGR is instituted, the grounds the PTAB resolves will differ from those present in the parallel district court litigation. For these reasons, the PTAB will not discretionarily deny institution of an IPR or PGR in view of parallel district court litigation where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.

Id. at 7. The Interim Procedure “applies to all proceedings pending before the Office,” and therefore governs our treatment of Petitioner’s *Sotera*

⁶ Petitioner’s stipulation refers to “any ground of invalidity raised in the Petition or that could have been raised in the Petition” while the stipulation in *Sotera* refers to “any ground raised or that could have been *reasonably* raised in an IPR,” but we view the language as similar enough to fall within the scope of *Sotera*’s analysis. Reply 4; *Sotera*, Paper 12 at 18–19. Petitioner arguably stipulates to a broader prohibition than the petitioner in *Sotera* because Petitioner’s stipulation may encompass grounds that it could not have reasonably raised in the Petition.

⁷ Available at:

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

stipulation here. *Id.* at 9. Petitioner’s stipulation tracks the language of the *Sotera* stipulation that the Interim Procedure addresses and we “will not discretionarily deny institution” when Petitioner submits such a stipulation.⁸ *Id.* at 7. Because our analysis of Petitioner’s stipulation alone requires us to not exercise our discretion to deny institution under § 314(a), we need not address the parties’ remaining arguments as to application of the *Fintiv* factors to the facts in this case.

B. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art at the time of the invention “would have been a person having (i) a Bachelor’s degree in computer science, computer engineering, electrical engineering, or a similar technical field[;] (ii) a working knowledge of computer programming and navigation systems; and (iii) two to four years of experience with location-based systems, user interfaces and databases.” Pet. 5–6 (citing Ex. 1003 ¶ 37). Patent Owner “does not dispute Petitioner’s definition.” Prelim. Resp. 23.

For purposes of this Decision, we adopt Petitioner’s assessment of the level of ordinary skill in the art as it is consistent with the ’824 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

⁸ We understand that the record reflects that Petitioner has only made the stipulation in our forum, but we expect that Petitioner will make the same stipulation in the district court litigation after this Decision issues. *See Sotera*, Paper 12 at 18–19 (noting that petitioner filed its stipulation in the district court).

C. Claim Construction

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b) (2019). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioner contends that it generally applies “the ordinary and customary meaning of the claim terms” and argues for a particular construction of a limitation in dependent claim 8. Pet. 7–8. Patent Owner disagrees with Petitioner’s proposed construction for claim 8 but contends that “it is not necessary to resolve this issue to deny institution.” Prelim. Resp. 23. Patent Owner also argues that Petitioner’s “ordinary meaning” approach to “virtual bus stops” (a term in every claim) and “real-time” (a term in claim 11) conflicts with its approach in the district court litigation, where Petitioner argued in favor of a specific construction for “virtual bus stops” and “real-time.” *Id.* at 23–25. According to Patent Owner, we should deny institution due to the inconsistency in Petitioner’s claim construction positions. *Id.* at 25. Importantly, however, Patent Owner does not take issue with Petitioner’s “ordinary meaning” approach to these limitations in this proceeding or argue for a particular construction for any limitation in the challenged claims. *See id.* at 23–25. In addition, Petitioner notes that Patent Owner successfully argued in favor of the “ordinary meaning” approach for “virtual bus stop” and “real-time” in the district court litigation. Reply 1–3; Ex. 1032, 2 (joint claim construction statement showing Patent Owner’s “ordinary meaning” proposal for “virtual bus stop” and “in real-time”); Ex.

1033, 6 (summarizing Patent Owner’s “ordinary meaning” approach for “virtual bus stop(s)” and “in real-time”); Ex. 1036, 9:19–23 (*Markman* hearing transcript indicating that district court would apply “plain and ordinary meaning” to “virtual bus stop”), 34:20–23 (applying “plain and ordinary meaning” to “in real-time”).

Under these circumstances, where the parties now agree that the ordinary meaning should apply to the claim limitations in question and the district court adopted the same approach, we see no reason to depart from applying the ordinary meaning to those same claim limitations in this proceeding. We therefore apply the plain and ordinary meaning to “virtual bus stops” and “real-time.” In addition, we decline Patent Owner’s request that we deny institution based on alleged inconsistencies between Petitioner’s “ordinary meaning” interpretation urged here versus Petitioner’s rejected proposed constructions in the district court litigation as a sufficient basis to deny institution. As to the construction of dependent claim 8, we need not reach Petitioner’s arguments to determine whether to institute *inter partes* review. See *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (stating that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Challenges to Independent Claims 1 and 2

Petitioner contends that independent claims 1 and 2 would have been obvious over Lambert, Poykko, and McCall. Pet. 8–46. Patent Owner argues that Lambert fails to disclose the “virtual bus stops” and related limitations in each of the independent claims, and that Poykko and McCall fail to remedy the deficiencies of Lambert. Prelim. Resp. 36–52. We first

provide an overview of the legal principles and prior art, and then address the parties' arguments.

1. Principles of Law

A claim is unpatentable under § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective indicia of non-obviousness.⁹ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

2. Overview of Lambert

Lambert is a United States patent that generally discloses “[a] ride sharing system [that] connects drivers who wish to share their vehicles with riders looking for a ride,” and “[m]atching an individual rider with an individual driver [to get] the rider to his destination quickly.” Ex. 1004, 1:13–16. Lambert explains that the “invention can be implemented in numerous ways, including as a process; an apparatus; a system; . . . [or] a computer program product embodied on a computer readable storage medium.” *Id.* at 1:61–64. Lambert describes a system for determining a dispatch that “comprises an input interface for receiving a request for a first

⁹ With respect to the fourth *Graham* factor, the parties at this time do not present arguments or evidence regarding objective indicia of non-obviousness. Therefore, the obviousness analysis at this stage of the proceeding is based on the first three *Graham* factors.

pickup including a first pickup location and a first destination, a driver selection system for determining a driver to dispatch to the first pickup location, and an output interface for providing a first pickup indication to the driver to go to the first pickup location.” *Id.* at 2:28–34. Lambert also discloses “ride chaining,” which Lambert describes as including the steps for a first request and “further for receiving a request for a second pickup including a second pickup location and a second destination.” *Id.* at 2:39–41.

Lambert explains a system for coordinating ride sharing. At a basic level, “[a] rider uses the rider system to request a ride, the driver dispatch server system assigns the ride to a driver, the ride request is delivered to the driver using the driver system, and the driver drives to meet the rider and gives them the ride.” *Id.* at 2:49–53. Lambert’s Figure 8A is reproduced below.

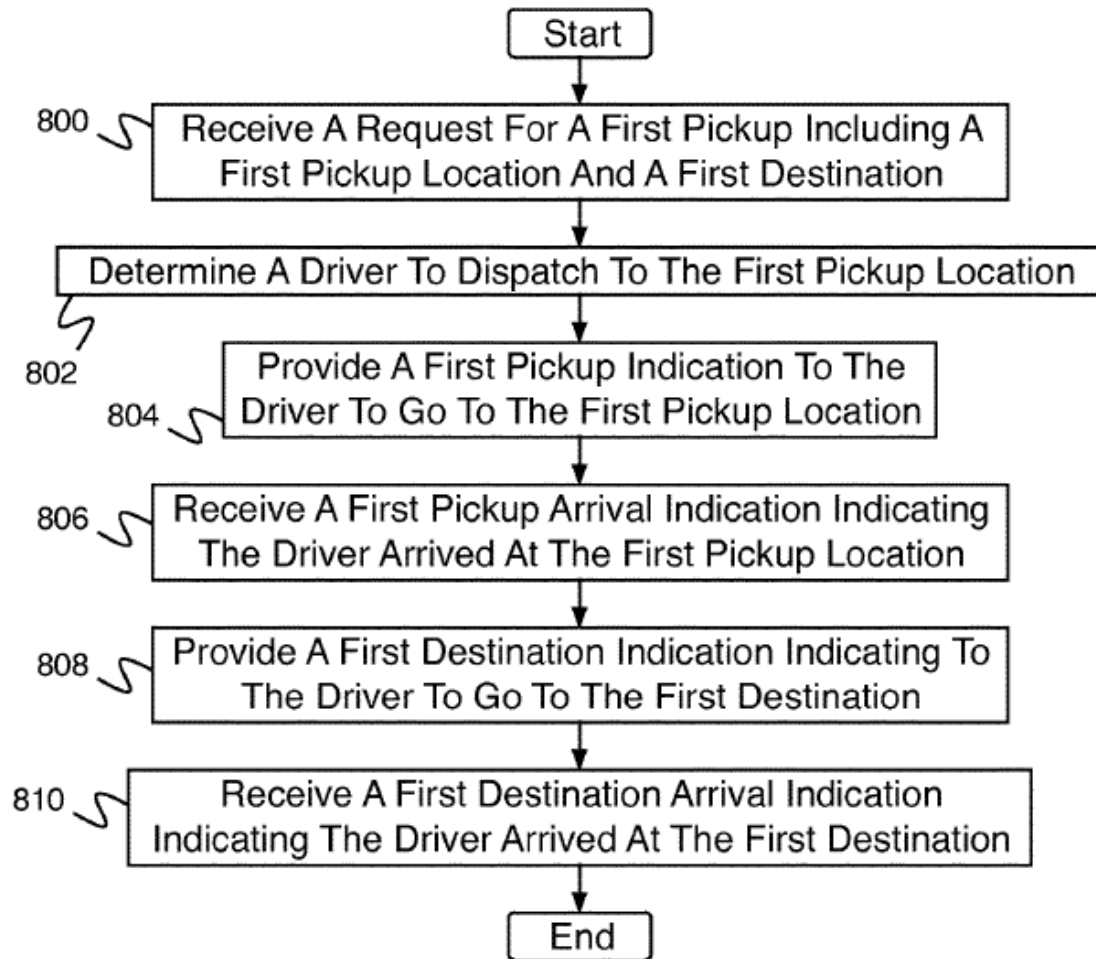


Fig. 8A

Figure 8A “is a flow diagram illustrating an embodiment of a process for a dispatch,” and explains the steps by which the system assigns drivers to particular requests from riders. *Id.* at 1:41–42. The steps include receiving a request for a first pickup from at a first pickup location, providing that location to a driver, and providing a first destination location to the driver. *Id.* at Fig. 8A.

For some embodiments, Lambert discusses having two riders sharing rides for the purpose of efficiency due to similarities in routes and request times, in which case the “request for a new ride is received by the driver

dispatch server system that can be shared with the already assigned route, the driver dispatch server system modifies the route to include the new ride, and provides the new modified route to the driver.” *Id.* at 2:53–3:1. Also, for the purpose of efficiency, Lambert discloses that, in some embodiments,

trip efficiency is increased by dynamically selecting pickup and dropoff locations (e.g., dropping off the first passenger a block away from their destination in order to avoid the driver looping around the block or making a left turn onto a busy street; selecting a pickup point at a major intersection between both riders and instructing them to walk there, etc.).

Id. at 4:17–23.

3. Overview of Poykko

Poykko is a United States patent application that generally relates to a system by which passengers can request rides between locations. Ex. 1005, code (57), ¶¶ 1, 5. Poykko teaches a method by which a rider can request a ride between pickup and dropoff locations by sending a Short Messaging System (“SMS”) or other forms of messages to a transport server. *Id.* at ¶¶ 5, 43–46. Poykko discloses a system that can include a “database 110 for storing information about passengers, vehicles, routes and usage of the demand responsive transport system.” *Id.* at ¶ 40. Poykko further teaches that the user can add additional pre-stored locations with the transport server that correspond to fixed locations, such as “HOME.” *Id.* at ¶¶ 41–42.

According to Poykko’s disclosed method, when a rider sends a transportation request, a transport server can determine a suitable vehicle for accomplishing the rider’s requested route based on current vehicle location information and the points along currently active routes. *Id.* at ¶ 52. Upon matching a vehicle with a rider, the system will automatically update the vehicle’s route itinerary and notify the rider and vehicle. *Id.*

A rider can request transportation to a dropoff location without indicating a pickup location in the message, in which case Poykko's system would then automatically request the current location data from the rider's mobile device. *Id.* at ¶¶ 48–49. Poykko's transport server would then “consult a database of possible stopping points to find the point nearest to the passenger's indicated location where a transport vehicle could stop, and announce it as the selected pick-up point to both the transport vehicle and the passenger.” *Id.* at ¶ 48. Alternatively, the “database of stopping points may include stopping points that have already been defined as points where a transport vehicle will stop anyway in the next few moments,” or “the points are defined as common locations for an organization, office names etc.” *Id.*

4. Overview of McCall

McCall is a United States patent application that generally relates to a system for processing and communicating ride sharing requests and routes. *See* Ex. 1006, code (57), ¶ 1. At a general level, McCall discloses a method by which a system can match vehicle operators with riders requesting rides, which “includes determining a route for an operator of the vehicle and accessing user preferences of the operator, the user preferences including characteristics of a ride share event and prospective ride share individuals.” *Id.* at ¶ 7. If a vehicle operator accepts a request, McCall explains that the “method includes transmitting a communication to the selected qualified candidate accepting the request.” *Id.*

McCall discusses that the vehicle operators can utilize communication devices for interacting with the system that include the vehicle's onboard system or other wireless communication devices such as a smart phone. *Id.* at ¶ 23. McCall describes the operator's communication device including

“output components of the I/O components [that] may include a display screen or monitor, or may be an audio system that presents audio messages or alerts to occupants of the vehicle.” *Id.* at ¶ 21. In certain embodiments, McCall describes how route information can be communicated to the operator’s device and displayed on the navigation screen. *See id.* at ¶ 39 (“In an embodiment, the logic 110 may be configured to update the driver’s route on the navigation screen to reflect the detour needed in order to accommodate the selected candidate.”).

5. *Discussion of Claims 1 and 2*

The parties treat independent claims 1 and 2 as containing essentially the same limitations, and we will also treat the claims together for purposes of our analysis. *See* Pet. 44–46 (addressing claim 2 by incorporating by reference relevant discussion from analysis of claim 1); Prelim. Resp. 39 n.8 (arguing that the relevant limitations of claim 2 parallel those of claim 1, and that its arguments as to claim 1 are equally applicable to claim 2). We will refer to the language of claim 1 for ease of reference. The parties also focus on the “virtual bus stop” limitations, and we will do the same in our analysis.

a. The Parties’ Positions

Petitioner contends that Lambert discloses a computer processor configured to receive a user’s ride-sharing request that includes origin and destination location data and also receive current vehicle location data for a plurality of ride-sharing vehicles within a geographic locale. Pet. 10–21. As to the “geographic locale” limitation, Petitioner argues that the limitation encompasses a geographic region such as a city or community, and that one of ordinary skill in the art would understand that Lambert’s transportation system services such a locale because distance and time constraints “naturally limit ridesharing services, such as described by Lambert.” *Id.* at

21. In the alternative, Petitioner argues that it would have been obvious to apply Lambert’s system to a geographic locale based on Poykko, which teaches a similar transportation system operating within a designated “coverage area.” *Id.* at 21–22.

As to the limitation requiring “accessing a memory that stores locations of a plurality of virtual bus stops associated with the geographic locale,” Petitioner argues that Lambert discloses “virtual bus stops” because it describes “dynamically selecting pickup and dropoff locations (e.g., dropping off the first passenger a block away from their destination in order to avoid the driver looping around the block or making a left turn onto a busy street; selecting a pickup point at a major intersection between both riders and instructing them to walk there, etc.).” Pet. 25 (quoting Ex. 1004, 4:17–23). Because Lambert discloses or renders obvious a system associated with a geographic locale, according to Petitioner, “each of Lambert’s dynamically selected pickup/dropoff locations qualifies as a virtual bus stop [that] corresponds to a geographic location point within the geographic locale at which a user can be picked up or drop[ed]-off by a ride-sharing vehicle.” *Id.* (emphasis omitted).

Petitioner next argues that although “Lambert does not specify whether the dynamically selected pickup/dropoff locations (i.e., a plurality of virtual bus stops) are stored in a memory accessed by the server,” it would have been obvious to do so because Poykko teaches such a system. *Id.* at 25–26. Petitioner contends that Poykko “teaches a shared transportation system including a transport server accessing ‘a database of possible stopping points to find the point nearest to the passenger’s indicated location where a transport vehicle could stop.’” *Id.* at 26 (quoting Ex. 1005 ¶ 48). Petitioner also relies on Poykko’s explanation that its database of stopping

points may include “stopping points that have already been defined as points where a transport vehicle will stop anyway,” “stopping points may be a list of all those points where convenient stopping of a transport vehicle is possible in any case,” or “the points are defined as common locations for an organization, office names etc.” *Id.* According to Petitioner, “[b]ased on the teachings of Poykko, it would have been obvious to a [person of ordinary skill in the art] to similarly configure Lambert’s server to access memory including a database of stopping points associated with the rideshare system’s coverage area when dynamically selecting pickup and dropoff locations.” *Id.* (citing Ex. 1003 ¶ 168). Petitioner then provides a number of reasons why one of ordinary skill in the art would have been motivated to pre-store the locations in Lambert’s database as taught by Poykko, with an expectation of success. *Id.* at 26–28 (citing Ex. 1003 ¶¶ 168–172; Ex. 1004, 4:17–23).

Patent Owner argues that claim 1 requires the use of virtual bus stops that are different than the user-identified origin and destination data to administer the claimed system and that Lambert’s dynamically selected pickup and dropoff locations do not satisfy all of the ways the virtual bus stops operate within the claimed system. Prelim. Resp. 36–40. Patent Owner contends that Lambert discloses “a conventional door-to-door ride sharing system that operates based on the rider-identified pickup and dropoff locations, not virtual bus stops provided by the ride-sharing system itself.” *Id.* at 40–42. As to Lambert’s disclosure of “dynamically selecting pickup and dropoff locations,” Patent Owner argues that Petitioner and its declarant fail to adequately explain how those locations correspond to virtual bus stops. *Id.* at 42–43 (citing Pet. 25, 30, 35, 38–39; Ex. 1003 ¶ 164; Ex. 1004, 4:17–23). According to Patent Owner, these passages merely suggest that a

driver or rider can select a different pickup or dropoff location, but Lambert's servers do not select the locations. *Id.* at 43–44 (citing Ex. 1004, 4:17–31, 4:40–41).

Patent Owner further contends that Lambert fails to disclose “accessing a memory that stores locations of a plurality of virtual bus stops.” Prelim. Resp. 44–46. Patent Owner asserts that Petitioner's reliance on Poykko does not remedy the fact that Lambert's servers themselves do not dynamically select pickup and dropoff locations and therefore “there is no reason to ‘pre-store’ stopping points in a database for use by Lambert's servers” and no reasonable expectation of success if one chose to do so. *Id.* at 45–46.

Patent Owner also argues that Lambert fails to disclose additional limitations related to “virtual bus stops,” including “accessing . . . current virtual bus stops associated with a plurality of passengers,” “determining . . . a particular vehicle . . . based on . . . current virtual bus stops,” and “assigning the particular vehicle and a pair of associated virtual bus stops” and “updating” routes based on those pairs. *Id.* at 46–50. For these limitations, Patent Owner relies on the allegedly ad hoc nature of the dynamic selection of locations in Lambert, and the lack of teaching in Lambert that those locations are used in Lambert's system in the claimed manner. *See id.*

b. Discussion

Based on our review of the current record, Petitioner establishes adequately that Lambert discloses the claimed virtual bus stops. Although the parties agree that “virtual bus stops” should be given its plain and ordinary meaning, neither party sheds much light on what the limitation encompasses. For purposes of this Decision, we determine that the

limitation excludes literal bus stops and includes stops shared by more than one rider or vehicle that can be represented virtually, in a computer medium. Other claim language makes clear that the virtual bus stops are distinct from the user-identified pickup and dropoff locations. Ex. 1001, 30:54–66 (claim 1 including user-identified origin and destination points as distinct from virtual bus stops). On this record, Petitioner shows sufficiently that Lambert discloses dynamically selected pickup and dropoff locations that are not literal bus stops and are virtual in the sense that they can be represented in a computer medium, and that the stops are distinct from the user-identified pickup and dropoff locations. See Pet. 25; Ex. 1004, 4:17–23 (describing dropoff locations “a block away” from the user’s destination and pickup location at an intersection near the user’s pickup location).

Petitioner also establishes sufficiently, based on the current record, that it would have been obvious to combine Lambert’s system with Poykko’s teaching to store a database of potential pickup and dropoff locations in memory, with those “virtual bus stops” accessed by Lambert’s server. See Pet. 25–26; Ex. 1005 ¶ 48. As Petitioner puts it, “it would have been obvious to a PHOSITA to similarly configure Lambert’s server to access memory including a database of stopping points associated with the rideshare system’s coverage area when dynamically selecting pickup and dropoff locations.” *Id.* at 26; Ex. 1003 ¶ 168. Petitioner’s assertions are adequately supported, at this stage of the proceeding, by Poykko and declarant testimony. See *id.* at 25–28 (citing Ex. 1003 ¶¶ 167–172). Similarly, Petitioner’s assertion that the combination of Lambert, Poykko, and McCall discloses the remaining limitations of claim 1 finds adequate support in the current record. See *id.* at 28–44.

Patent Owner's arguments do not undermine Petitioner's showing, based on the current record, for several reasons. First, Patent Owner does not explain adequately why Lambert fails to disclose "virtual bus stops" when reading that term in isolation. Instead, Patent Owner argues that Lambert fails to disclose the limitation by relying on the alleged absence of servers when selecting "virtual bus stops," but Patent Owner fails to explain why the ordinary meaning of "virtual bus stops," standing alone, requires servers to select the virtual bus stops. *See* Prelim. Resp. 42–43 (relying on Lambert's alleged failure to disclose servers that identify its dynamically selected locations as evidence that Lambert fails to disclose "virtual bus stops"). To the extent that Patent Owner continues to assert that Lambert fails to disclose "virtual bus stops" during trial, it should specify the ordinary meaning of that term and how Lambert's dynamically selected locations fail to disclose those locations. In addition, to the extent Patent Owner relies on other, related claim language in support of its arguments, it should identify that claim language and explain how the Petitioner's proposed combination fails to disclose the limitations.

Second, Patent Owner improperly attacks the references individually rather than addressing Petitioner's proposed combination. For example, Patent Owner asserts that Lambert's failure to disclose server-selected virtual bus stops not only fails to meet the "virtual bus stops" limitation, but also fatally undermines Petitioner's assertion that Lambert and Poykko, once combined, discloses "accessing a memory that stores locations of a plurality of virtual bus stops." Prelim. Resp. 43–45. Petitioner does not contend that Lambert's server, prior to the modification proposed by Petitioner based on Poykko, accesses a memory of virtual bus stop locations. *See* Pet. 25 ("Lambert does not specify whether the dynamically selected pickup/dropoff

locations (i.e., a plurality of virtual bus stops) are stored in a memory accessed by the server.”). Instead, Petitioner contends that once the virtual bus stop locations are pre-stored in a database based on the teachings of Poykko, Lambert’s server accesses the memory containing those virtual bus stops when selecting pickup and dropoff locations. *Id.* at 26 (citing Ex. 1003 ¶ 168). Patent Owner does not address directly this aspect of the proposed combination. *See* Prelim. Resp. 44–46. Patent Owner also argues that Poykko fails to disclose “virtual bus stops,” but Petitioner does not rely on Poykko for that limitation. *See id.* at 51. Patent Owner again fails to address directly Petitioner’s proposed combination, and whether that new system, not Lambert or Poykko standing alone, discloses the various “virtual bus stop” limitations.

Similarly, we view Petitioner’s arguments related to “virtual bus stops” in later claim limitations as based on the assumption that those locations are stored in a database in memory (as taught by Poykko) and used by Lambert’s server much as Lambert uses other locations. *See* Pet. 28–44. For example, Petitioner expressly refers back to its previous analysis for the limitation addressing “accessing a memory that stores locations of a plurality of virtual bus stops” in its arguments in support of later limitations referring to “virtual bus stops.” *Id.* at 30, 35, 38–39. Reading these later arguments as building on the previous assertions in the Petition makes sense given that the discussion of these limitations follows the Petition’s reliance on Poykko and the resulting combination. *Id.* at 25–28. Accordingly, Patent Owner’s arguments that Lambert alone does not disclose using its dynamically selected locations (the alleged virtual bus stops) in the manner Petitioner proposes does not address Petitioner’s proposed combination and Petitioner’s argument that once those locations are stored in a database and

accessed by Lambert's server, Lambert's other teachings related to user-identified pickup and dropoff locations can be used with the "virtual bus stop" locations. Whether Petitioner ultimately prevails at trial remains an open question, but Patent Owner's arguments, at this stage, do not fully address what Petitioner appears to propose in the Petition.

Third, Patent Owner makes numerous factual assertions as to what Lambert and Poykko teach and whether one of ordinary skill in the art would expect to succeed in making the changes Petitioner proposes. *See* Prelim. Resp. 40–52. On the current record, those factual assertions are mere attorney argument, and do not undermine Petitioner's arguments, which are supported by declarant testimony from one of ordinary skill in the art. *See* Pet. 8–46 (citing Ex. 1003). Although we determine that Petitioner makes an adequate showing as to its interpretations of the references based on the current record, we have not made any final determinations on these issues and will not do so until we review the full record at the conclusion of the trial.

Upon review of the parties' arguments and supporting evidence, we determine that Petitioner demonstrates a reasonable likelihood that claims 1 and 2 would have been obvious over Lambert, Poykko, and McCall.

E. Remaining Challenges

Petitioner challenges dependent claims 3, 6, 7, 12, 13, 16, 19, and 20 as obvious over Lambert, Poykko, and McCall. Pet. 6, 46–52. Petitioner also challenges claims 4, 5, 8, 17, and 18 as obvious over Lambert, Poykko, McCall, and Lerenc and claims 9–11, 14, and 15 as obvious over Lambert, Poykko, McCall, and Sweeney. *Id.* at 52–70. Patent Owner does not address these challenges beyond a general statement that it disagrees with Petitioner's arguments, and that we need not reach those disagreements due

to Petitioner's failure to meet its burden with respect to claims 1 and 2 and the failure of Lambert to disclose limitations in those claims. *See* Prelim. Resp. 52. Because we institute *inter partes* review as to the independent claims, we also institute *inter partes* review as to these dependent claims. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

IV. CONCLUSION

After considering the evidence and arguments presented in the Petition and Preliminary Response, we determine that the information presented shows a reasonable likelihood that Petitioner would prevail in establishing that at least one of the challenged claims of the '824 patent is unpatentable on grounds asserted in the Petition.

V. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–20 of the '824 patent on the unpatentability grounds asserted in the Petition; and

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

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