

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTERNATIONAL BUSINESS MACHINES CORP.,
Petitioner,

v.

GROUPON, INC.,
Patent Owner.

Case IPR2017-01452
Patent 7,856,360 B2

Before JAMES A. TARTAL, TIMOTHY J. GOODSON, and
JAMES A. WORTH, *Administrative Patent Judges*.

TARTAL, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

International Business Machines Corp. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–3, 7, 8, 11–16, 22–24, 27, 29, 30, 33–35, 41, 42, 45, 46, 49 and 52 of U.S. Patent No. 7,856,360 B2 (Ex. 1101, “the ’360 patent”). Groupon, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . 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.”

Upon consideration of the Petition and the Preliminary Response, we conclude the information presented does not show a reasonable likelihood that Petitioner would prevail in showing the unpatentability of any challenged claim of the ’360 patent. For the reasons provided below, the Petition is denied.

II. BACKGROUND

A. *The ’360 Patent*

The ’360 patent, titled “System for Providing a Service to Venues Where People Aggregate,” issued December 21, 2010, from U.S. Application No. 12/161,554, filed on July 18, 2008. Ex. 1101. The ’360 patent generally relates to a system and method for providing a service to promoters, including making promoter promotions accessible by the mobile phones of members associated with an organization. Ex. 1101, Abstract. The ’360 patent states that “[t]he system of the subject invention is referred to here as the ‘HoozwaresSM’ system, a play on the phrase,

‘Who’s where?’” *Id.* at 5:40–42. “The Hoozware system is a service which helps nightclub managers target advertisements to specific desired clientele who are members of the Hoozware system,” and “[m]embers of the Hoozware system in turn are encouraged to use the Hoozware system in order to receive rewards.” *Id.* at 5:44–48.

Figure 1 of the ’360 patent is reproduced below.

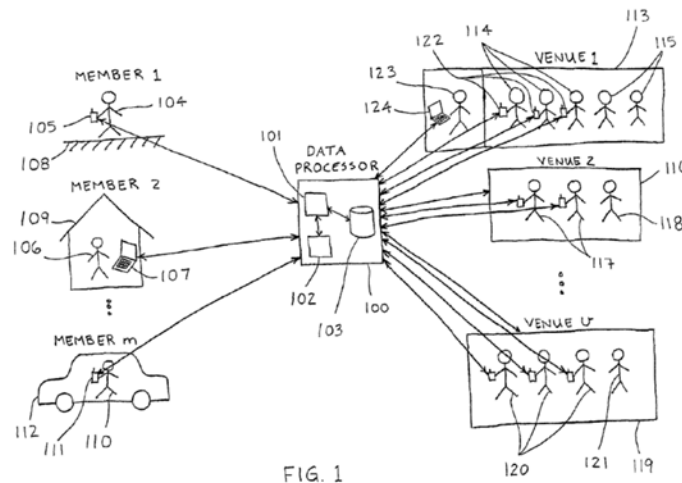


Figure 1 illustrates “a diagrammatic view of the Hoozware system, including members, venues and a data processor.” *Id.* at 30:54–55. Data processor 100 includes processor 101, computer memory 102, and database 103. *Id.* at 31:60–65. Data processor 100 can communicate wirelessly with Hoozware Member1 104 who is using data communication device 105, such as a mobile phone, and standing on ground 108. *Id.* at 32:11–20. Member2 106 may communicate with data processor 100 from building 109 using wired or wireless computer 107. *Id.* 32:21–24. MemberM 110 may communicate with data processor 100 from vehicle 112 using mobile phone 111. *Id.* at 32:26–31.

Data processor 100 is also capable of communicating with Venue1 113, for example through venue manager 123 using wired desktop computer

124 or a mobile phone. *Id.* at 32:36–43. Data processor 100 communicates with members 114 typically by their data communication devices 122, which typically have positioning sensing devices, such as global positioning system (GPS) sensors. *Id.* at 32:44–46, 52–54. Nonmembers 115 may also have data communication devices and “typically have limited access to information that the data processor 100 provides to the members 114.” *Id.* at 32:46–52. According to the ’360 patent:

The data processor 100 typically receives location information from the data communication devices 122 of members 114. Accordingly, at Venue1 113, three of the five people present are tracked and known to be at Venue1 113. For the tracked members 114 the data processor also knows their traits and can calculate demographics of members 114 at Venue1 113 and also estimate the demographics of the entire crowd based on a previously estimated relationship between member demographics and entire crowd demographics.

Id. at 32:58–67. Venue manager 123 may view information provided by data processor 100 concerning members 114 at Venue1 113, as well as information about members 117 and 120 at other venues 116 and 119, and may use that information to decide to send promotional material. *Id.* at 33:1–51. Venue2 116 may also send promotional material to its members in attendance. *Id.* at 34:7–11.

To enable nightclub managers to determine which targeted advertisement to send to a member, the Hoozware system runs a computer program that “may classify a member as: a nightclub candidate, in proximity to a nightclub, on the way to a nightclub, at a nightclub, etc.” *Id.* 6:51–52. The ’360 patent further explains:

A member might be classified by their GPS location (such as if they’re in a particular neighborhood or restaurant), proximity to other members, the day of the week and time of

night, as well as their previous nightclub history or previous pre-nightclub activity, to be a “nightclub candidate.” By using the GPS location information of a member to track their particular route or trajectory, a member might be classified as “on the way to a nightclub.” By using the GPS location information of a member to track their trajectory to a nightclub and then observing that the GPS signal disappeared while the member’s GPS mobile phone is still turned on, the member might be classified as “at a nightclub.”

Id. at 6:58–7:2; *see also id.* at 9:31–35 (stating that “using the GPS location of its members, the Hoozware system computer program running on the Hoozware system server determines whether or not to classify a member as attending one of the nightclubs at a point in time”).

The ’360 patent also describes using the computer program on the Hoozware system server to “digest data about each nightclub, including data provided by other Hoozware system members, data provided by the nightclub itself (such as whether they have a live band), and data available from other sources” to rank the nightclubs in a member’s selected search space based on the preferential criteria defined by the member. *Id.* at 10:28–36. “The computer algorithm that ranks the nightclubs for each member may employ search and ranking algorithms,” and may also employ classification algorithms, including but not limited to “statistical classification techniques . . . , vector quantizers, neural network algorithms, other Computer Science search and ranking algorithms, and the like.” Ex. 1101, 11:15–23. “Typical inputs to the computer algorithm include data such as: member traits, nightclub demographics and nightclub characteristics.” *Id.* at 11:24–26. “Member traits are personal features, beliefs, lifestyles, etc. of a member that are typically either inherited or

chosen by the member.” *Id.* at 11:26–28. Members are also encouraged to use the Hoozware system “in order to receive rewards.” *Id.* at 5:47–48.

B. Illustrative Claim

Petitioner challenges independent claims 1, 2, and 3; dependent claims 7, 8, and 11–16, which depend from claim 3; independent claim 22; dependent claims 23 and 24, which depend from claim 22; independent claim 27; dependent claims 29, 30, 33–35, 41, 42, 45, 46, and 49, which depend from claim 27; and independent claim 52. Claim 1 is illustrative of the claimed subject matter and is reproduced below:

1. A system for providing a service to venues where people aggregate, said system comprising members associated with an organization for processing and transmitting information to said venues, said members or non-members, said members having mobile communication devices, said system requiring at least one member to attend a venue, said system comprising:

a data processor, said data processor:

(1) receiving real-time data comprising information about a venue or attendees at said venue from a mobile communication device of at least one member presently or recently at said venue; and

(A) processing said real-time data by

(a) correlating said information about said attendees at said venue with trait information of said member on said data processor, or

(b) combining real-time data from a plurality of members, when said data processor receives real-time data comprising information about said attendees at said venue from a mobile communication device of at least a second member presently or recently at said venue;

said processing to provide processed data comprising a demographic of said attendees at said venue; and communicating to a recipient said processed data;

- (B) communicating to a recipient said real-time data comprising a demographic of said attendees at said venue; or
- (C) combining real-time data comprising a characteristic of said venue from a plurality of members to provide a combined characteristic of said venue, when said data processor receives real-time data comprising a characteristic of said venue from mobile communication devices of a plurality of members presently or recently at said venue; and communicating to a recipient said combined characteristic of said venue;

or

- (2) comprising information of a reward;
performing in the following order:
 - prior to a member being in a venue, informing said member of said reward that is receivable upon said member indicating in real time said member's presence in said venue;
 - receiving said indicating from a mobile communication device of said member, whereby said reward becomes receivable;
 - processing said indicating to provide processed data comprising
 - (A) the real-time location of said member,
 - (B) a trait of said member, wherein said data processor comprises said trait,
 - (C) a demographic of attendees at said venue, wherein said data processor comprises said demographic of attendees at said venue, or
 - (D) a combined characteristic of said venue, wherein said data processor comprises said combined characteristic of said venue; and
 - communicating to a recipient said processed data.

Ex. 1101, 63:64–64:52 (supplemental indentation added).

C. *Related Proceedings*

The '360 patent is the subject of a petition filed by Petitioner in IPR2017-01451. The Parties also indicate that the '360 patent is at issue in cases captioned *Groupon, Inc. v. Int'l Bus. Machs. Corp.*, Civil Action No. 1:16-cv-5064 (N.D. Ill.) and *International Business Machines Corp. v. Groupon, Inc.*, C.A. No. 1:16-cv-00122 (D. Del.). Pet. 1; Paper 5, 2.

The Parties further identify the following issued U.S. patents and pending U.S. patent applications that claim priority to one or more of the same application(s) to which the '360 patent claims priority:

U.S. Patent No. 7,788,188; U.S. Patent No. 8,103,519;

U.S. Patent No. 8,583,447; U.S. Patent No. 9,105,039;

U.S. Patent App. No. 12/973,947; U.S. Patent App. No. 13/919,944;

U.S. Patent App. No. 14/052,542; U.S. Patent App. No. 14/803,993; and

U.S. Patent App. No. 15/598,879.

Pet. 2; Paper 5, 3.

D. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–3, 7, 8, 11–16, 22–24, 27, 29, 30, 33–35, 41, 42, 45, 46, 49 and 52 of the '360 patent on the following grounds:

Reference(s)	Basis	Claim(s) challenged
Crowley ¹	§ 103	1, 2, 22–24, 27, 29, 30, 33–35, 41, 42, 45, 46, 49, and 52
Callegari ²	§ 103	1–3, 7, 8, 11–16, and 22–24

Petitioner supports its challenge with a Declaration by Susan Spielman, dated May 18, 2017 (Ex. 1114).³

¹ U.S. Patent No. 7,593,740 B2, issued September 22, 2009 (Ex. 1108, “Crowley”).

² U.S. Patent App. Pub. No. 2003/0004802 A1, published January 2, 2003 (Ex. 1109, “Callegari”).

³ Patent Owner argues that we should exercise our discretion under 35 U.S.C. § 314(a) to deny the Petition. Although Patent Owner asserts that “Petitioner improperly challenges the same claims by filing two Petitions on the same day” that present substantially the same arguments, Patent Owner further asserts that Petitioner has taken “inconsistent positions across each of the Petitions” by equating the claim term “correlating” to “indexing” in one petition and “grouping” in another. *Id.* at 24–27. We have considered Patent Owner’s arguments and are not persuaded to exercise our discretion to deny institution under the circumstances presented in this case. *See Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357 (PTAB Sept. 6, 2017) (Paper 19, 15–16) (precedential) (discussing factors considered in determining whether to exercise discretion to decline institution of review). Patent Owner also argues that we should decline institution under 35 U.S.C. § 325(d) because the asserted references are “cumulative of the references specifically referenced by the Examiner during prosecution.” Prelim. Resp. at 30. We have considered Patent Owner’s arguments and are not persuaded that the Examiner’s consideration of prior art alleged to be substantially similar to the references asserted by Petitioner warrants denial of the Petition in this case.

III. ANALYSIS

A. Claim Construction

Claims in an *inter partes* review are given the “broadest reasonable construction in light of the specification of the patent in which [they] appear[.]” 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2136 (2016).

1. Preamble Language

Petitioner states that in district court proceedings Patent Owner contends the preamble language of various claims of the ’360 patent is not limiting, but also proposes constructions if it is limiting. Pet. 12–13. Petitioner, however, fails to state whether *Petitioner* contends the preambles are limiting. A petition must set forth “[h]ow the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3). Merely stating Patent Owner’s contentions from a district court proceeding is not sufficient. In this case neither party has shown that any preamble language is limiting. Moreover, in the absence of any dispute over the meaning of any preamble terms, we determine no express construction is necessary for purposes of this decision. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘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)).

2. The Use of “Or”

Petitioner contends that “[m]any challenged claims recite a list of limitations connected by the conjunction ‘or,’” and asserts it need only show that the prior art discloses or renders obvious at least one of the limitations in such a list of alternative limitations. Pet. 10–11 (citing *Brown v. 3M*, 265

F.3d 1349, 1351 (Fed. Cir. 2001)). We agree that, to the extent the challenged claims use “or” to identify a disjunctive list of alternatives, Petitioner need only address one of the alternatives to establish the unpatentability of the claim as anticipated or obvious.

3. *“consisting of (1)” and “consisting of (2)”*

Claim 22 recites “real-time data comprising location information of said member provided by (1) a position-sensing device, or (2) said member checking-in using said mobile communication device.” Ex. 1101, 67:37–41. Claim 23 recites “[a] system according to claim 22 consisting of (1).” *Id.* at 67:47. Claim 24 recites “[a] system according to claim 22 consisting of (2).” *Id.* at 67:48. For purposes of this decision, we agree with Petitioner that “(1)” recited in claim 23 and “(2)” recited in claim 24 refer, respectively, to the features identified in claim 22 as “(1) a position-sensing device” and “(2) said member checking-in using said mobile communication device.” See Pet. 13–14.

4. *“wherein said indicating does not comprise a request to receive said reward”*

Claim 49 recites “wherein said indicating does not comprise a request to receive said reward.” Ex. 1101, 69:33–34. Petitioner contends the claim language “encompasses checking into a venue,” because it purportedly corresponds to the disclosure relied upon as written description support during prosecution. Pet. 14 (citing Ex. 1102, 780). Petitioner’s argument may be pertinent to whether an asserted reference discloses the claimed limitation, but does not inform the meaning of the claim term. In the absence of any controversy over the term, we determine no express construction is necessary for purposes of this decision. See *Wellman, Inc.*, 642 F.3d at 1361.

5. “*correlating*”

Claims 1 and 3 recite “processing said real-time data by (a) correlating said information about said attendees at said venue with trait information of said member on said data processor, . . . ; said processing to provide processed data comprising a demographic of said attendees at said venue.” Ex. 1101, 64:9–19. Claim 22 recites “correlating said location information with trait information of said member on said data processor to provide a demographic of attendees at said venue.” *Id.* at 67:42–46. Petitioner does not propose expressly a construction for the “correlating” limitations.

Outside of the claims, the Specification of the ’360 patent does not use or discuss “correlating” (or any other derivative of “correlate”). “Correlating” (or any other derivative of “correlate”) does not appear to occur in the prosecution history until introduced by the Examiner in an Office Action which stated that “Examiner believes the third determination (Specific Real-time Member based Demographics) to be allowable subject matter, if properly claimed to include correlation information with database to determine information before transmitting it to users,” and that “[t]he omitted elements are: [t]he correlation elements, which determines the (portion of) demographic information to send based on the received location information (such an automated determination step would also overcome the 101 rejection above)”. Ex. 1102, 695; *see also* Prelim. Resp. 12 (stating that “[t]he Examiner noted that both the § 101 and § 112 rejections would be overcome if this correlating step was explicitly, rather than implicitly, claimed”). Patent Owner explains that following the Office Action “[t]he Applicant canceled all of the pending claims, and submitted a new claim set,

based on the Examiner's suggested amendments and identification of allowable subject matter." Prelim. Resp. 12; *see also id.* at 22 (stating that the Examiner "required an amendment, *i.e.*, addition of a correlation," and that "[i]n response to the Office Action, the Applicant submitted new claims that recited the claimed 'correlating'").

Patent Owner argues in this case that "[c]orrelating" is not simply a generic mechanism for processing data, but it is a specific type of processing that requires a determination of what portion of the information to send to a user." Prelim. Resp. 18. Patent Owner provides a dictionary definition of "correlate" as meaning "to place in or bring into mutual or reciprocal relation." *Id.* (citing Ex. 2003). Patent Owner further contends that "'correlating' necessarily requires more than . . . grouping," allegedly based on the "clear claim language" and prosecution history. Prelim. Resp. 21.

In the absence of any discussion of "correlating" in the Specification, Patent Owner contends that the term corresponds to the description in the Specification of "the processing of matched information as a classification." Prelim Resp. 18. Patent Owner argues that "'correlating' requires determination of a match between the type of data specifically recited in the claims." *Id.* With regard to claims 1–3, according to Patent Owner, "a match is determined between information about said attendees at said venue and trait information of said member." *Id.* As to claim 22, Patent Owner asserts the "match is determined between said location information and trait information of said member." *Id.*

Patent Owner also argues that to achieve the goals of the '360 patent, the system correlates information and that to achieve the objective of the '360 patent it "necessarily begins with a match between a member and the

venue,” and “a statistical classification of the venue is performed” based on the match. Prelim. Resp. 23. We note, however, that not one claim of the ’360 patent recites “statistical classification” or “classification” and that only unchallenged claim 20 recites “match.” Ex. 1101, 67:18 (reciting “member-intended information based on . . . highest rating from other members, best match to custom demographic, ladies/guys night, rowdy atmosphere . . . or high quality of bar service”).

Based on these arguments, Patent Owner provides the following proposed constructions:

Claim Terms	Proposed Construction
“processing said real-time data by (a) correlating said information about said attendees at said venue with trait information of said member” (Claims 1–3)	processing said real-time data by (a) classifying a venue based on a match between information about said attendees at said venue and trait information of said member
“a data processor, said data processor . . . correlating said location information with trait information of said member on said data processor to provide a demographic of attendees at said venue” (Claim 22)	a data processor, said data processor . . . classifying a venue based on a match between said location information and trait information of said member on said data processor to provide a demographic of attendees at said venue

Prelim. Resp. 19. Rather than construing claim language, Patent Owner’s proposal is more akin to rewriting the claim. Under its proposal “correlating . . . information about said attendees” transforms to “classifying a venue,” with no clear corresponding relationship between the claim language and the proposed construction other than Patent Owner’s arguments addressing what the claim purportedly covers. In sum, we are not persuaded that Patent Owner’s proposed construction is sufficiently supported or persuasive on the present record. We recognize that one ordinary definition of “correlate,” as

provided by the dictionary cited by Patent Owner, is “to place or bring into mutual or reciprocal relation,” (Prelim. Resp. 18 (citing Ex. 2003)), and further determine that no express construction is necessary for purposes of this decision.

B. Asserted Obviousness Over Crowley

Petitioner contends claims 1, 2, 22–24, 27, 29, 30, 33–35, 41, 42, 45, 46, 49, and 52 would have been obvious over Crowley. Pet. 15–46. Crowley, a U.S. patent titled “Location-Based Social Software for Mobile Devices,” issued September 22, 2009. Patent Owner disputes Petitioner’s obviousness contentions but has not contested the prior art status of Crowley. Prelim. Resp. 32–50. 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) where in evidence, so-called secondary considerations. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

1. Summary of Crowley

Crowley generally relates to “a method of establishing connection between users of mobile devices” that includes:

receiving at a computer a location of a first user from a first mobile device, receiving from a second mobile device a location of a second user having an acquaintance relationship to the first

user, and sending a message to the first mobile device based on the proximity of the first user to the second user.

Ex. 1108, Abstract. Crowley states, presumably at the time of issuance, that one embodiment of the system described could be found “at the Dodgeball web site.” *Id.* at 2:18–19. The ’360 patent also refers to the Dodgeball website, stating it provides “another social cell phone capability, where you can communicate with groups of friends” and also “provides addresses of venues,” but the ’360 patent does not expressly identify or address Crowley. Ex. 1101 1:27–29.

Crowley describes a system that includes members who create profiles with demographic information and preferences. A server (or computer system) in Crowley can receive information from members, analyze the information, and identify acquaintances who are currently logged onto the system. Ex. 1108, 4:65–5:24; 5:52–64. “Once a subset of members, which consists of (1) acquaintances, (2) who are active in the system, and (3) are nearby, are identified, the system may then format and transmit appropriate messages to each relevant member.” *Id.* at 11:10–16. In one embodiment, the server “takes a more active role” by iteratively identifying “commonalities among sub-groups of users in a particular area who want to play,” and then sending the sub-group to a venue. *Id.* at 17:30–48. Crowley explains:

The method may comprise receiving at a computer a plurality of join commands from a plurality of user at one or more locations, correlating users into sets according to general geographic location, correlating users into subsets according to indicia of commonality or affinity with each other, and instructing the users via electronic message to identified locations grouped by commonality or affinity.

Id. at 3:27–35. “[A]dditional messages, such as promotional or advertising messages may be provided to users,” including coupons. *Id.* at 20:17–29.

2. Claim 1

Petitioner contends that claim 1 would have been obvious over Crowley with respect to the following subset of elements that correspond to one full alternative among several claimed (what Petitioner calls “one complete path through Claim 1”):

1. A system for providing a service to venues where people aggregate, said system comprising members associated with an organization for processing and transmitting information to said venues, said members or non-members, said members having mobile communication devices, said system requiring at least one member to attend a venue, said system comprising:

a data processor, said data processor:

...

(2) comprising information of a reward;
performing in the following order:

prior to a member being in a venue, informing said member of said reward that is receivable upon said member indicating in real time said member's presence in said venue;

receiving said indicating from a mobile communication device of said member, whereby said reward becomes receivable;

processing said indicating to provide processed data comprising

(A) the real-time location of said member

...; and

communicating to a recipient said processed data.

Pet. 15–27; Ex. 1101, 63:64–64:52 (supplemental indentation added).

Petitioner contends computer system 82 of Crowley corresponds to the claimed data processor (Pet. 17–19) and that the advertising messages to users in the form of coupons that can be sent by computer system 82

correspond to the claimed “information of a reward” (*id.* at 19). According to Petitioner, Crowley’s system describes sending advertising to members before they arrive at a venue. *Id.* at 20; *see also* Ex. 1108, 18:4–7 (stating that “advertising targeted to particular users . . . may also be provided to users in messages . . . using known mechanisms for delivering promotional and advertising content”). Petitioner also asserts Crowley describes a reward that is receivable upon a member indicating in real time the member’s presence in the venue. Pet. 22. According to Crowley, a user can identify their presence at a location and be “‘checked in’ or active in the system” by sending a message to the system with “the ‘at’ or ‘@’ command.” Ex. 1108 13:18–25. When a user opts in from a venue, “the user may be provided information about promotions,” which may act like coupons. *Id.* at 20:23–29.

Crowley does not disclose expressly informing a member, prior to being in a venue, of a reward that is receivable when the member indicates in real time their presence at the venue from a mobile communication device, as required by claim 1. *See* Pet. 22. Petitioner reasons that “[a] person of ordinary skill in the art would have found it obvious to use the ‘promotional materials or advertising’ that Crowley’s system sends to registered users before the users have arrived at the venue hosting the square dance,” because it “would encourage users to attend that venue.” Pet. 22. Petitioner also contends that the benefit of increasing the number of users who attend the event would motivate the proposed modification of Crowley and that the modification would require nothing more than modifying the information provided to members. *Id.* at 23.

We are not persuaded that the broad objective of encouraging users to attend an event provides a sufficient rationale for why Crowley, specifically, would be modified to require that a user be made aware, before arriving at a venue, of a reward that the member may only obtain after the member indicates in real time their presence in the venue through a mobile communication device. Petitioner's expert provides little more than a conclusory statement in support: "[a] person of ordinary skill in the art would have been motivated to use Crowley's pre-square dance 'promotional materials or advertising' to inform users of a reward that is receivable when the user 'opts in' from a venue hosting a square dance to entice users to attend the square dance." Ex. 1114 ¶ 111.

Missing is any sufficiently supported explanation for why it would have been obvious to offer a reward to a member before arriving at the venue that was only receivable after the member indicates in real time their presence at the venue through a mobile communication device, as required by claim 1. We agree that Crowley suggests informing a user about a reward that they can receive by attending a venue, and that such information would "entice users to attend that venue." *Id.* That does not, however, explain why Crowley would be modified to require the user to indicate in real time through a mobile communication device their presence at the venue before the advertised reward was receivable, as required by claim 1. Accordingly, we conclude the information provided by Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 1 of the '360 patent would have been obvious over Crowley.

3. *Claim 2*

Petitioner contends claim 2 would have been obvious over Crowley for the same reasons as claim 1. Pet. 27–28. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 2 of the '360 patent would have been obvious over Crowley for the same reasons Petitioner failed to make the necessary showing with respect to claim 1, as explained above.

4. *Claim 22*

Petitioner contends claim 22 would have been obvious over Crowley. Pet. 29–37. Claim 22 recites:

22. A system for providing a service to venues where people aggregate, said system comprising members associated with an organization for processing and transmitting information to said venues, said members or non-members, said members having mobile communication devices, said system requiring at least one member to attend a venue, said system comprising:

a data processor, said data processor:

receiving real-time data comprising information about attendees at said venue from a mobile communication device of at least one member presently or recently at said venue, said real-time data comprising location information of said member provided by

(1) a position-sensing device, or

(2) said member checking-in using said mobile communication device;

correlating said location information with trait information of said member on said data processor to provide a demographic of attendees at said venue;

and communicating to a recipient said demographic of attendees at said venue.

Ex. 1101 67:26–46.

Petitioner contends Crowley discloses the “receiving real-time data” limitation both through a computer system that automatically receives

location information through GPS features from a user's mobile device (a "positioning sensing device," as claimed) and through "a member checking-in" by texting the symbol "@" and the name of a venue. Pet. 30–31.

With regard to the "correlating" limitation, Petitioner contends that the system disclosed by Crowley permits members to opt-in to participate in an activity by sending the system a text message, sorts interested users into groups based on their location, breaks groups into sub-groups based on common demographic traits, and directs users in the subgroup to attend the activity at a particular location. Pet. 31–35. Petitioner's declarant similarly suggests that "breaking users down into groups based on which venue they are attending (i.e., their location) and into sub-groups based on their profile information (i.e., their traits)—entails correlating said location information with trait information of said member on said data processor to provide a demographic of attendees at said venue." Ex. 1114 ¶ 149.

Petitioner further asserts that "[i]t would have been obvious to modify Crowley to schedule a square dance at a venue that users with a demographic trait in common are already attending." Pet. 33. It is unclear why Crowley would require such a modification, as Crowley expressly describes "correlating" users at one location based on location and on "indicia of commonality." Ex. 1108 3:28–33. Accordingly, Patent Owner's contention that Crowley does not teach or suggest any "correlating" appears

unfounded on the present record.⁴ See Prelim. Resp. 47. Nevertheless, from Petitioner’s analysis we cannot discern why the benefits of “scheduling square dances at a venue that users are already attending” render claim 22 obvious or provides a rationale for modifying claim 22. Pet. 35–36.

Petitioner’s discussion fails to adequately address the scope and content of the prior art and any differences between the claimed subject matter and the prior art, as required by *Graham*. 383 U.S. at 17–18. The suggestion that Crowley would be modified for user convenience or to increase attendance to produce an “effective event” are conclusory and speculative. See Pet. 35–36.

We conclude Petitioner has not shown sufficiently how Petitioner contends Crowley discloses the “correlating” limitation and has not provided a sufficient rationale for modifying Crowley to render obvious claim 22. Accordingly, we conclude the information provided by Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 22 of the ’360 patent would have been obvious over Crowley.

5. *Claims 23 and 24*

Claims 23 and 24 depend from claim 22, and Petitioner relies on its analysis of claim 22 to show these dependent claims would have been obvious over Crowley as well. Pet. 37. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claims 23 and

⁴ Patent Owner also argues that “Crowley never provides the claimed demographic to a recipient,” because users only receive an invitation to a future event “with a single trait suggestive of a demographic who are at the venue.” Prelim. Resp. 48–49. This argument also appears unfounded on the present record as Crowley expressly states that “the system may identify the common characteristic through messages to the users,” and does not suggest those message are limited to “an invitation.” Ex. 1108 17:41–45.

24 would have been obvious over Crowley for the same reasons Petitioner failed to make the necessary showing with respect to claim 22, as explained above.

6. *Claims 27, 29, 30, 33–35, 41, 42, 45, 46, and 49*

Petitioner contends claim 27 would have been obvious over Crowley for the same reasons as claim 1. Pet. 38–39. Claims 29, 30, 33–35, 41, 42, 45, 46, and 49 depend from claim 27, and Petitioner relies on its analysis of claim 27 to show these dependent claims would have been obvious over Crowley as well. *Id.* at 39–45. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 27 or claims 29, 30, 33–35, 41, 42, 45, 46, and 49, which depend from claim 27, of the '360 patent would have been obvious over Crowley for the same reasons Petitioner failed to make the necessary showing with respect to claim 1, as explained above.

7. *Claim 52*

Petitioner contends claim 52 would have been obvious over Crowley for the same reasons as claim 1. Pet. 45–46. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 52 of the '360 patent would have been obvious over Crowley for the same reasons Petitioner failed to make the necessary showing with respect to claim 1, as explained above.

C. *Asserted Obviousness over Callegari*

Petitioner contends that claims 1–3, 7, 8, 11–16, and 22–24 would have been obvious over Callegari. Pet. 46–68. Callegari is a U.S. Patent Application titled “Methods for Providing a Virtual Coupon” published on January 2, 2003. Ex. 1109. Patent Owner disputes Petitioner’s obviousness

contentions, but has not contested the prior art status of Callegari. Prelim. Resp. 50–63.

1. Summary of Callegari

Callegari generally describes methods for providing a virtual coupon, including defining a coupon offer location. Ex. 1109, Abstract. In one embodiment, merchants subscribe to a service that implements location-based merchant presence methods, including a graphical user interface that enables a merchant to create a virtual coupon and present it “to a consumer device upon receipt of an indication that the consumer is within, or otherwise indicated an interest in, a location that overlaps with the coupon offer area defined by the merchant.” *Id.* at ¶ 104.

2. Claim 1

Petitioner contends that claim 1 would have been obvious over Callegari with respect to the following subset of elements that correspond to one full alternative among several claimed (what Petitioner calls “one complete path through Claim 1”):

1. A system for providing a service to venues where people aggregate, said system comprising members associated with an organization for processing and transmitting information to said venues, said members or non-members, said members having mobile communication devices, said system requiring at least one member to attend a venue, said system comprising:

a data processor, said data processor:

- (1) receiving real-time data comprising information about a venue or attendees at said venue from a mobile communication device of at least one member presently or recently at said venue; and
- (A) processing said real-time data by
 - (a) correlating said information about said attendees at said venue with trait information of said member on said data processor, . . . ;

said processing to provide processed data comprising a demographic of said attendees at said venue; and communicating to a recipient said processed data.

Pet. 21–28; Ex. 1101, 63:64–64:19 (supplemental indentation added).

With regard to the “receiving real time data . . . from a mobile communication device of at least one member,” Petitioner concedes it is not taught by Callegari, and instead contends “it would be an obvious design choice.” Pet. 50. Petitioner reasons that members have mobile communication devices to provide their location to merchants and to receive electronic coupons based on their location. *Id.* Petitioner states that “Callegari itself suggests tracking which consumers are actually attending a merchant’s premises, albeit via point-of-sale systems instead of receiving indications of consumers’ location from their mobile devices.” *Id.* at 52. According to Petitioner, “it would have been an obvious design choice for Callegari’s merchant presence server to receive indications of consumers’ locations and to transmit electronic coupons only to consumers on the merchants’ premises.” Pet. 53.

Patent Owner argues that Callegari only describes providing coupons to users as they move within an area outside of the venue. Prelim. Resp. 50. According to Patent Owner, altering Callegari to users within a venue is not a matter of design choice because such a limit solves a problem related to obtaining information about a venue or attendees at the venue. *Id.* at 52. Callegari summarizes the invention as including a “defined location for the coupon offer,” “receiving information from a consumer device that includes an indication of the consumer’s location,” and presenting the coupon offer to the consumer device if “the consumer’s location overlaps with the defined location for the coupon offer.” Ex. 1109 ¶ 11. Callegari also states that:

Merchants typically desire to make their presence known to consumers when the consumer is nearby, i.e., when the consumer's point of origin and/or area of interest 12 is essentially the same as the merchant's point of origin, overlaps with the merchant's point of origin, or comes within a service area targeted by the merchant.

Id. at ¶ 33. Contrary to Patent Owner's assertion, Callegari does not appear to prohibit a merchant's service area from including the area inside the venue. Petitioner also contends that when a merchant's point of origin overlaps with a user's point of origin, the user is at the merchant's location. Pet. 52. Patent Owner argues that "[n]othing in Callegari suggests that the 'user is attending the venue' when the system detects overlap between a consumer and a merchant's area of interest." Prelim. Resp. 53. Patent Owner's argument is directed to areas of interest, not to the overlap of points of origin as relied upon by Petitioner to support its contention that Callegari is broad enough to make obvious "receiving real-time data . . . from a mobile communication device of at least one member presently or recently at said venue," as claimed.

With regard to the "correlating" limitation, Petitioner contends that the system of Callegari stores subscriber information concerning individual customers, which Petitioner equates to "trait information," as claimed.

Pet 54; Ex. 1109 ¶ 52. According to Petitioner:

Callegari's merchant presence server computes demographic statistics based on which consumers have received electronic coupons—here, subscribing consumers that have attended a venue and received an electronic coupon—for use in subsequent targeted marketing. (Ex. 1109, at [0053], [0110]; Spielman Decl. ¶ 256.) In that regard, Callegari's merchant presence server correlates information about said attendees at a venue (i.e., attributes of other consumers receiving electronic coupons at the venue) on with trait information of said member

(i.e., attributes of the consumer receiving the electronic coupon) on said data processor to compute a demographic of attendees at the venue.

Pet. 54–55.

Patent Owner argues that “[i]nstead of the required ‘correlating,’ Callegari simply computes demographic statistics based on which consumers have received electronic coupons for use in subsequent targeted marketing.” Prelim. Resp. 61. Patent Owner also argues that Petitioner relies on Callegari’s disclosure of collecting data over a period of time, not “real-time data,” as required by the claim. Further, according to Patent Owner:

Other than the mechanism to count coupon users, which is distinct from the correlating, Callegari merely provides data about users without any teaching or suggestion that *any* further analysis is performed. Callegari is silent as to any other statistics that are generated and neither Petitioner nor its expert has provided any support or evidence for other types of statistical calculations or required correlations.

Id. at 62.

Petitioner’s analysis does not sufficiently demonstrate how Petitioner contends Callegari renders obvious the “processing” and “correlating” limitation. Claim 1 requires processing “real-time” data to provide a “demographic of said attendees at said venue.” The correlation Petitioner contends Callegari discloses addresses only “which consumers have received electronic coupons.” Pet. 54–55. Missing is any explanation from Petitioner of how that information, which as Patent Owner notes appears could extend over any duration of time, provides the required “demographic of said attendees at said venue.” Accordingly, we conclude the information provided by Petitioner does not demonstrate a reasonable likelihood of

prevailing in showing claim 1 of the '360 patent would have been obvious over Callegari.

3. *Claims 2, 3, 7, 8, and 11–16*

Petitioner contends claims 2 and 3 would have been obvious over Callegari for the same reasons as claim 1. Pet. 55–58. Petitioner also contends that claims 7, 8, and 11–16, which depend from claim 3, would have been obvious over Callegari based on Petitioner's contentions with respect to claim 1. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claims 2, 3, 7, 8, and 11–16 of the '360 patent would have been obvious over Callegari for the same reasons Petitioner failed to make the necessary showing with respect to claim 1, as explained above.

4. *Claims 22–24*

Petitioner contends claims 22–24 would have been obvious over Callegari. Pet. 64–68. In particular, Petitioner contends the “correlating” limitation of claim 22 would have been obvious for the same reasons the “correlating” limitation of claim 1 would have been obvious. *Id.* at 67. We determine Petitioner does not demonstrate a reasonable likelihood of prevailing in showing claim 22 or claims 23 and 24, which depend from claim 22, would have been obvious over Callegari for the same reasons Petitioner failed to make the necessary showing with respect to claim 1, as explained above.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied as to all challenged claims of the '360 patent.

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Patent 7,856,360 B2

For PETITIONER:

Kevin K. McNish
DESMARAIS LLP
kkm-ptab@desmaraisllp.com

For PATENT OWNER:

Christopher T.L. Douglas
Bruce J. Rose
Brian C. Ellsworth
ALSTON & BIRD LLP
christopher.douglas@alston.com
bruce.rose@alston.com
brian.ellsworth @alston.com