Paper 13 Date: April 30, 2021

# UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD FACEBOOK, INC., Petitioner, V. USC IP PARTNERSHIP, L.P., Patent Owner. IPR2021-00033

Patent 8,645,300 B1

Before DANIEL J. GALLIGAN, AARON W. MOORE, and RUSSELL E. CASS, *Administrative Patent Judges*.

CASS, Administrative Patent Judge.

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

#### I. INTRODUCTION

# A. Background

Facebook, Inc. ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–4 and 11–17 (the "challenged claims") of U.S. Patent No. 8,645,300 (Ex. 1001, "the '300 patent"). Paper 2 ("Pet."). USC IP Partnership, L.P. ("Patent Owner") filed a Preliminary Response. Paper 8 ("Prelim. Resp."). With our authorization, Petitioner filed a Preliminary Reply (Paper 9, "Prelim. Reply") and Patent Owner filed a Preliminary Surreply (Paper 11, "Prelim. Sur-reply").

We have authority to determine whether to institute an *inter partes* review, under 35 U.S.C. § 314 and 37 C.F.R. § 42.4. An *inter partes* review may not be instituted unless it is determined that "the information presented in the petition filed under section 311 and any response filed under section 313 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 (2018); *see also* 37 C.F.R § 42.4(a) (2020) ("The Board institutes the trial on behalf of the Director."). The reasonable likelihood standard is "a higher standard than mere notice pleading," but "lower than the 'preponderance' standard to prevail in a final written decision." *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13 (PTAB Dec. 20, 2019) (precedential).

For the reasons provided below and based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims. Accordingly, we institute an *inter partes* review on all grounds set forth in the Petition.

#### B. Real Parties in Interest

Petitioner states that "Facebook, Inc." is the real party in interest. Pet. 1. Patent Owner states that "USC IP Partnership, L.P., the owner of [the '300 patent], is the real-party-in-interest," and that "USC IP Management LLC, USC IP Partnership, L.P.'s General Partner, is also a real party in interest." Paper 4, 1.

#### C. Related Proceedings

The parties identify the following district court case involving the '300 patent: *USC IP Partnership, L.P. v. Facebook, Inc.*, 6:20-cv-555 (W.D. Tex.). Paper 4, 1. The parties also identify the following *inter partes* review proceeding involving the '300 patent: *Facebook, Inc. v. USC IP Partnership, L.P.*, IPR2021-00034. Pet. 1; Paper 3, 1; Paper 4, 1.

## D. The '300 Patent (Ex. 1001)

The '300 patent relates to a system for "determining a visitor's intent and for using the visitor's intent to predict and suggest webpages for the visitor." Ex. 1001, 1:17–19. The patent explains that a company may have multiple websites, each containing multiple webpages, which are collectively referred to as a "namespace." *Id.* at 2:49–58. The system of the invention includes "an intent engine 20 that collects and analyzes intent data from visitors as they browse webpages within a namespace" and "provides an intent tool 22 that is used in conjunction with one or more webpages 13 within a namespace." *Id.* at 2:59–63. The intent tool 22 "may incorporate user interface display elements into a webpage that elicit[s] intent and success information from users" and "provides the collected information to the intent engine 20." *Id.* at 2:63–67. The intent engine 20 then "process[es]

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the intent and learns to predict intent and intent-based destination pages." *Id.* at 2:67–3:2.

More specifically, when a visitor first navigates to a webpage within a namespace controlled by the intent engine, the intent engine infers an intent of the visitor. Ex. 1001, 4:60–62. In one embodiment, the intent engine receives the URL of the current page and uses it as a lookup to a database, which returns a ranked list of "intent candidates." *Id.* at 4:62–65. The intent engine selects the highest ranked intent candidate as the "inferred intent," and displays it in a "current intent" field on the webpage. *Id.* at 4:66–5:1.

The intent engine can be used to integrate a widget 22 into a webpage. Ex. 1001, 4:48–50. One embodiment of the intent widget 22 is shown in Figure 4, reproduced below:

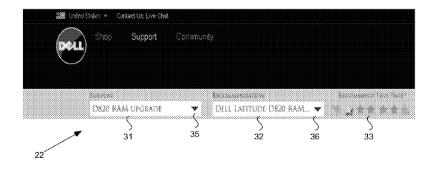


Figure 4

Figure 4 shows intent widget 22 that appears as a "toolbar" incorporated into a webpage for Dell Computers. Ex. 1001, 4:53–56, 6:19–20. It displays Current Intent 31 as "D820 RAM upgrade," which the user may alter by selecting other intents from drop down menu 35 or typing text directly into intent field 31. *Id.* at 6:20–24. Based on the current intent, widget 22 displays a recommendation 32 that provides a hyperlink to a webpage "that is most likely to provide the information that the visitor is seeking, i.e. that

matches the current intent." *Id.* at 6:24–28. In this example, the visitor is recommended to a page dedicated to "DELL Latitude D820 RAM Upgrades." *Id.* at 6:31–33. Alternatively, the recommendation field may be hidden until the visitor confirms their intent. *Id.* at 6:61–65.

As shown in Figure 4 above, the visitor may also "select the rating tool 33 to indicate a rating of the webpage for the current intent." Ex. 1001, 6:34–35. "In one embodiment, a 7-point scale is provided using which the visitor may rate pages via a simple thumbs-up and thumbs-down to indicate Success (6) or Failure (0), or they may choose to give the page 1 to 5 stars to indicate degrees of Success." *Id.* at 6:40–44.

The '300 patent also displays an alternative configuration of intent widget 22 in Figure 5, reproduced below.

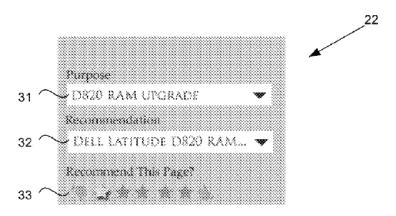


Figure 5

Figure 5 shows an alternative embodiment in which widget 22 is displayed in a vertical configuration, with equivalent fields for current intent 31, recommendation 32, and rating tool 33 as shown for the horizontal implementation of Figure 4. Ex. 1001, 6:56–59.

#### E. Illustrative Claims

Of the challenged claims, claims 1 and 11 are independent. Claim 1 is illustrative and is reproduced below.

- 1. A method for predicting an intent of a visitor to a webpage, the method comprising:
  - [a] receiving into an intent engine at least one input parameter from a web browser displaying the webpage;
  - [b] processing the at least one input parameter in the intent engine to determine at least one inferred intent;
  - [c] providing the at least one inferred intent to the web browser to cause the at least one inferred intent to be displayed on the webpage;
  - [d] prompting the visitor to confirm the visitor's intent;
  - [e] receiving a confirmed intent into the intent engine;
  - [f] processing the confirmed intent in the intent engine to determine at least one recommended webpage that matches the confirmed intent, the at least one recommended webpage selected from a plurality of webpages within a defined namespace;
  - [g] causing the webpage in the web browser to display at least one link to the at least one recommended webpage;
  - [h] prompting the visitor to rank the webpage for the inferred intent;
  - [i] receiving a rank from the web browser; and
  - [j] storing a datapoint comprising an identity of the webpage, the inferred intent and the received rank.

Ex. 1001, 18:36-58 (bracketed paragraph identifiers added).

# F. Applied References

Petitioner relies upon the following references:

Gregov et al., U.S. Patent No. 8,032,506 B1, issued Oct. 4, 2011 (Ex. 1003, "Gregov");

Hartman et al., U.S. Patent No. 6,615,226 B1, issued Sept. 2, 2003 (Ex. 1004, "Hartman");

Linden et al., U.S. Patent No. 6,912,505 B2, issued June 28, 2005 (Ex. 1005, "Linden");

Holzner, *Ajax for Dummies* (2006), pp. 1–150 (Ex. 1006, "Holzner");

Nickerson, U.S. Patent No. 7,827,487 B1, issued Nov. 2, 2010 (Ex. 1007, "Nickerson");

Sriver, WO 2008/130932 A1, pub. Oct. 30, 2008 (Ex. 1009, "Sriver").

## Pet. i, 3.

Petitioner submits the Declaration of Dr. Sandeep Chatterjee (Ex. 1002).

## G. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–4 and 11–17 of the '300 patent based on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–4, 11–16	$103(a)^1$	Gregov, Hartman, Linden,
		Holzner, Nickerson
17		Gregov, Hartman, Linden,
		Holzner, Nickerson, Sriver

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<sup>&</sup>lt;sup>1</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), included revisions to 35 U.S.C. § 103 that became effective after the filing of the application that led to the '300 patent. Therefore, we apply the pre-AIA version of 35 U.S.C. § 103.

#### II. DISCUSSION

A. Discretion Under 35 U.S.C. § 314(a) Based on Related District Court Proceeding

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an [*inter partes* review (IPR)] proceeding."); 35 U.S.C. § 314(a) ("The Director *may not* authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 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." (emphasis added)). In the Preliminary Response, Patent Owner contends that we should exercise our discretion to deny the Petition in favor of the parallel district court proceeding, which is currently scheduled for jury selection on December 13, 2021. Prelim. Resp. 2–10.

The Board has held that the advanced state of a parallel district court action is a factor that may weigh in favor of denying a petition under § 314(a). See NHK Spring Co. v. Intri-Plex Techs., Inc., IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential) ("NHK"); Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019), 58 & n.2, available at https://www.uspto.gov/TrialPracticeGuideConsolidated ("Trial Practice Guide"). We consider the following factors to assess "whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding":

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

- 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
- 3. investment in the parallel proceeding by the court and the parties;
- 4. overlap between issues raised in the petition and in the parallel proceeding;
- 5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
- 6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB March 20, 2020) (precedential) ("Fintiv"). In evaluating these factors, we "take[] a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review." *Id.* at 6.

We consider each of these factors below.

1. Factor 1 — Stay of Related Litigation Proceeding

Neither party has requested a stay of the related district court proceeding. Prelim. Resp. 3. Given the particular circumstances of this case, we determine that it would be improper to speculate, at this stage, what the district court might do regarding a motion to stay, should one be requested. See Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC, IPR2019-01393, Paper 24 at 7 (PTAB June 16, 2020) (informative) ("Sand Revolution") ("In the absence of specific evidence, we will not attempt to predict how the district court in the related district court litigation will proceed because the court may determine whether or not to stay any individual case, including the related one, based on a variety of circumstances and facts beyond our control and to which the Board is not privy."); Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 15 at 12 (PTAB

May 13, 2020) (informative) ("Fintiv II") ("We decline to infer, based on actions taken in different cases with different facts, how the District Court would rule should a stay be requested by the parties in the parallel case here. This factor does not weigh for or against discretionary denial in this case."). Accordingly, we determine that this factor does not weigh either for or against exercising our discretion to deny institution in this case.

# 2. Factor 2 — Proximity of Court's Trial Date

Patent Owner argues that any final decision stemming from the Petition "would be unlikely to issue before May 2022," while trial in the parallel district court proceeding is scheduled to begin five months earlier in December 2021." Prelim. Resp. 8–9. Patent Owner also asserts that "[e]ven in the unlikely event that the WDTX trial is somewhat delayed, it will still be held well before any final written decision in this matter." *Id.* at 9. "Moreover," according to Patent Owner, "the presidential administration currently expects sufficient progress with vaccinations such that any American willing to be vaccinated can do so by the end of summer 2021, months before the December 2021 WDTX trial . . . , rendering a COVID-19 trial delay unlikely." *Id.* 

Petitioner responds that Patent Owner ignores the significant trial backlog the pandemic created. Prelim. Reply 2. According to Petitioner, "[t]here are at least 11 civil cases scheduled for trial before the district court in December 2021—with five scheduled just days before the trial date in the related litigation and a second trial scheduled on the exact same date." *Id.* 

<sup>&</sup>lt;sup>2</sup> Petitioner specifically identifies *Impulse Downhole v. Rubicon Oilfield*, No. 6:19-cv-00378 (W.D. Tex.) (trial set for 12/6/2021); *Estech v. Regions Fin.*, No. 6:20-cv-00322 (W.D. Tex.) (trial set for 12/7/2021); *EcoFactor v.* 

"Because the district court cannot physically conduct all of the trials currently scheduled in December 2021," Petitioner argues, "the December 13, 2021 trial may not proceed as scheduled." *Id.* at 2–3. Petitioner also cites two cases where this factor was treated as neutral despite a scheduled trial date before the Board's projected deadline for a final written decision. *Id.* at 1–2 (citing *HP Inc. v. Slingshot Printing LLC*, IPR2020-01084, Paper 13 at 9 (PTAB Jan. 14, 2021) (Factor 2 neutral despite trial scheduled five months before final written decision where "the district court's . . . trial date may slip . . . . [b]ecause the same trial date is set for two cases"); *Apple Inc. v. Parus Holdings, Inc.*, IPR2020-00686, Paper 9 at 13 (PTAB Sept. 23, 2020) (Factor 2 neutral where trial scheduled two months before final written decision and "we cannot ignore the substantial uncertainty in the Texas court's 'Predicted Jury Selection/Trial' date.")).

A final decision in this proceeding will issue no later than May 2022, approximately five months after the currently scheduled date for jury selection and trial. We decline to speculate that the scheduled trial date in this case will slip because other cases are scheduled on or near the same day. That said, the second *Fintiv* factor looks at the *proximity* of the trial date to the date of our final written decision. The timing of the trial date is a proxy for the likelihood that the trial court will reach a decision on validity before the Board issues a final written decision. Also, this factor is not considered in isolation, but holistically along with other factors. *Fintiv*, Paper 11 at 6 (discussing how "there is some overlap among these factors" and "[s]ome

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v. Ecobee, No. 6:20-cv-00078 (W.D. Tex.) and EcoFactor v. Vivint, No. 6:20-cv-00080 (W.D. Tex.) (trial set for 12/7/2021); and Ravgen v. Natera, No. 1:20-cv-00692 (W.D. Tex.) (trial set for 12/13/2021, the same day as the parallel district court litigation). Prelim. Reply 2–3 n.2.

facts may be relevant to more than one factor."). Here, the scheduled trial date is over seven months away. Although this fact favors denial, we view the relevance of this factor as diminished somewhat when, as discussed with respect to factor three below, this case is still at a relatively early stage, with fact discovery having begun less than two months ago and not set to close until July 22, 2021. Based on these facts and circumstances, we determine that this factor slightly favors denial.

## 3. Factor 3 — Investment in the Parallel Proceeding

The district court proceeding is still at a relatively early stage. Fact discovery opened on March 8, 2021, has been proceeding for less than two months, and will not close until July 22, 2021. Ex. 3002, Ex. A 4–5. Still in the future are the deadlines to amend pleadings (May 21, 2021), serve final infringement and invalidity contentions (May 21 and 24, 2021), serve opening expert reports (July 29, 2021), complete expert discovery (Sept. 9, 2021), and file dispositive motions (Sept. 23, 2021). *Id.* at 4–6. Jury selection and trial are not scheduled until December 13, 2021. *Id.* at 7.

The district court held a claim construction hearing on March 5, 2021. Ex. 2015. Patent Owner asserts that the district court issued a claim construction order, but does not submit that order in this proceeding. Prelim. Sur-reply 2. Therefore, there is no evidence in the record that the issues considered in the claim construction order bear on those raised in this proceeding.

We are not persuaded that the above actions indicate the type of significant investment that would support exercising our discretion to deny institution. The present circumstances are somewhat analogous to those in *Sand Revolution*, where the panel observed that "much work remains in the

district court case as it relates to invalidity: fact discovery is still ongoing, expert reports are not yet due, and substantive motion practice is yet to come." *Sand Revolution*, Paper 24 at 11. Moreover, there is no indication in the record that the district court has considered the validity issues raised in this Petition.

Petitioner's diligence in filing its Petition also weighs against exercising our discretion to deny institution. Patent Owner served Petitioner with its preliminary disclosure of asserted claims and infringement contentions on September 4, 2020. Ex. 1016, 5. Petitioner filed its Petition in this proceeding approximately one month later, on October 7, 2020, even before filing its invalidity contentions in the district court on October 30, 2020. Ex. 2006. As the Board explained in *Fintiv*, "it is often reasonable for a petitioner to wait to file its petition until it learns which claims are being asserted against it in the parallel proceeding," and where "the petitioner filed the petition expeditiously, such as promptly after becoming aware of the claims being asserted, this fact has weighed against exercising the authority to deny institution under *NHK*." *Fintiv*, Paper 11 at 11.

In light of the relatively early stage of the parallel district court proceeding, and Petitioner's diligence in filing the Petition, we determine that this factor weighs against exercising our discretion to deny the Petition.

4. Factor 4 — Overlap With Issues Raised in the Parallel Proceeding

This factor "evaluates 'concerns of inefficiency and the possibility of conflicting decisions' when substantially identical prior art is submitted in both the district court and the *inter partes* review proceedings." *Sand Revolution*, Paper 24 at 11 (quoting *Fintiv*, Paper 11 at 12).

Petitioner argues that "[t]his factor weighs heavily against denial of institution, as there is zero overlap between the prior art relied on in the IPR grounds and the prior art identified in Petitioner's invalidity contentions." Prelim. Reply 4. Petitioner further represents that, in the event of institution, it will not rely on the IPR references in the district court. *Id.* Therefore, Petitioner asserts, the prior art references cited in the IPR will not be considered at any district court trial. *Id.* 

Patent Owner does not allege that the references relied on in the Petition have been asserted in Petitioner's invalidity contentions in the parallel district court proceeding. Prelim. Resp. 4–8. Instead, Patent Owner asserts that the invalidity contentions in the district court "include numerous references that allegedly disclose the same features disclosed by the Petition references," including "(1) a webpage that provides recommendations of other webpages that a website visitor can access, and (2) allowing the visitor to provide a ranking for one or more webpages." *Id.* at 5 (quoting Pet. 7). However, Patent Owner does not show that any specific references in the invalidity contentions are cumulative of the references relied on in the Petition.

Because neither the references nor the grounds asserted in the Petition have been or will be raised in the parallel district court proceeding, we determine that there is little risk of duplication of effort or conflicting decisions, and this factor weighs against exercising our discretion to deny institution.

5. Factor 5 — Commonality of Parties in the Parallel Proceedings

If the petitioner here was unrelated to the defendant in the parallel district court proceeding, that might weigh against discretionary denial. *See* 

Fintiv, Paper 11 at 13–14. Here, however, the Petitioner is the defendant in the parallel proceeding. Whether that fact weighs in favor of or against exercising discretion to deny institution depends on which tribunal was likely to address the challenged patent first. As noted above, the trial date in the parallel district court proceeding is currently scheduled to occur before a final written decision is due in this proceeding. See § II.B.2, supra. Thus, we find that this factor weighs in favor of exercising our discretion to deny the Petition.

## 6. Factor 6 — Other Circumstances

Patent Owner argues that the Petition "does not disclose or suggest key limitations of each of the challenged claims, and therefore does not establish a reasonable likelihood that the Petitioner would prevail with respect to at least one of the claims challenged in the Petition." Prelim. Resp. 10. Patent Owner alleges that "[t]he record also raises the possibility that Petitioner has filed this Petition . . . simply to create additional work for Patent Owner or in unfounded hopes that the WDTX litigation might be stayed," which "unnecessarily burdens the Board." *Id*.

As discussed below, we do not agree with Patent Owner's arguments on the merits and find that Petitioner has met its burden of demonstrating a reasonable likelihood that it would prevail in showing that claims of the '300 patent are unpatentable. However, on the record before us, we cannot say that the merits are "particularly strong." Thus, we determine that this factor is neutral.

#### 7. Conclusion

As noted in *Fintiv*, we consider the above factors as part of "a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review." *Fintiv*, Paper 11 at 6. Taken together, the

relatively early stage of the district court proceeding, Petitioner's diligence in filing the Petition, the lack of overlap between the Petition's prior art references and grounds and those raised in the district court proceeding, and the relative proximity of the district court's scheduled trial date to the projected final written decision date, indicate that this is not a case where exercising our discretion to deny institution would be appropriate. Thus, considering the *Fintiv* factors as part of a holistic analysis, we are not persuaded that the interests of the efficiency and integrity of the system would be best served by invoking our authority under 35 U.S.C. § 314(a) to deny institution of a potentially meritorious Petition.

B. Discretion Under 35 U.S.C. § 314(a) Based on Multiple Petitions
On the same day, Petitioner filed two petitions challenging different
claims of the '300 patent. In this Petition, Petitioner challenges independent
claims 1 and 11 and dependent claims 2–4 and 12–17. In IPR2021-00034,
Petitioner challenges independent claim 5 and dependent claims 6–10.
IPR2021-00034, Paper 2. In accordance with the Trial Practice Guide,<sup>3</sup>
Petitioner filed a separate paper ranking its petitions and explaining the
differences between them. Paper 3 ("Explanation").

Petitioner notes that Patent Owner identified all of the '300 patent claims as being infringed in its infringement contentions in the parallel district court proceeding. Explanation 1. Petitioner states that it "considered filing a single petition challenging all 17 asserted claims, but given the length and number of limitations involved, enumerating the grounds for all

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<sup>&</sup>lt;sup>3</sup> Trial Practice Guide at 59–61 (explaining that the Board may exercise discretion under 35 U.S.C. § 314(a) to deny a petition(s) if it determines that more than one petition challenging claims of the same patent is not warranted).

seventeen claims in a single petition would have materially reduced the thoroughness of its analysis." *Id.* at 2. According to Petitioner, this is supported by the fact that "both concurrently filed Petitions present no more than a single Ground of obviousness with respect to each claim." *Id.* "Because each Petition challenges a distinct set of claims," Petitioner asserts, "and presents no more than one Ground for any individual claim, both Petitions should be afforded full and fair consideration by the Board on their merits." *Id.* 

Patent Owner argues that considering both petitions would create an unnecessary burden on the Board and Patent Owner. IPR2021-00034, Paper 8 at 3–5. Patent Owner asserts that the two petitions challenge a total of only seventeen claims, and that these claims do not include an excessive number of limitations. *Id.* at 4. Patent Owner also points to the overlap in prior art references among the petitions. *Id.* According to Patent Owner, Petitioner could have easily presented all of its proposed grounds within the word count limit of a single petition. *Id.* at 5.

We find that Petitioner has made a reasonable showing that two petitions are appropriate here. In particular, it is reasonable to conclude that the number of claims, the length of the claims, and the difference in scope of the independent claims warranted the filing of two petitions. For example, Petitioner's showing for claim 1 occupies approximately forty-one pages and independent claim 11 occupies approximately twelve pages of this petition, which is reasonable in view of the length of those claims. Pet. 10–51, 55–67. Petitioner's showing for claim 5, which differs in scope from claims 1

and 11,<sup>4</sup> occupies approximately 31 pages of the -00034 petition, which also is reasonable in view of the length of claim 5. IPR2021-00034, Paper 2 at 10–41. Additionally, some of the dependent claims are lengthy or complex, necessitating several pages of explanation. *See, e.g.*, Pet. 51–55, 67–82; IPR2021-00034, Paper 2 at 41–67. Based on the facts before us, we decline to exercise our discretion to deny the Petition under 35 U.S.C. § 314(a) due to Petitioner's filing of two petitions against the same patent.

#### C. Claim Construction

A claim "shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b)." 37 C.F.R. § 42.100(b) (2020). Petitioner states that the '300 patent specification "provides exemplary definitions and/or descriptions of certain terms recited in the claims" in column 4, and contends that its "analysis tracks those descriptions and is otherwise consistent with the specification." Pet. 6–7 (citing Ex. 1001, 4:20–27). Petitioner further contends that it "does not believe express claim construction is necessary at this time." *Id.* at 7.

Patent Owner states that, at this stage of the proceeding, it is applying "Petitioner's term interpretations to minimize the disputes to be resolved by the Board at this preliminary stage," but that it "reserves the right to contest those interpretations in the future." Prelim. Resp. 14.

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<sup>&</sup>lt;sup>4</sup> For example, claim 5 recites "wherein processing the indicated intent comprises using the indicated intent as a reference to intent ranking data that ranks the plurality of webpages for the indicated intent, the intent ranking data comprising intent data provided by previous visitors to one or more webpages of the namespace," a limitation not recited in claims 1 or 11.

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At this stage of the proceeding, we apply the definitions of the terms "intent," "intent candidate," "inferred intent," "declared intent," and "current intent" set forth in the '300 patent specification, as follows:

Intent—a unique purpose or usage of the website.

Intent Candidates—a ranked list of Intents for the current page.

Inferred Intent—one or more of the highest ranked Intent Candidates for the current page. The intent tool passively applies the Inferred Intent to each page by default.

Declared Intent—an Intent that has been confirmed by the visitor as the purpose for the page visit.

Current Intent—the current user-specified or programmatically inferred Intent for the page visit. The Inferred Intent (top rated) is applied as the Current Intent until the user sets a Declared Intent.

Ex. 1001, 4:25–36.

We determine that it is not necessary to provide an express interpretation of any other claim term at this time. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) ("[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.").

# D. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 if "the differences between the subject matter sought to be patented 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, objective evidence of non-obviousness.<sup>5</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of prior art elements would have produced a predictable result weighs in the ultimate determination of obviousness. *Id.* at 416–417.

In an *inter partes* review, the petitioner must show with particularity why each challenged claim is unpatentable. *Harmonic Inc. v. Avid Tech.*, *Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016); 37 C.F.R. § 42.104(b) (2020). The burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

We analyze the challenges presented in the Petition in accordance with the above-stated principles.

# E. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art at the time of the alleged invention "would have possessed at least a bachelor's degree in software engineering, computer science, computer engineering, or electrical engineering, with at least two years of experience in web-based software application development (or equivalent degree or experience)." Pet. 4–5 (citing Ex. 1002 ¶ 12). Patent Owner does not object to Petitioner's

<sup>5</sup> At this stage of the proceeding, Patent Owner has not presented objective evidence of non-obviousness.

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proposed level of ordinary skill at this stage of the proceeding. Prelim. Resp. 13.

At this stage of the proceeding, with the exception of the open-ended language "at least," we adopt Petitioner's assessment of the level of skill in the art, which is consistent with the '300 patent and the asserted prior art of record.

## F. Ground 1: Obviousness of Claims 1–4 and 11–16

Petitioner contends that claims 1–4 and 11–16 would have been obvious over the combination of Gregov, Hartman, Linden, Holzner, and Nickerson. Pet. 3, 10–79. Patent Owner disagrees, arguing that the claimed combination does not teach several of the limitations of these claims. Prelim. Resp. 14–31.

## 1. Overview of Gregov (Ex. 1003)

Gregov is directed to a system for generating item recommendations on a merchant website. Ex. 1003, code (57), Figs. 3–6. In one embodiment, the user first performs a key word search to generate an initial set of recommendations. *Id.* at 2:27–28, 4:8–15. For example, the user may enter the search string "digital photography" to find books relating to that topic. *Id.* at 4:12–15. The system then displays search results, as shown in Figure 4, reproduced below:



FIG. 4

Figure 4 of Gregov shows a set of search results for the term "digital photography." Ex. 1003, Fig. 4. As can be seen in Figure 4, the search produced a number of book items 411–413 most relevant to the search string inputted. *Id.* at 4:20–22. Figure 4 also displays a recommendations button 420, which the user can click to obtain recommendations that are based upon the top three items in the search result. *Id.* at 4:22–26.

When the user clicks recommendation button 420, the system displays the screen shown in Figure 5, reproduced below.



FIG. 5

Figure 5 of Gregov shows a list of recommended items 510–560. Items 510, 540, and 520 are the top three items returned as items 411–413 in Figure 4. Ex. 1003, 4:27–31. Items 530, 550, and 560 are among the items returned by the recommendation engine when seeded with the top three items from the search. *Id.* at 4:32–34. Thus, the recommended items shown in Figure 5 are a combination of the top items returned by the initial search and recommendations based upon these top items. *Id.* at 4:34–36.

Figure 5 further shows a button labeled "More like this" next to each recommended item that the user may click on to base a new set of recommendations on that item. Ex. 1003, 4:37–39. For example, if the user clicks button 551, the system will base a new set of recommendations on item 550, a book entitled "The Art of Digital Photography." *Id.* at 4:39–42. The results are shown in Figure 6, reproduced below.

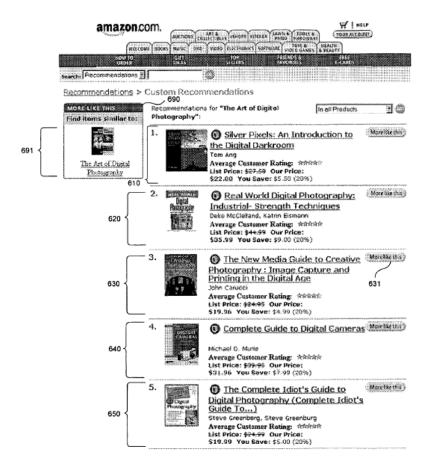
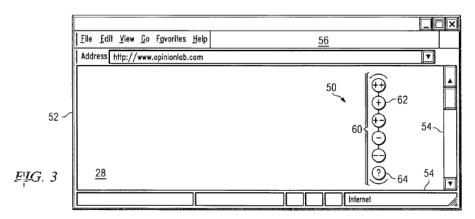


FIG. 6

Figure 6 shows a set of recommendations displayed by the system when the user clicks button 551 in Figure 5. Ex. 1003, 4:43–46. In Figure 6, seed item 691 is "The Art of Digital Photography" shown as item 550 in Figure 5. *Id.* at 4:46–49. Figure 6 also shows a list of recommended items 610–650 that are based upon using item 691 alone as a seed for the recommendation engine. *Id.* at 4:50–53. The user may add additional seed items to the list of user-specified seed items by clicking a "More like this" button associated with one of the items listed in Figure 6, such as button 631 associated with item 630. *Id.* at 4:53–57.

## 2. Overview of Nickerson (Ex. 1007)

Nickerson discloses a system for receiving page-specific user feedback concerning a webpage, which may include a feedback measurement tool incorporated into the webpage. Ex. 1007, code (57), 4:27–30. An example is shown in Figure 3, reproduced below.



As shown in Figure 3, webpage 28 displays a feedback measurement tool with a multi-level subjective rating scale 60 that includes five levels ranging from very negative to very positive, each level having an associated language-independent symbol 62 (such as "+" or "-"). Ex. 1007, 15:24–30. To record general feedback concerning webpage 28, the user selects an appropriate symbol 62 reflecting their feedback. *Id.* at 15:45–59.

Nickerson also explains that, instead of or in addition to a general feedback measurement tool, the system may include a specific feedback measurement tool for measuring user feedback concerning one or more selected aspects of a webpage, including the content, design, usability, or any other suitable aspect of the webpage. Ex. 1007, 6:46–51. Feedback and related input received from users may be stored in a database. *Id.* at 6:64–7:3.

- 3. Analysis of Independent Claim 1
  - a) 1[pre]: "[a] method of predicting an intent of a visitor to a webpage"

Petitioner asserts that, to the extent the preamble of claim 1 is limiting, Gregov teaches the subject matter of the preamble. Pet. 10. Specifically, Petitioner states that "Gregov teaches predicting an intent of a visitor to a merchant webpage through a recommendation engine that identifies items (such as products) likely to match the purpose behind the user's visit." *Id.* According to Petitioner, the claimed "webpage" corresponds "to a webpage on the merchant website that provides recommendations," such as Figure 5 of Gregov. *Id.* 

As to "predicting an intent of a visitor," Petitioner argues that "the '300 patent provides an exemplary definition of 'intent' as 'a unique purpose or usage of the website." Pet. 11–12 (citing Ex. 1001, 4:25). According to Petitioner, the claimed "website" in Gregov "takes the form of a merchant website (such as Amazon.com) that provides a number of products and associated product information to website visitors." *Id.* at 12 (citing Ex. 1003, 1:20–25). Petitioner argues that the "unique purpose or usage of the website" "corresponds to one or more items offered by the merchant website (such as one or more books on 'digital photography') for which a visitor can obtain information and/or place a purchase." *Id.* (citing Ex. 1002 ¶¶ 69–71). Thus, in Petitioner's view, "[o]ne or more of these items would . . . match a visitor's unique purpose for visiting the website, as well as that visitor's unique usage of the website." *Id.* 

Petitioner further argues that "Gregov predicts the intent of a visitor by identifying at least one item recommendation directed to that visitor" based on "processing inputs from the user that provide indications of the

visitor's likely interests." *Id.* (citing Ex. 1003, 2:10–26, 2:35–37).

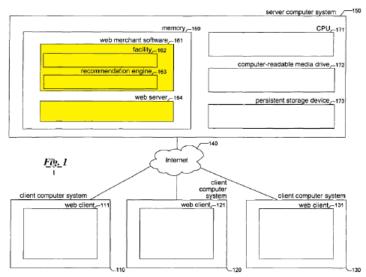
According to Petitioner, "[a] skilled artisan would have understood and found it obvious that by generating product recommendations, the Gregov system is making a prediction about the purpose or 'intent' behind the user's visit to the website." *Id.* (citing Ex. 1002 ¶¶ 72–73).

Patent Owner does not present arguments regarding the preamble. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding the preamble.<sup>6</sup>

b) 1[a]: "receiving into an intent engine at least one input parameter from a web browser displaying the webpage"

Petitioner argues that Gregov discloses the claimed "intent engine" within computer system 150, as shown in Petitioner's annotated version of Gregov's Figure 1 below:

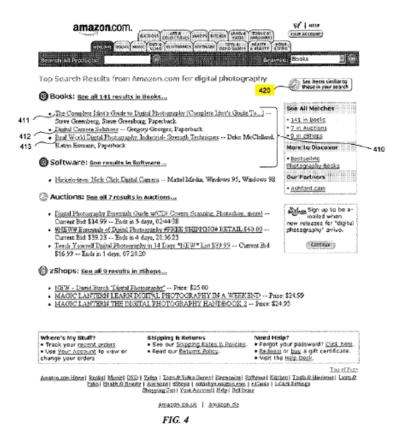


Petitioner's Annotated Version of Gregov's Figure 1. Pet 13.

<sup>&</sup>lt;sup>6</sup> Because we are persuaded that Petitioner has shown that Gregov teaches the subject matter recited in the preamble, we need not decide whether the preamble is limiting for purposes of this Decision.

Petitioner argues that the memory 160 of server computer system 150 includes web server software 164 that "provides basic web server functionality," as well as web merchant software 161 containing recommendation engine 163 that "can generate a ranked list of item recommendations." Pet. 13 (citing Ex. 1003, 2:53–59, 2:62–64, 4:3-7; Ex. 1002 ¶ 74). According to Petitioner, the "intent engine" in Gregov includes both "the web server software 164 that receives requests from users and delivers webpages, and web merchant software 161 that generates recommendations based on user input." *Id.* at 13–14. Petitioner asserts that this mapping "is consistent with the '300 patent's description of an 'intent engine' as having 'functions' that 'may be incorporated into webpages,' and that 'the intent engine may be incorporated into a web server." *Id.* at 14 (citing Ex. 1001, 17:58–62, 3:22–24).

Petitioner further argues that the claimed "at least one input parameter" received from the web browser is taught in Gregov by "the request generated when the user presses recommendations button 420," which is highlighted in Petitioner's annotated version of Figure 4 reproduced below.



Petitioner's annotated version of Gregov's Figure 4 highlighting button 420. Pet. 15.

Petitioner argues that "[t]he 'at least one input parameter' is received by the server when the user presses button 420 shown in Figure 4 using his web browser," which "causes the browser to display the recommendation webpage" shown in Figure 5 of Gregov. Pet. 15–16 (citing Ex. 1003, 4:22–26, 4:24–28, Fig. 5). Petitioner further contends that, "[b]ecause the button triggers the display of the recommendation webpage as shown in Figure 5, it would have been obvious that the button causes at least one input parameter to be received by the server." *Id.* at 16 (citing Ex. 1002 ¶¶ 76–79). Additionally according to Petitioner, this input parameter would be received "into an intent engine . . . from a web browser displaying the web page" because web server 164 "receives a request from the web browser that will display the recommendation page (Figure 5), in response to

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the user activating button 420 (Figure 4)." Pet. 16–17 (citing Ex. 1003, 2:62–64; Ex. 1002 ¶ 80).

Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

c) 1[b]: "processing the at least one input parameter in the intent engine to determine at least one inferred intent"

Petitioner argues that Gregov teaches this limitation. Petitioner contends that, in response to receiving the "at least one parameter" (button 420 in Figure 4), Gregov's server processes the parameter to "determine at least one inferred intent" by identifying recommended items available on the website, as in Gregov's Figure 5. Pet. 21 (citing Ex. 1003, 4:22–36; Ex. 1002 ¶¶ 89–91). According to Petitioner, "[e]ach recommended item reflects an inference by the system about the purpose or 'intent' behind the user's visit to the merchant's website (*i.e.*, about one or more items sought by the user for obtaining product information and/or placing a purchase)." *Id.* at 22. Thus, Petitioner contends, "[t]he recommended items in Figure 5 . . . . teach and suggest 'determining at least one inferred intent." *Id.* (citing Ex. 1002 ¶ 92). These items qualify as "at least one inferred intent," according to Petitioner, "because each represents 'one of the highest ranked Intent Candidates for the current page,' using the terminology from the '300 specification." *Id.* at 23–24 (citing Ex. 1001 4:20–30).

Additionally, Petitioner argues that Gregov teaches determining the inferred intent by "processing the at least one input parameter" because Gregov's identification of the recommended items occurs in response to the user activating recommendations button 420 in Figure 4. Pet. 24. Petitioner

also argues that Gregov teaches processing the input parameter "in the intent engine" because the processing is done using Gregov's web server 164 and merchant software 161 (which incorporates the recommendation engine 163), which are included in the "intent engine" as explained above. *Id.* at 24–25 (citing Ex. 1002 ¶¶ 74, 97); *see* § II.F.3.b, *supra*.

Patent Owner argues that Gregov does not teach "determining at least one inferred intent," but instead "at best discloses methods of receiving an **explicit** request for additional information similar to information previously presented, and then presenting such additional information in response to that explicit request." Prelim. Resp. 15. According to Patent Owner, "this mapping reads the term 'inferred' out of the claims completely," because "the user clicks on a button on which appears the text '[s]ee items similar to those in your search' [in Figure 4] in order to see items similar to those in their prior search," and "[t]here is no question as to the meaning or intent of the user clicking on that button, and therefore no need to infer intent." *Id.* at 15, 17. Therefore, Patent Owner contends, Petitioner "attempts to rewrite 'determin[ing] at least one inferred intent' to require only 'identifying recommended items." *Id.* at 18.

At this stage of the proceeding, we determine that Petitioner has shown a reasonable likelihood that Gregov teaches this limitation. The '300 patent describes "intent" as "a unique purpose or usage of the website," and the parties have agreed on this construction of "intent" in the parallel district court proceeding. Ex. 1001, 4:25; Ex. 3001, 1. In the context of the book shopping website of Gregov, we determine that the visitor's "intent" can be to find a particular book that matches what the visitor is looking for. Given this understanding, we agree with Petitioner that Gregov "infers" this intent

by using the visitor's pressing of the button 420 in Figure 4 labeled "See items similar to those in your search," along with the results of the search using the visitor's search terms, to determine one or more candidate books to match what the visitor is looking for, as shown by the listing in Figure 5.

We further agree with Petitioner that each of the search results 510–580 in Figure 5 are "inferred intents" because they are "one of the highest ranked Intent Candidates for the current page," which is how the '300 specification describes "inferred intent." Ex. 1001, 4:28–30.

Based on the present record, we do not agree with Patent Owner's argument that Gregov does not infer intent because it receives an "explicit" request for information. To begin with, Patent Owner has not pointed us to anything in the intrinsic evidence that would preclude inferring of intent from a button representing an "explicit" request for information. Moreover, the button 420 in Figure 4, upon which Petitioner relies, is not an "explicit" request for a specific book that the user is searching for, but rather is merely a request for the system to identify candidates that may match the book the user is intending to find. Ex. 1003, 4:22–26. Thus, we do not agree that Petitioner is reading the term "inferred" out of the claim. Similarly, we do not agree with Patent Owner's argument that Petitioner "attempts to rewrite 'determin[ing] at least one inferred intent' to require only 'identifying recommended items'" (Prelim. Resp. 18), because we do not see anything in the claim or the specification that would prevent "identifying recommended items" from being the result of a process of inferring the visitor's intent.

Consequently, we determine that, on the record before us, Petitioner has established a reasonable likelihood that Gregov teaches this limitation.

d) 1[c]: "providing the at least one inferred intent to the web browser to cause the at least one inferred intent to be displayed on the webpage"

Petitioner argues that Gregov's system provides at least one inferred intent (the item recommendations of Figure 5) through the recommendation webpage delivered to the visitor's web browser, and displays that inferred intent on the webpage of Figure 5. Pet. 25 (citing Ex. 1001, Fig. 5, 4:27–29; Ex. 1002 ¶ 98).

Patent Owner relies on its argument for limitation 1[b] for limitation 1[c]. Prelim Resp. 15–20.

As discussed with respect to limitation 1[b] above, we find that Petitioner has made a sufficient showing that Gregov teaches "determin[ing] at least one inferred intent." We also determine that Petitioner has sufficiently shown that this "inferred intent" is provided to the web browser to cause it to be displayed on the webpage, as shown in Gregov's Figure 5. Therefore, based on the record before us, Petitioner has established a reasonable likelihood that Gregov teaches this limitation.

e) 1[d]: "prompting the visitor to confirm the visitor's intent"
Petitioner argues that Gregov teaches this limitation. Specifically,
Petitioner contends that this limitation is met by Gregov's button labeled
"More like this" in Figure 5, which "prompts the visitor to confirm that the
visitor is in fact seeking 'items of a particular type' (Ex. 1003, 2:24–25), and
thus wishes to see more like it." Pet. 25–26. For example, Petitioner argues
that the visitor may click the "More like this" button 551 in Figure 5 "in
order to base a new set of recommendations on item 550, a book entitled
'The Art of Digital Photography." *Id.* at 26 (citing Ex. 1003, 4:37–42). By
pressing this button, Petitioner asserts, the visitor "is prompted to provide

confirmation that she is in fact seeking items of a particular type commensurate with and closely related to the specific item to which [the] button corresponds—in other words, that items of that type would match the underlying purpose of her visit to the merchant website." *Id.* at 27 (citing Ex. 1002 ¶¶ 100–101; Ex. 1003, 2:55–59, 2:19–26). According to Petitioner, "[t]his mapping is consistent with the '300 specification, which uses the terms 'confirmed' and 'declared' intent synonymously to refer to an intent declared by the user that is then used by the system to determine further recommendations." *Id.* (citing Ex. 1001, 7:37–42).

Patent Owner disagrees, arguing that "a user's selection of button 551 actually indicates that the alleged 'intent' identified by Gregov, i.e., the full list of items in Fig. 5 . . ., was incorrect and that the user wants to see other options." Prelim Resp. 20. Thus, Patent Owner asserts, the "More like this" button 551 does not "confirm intent," as required by limitation 1[d]. *Id*.

At this stage of the proceeding, we find that Petitioner has shown a reasonable likelihood that Gregov teaches this limitation. As discussed above, we agree with Petitioner that item 550 in Figure 5 indicates an "inferred intent," as we understand that term to be used in the '300 patent. See § II.F.3.c, supra. Based on the present record, we agree with Petitioner that the visitor's pressing of the "More like this" button 551 next to item 550 in Figure 5 signifies that the visitor is seeking items similar to item 550, and therefore "confirms" that item 550 reflects the visitor's intent, at least to some degree. See Ex. 1003, 4:37–42. Consequently, at this stage of the proceeding, we find that Petitioner has shown a reasonable likelihood that Gregov discloses this limitation. The parties may further address the proper

meaning of "confirm[ing] the visitor's intent," and whether that meaning is taught by Gregov, during the trial.

Petitioner argues that this step corresponds to the recommendation facility in Gregov (part of the "intent engine") receiving the user input from selecting the "More like this" button next to a presented item from Figure 5 (the confirmed intent). Pet. 27. According to Petitioner, the received input corresponds to the "confirmed intent." *Id.* at 28. Petitioner argues that this confirmed intent is received into the intent engine because the user input is received by Gregov's recommendation facility in order to add the item next to the "More like this" button to the list of "seed items" for generation of further item recommendations. *Id.* (citing Ex. 1003, 3:27–44; Ex. 1002

Patent Owner relies on its argument for limitation 1[d] for limitation 1[e]. Prelim Resp. 20.

As discussed with respect to limitation 1[d] above, we find that Petitioner has made a sufficient showing that Gregov teaches "prompting the visitor to confirm the visitor's intent." We also determine that Petitioner has sufficiently shown that this "confirmed intent" is "received into the intent engine," as required by limitation 1[e]. Therefore, based on the record before us, Petitioner has established a reasonable likelihood that Gregov teaches this limitation.

g) 1[f]: "processing the confirmed intent in the intent engine to determine at least one recommended webpage that matches the confirmed intent, the at least one recommended webpage selected from a plurality of webpages within a defined namespace"

Petitioner argues that after Gregov's server receives the user input from pressing the "More like this" button in Figure 5 (the "confirmed intent"), the server "processes th[e] confirmed intent" by adding the item corresponding to the "More like this" button to the seed list and using that "seed" item to generate new recommendations, as shown in Figure 6. Pet. 29 (citing Ex. 1003, 3:40–43, 2:55–59, 4:37–53). According to Petitioner, one of ordinary skill would have understood that the new item recommendations in Figure 6 correspond to "at least one recommended webpage" because one of ordinary skill would have recognized that the display of underlining under item names indicates a hyperlink to a webpage providing further information on the item. Pet. 32–33. "Because addition of the item [corresponding to the 'More like this' button] to the seed list occurred in response to the confirmed intent (i.e., pressing 'More like this' for that item)," Petitioner asserts, "Gregov renders obvious 'processing the confirmed intent' to determine at least one recommended webpage," as claimed. *Id.* at 29 (citing Ex. 1002 ¶ 105).

Petitioner additionally argues that this "processing" occurs within Gregov's recommendation engine, and that Gregov's recommendation engine sits within the server and is part of the claimed "intent engine." Pet. 29. Petitioner further argues that it would have been obvious that each hyperlinked item detail page (such as Figure 6) is also part of the merchant website (a "defined namespace"), and would have been selected from among

the webpages that make up the merchant website (i.e., "from a plurality of webpages within a defined namespace"). Pet. 34–35.

Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

h) 1[g]: "causing the webpage in the web browser to display at least one link to the at least one recommended webpage"

Petitioner argues that the webpage as shown in Gregov's Figure 6 displays a link to a corresponding item detail webpage for each item, and that this item detail webpage is the "at least one recommended webpage," as claimed. Pet. 35. Petitioner also argues that one of ordinary skill would have regarded Figures 5 and 6 as referencing the same webpage (the recommendation webpage), and that this webpage corresponds to "the webpage" recited in element 1[c], as well as "the webpage" recited in element 1[g]. Pet. 36–40.

Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

*i)* 1[h]: "prompting the visitor to rank the webpage for the inferred intent"

Petitioner argues that Gregov does not expressly disclose this limitation, but that it would have been obvious in light of Nickerson, which discloses a technique for allowing visitors to rank webpages on a website. Pet. 40–45. Petitioner argues that Nickerson discloses a "feedback measurement tool" that can be incorporated into any existing webpage, and

can appear as an icon viewable in the browser window. Pet. 40–41 (citing Ex. 1007, 14:51–57). One example provides a "multi-level subjective rating scale" including five levels ranging from very negative to very positive. *Id.* at 41 (citing Ex. 1007, Fig. 3, 15:24–39). Petitioner contends that this teaches "prompting the user to rank [a] webpage," and is "remarkably similar" to the webpage rating tool 33 described in Figures 4 and 5 of the '300 patent, which prompts the user to rank the webpage for the inferred intent by including the language "Recommend This Page" and providing a multi-point scale. *Id.* at 41 (citing Ex. 1001, Fig. 4–5, 6:34–44).

Petitioner argues that it would have been obvious to adapt Gregov's webpages to include Nickerson's feedback measurement tool. Pet. 42 (citing Ex. 1002 ¶ 134). To illustrate this combination, Petitioner provides a drawing combining Gregov's Figure 5 recommendation page with Nickerson's rating tool from Figure 3, reproduced below.

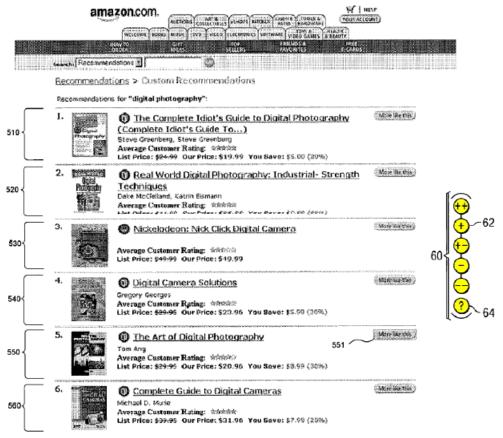


FIG. 5

Petitioner's diagram combining Nickerson's Figure 3 rating tool 60 into Gregov's Figure 5 recommendations page. Pet. 42.

Petitioner argues that this combination would have resulted in a system that prompts the visitor to rank the webpage "for the inferred intent" because "[t]he feedback measurement tool in the proposed combination would prompt the visitor to rank the webpage for presenting item recommendations, such as recommended item 550 ('The Art of Digital Photography') (the 'at least one inferred intent')." Pet. 43. Thus, Petitioner asserts, it would have been obvious that the solicited feedback is for one or more of the recommendations (the "inferred intent") as presented on the page. *Id.* (citing Ex. 1002 ¶ 135). In other words, according to Petitioner, the ranking would relate to "whether the visitor found the

recommendation page and/or its recommendations helpful/unhelpful, informative/uninformative, etc." *Id*.

Petitioner argues that one of ordinary skill would have been motivated to add Nickerson's feedback tool to Gregov in order "to collect valuable user feedback about webpages on the merchant website." Pet. 44 (citing Ex. 1002 ¶¶ 137–138; Ex. 1007, 1:31–52, 4:35–47). According to Petitioner, in the context of Gregov's recommendation page, "the feedback tool would have provided a distinct further benefit by allowing the administrator to use the feedback to assess whether visitors found item recommendations to be relevant and/or useful, and would have been motivated to do so in order to provide an improved user experience." *Id.* at 44–45 (citing Ex. 1002 ¶ 137). Petitioner further asserts that one of ordinary skill would have had "every expectation of success" in adapting Gregov's recommendation page to include Nickerson's feedback tool, and that this adaptation "would have required nothing more than conventional and well-known programming techniques." *Id.* at 45 (citing Ex. 1002 ¶¶ 134, 139; Ex. 1007, 2:30–36, 4:30–36, 6:16–28).

Patent Owner argues that the cited references do not disclose prompting a visitor to rank the webpage "for the inferred intent." Prelim. Resp. 21. To the contrary, Patent Owner asserts, Nickerson only "discloses a technique for allowing visitors to rate a webpage **as a whole**," because its rating scale "merely allows a user to record a ranking for the overall look

<sup>&</sup>lt;sup>7</sup> Petitioner further asserts that its mapping "is consistent with Patent Owner's infringement allegations" in the parallel district court proceeding, which accuse Petitioner of "prompt[ing] the visitor to rank the webpage for inferred intent by, for example, reacting to the webpage or providing feedback." Pet. 43 n.5 (citing Ex. 1013 ¶ 43).

and feel of the webpage and does not disclose any method of prompting a user to rank the webpage **specifically for the inferred intent**, as required by limitation 1[h]." *Id.* at 21–22 (citing Ex. 1007, 15:24–34, Fig. 3).

In determining the meaning of "prompting the visitor to rank the webpage for the inferred intent," we consider the disclosures of the '300 specification concerning ranking of webpages for inferred intent. The '300 specification shows the rating tool 33 in Figure 4, reproduced below.

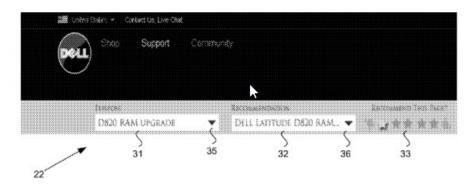


Figure 4

According to the specification, the rating tool 33 in Figure 4 (reproduced above) allows the visitor "to indicate a rating of the webpage for the current intent." Ex. 1001, 6:34–38. This rating tool as shown includes "a 7-point scale . . . using which the visitor may rate pages via a simple thumbs-up and thumbs-down to indicate Success (6) or Failure (0), or they may choose to give the page 1 to 5 stars to indicate degrees of Success." *Id.* at 6:38–44. The specification further states that "[t]he visitor does not have to fully understand the 'Success' paradigm or the nature of the 7-point scale," and "may simply interact with familiar concepts, thumbs-up/down and a range of stars, as they see fit." *Id.* at 6:49–52.

In view of these disclosures in the specification, we do not understand "prompting the visitor to rank the webpage for the inferred intent" to require

the system to explicitly tell the visitor that the ranking is for the purpose of determining how closely the webpage matches what the user is intending to find. Rather, we understand it to be sufficient if the system provides a more general ranking system that allows the visitor to provide a ranking for the page, such as "thumbs-up/down" or "a range of stars" that may relate in some respect to how closely the webpage matches what the visitor is seeking. *See* Ex. 1001, 6:49–52.

Given this understanding, we determine that Petitioner has shown a reasonable likelihood that this limitation is met by the combination of Nickerson's page rating scale with Gregov's recommendations page. In this combination, we understand that a rating for the recommendations page may consider how well the recommendations on the page (the "inferred intents") match what the visitor intends to find (the visitor's intent). For example, if the recommendations in Gregov's Figure 5 are not relevant to what the user is looking for, the user may give a low rating to the webpage. Accordingly, we find that Petitioner has made a sufficient showing at this stage of the proceeding that the ranking in the Gregov/Nickerson combination is "for the inferred intent." The parties may further address the meaning of "rank[ing] the webpage for the inferred intent," and whether this phrase is met by the Gregov/Nickerson combination, during the trial.

Additionally, based on the present record, we determine that

Petitioner has shown a sufficient motivation to combine Gregov and

Nickerson in order to use Nickerson's rating tool to collect user feedback on

Gregov's system and provide improvements to enhance user experience.

Patent Owner does not address motivation to combine at this stage of the

proceeding.

Consequently, we determine that, on the record before us, Petitioner has established a reasonable likelihood that the prior art teaches this limitation.

*j) I[i]:* "receiving a rank from the web browser"

Petitioner argues that Nickerson discloses "receiving a rank from the web browser" when the user selects an appropriate ranking using the feedback measurement tool, which is then transmitted to a server for storage. Pet. 45 (citing Ex. 1001, 15:45–50). According to Petitioner, the user-provided rank would be received from the web browser when the browser transmits the rank to the server for Gregov's merchant website. *Id.* (citing Ex. 1002 ¶ 140).

Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

k) 1[j]: "storing a datapoint comprising an identity of the webpage, the inferred intent and the received rank"

Petitioner argues that this limitation would have been obvious over the combination of Gregov, Nickerson, and Linden. Pet. 46–51. According to Petitioner, one of ordinary skill would have interpreted a "datapoint" as "requiring storage of the claimed pieces of information as data for a particular webpage that was ranked by a visitor, but not specifying any particular physical storage arrangement." Pet. 46 (citing Ex. 1002 ¶ 142). Petitioner argues that Nickerson teaches collecting and storing a datapoint comprising at least the title and URL for the webpage ("an identity of the

webpage"), and the rating provided by the user ("the received rank"). Pet. 47 (citing Ex. 1007, 15:45–59).

Petitioner acknowledges that Nickerson does not appear to disclose storage of "the inferred intent," but argues that it would have been obvious to do so. Pet. 48–51. Relying on Dr. Chatterjee, Petitioner contends that one of ordinary skill would have been motivated to adapt the Gregov/Nickerson combination to store, along with the identity and userprovided ranking for the recommendation page, one or more of the recommended items presented as results on that page. Id. at 49–50 (citing Ex. 1002 ¶¶ 149, 137–138). According to Petitioner and Dr. Chatterjee, creating a record of items actually recommended (the "at least one inferred intent") along with the other information about the recommendation page "would have made that ranking data even more meaningful" and "provided more insight into the cause of the visitor's rating" in order to "allow the administrator to analyze the relevance and quality of particular recommendations presented on the page." *Id.* at 50 (citing Ex. 1002 ¶ 142). Petitioner also points to Nickerson's disclosure that the stored feedback information for a webpage can additionally include "any other suitable information." Id. (citing Ex. 1007, 15:59).

Again relying on Dr. Chatterjee, Petitioner argues that Linden would have further motivated one of skill to store the items identified on the recommendation page in order to improve the quality of subsequent recommendations. Pet. 50 (citing Ex. 1002 ¶ 150). According to Petitioner, Linden teaches maintaining a record of search queries and the results of those queries presented to the user (Ex. 1005, 25:46–49, 25:67–26:4, 26:58–65) and using the results of prior searches when identifying and ranking

items to recommend (*id.* at 30:27–30, 27:21–24). Pet. 49–50. Petitioner argues that "[b]y maintaining in Gregov a record of how often a given item is identified and displayed by the recommendation engine, along with user-provided feedback, the recommendation engine would have the ability to further determine: (a) that the item has a greater likelihood of having relevance to the visitor (and thus should be promoted and displayed more prominently), or (b) that the item is deemed irrelevant or repetitive (and thus should be excluded or displayed less prominently)." *Id.* at 50–51 (citing Ex. 1002 ¶ 150; Ex. 1005, 30:37–40). Petitioner argues that "[a]lthough Gregov does not describe the process of identifying recommended items as 'searching,' a skilled artisan would have understood Gregov's recommendation process to be analogous to identifying search results as described in Linden, and thus would have been motivated to use the known technique of Linden to improve a similar process in Gregov, with a reasonable expectation of success." *Id.* at 51 (citing Ex. 1002 ¶ 151).

Patent Owner argues that "none of the five references that make up [Petitioner's] proposed obviousness combination discloses storing either an actual inferred intent or the links in Gregov that the Petition mischaracterizes as inferred intent." Prelim. Resp. 24. Patent Owner also contends that Petitioner's obviousness rationale "is difficult to piece together from reading the Petition," and is based on improper "hindsight bias and purported 'common sense" of a person of ordinary skill. Prelim. Resp. 23–24.

Based on the present record, including Petitioner's arguments and the as yet unrebutted testimony of Dr. Chatterjee reviewed above, we determine that Petitioner has set forth sufficient evidence of obviousness at this stage of the proceeding. We agree with Petitioner that the Gregov/Nickerson

combination teaches storing the identity of the webpage and the received rank. Ex. 1007, 15:45–59; Ex. 1002 ¶ 144. We further find that Petitioner has provided a sufficient rationale, supported with testimony from Dr. Chatterjee, to establish a reasonable likelihood that one of ordinary skill would have been motivated to store one or more recommended items along with the page identification and rank in order to provide further data to analyze the effectiveness of the webpage and facilitate improvements. *See* Ex. 1002 ¶¶ 147–150, 137–138; Ex. 1005, 25:46–49, 25:67–26:4, 26:58–65, 30:27–30, 27:21–24, 30:37–40. At this stage of the proceeding, therefore, we disagree with Patent Owner's allegations that the combination is based on improper hindsight bias and unsupported "common sense."

Moreover, the fact that none of the references individually discloses the limitation at issue here is not dispositive, because Petitioner's argument is based on obviousness, not anticipation. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (Where obviousness is based on a combinations of reference, one cannot show nonobviousness by attacking references individually.).

Consequently, we determine that, on the record before us, Petitioner has established a reasonable likelihood that the prior art teaches this limitation.

# l) Summary for Claim 1

For the foregoing reasons, we are persuaded that Petitioner's cited evidence and reasoning demonstrates a reasonable likelihood that Petitioner would prevail in its contentions regarding claim 1.

#### 4. Dependent Claim 2

Claim 2 depends from claim 1 and further recites that "the at least one input parameter comprises an identity of the webpage." Ex. 1001, 18:59–60. Petitioner argues that "it would have been obvious that the request message triggered by button 420 [in Figure 4 of Gregov] would have included a URL" and "that the webpage shown in Figure 5 would be delivered in response to the server receiving an HTTP request message from the browser that includes a URL for the webpage." Pet. 17 (citing Ex. 1001, 3:38–41; Ex. 1002 ¶ 81). Petitioner further contends that its position is confirmed by Hartman, whose disclosures were incorporated into Gregov. *Id.* (citing Gregov 3:25–26 (incorporating Application No. 08/928,555, which issued as Hartman)). Specifically, Petitioner relies on the following disclosure in Hartman:

Each resource (e.g., computer or Web page) of the WWW is uniquely identifiable by a Uniform Resource Locator ("URL"). To view a specific Web page, a client computer system specifies the URL for that Web page in a request (e.g., a HyperText Transfer Protocol ("HTTP") request). The request is forwarded to the Web server that supports that Web page. When that Web Server receives the request, it sends that Web page to the client computer system.

Ex. 1004, 1:29–37, cited in Pet. 17–18.

According to Petitioner, "[i]t thus would have been obvious to implement Gregov such that pressing button 420 resulted in transmission of a URL (*e.g.*, URL identifying the recommendation page of Figure 5) to the server—thus providing one example of an '**input parameter**' as claimed." Pet. 18 (citing Ex.  $1002 \, \P \, 82$ ). Petitioner asserts that a person of ordinary skill "would have found it obvious that the request message generated by

pressing button 420 can include additional or alternative 'input parameters.'" *Id.* (citing Ex. 1002 ¶ 83).

Petitioner further argues that one of ordinary skill would have been motivated to implement Gregov such that the recommendations button 420 in Figure 4 causes transmission of at least one parameter (e.g., a URL) from the browser to the server because: (1) this was an accepted and industry standard HTTP technique for delivering webpage content in response to requests from web browsers; and (2) this standard technique would have ensured broad compatibility with existing server software and widely-used browsers. Pet. 18 (citing Ex. 1002 ¶¶ 81–85). According to Petitioner, the combinability of these references is further reinforced by the fact that both originate from the same applicant (Amazon) and describe aspects of a common system, and that Gregov expressly incorporates Hartman. *Id.* at 19.

Patent Owner argues that Petitioner "ignores limitation 1[b], which requires that the same 'input parameter' be processed 'in the intent engine to determine at least one inferred intent." Prelim. Resp. 25–26. Patent Owner contends that Gregov does not disclose using a URL as an input parameter "to determine at least one inferred intent," and that the Petition provides no explanation for how Gregov's recommendation engine could be modified to generate recommendations based on a URL instead of a subset of items appearing in a webpage. *Id.* at 26. Patent Owner further argues that Petitioner's argument that Gregov could have been modified to transmit a URL relies on improper hindsight bias and purported "common sense." *Id.* at 25.

Based on the present record, we determine that Petitioner has sufficiently shown that the combination of Gregov and Hartman teaches

receiving into an intent engine an "input parameter" in the form of a URL, which "comprises an identity of the webpage." We also determine that Petitioner has set forth an adequate basis at this stage to combine Gregov and Hartman. However, it is not clear based on the current record whether Petitioner's combination discloses "processing the input parameter in the intent engine to determine at least one inferred intent," as required by claim 1[b]/claim 2. On the one hand, we agree with Patent Owner that Petitioner fails to sufficiently explain how its proposed combination would process a URL to generate recommendations based on that URL. On the other hand, claim 2 uses the open-ended term "comprising," which suggests that "an identity of the webpage" may be one among other values in "the at least one input parameter" such that the "identity of a webpage" specifically need not be processed according to limitation 1[b]. During trial, the parties may further address the meaning of this claim language and whether it is taught by Petitioner's proposed combination.

### 5. Dependent Claims 3 and 4

Petitioner contends that claims 3 and 4, which depend from claims 1 and 3, respectively, are unpatentable based on the combination of Gregov, Hartman, Linden, Holzner, and Nickerson. Pet. 3, 53–55. Patent Owner does not provide any separate argument against these dependent claims, at this stage of the proceeding. *See generally* Prelim. Resp. Based on the evidence of record, we determine that Petitioner has demonstrated a reasonable likelihood that claims 3 and 4 are unpatentable over the prior art.

- 6. Analysis of Independent Claim 11
  - a) 11[pre]: "[a]n intent processing system"

Petitioner asserts that, to the extent the preamble of claim 11 is limiting, Gregov teaches the subject matter of the preamble, referencing its discussion of the limitations of claim 11. Pet. 55. Patent Owner does not present arguments regarding the preamble. *See generally* Prelim. Resp. We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding the preamble.<sup>8</sup>

b) 11[a]: "an intent engine configured to display an intent tool in at least one webpage when the at least one webpage is loaded into a user browser, the intent tool comprising a plurality of display elements comprising one or more of: an intent field; a recommendation field; and a ranking tool"

For this element, Petitioner references its argument for claim 1[a] concerning the "intent engine." Pet. 56. Petitioner also contends that the "at least one webpage" corresponds to the recommendation webpage of Gregov as shown in Figures 5 and 6, which represent views of the same webpage. *Id.* 

Referencing its argument for claim 1, Petitioner contends that the claimed "intent tool" corresponds to the content and functionality of the recommendation webpage in the Gregov/Nickerson combination. Pet. 57–58. Specifically, Petitioner contends that this content and functionality includes the following:

(1) displaying at least one "inferred intent," i.e., an initial list of recommended items in Figure 5 (citing Ex. 1001,4:19–36, 3:17–31, Fig. 5);

<sup>&</sup>lt;sup>8</sup> Because we are persuaded that Petitioner has shown that Gregov teaches the subject matter recited in the preamble, we need not decide whether the preamble is limiting for purposes of this Decision.

- (2) allowing the user to confirm or declare his intent, i.e., by pressing "More like this" with respect to a particular item listed in Figure 5 (citing Ex. 1001, 4:37–42, 3:33–42);
- (3) displaying a further set of recommendations on the webpage based on and matching the declared intent, i.e., the set of recommendations shown in Figure 6 (citing Ex. 1001, 4:43–53, 3:40–44); and
- (4) allowing the user to rank the recommendation webpage using Nickerson's user feedback tool, upon viewing either Figure 5 or 6 (citing Ex. 1007, 14:46–51, 15:45–50, Figs. 3–4).

*Id.* at 57–58.

Petitioner argues that this functionality is provided on the webpage through "a plurality of display elements comprising one or more of: an intent field; a recommendation field; and a ranking tool." Pet. 58–63. According to Petitioner, the "intent field" includes the portion of the webpage shown in Figure 5 for presenting the initial set of item recommendations. *Id.* at 59. Petitioner contends that the plain and ordinary meaning of "field" in the context of the specification refers to a particular area in which a particular type of information is displayed. *Id.* at 59–60 (citing Ex. 1002 ¶¶ 164–165). Thus, Petitioner asserts, the particular area of Figure 5 that displays the product recommendations (the "inferred intents") is an "intent field." *Id.* 

Petitioner next argues that the claimed "recommendation field" is met by Gregov's list of recommended items in Figure 6 presented after the user confirmed his intent by pressing the "More like this" button next to an item in Figure 5. *Id.* at 60 (citing Ex. 1003, Fig. 6, 4:37–53). According to Petitioner, the area displaying this list is a "recommendation field" because it is a portion of the display in which recommendations are presented. *Id.* at 62 (citing Ex. 1002 ¶ 167). Petitioner also argues that the claim does not

require that the "intent field" and "recommendation field" appear on the display at the same time, so the fact that Gregov's "intent field" in Figure 5 and "recommendation field" in Figure 6 appear on the screen at different times does not take the reference out of the claims. *Id.* (citing Ex. 1001, 6:61–65 ("Some of the intent display elements may also be hidden within the page until activated or required by the visitor. For example, the recommendation field may be hidden until the visitor confirms their intent.")).

Petitioner further argues that the Gregov/Nickerson combination includes a "ranking tool," referencing Nickerson's feedback measurement tool discussed with respect to claim elements 1[h]–1[j]. Pet. 63 (citing Ex. 1007, 15:30–59). According to Petitioner, the feedback measurement tool is a "ranking tool" because it allows the user to provide a ranking with respect to one or more webpages from Gregov's merchant website, including the recommendation page as shown in Figures 5 and 6. *Id.* (citing Ex. 1002 ¶¶ 169, 133).

Patent Owner argues that Petitioner never specifically identifies an "intent tool" disclosed by any of the references. Prelim. Resp. 27.

According to Patent Owner, Petitioner's identification of the "intent tool" as "the content and functionality of the recommendation webpage under the combination of Gregov and Nickerson" is flawed because the Petition also asserts that the same recommendation page of Gregov is the "at least one webpage" loaded into the browser. *Id.* Thus, Patent Owner asserts, "[t]hat webpage cannot be both the 'at least one webpage' and the 'intent tool' that is displayed 'in' that same webpage," because "construing the claim in that manner would improperly give the exact same meaning and scope to 'intent

tool' and 'at least one webpage." *Id.* Patent Owner further argues that the '300 patent specification "is not consistent with interpreting limitation 11[a] to conflate the 'intent tool' and the 'at least one webpage," because Figure 4 "discloses a distinct intent tool that appears within a webpage." *Id.* at 28–29 (citing Ex. 1001, 4:53–55, Fig. 4).

We find that Petitioner has made a sufficient showing at this stage of the proceeding that the Gregov/Nickerson combination teaches this limitation. Based on the present record, we also disagree with Patent Owner's arguments to the contrary. Specifically, we do not agree that Petitioner fails to identify an "intent tool" in the references, because Petitioner has identified the "intent tool" as the particular set of four different "contents and functionalities" associated with the recommendation webpage in the Gregov/Nickerson combination, as discussed above. See Pet. 57–58. We also do not agree with Patent Owner's argument that Petitioner conflates the claimed "webpage" and "intent tool," because we understand Petitioner to identify the Gregov/Nickerson "intent tool" as being made up of certain specific aspects of the webpage, not as comprising the webpage in its entirety. For example, the webpage of Gregov's Figure 5 includes elements that would not be part of the "intent tool," such as the menu items and selections included at the top of the page. Indeed, the "intent tool" in Petitioner's combination appears to be incorporated into the webpage of Figure 5 in a similar manner as the '300 patent specification's "intent tool" ("intent widget 22") is "incorporated into a webpage for Dell Computers." See Ex. 1001, 4:53–56, 6:19–21, Fig. 5.

Consequently, we determine that, on the record before us, Petitioner has established a reasonable likelihood that the prior art teaches this limitation.

c) 11[b]: "at least one database configured to store intent data"
Petitioner argues that the "at least one database" corresponds to one or more databases implemented in Gregov's server system 150 for storing the user feedback information of Nickerson and the "click stream" information from Linden. Pet. 63 (citing Ex. 1003, 2:47–49 (referring to "a server computer system 150 hosting the facility"), Fig. 1). Referencing its argument for claim element 1[j], Petitioner contends that Nickerson discloses using a database to store feedback and related input from visitors. Pet. 63–64 (citing Ex. 1007, 15:45–50, 6:64–7:3). Relying on Dr. Chatterjee, Petitioner asserts that the claimed use of "at least one database" to store data is an implementation detail that would have been apparent and obvious to a person of ordinary skill. *Id.* at 64 (citing Ex. 1002 ¶ 170).

Petitioner asserts that claim 11 does not provide detail about the claimed "intent data," but that the '300 patent specification describes "an intent database 23 for storing various <u>intent related data</u>, <u>such as page views</u>, intent candidates, recommendations for particular web pages, <u>success data</u>, etc.," and defines "Success" as "a 'thumbs-up' rating of a page." Pet. 64 (citing Ex. 1001, 3:29–33, 4:45–46). Relying on Dr. Chatterjee, Petitioner argues that a skilled artisan reading the specification would have understood "intent data" to be satisfied by data for one or more information categories identified as "various intent related data" from the specification, including "success data" (the user-provided rating of a page). *Id.* (citing Ex. 1002 ¶ 172). Petitioner further contends that this understanding is consistent with

claim 11's language reciting "at least one database configured to store intent data," and "receiv[ing] ranking data from the ranking tool and stor[ing] the ranking data in the at least one database." *Id.* at 64–65. Petitioner also asserts that this understanding is consistent with dependent claim 12's language reciting storage in "the at least one database" of a datapoint that comprises "the received ranking" (as well as "a current intent indicated by the intent field" and "a current webpage loaded in the user browser"). *Id.* at 65. Accordingly, Petitioner argues, the "intent data" in claim 11 "would be satisfied by at least user-provided ratings or rankings of a page." *Id.* (citing Ex. 1002 ¶ 173). Petitioner references its arguments for element 1[j] that it would have been obvious to implement the combination of Gregov, Nickerson, and Linden to store intent data in the form of raking data in a database. *Id.* 

Patent Owner argues that none of the references "disclose or suggest a database configured to store intent data," referring to its argument for element 1[j]. Prelim. Resp. 29. Element 1[j], however, does not use the term "intent data," and Patent Owner does not indicate how it is interpreting that term or why it is not met by the references.

Based on the present record, we determine that Petitioner has demonstrated a reasonable likelihood that the "intent data" includes feedback information on an item/webpage, and that it would have been obvious to store this information in a database, as discussed above with respect to element 1[j]. *See* § II.F.3.k, *supra*. Therefore, we determine that, at this stage of the proceeding, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

d) 11[c]: "wherein the intent engine is configured to: display at least one intent in the intent field; display at least one webpage recommendation in the recommendation field; and receive ranking data from the ranking tool and store the ranking data in the at least one database"

Petitioner argues that the webpage provided by Gregov's "intent engine" is configured to display "at least one intent in the intent field" (the at least one initial item recommendation displayed in the "intent field" of Figure 5), and "at least one webpage recommendation in the recommendation field" (the at least one webpage recommendation displayed in the "recommendation field" of Figure 6). Pet. 67. Petitioner also argues that the webpage is configured to "receive ranking data from the ranking tool" in the form of user feedback provided through Nickerson's feedback measurement tool. *Id.* Petitioner further references its argument for element 11[b] that it would have been obvious to store the received ranking data in one or more databases in Gregov's server system 150 ("the at least one database"). *Id.* 

Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp.

We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding this limitation.

# e) Summary for Claim 11

For the foregoing reasons, we are persuaded that Petitioner's cited evidence and reasoning demonstrates a reasonable likelihood that Petitioner would prevail in its contentions regarding claim 11.

## 7. Dependent Claims 12, 13, and 14

Petitioner contends that claims 12, 13, and 14, which depend from claims 11, 12, and 13, respectively, are unpatentable based on the

combination of Gregov, Hartman, Linden, Holzner, and Nickerson, and provides arguments explaining how the references teach the limitations of these claims. Pet. 3, 67–75. Patent Owner relies on its previous arguments concerning claims 1 and 11 for these dependent claims. Prelim. Resp. 30. Based on the evidence of record, we determine that Petitioner has demonstrated a reasonable likelihood that claims 12, 13, and 14 are unpatentable over the prior art.

## G. Ground 2: Obviousness of Claim 17

Claim 17 is dependent on claim 11. Petitioner contends that claim 17 is unpatentable as obvious over the combination of Gregov, Hartman, Linden, Holzner, Nickerson, and Sriver, and provides arguments explaining how the references teach the limitations of these claims and provides a rationale supporting the combination. Pet. 3, 80–82. Patent Owner does not provide separate argument against this unpatentability ground at this stage of the proceeding. Prelim. Resp. 31. We determine that, on the record before us, Petitioner's cited evidence sufficiently supports its contentions regarding claim 17.

#### III. CONCLUSION

After considering the evidence and arguments presented in the current record, we determine that Petitioner has demonstrated a reasonable likelihood of success in proving that at least one of the challenged claims of the '300 patent is unpatentable. We therefore institute trial on all challenged claims and grounds raised in the Petition. *See PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (indicating that a decision whether to institute an *inter partes* review "require[s] a simple yes-or-no institution

choice respecting a petition, embracing all challenges included in the petition").

At this stage of the proceeding, we have not made a final determination as to the patentability of any challenged claim or as to the construction of any claim term.

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–4 and 11–17 of the '300 patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '300 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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