

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VMWARE, INC.,
Petitioner,

v.

INTELLECTUAL VENTURES I LLC,
Patent Owner.

IPR2020-00470
Patent 7,949,752 B2

Before THOMAS L. GIANNETTI, JENNIFER MEYER CHAGNON, and
JOHN R. KENNY, *Administrative Patent Judges*.

CHAGNON, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314, 37 C.F.R. § 42.4

I. INTRODUCTION

VMware, Inc. (“Petitioner”)¹ filed a Petition requesting *inter partes* review of claims 1–4, 6, 9–11, 13, 14, and 22–26 (“the challenged claims”) of U.S. Patent No. 7,949,752 B2 (Ex. 1001, “the ’752 patent”). Paper 1 (“Pet.”). Intellectual Ventures I LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). Additionally, we granted Petitioner’s request to file a reply to the Preliminary Response in order to address the factors laid out in our recent precedential Order in *Apple, Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv* Order”) regarding the exercise of our discretion under 35 U.S.C. § 314(a). Paper 8. Petitioner filed a Reply (Paper 9) and Patent Owner, in turn, filed a Sur-reply (Paper 10).

We have authority to determine whether to institute an *inter partes* review under 35 U.S.C. § 314, which provides that an *inter partes* review may be instituted only upon a showing that “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). After considering the Petition, the Preliminary Response, and the evidence of record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to at least one claim challenged in the Petition. Further, we decline to exercise discretion to deny institution under 35 U.S.C. § 314(a). Accordingly, we institute an *inter partes* review of all challenged claims of the ’752 patent, based on all grounds identified in the Petition.

¹ Petitioner states that VMware, Inc. is the real-party in interest in this proceeding. Pet. 1, 62. Petitioner also states that “VMware, Inc. is a majority-owned subsidiary of EMC Corporation which is a wholly-owned subsidiary of Dell Technologies Inc.” *Id.*

The following findings of fact and conclusions of law are not final, but are made for the sole purpose of determining whether Petitioner meets the threshold for initiating review. Any final decision shall be based on the full trial record, including any response timely filed by Patent Owner. Any arguments not raised by Patent Owner in a timely-filed response may be deemed waived, even if they were presented in the Preliminary Response.

A. Related Proceedings

The parties identify *Intellectual Ventures I, LLC v. VMware, Inc.*, Case No. 1-19-cv-01075 (W.D. Tex.) (the “parallel proceeding”) as a related matter involving the ’752 patent. Pet. 62; Paper 4, 1.

The parties also identify *Intellectual Ventures I, LLC v. HCC Insurance Holdings, Inc.*, Case No. 6-15-cv-00660 (E.D. Tex.) as a dismissed matter involving the ’752 patent. Pet. 62; Paper 4, 1. Additionally, the parties identify IPR2016-01431 as a dismissed *inter partes* review proceeding involving the ’752 patent. Pet. 62; Paper 4, 1.

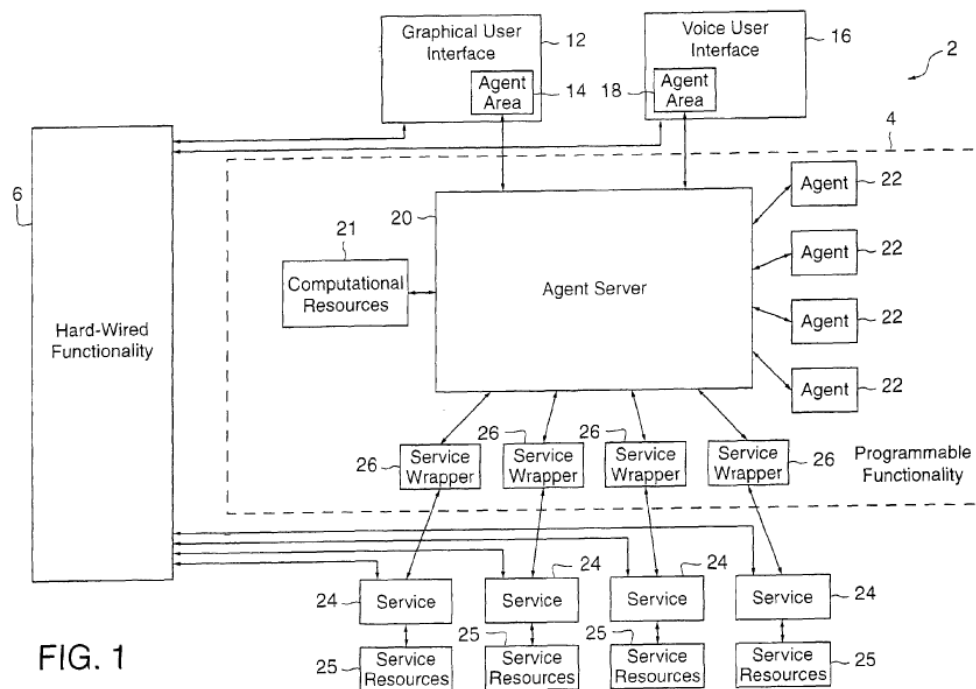
B. The ’752 Patent

The ’752 patent, titled “Network System Extensible by Users,” was filed November 24, 2004,² and issued on May 24, 2011. Ex. 1001, codes (22), (45), (54). The ’752 patent describes a “network system” that “users may extend or customize” through an agent system. *Id.* at 2:52–55. A

² The ’752 claims priority as a continuation of application No. 09/712,712, filed on Nov. 14, 2000, which is a continuation of application No. 09/178,366, filed on Oct. 23, 1998. Ex. 1001, code (63). The specific priority date of the challenged claims is not at issue in this proceeding, and we need not make any determination in this regard for purposes of this Decision.

network system provides, e.g., information technology services “such as electronic mail (e-mail), voice mail, electronic organizer (for appointments and/or addresses), online data retrieval (for, e.g., periodicals and stock quotes), and the like.” *Id.* at 5:32–37, 43–45. The network system is extended or customized for a user such that “[e]ach service individually, or the network system as a whole, can be extended by adding agents.” *Id.* at 2:54–59.

Figure 1, reproduced below, illustrates a network system that is customizable or extensible for users via agents. *Id.* at 3:51–52.



As shown in network system 2 of Figure 1, above, “agent server 20 controls, coordinates, and otherwise manages the overall operation of programmable functionality component 4” and, further, “may invoke, initiate, or execute various routines, processes, objects, and the like.” *Id.* at 7:51–55. “For example, when a user wishes to interact with network system 2 via graphical user interface 12, agent server 20 may cause web pages to be downloaded to

an electronic user device.” *Id.* at 7:55–58. Agent server 20 also “execut[es] agent objects,” i.e., agents. *Id.* at 7:62–63; *see also id.* at 15:33–37 (“Agent objects 46 each correspond to a particular agent 22 of network system 2 (FIG. 1). Each agent object 46 can be an internal representation within agent server 20 for the corresponding agent 22. Agent objects 46 comprise software objects.”).

Further, “each agent 22 is responsible for performing a particular task or set of tasks on behalf of the respective principal,” e.g., “answering telephone calls, taking voice mail messages, placing telephone calls, notifying the user of recently received messages (voice mail and/or e-mail), delivering messages, setting up meetings/appointments, gathering information, negotiating deals, transacting electronic commerce, etc.” *Id.* at 8:56–64. During execution of the agent, the agent “begins to receive events [and can] handle these events.” *Id.* at 10:9–11. The agent includes event handlers component 58; an event handler includes “a routine for handling an event of a specified type,” e.g., “events can be the lapse of a previously specified amount of time or the delivery of an e-mail message.” *Id.* at 18:22–28. An event can be “identified by a uniform resource locator (URL) which . . . specifies both the event’s type and the agent 22 which is [the] event’s intended recipient.” *Id.* at 18:29–32.

In an “exemplary operation for agent server 20,” an agent “is responsible for waking up its principal at a certain time each weekday morning,” the wake up time constituting an event. *Id.* at 16:9–14. Upon the event’s occurrence, agent server 20 includes an “engine 42 [which] executes the particular agent object 46.” *Id.* at 16:13–15; *see id.* at 15:14–19. “When this agent object 46 is executed, the corresponding agent 22 (using the

appropriate services 24) performs the task of waking up the principal.” *Id.* at 16:15–18.

Although the agent object resides on, and is executed by, the agent server in the above-described embodiment (*see id.* at 16:9–20, 22:52–23:57), the ’752 patent also discloses that, in another embodiment, “each agent 22 may direct its own movement (i.e., transportation) through a computer-based system . . . by executing an instruction which identifies a destination computer within the computer-based system and directs that the particular agent 22 be transported there.” *Id.* at 9:60–64. The agent may then further “determine another destination computer to which the agent should travel.” *Id.* at 9:67–10:2; *see also id.* at 14:10–16 (“[A]gents 22 may travel throughout the environment of computer-based system 30. . . . As an agent 22 moves and executes, it may perform its respective tasks on behalf of the principal.”).

Additionally, in order to perform their “respective tasks, agents 22 may use or consume various computational resources 21 (e.g., memory storage space, processing time, and the like)” and “various service resources” (i.e., “a resource which enables a service to be performed” (e.g., a “modem for on-line communication” or an “on-line database provider service”)). *Id.* at 9:31–36, 10:62–11:5. Computational resources “may be ‘consumed’ or ‘used up’” by agents “during the operation of network system 2.” *Id.* at 8:21–23. Likewise, at least some service resources “may comprise discrete units which are ‘consumed’ during utilization of the respective resource by an agent 22,” such as, e.g., “units of data-access time or inquiry which are consumed as an agent retrieves data.” *Id.* at 11:6–16.

The “consumption of computational and service resources by various agents 22 can be monitored, and the respective principals charged for the

same.” *Id.* at 9:36–39. Monitoring may further “ensure that other agents 22 (acting on behalf of the same or other principals/users) have adequate computational and service resources.” *Id.* at 9:46–51; *see also id.* at 12:25–32 (Service wrapper 26 “may also monitor the amount of each respective service resource 25 consumed to ensure that no particular agent 22 uses more than an amount authorized for that agent when performing its specific task(s). This protects both the authorizing user/subscriber and the service provider against undue consumption of service resources 25.”).

In order to allocate resources, “[i]n one embodiment, each agent 22 is given permission to consume up to a pre-authorized amount of each computational resource and each service resource that the agent may use when performing its respective task(s).” *Id.* at 9:40–43. In another embodiment “a predetermined amount of resource” is authorized “for the principal” such that “the associated agents 22 are given a ‘pool’ of that resource from which to draw.” *Id.* at 9:52–59.

C. Illustrative Claim

Of the challenged claims, claims 1, 9, and 24 are independent. Claims 2–4 and 6 depend from claim 1; claims 10, 11, 13, 14, and 23 depend from claim 9; and claims 25 and 26 depend from claim 24. Independent claim 1 of the ’752 patent is reproduced below, and is illustrative of the challenged claims.

1. A system for performing user customized network-based operations, comprising:

means for receiving data for creating a network-based agent;

means for invoking, in response to receiving a URL defining a type of event and identifying the network-based agent, an execution of the network-based agent;

means, including the network-based agent, for using a service and a service resource configured to be consumed by the network-based agent for performing the operation, wherein an amount of the service resource is exhausted upon being consumed by the network-based agent; and

means for communicating a result of the operation over a network communications link.

Ex. 1001, 25:55–26:2.

D. The Applied References

Petitioner relies on the following references in the asserted grounds.

Pet. 22–23.

Reference	Issue Date/ Publication Date	Exhibit
U.S. Patent No. 6,029,175 (“Chow”)	Feb. 22, 2000 ³	Ex. 1018
U.S. Patent No. 5,367,635 (“Bauer”)	Nov. 22, 1994 ⁴	Ex. 1019
U.S. Patent No. 5,603,031 (“White”)	Feb. 11, 1997 ⁵	Ex. 1020

Petitioner also relies on the Declaration of Farrell Long, Ph. D. (Ex. 1005) to support its positions.

³ Chow was filed on June 7, 1996, and is prior art to the challenged claims at least under 35 U.S.C. § 102(a), (b), (e). *See* Ex. 1018, code (22); Pet. 22.

⁴ Bauer was filed on August 29, 1991, and is prior art to the challenged claims at least under 35 U.S.C. §§ 102(a), (b), (e). *See* Ex. 1019, code (22); Pet. 22.

⁵ White was filed on July 8, 1993, and is prior art to the challenged claims at least under 35 U.S.C. §§ 102(a), (e). *See* Ex. 1020, code (22); Pet. 23.

E. The Asserted Grounds

Petitioner sets forth its challenges to claims 1–4, 6, 9–11, 13, 14, and 22–26 on the following grounds. Pet. 21–22.

Reference(s)	35 U.S.C. §	Claims Challenged
Chow	103 ⁶	1–4, 9, 13, 14, 22, 24–26
Chow and Bauer	103	6, 10, 11, 23
Chow and White	103	1–4, 9, 13, 14, 22, 24–26
Chow, White, and Bauer	103	6, 10, 11, 23

II. ANALYSIS

A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

⁶ Because the application leading to the ’752 patent was filed before March 16, 2013, patentability is governed by the version of 35 U.S.C. §§ 102 and 103 preceding the Leahy-Smith America Invents Act (“AIA”), Pub L. No. 112-29, 125 Stat. 284 (2011).

A claim is unpatentable under 35 U.S.C. § 103(a) 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 ordinary skill in the art; and (4) objective evidence of nonobviousness.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). Instead, Petitioner must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. Cir. 2016).

We analyze the asserted grounds of unpatentability in accordance with these principles to determine whether Petitioner has met its burden to establish a reasonable likelihood of success at trial.

⁷ At this stage of the proceeding, the parties have not asserted or otherwise directed our attention to any objective evidence of non-obviousness.

B. Level of Ordinary Skill in the Art

Petitioner contends that a person having ordinary skill in the art would have had “a bachelor’s degree in computer science or electrical engineering and at least two years of experience in computer software systems.” Pet. 12 (citing Ex. 1005 ¶ 21).

At this stage of the proceeding, Patent Owner does not contest Petitioner’s definition of a person of ordinary skill in the art. *See generally* Prelim. Resp.

Based on the current record and for the purposes of this Decision, we adopt Petitioner’s proposed description of the person of ordinary skill in the art.

C. Claim Construction

For this *inter partes* review proceeding claim terms

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), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.100(b) (2019). Further, “[a]ny prior claim construction determination concerning a term of the claim in a civil action, or a proceeding before the International Trade Commission, that is timely made of record in the *inter partes* review proceeding will be considered.”⁸ *Id.*

⁸ A claim construction order was recently entered in the parallel district court proceeding (Ex. 3001), which we have considered. We also have considered a claim construction order entered by the magistrate judge in the dismissed Eastern District of Texas litigation identified above (*see* Section I.A).

Under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–19 (Fed. Cir. 2005) (en banc), claim terms are given their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012).

Petitioner discusses the construction of several claim terms — including the “means” limitations, “service”/“service resource,” “agent,” “URL defining a type of event and identifying the network-based agent,” “consumed,” “exhausted,” “event handler,” and “service wrapper” — but proposes that construction of most of these terms is not necessary for purposes of this Decision. *See* Pet. 12–21; *id.* at 13 (“VMware will address all terms that have been subject to a prior construction dispute. But VMware does not believe that the Board will need to reach a construction for all previously disputed terms to resolve the issues in this petition.”). Patent Owner asserts the only construction that is “relevant to the issues raised in this Preliminary Response” is the term “agent.” Prelim. Resp. 17 n.4.

We discuss the construction of “agent” below. We determine that no other terms require express construction for the purposes of this Decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’”)).

Regarding the term “agent,” Petitioner notes that in a prior district court proceeding, the magistrate judge recommended this construction: “a process that occupies a place and that is mobile, i.e., can move from a first

place to a second place.” Pet. 16–17 (citing Ex. 1009, 24–26).⁹ Patent Owner proposes using this same construction in this proceeding. *See* Prelim. Resp. 17. We note, also, that this construction was agreed upon by the parties and adopted by the district court in the ongoing parallel proceeding. *See* Ex. 2001, 2; Ex. 3001, 1.

This construction of “agent” is based on lexicography. The ’752 patent incorporates the text of White. *See* Ex. 1001, 5:27–31 (“[A]n agent system is taught by U.S. Pat. No. 5,603,031 [White], issued to the Assignee of the present invention, the text of which is incorporated herein by reference.”); Prelim. Resp. 17–18. White includes a glossary specifically defining “agent” as “a process that occupies a place and that is mobile, i.e., can move from a first place to a second place.” Ex. 1020, 16:65–67. This definition also is consistent with the embodiments described in the Specification of the ’752 patent. We therefore adopt the parties’ agreed upon construction for purposes of this Decision.

D. Discretion Under 35 U.S.C. § 314(a)

Patent Owner, relying on our precedential decisions in *NHK*¹⁰ and the *Fintiv* Order, contends that we should exercise our discretion under 35 U.S.C. § 314(a) to deny institution based on the status of the parallel district court litigation. *See* Prelim Resp. 8–16.

⁹ Petitioner refers also to an alternative construction of “agent” which it says was presented by Patent Owner in prior litigation. Pet. 17. Petitioner therefore “presents alternate grounds that account for both possible constructions.” *Id.*

¹⁰ *NHK Spring Co., Ltd. v. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential).

1. *Legal Standards*

Under 35 U.S.C. § 314(a), the Director has discretion to deny institution of an *inter partes* review. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“*SAS*”) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review.” (emphasis omitted)); *Harmonic*, 815 F.3d at 1367 (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

In determining whether to exercise discretion to deny institution under 35 U.S.C. § 314(a), the Board considers an early trial date in related litigation as part of an assessment of all relevant circumstances of the case, including the merits, in an effort to balance considerations such as system efficiency, fairness, and patent quality. *Fintiv* Order 5–6; *see also NHK*, Paper 8 at 19–20 (denying institution relying, in part, on § 314(a) because the parallel district court proceeding was scheduled to finish before the Board reached a final decision).

When considering an early trial date in related litigation, the Board evaluates the following factors (“*Fintiv* factors”):

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.

Fintiv Order 5–6. In evaluating these factors, “the Board takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

2. *Factual Background*

The progress of the related district court litigation is pertinent to discretion under 35 U.S.C. § 314(a). We summarize the progress as follows.

On July 31, 2019, Patent Owner filed a Complaint (Ex. 1021) against Petitioner in the U.S. District Court for the Western District of Texas.

Patent Owner served its infringement contentions on November 5, 2019. Ex. 1013; *see* Prelim. Resp. 11. Petitioner served its initial invalidity contentions on January 15, 2020. Ex. 2002; *see* Prelim. Resp. 11.

On February 10, 2020, Petitioner filed the Petition in this proceeding. *See* Paper 3 (according the Petition a filing date of February 10, 2020).

A *Markman* hearing was held on May 14, 2020 and the district court issued a claim construction order on June 10, 2020.¹¹ *See* Ex. 1027; Ex. 2005; Ex. 3001.

Petitioner has filed in the District Court a stipulation indicating that if an IPR is instituted, it “will not assert invalidity of [the challenged claims]

¹¹ The *Markman* hearing addressed the claims of only a subset of the patents asserted in the parallel proceeding, including those of the '752 patent. *See* Ex. 3001 (“The Court held Part 1 of the *Markman* hearing on May 14, 2020.”). The parties have not provided, and we are unaware of, the schedule for Part 2 of the *Markman* hearing.

based on any of the [asserted grounds], or on any other ground involving the [asserted] references alone or in combination with any other reference” in the District Court. Ex. 1026.

Per the court’s Scheduling Order, Final Infringement and Invalidity Contentions were due July 1, 2020.¹² Ex. 1012, 6. Further, fact discovery closes on October 16, 2020, and expert discovery closes on December 21, 2020.¹³ *Id.* Dispositive motions are due on January 13, 2021. *Id.*

The Scheduling Order states that trial is set for “(Early) April ___, 2021 (subject to the Court’s availability)” and that “The Court expects to set this date at the conclusion of the *Markman* Hearing.” Ex. 1012, 7–8. The record does not indicate that an alternate date has been set. *Cf.* Ex. 1027, 63:6–65:1 (discussing possible trial dates).

3. *Analysis of the Fintiv Factors*

With this background, we consider each of the factors set forth in the *Fintiv* Order. We then weigh the factors and take a holistic view of whether efficiency and integrity of the patent system are best served by denying or instituting review.

Factor 1: whether a stay exists or is likely to be granted if a proceeding is instituted

Petitioner asserts that “the District Court has not issued a stay in the parallel proceeding,” and that this factor, therefore, “do[es] not weigh

¹² Neither party has provided information regarding whether these contentions have been served, or if the date has been moved pending any second *Markman* hearing.

¹³ The court’s Scheduling Order also indicates, however, that “all other discovery is stayed until after the *Markman* hearing.” Ex. 1012, 1.

against instituting *inter partes* review.” Reply 8. Patent Owner contends that the District Court “is unlikely to issue a stay if the IPR is instituted in this case,” arguing that this factor, therefore, favors denial. Sur-reply 1–2.

Neither party has requested a stay of the parallel proceeding pending this *inter partes* review. Thus, the District Court has not ruled on this issue. Patent Owner contends that the judge in the parallel proceeding is “unlikely to issue a stay if the IPR is instituted in this case” because he has “previously denied a motion to stay when an IPR was instituted after claim construction was fully briefed and shortly before the claim construction hearing.” *Id.* at 2. Patent Owner further contends that here, “the parties have already engaged in discovery and completed claim construction briefing, and the court has conducted a *Markman* hearing and issued its claim construction order.” *Id.* We decline to infer, however, how the District Court might rule, should a stay be requested by the parties in the parallel proceeding. This factor, therefore, does not weigh for or against discretionary denial in this case. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative) (“*Fintiv DI*”); *Sand Revolution II, LLC v. Cont’l Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 7 (PTAB June 16, 2020) (informative) (“*Sand Revolution*”).

Factor 2: proximity of the court’s trial date to the Board’s projected statutory deadline

Patent Owner argues that “the district-court trial will be completed months before the Board’s projected statutory deadline for a final written decision,” arguing that this factor, therefore, favors denial. Prelim. Resp. 14–15. Petitioner contends that “the District Court has not yet set trial in the

parallel proceeding, and the trial could occur months after a Final Written Decision in this proceeding.” Reply 8 (citing Ex. 1027).

As noted above, the Scheduling Order in the parallel proceeding set the jury trial to begin in “(Early) April ___, 2021 (subject to the Court’s availability)” (Ex. 1012, 8), approximately four months before a final written decision would be due in this proceeding (August 2021). The Scheduling Order appears to indicate an approximate trial date that is tentative based on the Court’s availability. Although there is some evidence that indicates that the trial date may change (*see, e.g.*, Reply 8 (citing Ex. 1027, 64:2–22)), the District Court has not yet changed the date (*see* Sur-reply 3). “We generally take courts’ trial schedules at face value absent some strong evidence to the contrary.” *Fintiv* DI 13.

“If the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution under *NHK*.” *Fintiv* Order 9. Because the Scheduling Order has not definitively set a trial date, and, at earliest, trial is tentatively scheduled approximately four months before our deadline to reach a final decision, this factor weighs only somewhat in favor of discretionary denial in this case.

Factor 3: investment in the parallel proceeding by the court and parties

Patent Owner contends that “[t]he district court has already expended substantial resources to gain familiarity with and resolve the[] issues.” Prelim. Resp. 9. As noted above, the parties have already served their respective infringement contentions and initial invalidity contentions. The District Court completed a *Markman* hearing on May 14, 2020 and has

issued a claim construction order.¹⁴ *See* Ex. 1027; Ex. 3001. Under the current schedule, fact and expert discovery, dispositive motions, and trial are expected to occur prior to the August 2021 deadline for issuing a Final Written Decision in this proceeding. *See* Ex. 1012, 6–8. Petitioner contends that these dates in the parallel proceeding may change. *See* Reply 3–4.

We recognize that much work remains in the parallel proceeding as it relates to invalidity: fact discovery is ongoing, expert reports are not yet due, and substantive motion practice is yet to come. Thus, although the parties and the District Court have invested effort in the parallel proceeding to date, further effort remains to be expended in this case before trial. The facts here are similar to those in both recent Board informative decisions. *See Sand Revolution* 11; *Fintiv* DI 14.

We also find that the timing of the Petition was reasonable. Petitioner filed its Petition less than four weeks after serving its initial invalidity contentions and nearly six months before the statutory deadline. *See Fintiv* Order 11–12 (considering timing of the Petition as part of the third *Fintiv* factor).

We find that this factor does not weigh for or against discretionary denial in this case.

Factor 4: overlap between issues raised in the petition and in the parallel proceeding

Patent Owner contends that “VMware has presented essentially the same art and grounds of unpatentability in its Petition that it is asserting in the district-court case.” Prelim. Resp. 9 (citing Ex. 2002 (Preliminary

¹⁴ As noted above, the *Markman* hearing was for only a subset of patents at issue in the parallel proceeding, including the ’752 patent.

Invalidity Contentions)); *see also* Ex. 2004 (Invalidity Chart). Patent Owner also contends that “any relevant claim-construction issues necessary to resolve validity question, will of necessity be presented in both forums—and under the very same claim-construction standard.” Prelim. Resp. 10.

Petitioner notes that it “has stipulated that if the Board institutes *inter partes* review of the challenged claims of the ’752 patent, [Petitioner] will not pursue invalidity on the same grounds or even the same references in the parallel district court proceeding.” Reply 1; *see* Ex. 1026. Petitioner contends that, because of this stipulation, “[t]here will . . . be *no* overlap of invalidity issues between the parallel district court proceeding and this *inter partes* review.” Reply 2.

Petitioner’s stipulation here mitigates any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.¹⁵ *See Sand Revolution* 12.

Thus, we find that this factor weighs in favor of not exercising discretion to deny institution under 35 U.S.C. § 314(a).

Factor 5: whether the petitioner and the defendant in the parallel proceeding are the same party

Petitioner and Patent Owner acknowledge the parties are the same in the *inter partes* proceeding and in the parallel proceeding. Prelim. Resp. 15; Reply 9. Thus, this factor supports denying institution. *See Fintiv* DI 15;

¹⁵ Patent Owner contends that the “stipulation does not eliminate the overlap between the proceedings and does not address substantially similar art that it could raise that would still render the current IPR issues duplicative.” Sur-reply 5–6. The stipulation here, however, goes farther than that in *Sand Revolution*, where “Petitioner stipulate[d] only that it will not pursue, in district court, the ‘same grounds’ presented in the Petition.” *Sand Revolution* 12 n.5.

Sand Revolution 12–13; *Fintiv* Order 13–14 (“If a petitioner is unrelated to a defendant in an earlier court proceeding, the Board has weighed this fact against exercising discretion.”).

Factor 6: other circumstances and considerations that impact the Board’s exercise of discretion, including the merits

As discussed below, Petitioner has met its burden of demonstrating a reasonable likelihood that it would prevail in showing that claims of the ’752 patent are unpatentable.¹⁶ At this preliminary stage of the proceeding and on the record before us, Petitioner’s case is strong on the challenged claims. *Fintiv* Order 14–15 (“[I]f the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution.”). Although we recognize the record may change during trial, as discussed in detail below, Petitioner has made a sufficiently persuasive showing, on the record presently before us, that the prior art references cited in the Petition teach or suggest all limitations of the challenged claims.

¹⁶ Petitioner includes arguments directed to the merits of the asserted grounds in its discussion of Factor 6. *See* Reply 4–8; *see also id.* at 4 n.2 (“While it is unusual for a petitioner to have an opportunity to address the arguments raised in the preliminary response of a patent owner, the sixth *Fintiv* factor seems to call for such an analysis. For example, the reply brief authorized in *Fintiv* addressed the merits of the preliminary response in that proceeding. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 12 (Mar. 27, 2020).”). Patent Owner contends that Petitioner “improperly used its analysis of *Fintiv* Factor 6 as an opportunity to rebut the arguments [Patent Owner] raised in its Preliminary Response.” Sur-reply 9–10. Because we find Petitioner has presented a reasonable likelihood of success on the merits without considering these arguments (*see infra* Sections II.F & II.G), we need not determine whether Petitioner’s merits-based arguments in the Reply are proper.

We determine, on this preliminary record, that Petitioner has set forth a strong case for the obviousness of the challenged claims. Thus, this factor weighs in favor of not exercising discretion to deny institution under 35 U.S.C. § 314(a). *See Sand Revolution* 13.

Conclusion

We take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review” when considering the six *Fintiv* factors. *Fintiv* Order 6. Our holistic review of the *Fintiv* factors, namely that the timing of the Petition was reasonable, that there is a minimal overlap of the two proceedings, and that the merits of the Petition are strong, indicates that the *Fintiv* factors weigh in favor of instituting *inter partes* review. As such, 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 meritorious Petition. For the reasons discussed above, we decline to deny institution under § 314(a).

E. Overview of the Asserted References

1. Chow (Ex. 1018)

Chow is titled “Automatic Retrieval of Changed Files by a Network Software Agent.” Ex. 1018, code (54). Chow describes a “[s]oftware agent,” also referred to as a “Revision Manager,” “for automatically retrieving changed documents previously accessed from network and internetwork servers.” *Id.* at 3:60–64. In particular, “Revision Manager operates as an intermediary between a client, such as a browser executed at a user’s terminal, and a local or remote network server.” *Id.* at 3:65–4:1.

Figure 3 of Chow is reproduced below.

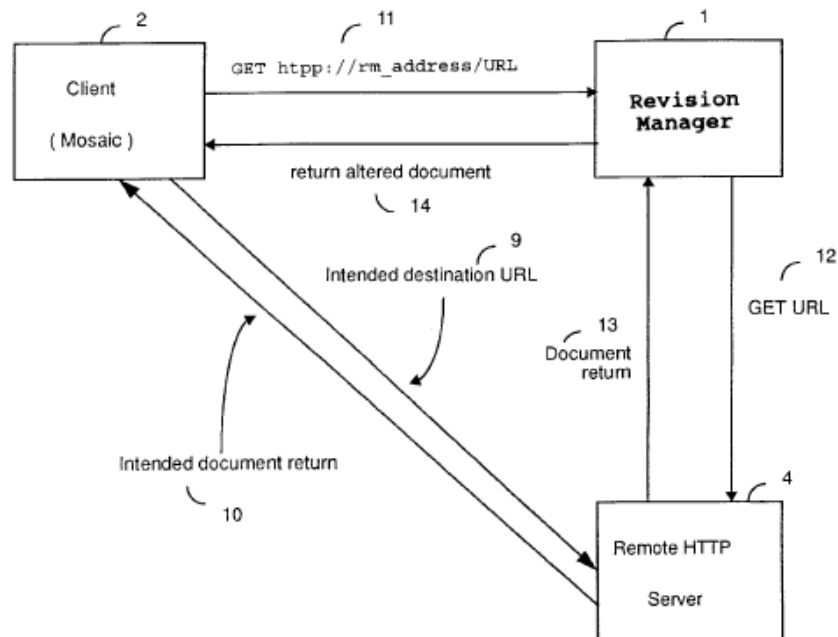


Figure 3, above, is a block diagram illustrating data communication among the Revision Manager, a client browser, and a remote server. *Id.* at 7:11–13. Through Revision Manager 1, client 2 can “identify a document of interest for which the user would like updates to be sent automatically.” *Id.* at 10:41–44; *see id.* at 4:6–21, 9:59–60. As shown in Figure 3, instead of client 2 retrieving the document of interest directly from remote HTTP server 4 (via intended destination URL 9 and intended document return 10), Revision Manager 1 acts as an intermediary between client 2 and remote HTTP server 4. *Id.* at 9:52–58. That is, client 2 requests the document from Revision Manager 1, Revision Manager 1 retrieves the document from remote HTTP server 4, and Revision Manager 1 sends the requested document to client 2. *See id.* at 4:1–5. Further, client 2 requests Revision Manager 1 to automatically update the document by sending GET command 11 to Revision Manager 1. *Id.* at 9:59–62; *see id.* Fig. 5. GET commands include URLs which further include the URL of the requested document and

“the Revision Manager’s URL as the prefix.” *Id.* at 10:9–18; *see id.* 20:24–32.

In order to automatically update documents of interest for the client, the Revision Manager includes a Polling Daemon. *Id.* at 10:45–46. The Polling Daemon determines if a document of interest has been modified and, if so, retrieves the updated document from the remote HTTP server and also saves the updated document in the Revision Manager’s cache. *Id.* at 10:52–65. The Polling Daemon then “instruct[s] the client browser to open and display the updated document” from the Revision Manager’s cache. *Id.* at 10:65–11:2, 6–17.

Further, before retrieving the updated document, the Revision Manager may “check any cost associated with retrieving the document from the [specific] source [of the document] (such as communication charges, server charges, and copyright holder charges)” of the document. *Id.* at 25:65–26:1; *see id.* at 5:57–61. “If the cost would not exceed an acceptable level, and the quality would exceed an acceptable level, then the source would be acceptable.” *Id.* at 26:3–5; *see id.* at 30:3–6 (“A source would be deemed acceptable, for example, if it could deliver the object with no more than a certain acceptable latency and at no more than a certain acceptable cost.”). Furthermore, if there are multiple alternative sources for the document, the Revision Manager “compare[s] the cost, quality, and timeliness of delivery from the acceptable sources and select[s] one of the sources having the best combination of cost, quality, and timeliness.” *Id.* at 26:5–14; *see id.* at 30:6–27 (describing a “cost-benefit function” implemented by the Revision Manager). Doing so allows the Revision Manager potentially to obtain the document, for example, at a lower cost. *Id.* at 30:30–36.

2. *White (Ex. 1020)*

White is titled “System and Method for Distributed Computation Based Upon the Movement, Execution, and Interaction of Processes in a Network.” Ex. 1020, code (54). White describes a “distributed computing environment in which agent processes direct their own movement throughout a computer network.” *Id.* at code (57).

In its background, White describes that “[m]any computer communication systems implement what is called ‘remote procedure calling.’” *Id.* at 2:66–67. White continues, stating that, “[i]n remote procedure calling, a client process, which is executing on a first computer system and which seeks to manipulate data on a second computer system, requests action through a server process, which is executing on the second computer system and which manipulates data in response to requests from the client process.” *Id.* at 2:67–3:6. White explains that such remote procedure calling “require[s] substantial use of communications media which in turn involves considerable expense and time.” *Id.* at 3:13–15. White then describes “[a]n alternative approach to remote procedure calling” known as “remote programming.” *Id.* at 4:23–24. “In remote programming, a process, which is called a ‘client process’ and which executes on a first computer system, sends to a server process executing on the second computer system a list of instructions.” *Id.* at 4:23–26. White describes that “[t]he instructions are then carried out by the server process effectuating the goal of the client process. The instructions which the server process is designed to carry out must have some degree of generality; i.e., the instructions must provide some degree of decision-making capabilities.” *Id.* at 4:26–31. White recognizes, however, that “remote programming

encounters the same inefficiencies of remote procedure calling when a computer process seeks to coordinate manipulation of data on two or more computer systems.” *Id.* at 5:26–29.

White asserts that remote programming improves upon remote procedure calling “by (i) enabling processes to interact without communicating across network communications media and (ii) improving the performance of the interactions between processes by eliminating communication across network communications media which often has high-latency.” *Id.* at 9:17–26. White describes that the “processes of this invention are a *novel implementation* of ‘remote programming’” which provides an improvement over “the more familiar ‘remote procedure calling.’” *Id.* at 9:17–19 (emphasis added). White further asserts that its invention “provides computer processes with a level of mobility, extensibility and generality not found in the [remote programming paradigms typically found in the] prior art.” *Id.* at 19:61–65.

White describes that its implementation of remote programming “route[s] a particular computer process to a selected computer system” for execution by the selected computer system. *Id.* at 19:37–42. In particular, White teaches an “agent is a process which occupies a place and which is mobile, i.e., can move from a first place to a second place.” *Id.* at 16:65–67. By “enabling an agent to travel to a remote computer system in the midst of the agent’s execution, the agent is free to travel to data which the agent is configured to access.” *Id.* at 22:26–29.

3. *Bauer (Ex. 1019)*

Bauer is titled “Network Management Agent with User Created Objects Providing Additional Functionality.” Ex. 1019, code (54). Bauer

describes “a network management agent having the capability of adding new objects to the agent.” *Id.* at 3:46–48. In particular, “user defined objects are defined in a configuration file which is read by a network management agent.” *Id.* at 3:52–54. The agent “incorporate[s] objects in the configuration file.” *Id.* at 3:55–57. When “a request for a user defined object reaches an agent, the appropriate user defined process is initiated to acquire data, control a peripheral, or execute whatever is requested. Data is returned from the user defined process back through the agent to the user.” *Id.* at 3:57–62.

F. Asserted Obviousness over Chow and White

As noted *supra*, Petitioner presents “alternate grounds that account for both possible constructions of ‘agent’ in this petition.” Pet. 17. The grounds based on Chow and White “analyze the claims with the prior district court construction of agent.” *Id.* at 17, 21. Because we have adopted the prior district court construction of “agent” (*see* Section II.C), we proceed with an analysis of Petitioner’s obviousness grounds based on Chow and White.

Petitioner asserts that claims 1–4, 9, 13, 14, 22, and 24–26 would have been obvious over Chow and White. Pet. 56–60; *see also id.* at 24–51 (Petitioner’s discussion of the obviousness ground based on Chow alone, to which Petitioner refers back in the discussion of the ground based on Chow and White). Patent Owner opposes, arguing that the asserted combination does not teach or suggest all features of the claimed method (*see* Prelim. Resp. 20–21, 25–26) and that Petitioner does not adequately support the combination of Chow and White (*see id.* at 20–25, 27–28).

1. *Independent Claim 1*

- a) *A system for performing user customized network-based operations*

Petitioner asserts Chow teaches the preamble of claim 1. Pet. 29¹⁷; *see* Ex. 1005 ¶ 93. In particular, Petitioner asserts that Chow describes “a software agent that obtained updated copies of an internet webpage specified by a user,” which teaches the recited system. Pet. 29 (citing Ex. 1018, 3:60–64; Ex. 1005 ¶ 93). Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp. We determine that, on the record now before us, Petitioner has demonstrated sufficiently that Chow teaches the preamble.¹⁸

- b) *means for receiving data for creating a network-based agent*

Petitioner asserts that the combination of Chow and White teaches this limitation. *See* Pet. 56–60; *see also id.* at 29–30; Ex. 1005 ¶¶ 95–97, 188–192. In particular, Petitioner states that Chow’s “Revision manager was ‘a programmed digital computer linked by standard internet connections . . . to other nodes in the data network.’” Pet. 29 (citing Ex. 1018, 9:26–29, 25:15–19, Fig. 34); *see* Ex. 1005 ¶ 96. Petitioner also points out that Chow’s “Revision Manager program (the network-based

¹⁷ Petitioner’s obviousness-based ground of unpatentability over Chow and White relies, at least in part, on Petitioner’s obviousness-based grounds of unpatentability over Chow. Pet. 59. Accordingly, we reference relevant portions of Petitioner’s discussion of Chow. *See id.* at 24–51.

¹⁸ Because we are persuaded that Petitioner has shown that Chow teaches the preamble, we need not decide whether the preamble is limiting for purposes of this Decision.

agent) was initiated by reading command line arguments and a server configuration file to reflect the configuration of the host system.” Pet. 29 (citing Ex. 1018, 11:35–40); *see* Ex. 1005 ¶ 95. Petitioner asserts that Chow’s Revision Manager uses a “polling daemon” to provide agent services, and that the polling daemon is a “remote procedure calling” process. Pet. 58 (citing Ex. 1018, 17:44–20:64, Figs. 18–22; Ex. 1005 ¶ 188). Further, Petitioner points out that “White disclosed a mobile agent system,” and, in particular, a “remote programming agent process.” *Id.* at 56, 59 (citing Ex. 1020, 8:27–41).

Furthermore, Petitioner asserts that a person of ordinary skill in the art “would have been motivated to modify the remote procedure calling agent process in Chow,” i.e., Chow’s polling daemon, “with a remote programming agent process like the one taught in White because the combination would be the simple substitution of one known technique for another and would have obtained predictable results.” *Id.* at 59 (citing Ex. 1005 ¶ 189). Petitioner further contends that “given that White solved some of the issues with prior art remote programming systems, a [person of ordinary skill in the art] would have preferred to use White’s remote programming implementation rather than the prior art remote programming implementations.” *Id.* (citing Ex. 1020, 8:51–13:22).

Patent Owner presents two main arguments asserting that Petitioner fails to establish that Chow and White are properly combined to teach an “agent,” as recited in the claims. Prelim. Resp. 20–25. First, Patent Owner argues that Petitioner “fails to explain how the combination of Chow and White achieves the claimed invention,” specifically an “agent.” *Id.* at 20–22. Second, Patent Owner argues that Petitioner “does not explain why or how it would have been appropriate to modify Chow’s system to include

a mobile agent even though Chow does not contemplate such a modification.” *Id.* at 23–25 (emphasis omitted).

Based on the record now before us, Patent Owner’s arguments are not persuasive. First, we disagree with Patent Owner that Petitioner has not adequately explained how the combination of Chow and White teaches a “mobile agent.” *See id.* at 21. Petitioner states that the combination of Chow and White “modif[ies] the remote procedure calling agent process in Chow with a remote programming *agent process like the one taught in White.*” Pet. 59 (emphasis added); *see also id.* (“[T]he stationary agent system of Chow has been modified to be a mobile agent system as taught by White.”). As such, the combination proffered by Petitioner expressly includes White’s agent process, which as Patent Owner confirms, is a mobile agent. *See* Prelim. Resp. 17–18 (citing Ex. 1020, 16:65–67).

In addition, White’s remote programming relies on mobile agents to function. For example, claim 1 of White recites a “method for implementing remote programming” in which “an agent process is transported.” Ex. 1020, 357:61–358:3. As described, White provides an “extension of the traditional remote programming paradigm” in which “computer processes . . . direct their own movement through the network.” *Id.* at 20:8–12; *see id.* at 9:17–19. Such computer processes are described by White as agents: White states that an “agent is a process” (*id.* at 16:65–67; *see id.* at 8:31–32, 21:36–37) that “can direct its own movement, i.e., transportation, through the network” (*id.* at 22:50–51; *see id.* at 22:26–29). As such, White’s remote programming uses agents, i.e., processes, which can direct their own movement through the network. Patent Owner does not persuasively explain why the agent processes of the improved remote programming that White describes, i.e., “remote programming agent process[es]” (Pet. 59), fail to

teach “mobile agents.” Instead, on this record, we are persuaded by Petitioner’s contentions, as discussed. *See also id.* (“There can be no doubt that White taught mobile agents as that term is construed [here] because White is the very same source of the definition that is the basis for that construction.”)

We also are not persuaded by Patent Owner’s second argument, that Petitioner fails to adequately support the combination of Chow and White because Petitioner “never explains why a [person of ordinary skill in the art] would be motivated to convert Chow’s alleged ‘agent’ from stationary to mobile.” Prelim. Resp. 23. As discussed above, Petitioner provides the following rationales for the combination of Chow and White: (1) White teaches that “remote programming [generally] was preferable to remote procedure calling” (Pet. 58–59 (citing Ex. 1020, 3:6–15, 5:17–25; Ex. 1005 ¶ 189)); and (2) White’s specific remote programming implementation “solved some of the issues with prior art remote programming systems” (*id.* at 59 (citing Ex. 1020, 8:51–13:22)). That is, Petitioner explains that the improvements that White describes — remote programming using mobile agents provides improvements over remote procedure calling using stationary agents — would have motivated a person of ordinary skill in the art to combine the references. *Id.* at 58–59. Based on the record now before us, Petitioner has shown sufficiently that “the combination would be the simple substitution of one known technique for another and would have obtained predictable results” and has provided evidence that the skilled artisan “would have preferred to use White’s remote programming implementation rather than the prior art remote programming implementations.” *Id.* (citing Ex. 1005 ¶¶ 189–190; Ex. 1020, 8:51–13:22). Patent Owner’s argument here that Petitioner’s “motivation to combine

focuses on ‘remote programming’ versus ‘remote procedure calling’ instead of the actual term in the claims — agent” (Prelim. Resp. 23–24) is unpersuasive because White’s remote programming uses agents to provide the improvements White offers, as discussed above.

Further, although, Patent Owner argues that it is not a “certainty” that “remote programming” is an improvement over “remote procedure calling” (Prelim. Resp. 24–25), White expressly outlines advantages remote programming has over remote procedure calling. White states that

[r]emote programming improves upon remote procedure calling by (i) enabling processes to interact without communicating across network communications media and (ii) improving the performance of the interactions between processes by eliminating communication across network communications media which often has high-latency.

Ex. 1020, 9:19–25. Even if it those improvements were not guaranteed, the potential improvements stated by White reasonably would have motivated the combination of Chow and White. Moreover, the “circumstances” where “remote programming encounters the same inefficiencies of remote procedure calling” to which Patent Owner points (Prelim. Resp. 24 (citing Ex. 1020, 5:26–30)) relate to prior remote programming techniques, rather than White’s improved programming technique (*see* Ex. 1020, 9:17–19, 19:61–65).

Patent Owner also argues that Petitioner does not provide “the requisite analysis of identifying differences between the claims and the prior art” and did not provide “a proper rationale . . . for why the independent claims would have been obvious.” *See* Prelim. Resp. 27–29. In particular, Patent Owner contends that Petitioner has not “determin[ed] any differences between the prior art and the claims,” and thus has not sufficiently analyzed

the *Graham* factors. *Id.* at 27–28. Patent Owner’s argument here focuses on Petitioner’s showing with respect to the asserted ground based on Chow alone.

We recognize that Petitioner relies on these arguments in presenting its case based on the combination of Chow and White. In presenting its case for the grounds based on Chow and White, Petitioner, however, expressly states that Chow’s agent is “a stationary agent,” as opposed to a mobile agent, as required by the claims as we have construed them. Pet. 56–57; *see supra* Section II.C. As such, Petitioner sets forth that Chow does not teach the type of agent recited in the claims, and relies on White for this teaching. Indeed, Patent Owner understands this, stating that Petitioner “concedes that if ‘agent’ is interpreted to be a ‘mobile’ agent then Chow does not disclose the claimed ‘agent.’” Prelim. Resp. 21 (citing Pet. 56). Furthermore, as discussed above, Petitioner articulates rationale with reasonable underpinning to combine White’s mobile agent with Chow. Pet. 58–59.

Accordingly, we determine that, on the record now before us, Petitioner has demonstrated sufficiently that the combination of Chow and White teaches this limitation.

- c) *means for invoking, in response to receiving a URL defining a type of event and identifying the network-based agent, an execution of the network-based agent*

Petitioner asserts that the combination of Chow and White teaches this limitation. *See* Pet. 56–60; *see also id.* at 30–33; Ex. 1005 ¶¶ 99–107. In particular, Petitioner points out that, in Chow, “one way for a client browser to invoke the Revision Manager program (the network-based agent) was by receiving a URL [(as part of a CCI GET command)] and sending a HTTP

GET command to the Revision Manager identified in that URL.” Pet. 30, 32 (citing Ex. 1018, 20:17–47); *see* Ex. 1005 ¶ 99. Dr. Long testifies that a person of ordinary skill in the art “would have understood that this teaching was a teaching of performing the function of invoking execution of a network-based agent (the Revision Manager program) in response to receiving a URL.” Ex. 1005 ¶ 99; *see also* Pet. 31 (citing this testimony).

Patent Owner contests the propriety of combining Chow and White in regards to an “agent” — arguments which we do not find persuasive, as discussed above — but does not otherwise present arguments regarding this limitation. *See generally* Prelim. Resp. We determine that, on the record now before us, Petitioner has demonstrated sufficiently that the combination of Chow and White teaches this limitation.

d) means, including the network-based agent, for using a service and a service resource configured to be consumed by the network-based agent for performing the operation, wherein an amount of the service resource is exhausted upon being consumed by the network-based agent

Petitioner asserts that Chow teaches this limitation. Pet. 33–35; *see* Ex. 1005 ¶¶ 109–115. In particular, Petitioner points out that Chow’s “Revision Manager program (the network-based agent) retrieved documents/webpages from a source (used a service) and would only retrieve the document/webpage if the monetary costs (consumed units of a service resource) associated with that retrieval did not exceed a ‘certain acceptable cost.’” Pet. 33 (citing Ex. 1018, 25:65–26:5, 29:60–30:6); *see* Ex. 1005 ¶ 109. Petitioner argues that a person of ordinary skill in the art “would have understood that money,” i.e., a cost paid for some service “can be spent

only once and therefore spending this money would have exhausted a service resource.” Pet. 34–35 (citing Ex. 1005 ¶ 115).

Patent Owner argues Petitioner “has not shown that Chow describes, suggests, or otherwise inherently requires any exhaustion of said money,” i.e., a service resource, “*upon* any given consumption” and “does not disclose when any alleged exhaustion would occur.” Prelim. Resp. 26.

Chow, however, describes the exhaustion of resources upon the consumption of those resources when a cost is paid to obtain an object, e.g., a document. As Petitioner points out (Pet. 33–35), Chow describes a “cost associated with retrieving the document from the source (such as communication charges, server charges, and copyright holder charges)” (Ex. 1018, 25:66–26:1). Chow subsequently describes “obtain[ing] the object,” i.e., document, “from [a] source having the minimum value of [a] cost-benefit function.” *Id.* at 30:26–27, 35–36. Obtaining a document for some cost in resources, exhausts whatever resources are required upon payment of the cost. Indeed, as Petitioner’s expert points out, spending or using some resource exhausts that resource. Ex. 1005 ¶ 115. Patent Owner’s argument does not persuasively explain why providing a resource does not “exhaust” that resource upon use of that resource. We determine that, on the record now before us, Petitioner has demonstrated sufficiently that Chow teaches this limitation.

e) means for communicating a result of the operation over a network communications link

Petitioner asserts that Chow teaches this limitation. Pet. 35–36; *see* Ex. 1005 ¶¶ 117–119. In particular, Petitioner points out that Chow’s “Revision Manager program (the network-based agent) provided updated

copies of webpages to clients who had requested updates.” Pet. 35 (citing Ex. 1018, 9:59–10:30, 20:17–47; Figure 3); Ex. 1005 ¶ 117. Petitioner argues that a person of ordinary skill in the art “would have understood that Chow taught that the Revision Manager communicated data, such as updated copies of webpages, and that this data could be communicated via a communication line connected to the network interface of the Revision Manager.” Pet. 35–36 (citing Ex. 1005 ¶ 118). Patent Owner does not present arguments regarding this limitation. *See generally* Prelim. Resp. We determine that, on the record now before us, Petitioner has demonstrated sufficiently that Chow teaches this limitation.

f) Conclusion as to Claim 1

Based on the current record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claim 1 would have been obvious over the combination of Chow and White.

2. Independent Claims 9 and 24

Independent claims 9 and 24 recite a system and method, respectively, for performing user customized network-based operations, but otherwise recite limitations similar to those of claim 1. Petitioner relies on the same teachings of Chow and White for claims 9 and 24 as those discussed above for claim 1.¹⁹ *See* Pet. 39–42, 46–48. At this stage of the proceeding, Patent Owner does not present arguments separate from those discussed above with

¹⁹ The system of claim 9 also recites a processor and memory. We are persuaded by Petitioner’s showing regarding these limitations of claim 9. *See* Pet. 40 (citing Ex. 1018, 3:60–64, 25:15–19, Fig. 34); Ex. 1005 ¶¶ 141–142.

respect to claim 1. *See generally* Prelim. Resp. Based on the current record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claims 9 and 24 would have been obvious over the combination of Chow and White.

3. *Dependent Claims 2–4, 13, 14, 22, 25, and 26*

Petitioner asserts that the combination of Chow and White teaches each of the additional limitations of dependent claims 2–4, 13, 14, 22, 25, and 26. *See* Pet. 36–39, 42–46, 48–51, 59–60. Petitioner supports these assertions with citations to the record and the testimony of Dr. Long. *See id.*; Ex. 1005 ¶¶ 122–138, 147–157, 164–170, 192. At this stage of the proceeding, Patent Owner does not dispute these assertions, or raise arguments separate from those discussed above. *See generally* Prelim. Resp.

We have reviewed Petitioner’s contentions and supporting evidence, and based on the current record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claims 2–4, 13, 14, 22, 25, and 26 would have been obvious over the combination of Chow and White.

G. *Asserted Obviousness over Chow, Bauer, and White*

Petitioner asserts that the combination of Chow, Bauer, and White teaches each of the additional limitations of dependent claims 6, 10, 11, and 23 and that a person of ordinary skill in the art would have been further motivated to combine the teachings of Bauer with those of Chow and White. *See* Pet. 51–56, 60. Petitioner supports these assertions with citations to the record and the testimony of Dr. Long. *See id.*; Ex. 1005 ¶¶ 171–186. At this stage of the proceeding, Patent Owner does not dispute these assertions, or

raise arguments separate from those discussed above. *See generally* Prelim. Resp.

We have reviewed Petitioner’s contentions and supporting evidence, and based on the current record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claims 6, 10, 11, and 23 would have been obvious over the combination of Chow, Bauer, and White.

H. Petitioner’s Other Asserted Grounds

As noted above (*supra* Section I.E), Petitioner alleges that claims 1–4, 9, 13, 14, 22, and 24–26 would have been obvious in view of Chow (Pet. 24–51) and that claims 6, 10, 11, and 23 would have been obvious in view of Chow and Bauer (*id.* at 51–56), i.e., Grounds I and II. Petitioner’s asserted grounds based on Chow and White, i.e., Grounds III and IV (which are discussed above in Sections II.F & II.G), are presented as “alternate grounds,” which “analyze the claims with the prior district court construction of agent.” Pet. 17, 21. As discussed above (*see supra* Section II.C), we have adopted the district court claim construction for agent. Therefore, we do not provide a detailed assessment of the additional grounds, i.e., Grounds I and II, which are based upon a claim construction that we have not adopted.

However, in accordance with USPTO Guidance, “if the PTAB institutes a trial, the PTAB will institute on all challenges raised in the petition.” *See Guidance on the Impact of SAS²⁰ on AIA Trial Proceedings*

²⁰ In *SAS*, the Supreme Court held that a decision to institute under 35 U.S.C. § 314 may not institute review on fewer than all claims challenged in a petition. 138 S. Ct. at 1355–56.

(Apr. 26, 2018) (available at <https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial>); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (a decision to institute is “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”). In light of our determination that Petitioner has met its burden under 35 U.S.C. § 314(a) as to its challenge of claims 1–4, 9, 13, 14, 22, and 24–26 as obvious over Chow and White and claims 6, 10, 11, and 23 as obvious over Chow, Bauer, and White, we also institute *inter partes* review based on Petitioner’s other asserted grounds.

III. CONCLUSION

For the reasons set forth above, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to at least one claim of the ’752 patent. Thus, we institute an *inter partes* review as set forth in the Order below. Trial shall commence on the entry date of this Decision.

IV. ORDER

Accordingly, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–4, 6, 9–11, 13, 14, and 22–26 of U.S. Patent No. 7,949,752 B2 is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the ’752 patent is hereby instituted commencing on the

IPR2020-00470
Patent 7,949,752 B2

entry date of this Decision, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial.

IPR2020-00470
Patent 7,949,752 B2

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