

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BRYCER, LLC, and BRYCER MANAGEMENT, INC.
Petitioner,

v.

TEGRIS, INC.,
Patent Owner.

IPR2023-01196
Patent 11,126,966 B2

Before HUBERT C. LORIN, MEREDITH C. PETRAVICK, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Brycer, LLC and Brycer Management, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 8–16 of U.S. Patent No. 11,126,966 B2 (Ex. 1001, “the ’966 patent”). Tegriss Inc. (“Patent Owner”) filed a Preliminary Response (Paper 8, “Prelim. Resp.”).

We have jurisdiction under 35 U.S.C. § 6.

Upon consideration of the arguments and evidence presented by Petitioner, we are persuaded that Petitioner has demonstrated, under 35 U.S.C. § 314(a), a reasonable likelihood that it would prevail in showing the unpatentability of at least one challenged claim.

For the reasons stated below, we institute *inter partes* review as to challenged claims 8–16 of the ’966 patent.

B. Related Proceedings

Petitioner indicates, and Patent Owner agrees, that the ’966 patent was asserted in *Tegriss, Inc. v. Brycer, LLC*, Case No. 6:22-cv-5741 (N.D. Ill. 2022); however, that case was dismissed by Patent Owner and the ’966 patent was again asserted in *Tegriss, Inc. v. Brycer, LLC*, Case No. 1:23-cv-07744 (N.D. Ill. 2023). Paper 6, 1 (Petitioner’s Mandatory Notice); Prelim. Resp. 5.

Also, Patent Owner notifies us that there are two pending U.S. continuation patent applications, Appl. No. 17/405,909 and Appl. No. 17/942,876, that each claim priority to the ’966 patent. Prelim. Resp. 5.

C. The '966 patent (Ex. 1001)

1. Disclosure

The '966 patent, titled “Systems and Methods for a Web Based Inspection Compliance Registry and Communication Tool,” relates to using a web registry to track the inspection compliance of an owned asset. Ex. 1001, code (54), 3:8–11.

The '966 patent explains that there are “assets that are owned around the world that require compliance with a code, local rule, state law, or federal law.” Ex. 1001, 1:19–22. The '966 patent uses as “a non limiting example, a fire hydrant” “as an owned asset throughout the specification.” *Id.* at 1:34–38. According to the '966 patent, “the hydrant is preferably inspected annually.” *Id.* at 1:39–41. “An inspector will record information about the hydrant[']s location and operability.” *Id.* 1:43–45.

“Computer software has been used in the past as a way for inspecting authorities to track fire hydrant usage.” Ex. 1001, 1:59–60. However, the '966 patent explains that the “disadvantage of using current fire hydrant management software is the limitation of communication within the department and interdepartmentally.” *Id.* at 2:17–19. The '966 patent further explains that “[c]urrently there is not a standard format for collecting fire hydrant information” and “the information would not likely integrate well using current software and inspection methods.” *Id.* at 2:34–37. Many prior approaches to keeping records, according to the '966 patent, “affect[s] the local businesses['] and residence’s fire insurance premiums.” *Id.* at 2:60–63.

Accordingly, “[a]llowing an accessible format to independent contractors would allow cheaper maintenance costs and saves [sic] the department and taxpayer’s money.” Ex. 1001, 3:1–4.

To that end, the ’966 patent discloses “a web registry to track the inspection compliance of an owned asset.” Ex. 1001, 3:8–11. In one example, a fire marshal “will receive weekly or monthly updates of all due and overdue inspections,” and “use the registry to communicate to the owner his intention to enforce the inspection.” *Id.* at 4:21–34. “The owner will use the registry to find qualified inspection companies.” *Id.* at 4:34–36. An inspection company “will also use the registry (via the web or mobile device) to input their inspections with or without deficiency information.” *Id.* at 4:37–41.

Fig. 2 is reproduced below.

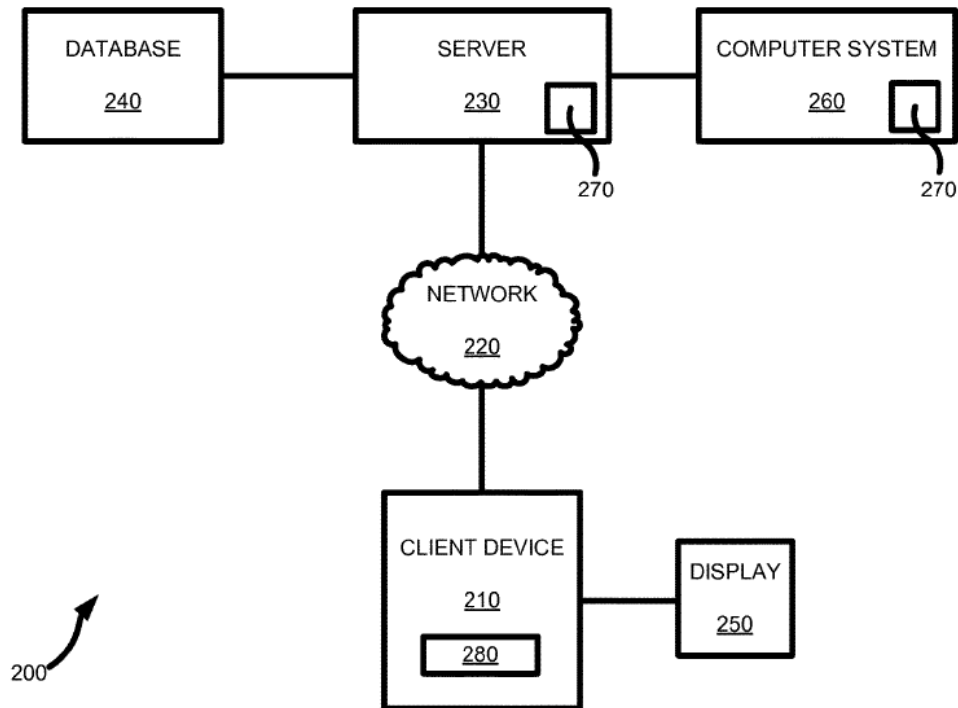


Fig. 2

Figure 2 of the '966 patent illustrates an exemplary computer network system (200). Ex. 1001, 3:34–36.

Figure 2 shows an electronic client device (210) is linked via a network (220) to a server (230). Ex. 1001, 6:21–29. The server (230) is coupled to a database (240) and a computer system (260). *Id.* A user of the client device (210) may “use a web based compliance registry on a browser application running on the client device to access web content served by the server **230**.” *Id.* at 6:53–57. The server (230) is coupled to a database, and may “retrieve information there from and to store information thereto.” *Id.* at 6:44–49.

Figure 5, reproduced below, shows a method for using a web enabled inspection registry. Ex. 1001, 8:15–16.

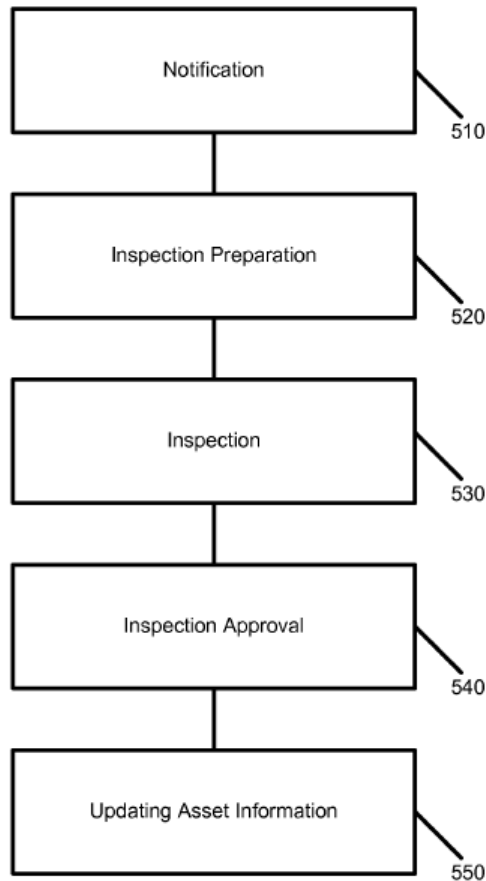


Fig. 5

Figure 5 of the '966 patent shows blocks 510 through 550 for using a web enabled inspection registry. Ex. 1001, 8:15–16.

At block 510 of Figure 5, “an owner/inspecting authority is notified that an inspection is needed on an owned asset.” Ex. 1001, 8:16–17. The owner is sent recommendations including “names of inspectors, types of inspection needed and general costs.” *Id.* at 8:26–31. At block 520, the owner may use the web based compliance registry to find a qualified inspector.” *Id.* at 8:42–44. “At block 530 an inspection takes place.” *Id.* at 8:54. The inspector enters inspection information and transmits “the

inspection to a reviewing authority from the web based compliance registry.” *Id.* at 8:63–9:2. At blocks 540 and 550, the inspection is reviewed by an approving authority and “the information is updated on the system to reflect a completed and valid inspection.” *Id.* at 9:3–24.

2. Claims 8–16

Petitioner challenges claims 8–16. Pet. 3.

Claim 8, reproduced below, is the independent claim from which claims 9–16 directly or indirectly depend. Bracketing, consistent with the Petition, is added to assist in referring to the claim elements.

8. [8pre] A computer-implemented method for using a fire hydrant management software and a web-based registry to track requisite inspection of an owned asset comprising:

[8a] granting remote access to a web-based registry system, wherein the web-based registry is configured to run a fire hydrant management software, to at least three classes of user, wherein the three classes of user comprise:

- (1) an owner of an asset
- (2) an approval authority
- (3) an inspector

[8b] retrieving, by a computer-based fire hydrant management software system, real time records of assets from a database, the database being accessible and augmentable by a classes of user;

[8c] analyzing the records of assets from the database to identify notification events;

[8d] based on the analysis, notifying an owner of an asset of a notification event, wherein the notice includes a standard format description of the type of inspection, and a cost associated

with the type of inspection, and wherein the notification event comprises a designatable interval in advance of an impending deadline for the inspection, and wherein the owner of the asset, upon remotely accessing the fire hydrant management software compliance registry, may update and review the status of the assets;

[8e] based upon the analysis, sending a standard format notice to the approval authority of the status of the assets assigned to the approval authority, and wherein the approval authority, upon accessing the web-based registry, may update and review the status of the assets assigned;

[8f] upon logging on to a password controlled website configured to provide access to the fire hydrant management software, providing to an inspector the owner selects, the selection based upon a list of qualified inspectors that are available to inspect the asset based upon attributes including proximity to the asset, a web-based template configured to describe the asset and [d] each of the steps of the inspection;

[8g] receiving from the inspector, inspection information in specific response to the web-based template;

[8h] storing in a database in association with the asset, the inspection information, wherein the inspection information is accessible to the users, and updating the database in association with the asset based upon the inspection information;

[8i] transmitting to the approval authority, a standard format compliance report including noting compliance, wherein the compliance report includes, noting deficiencies in the asset and storing the noted deficiencies in association with the asset.

Ex. 1001, 15:16–16:13.

D. Asserted References

Petitioner relies on the following references:

Name	Reference	Ex. No.
Key	U.S. Patent Application Publication No. 2002/0029222A1, published Mar. 7, 2002	1005
Sweeney	U.S. Patent Application Publication No. 2005/0021449A1, published Jan. 27, 2005	1006
Chauhan	W.O. International Publication No. 2004/104891A1, published Dec. 2, 2004	1016
McKinney	U.S. Patent Application Publication No. 2004/0230455A1, published Nov. 18, 2004	1020

Petitioner also relies on the Declaration of Richard MacInnes (Ex. 1003) as support for the various contentions.

Patent Owner relies on the Declaration of David Hilliard Williams (Ex. 2001) as support for the various contentions.

E. Asserted Ground

Petitioner contends that claims 8–16 of the '966 patent are unpatentable under the following ground:

Ground	Claims Challenged	35 U.S.C. §	Reference(s)/Basis
I	8–16	§ 103 ¹	Key, Chauhan, Sweeney, McKinney

Pet. 3.

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102 and 103. Because the challenged claims of the '966 patent have an effective filing date before the

II. ANALYSIS

A. Discretionary Denial Under 35 U.S.C. § 325(d)

Patent Owner requests that the Board exercise its discretion to deny institution under § 325(d). Prelim. Resp. 49–57.

Section 325(d) provides that the Director may elect not to institute a proceeding if the challenge to the patent is based on matters previously presented to the Office. 35 U.S.C. § 325(d) states, in pertinent part, that “[i]n determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.”

The Board uses a two-part framework for evaluating arguments under § 325(d):

- (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and
- (2) if either condition of first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential) (“*Advanced Bionics*”). “[T]he *Becton, Dickinson* factors provide useful insight into how to apply the framework under 35 U.S.C. § 325(d).” *Id.* at 9 (footnote omitted). The non-exclusive *Becton, Dickinson* factors are:

effective date of the applicable AIA amendments, we refer to the pre-AIA version of 35 U.S.C. § 103 throughout this Decision.

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
- (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8, 17–18 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph) (“*Becton, Dickinson*”). *Becton, Dickinson* factors (a), (b), and (d) relate to the first part of the *Advanced Bionics* framework (whether the same or substantially the same art or arguments previously were presented to the Office), and *Becton, Dickinson* factors (c), (e), and (f) relate to the second part of that framework (previous Office error). *Advanced Bionics*, Paper 6 at 9–11. Only if the same or substantially the same art or arguments were previously presented to the Office do we then consider whether the petitioner has demonstrated a material error by the Office. *Id.*

Under § 325(d), the art or arguments must have been previously presented to the Office during proceedings, such as examination of the underlying patent application, pertaining to the challenged patent. *Advanced*

Bionics, Paper 6 at 7. Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (“IDS”), in the prosecution history of the challenged patent. *Id.* at 7–8.

1. First step of the framework

whether the same or substantially the same art previously was presented to the Office

Key, Chauhan, Sweeney, and McKinney, the references of Ground I, are not the same as references previously presented to the Office. Patent Owner does not indicate, nor does there appear to be any indication in the record, that the Examiner considered these references. *See generally* Prelim. Resp. 49–57; Ex. 2001 ¶¶ 187–196. *Cf. Becton, Dickinson* factor (c).

Instead, Patent Owner alleges that certain references of Ground I (Key, Sweeney, McKinney) are “cumulative” of certain references applied by the Examiner. Prelim. Resp. 51–57. *Cf. Becton, Dickinson* factors (a), (b). Specifically, Patent Owner contends that

- Key and the combination of Key and Sweeney are cumulative of *Campion* (U.S. Patent 7,649,450) (Prelim. Resp. 51–55);
- Sweeney and McKinney are cumulative of *Colliau* (U.S. 2008/0114638) (Prelim. Resp. 55–56); and
- Chauhan is cumulative of “Annual Hydrant Inspection Procedures 2001” (Ex. 2003) and the Background of the Invention section of the ’966 Patent (Prelim. Resp. 56).

Id.

In making these arguments, Patent Owner combines its analysis of same or similar art, and same or similar arguments. *Id.* at 51–57. Further,

Patent Owner focuses its analysis on a comparison of the Petition and the prosecution history based on claim 8. *Id.*

However, the claims subject to the proposed ground are not the same as the claims examined by the Examiner and to which prior art rejections (involving, *inter alia*, Campion and Colliau) were applied.

The claims addressed by the Office Action mailed October 31, 2019 were rejected over prior art, including Campion and Colliau, as well as under 35 U.S.C. § 101. *See* Ex. 1002, 438–480. The claims were then extensively amended. *Id.* at 495–519. In the subsequent Final Office Action mailed August 3, 2020, the § 101 rejection was maintained but all the prior art rejections were withdrawn, without discussion. *Id.* at 575. In response, an Amendment was filed (February 3, 2021) newly adding, *inter alia*, “fire hydrant management software” to, e.g., claim 21 (now claim 8). *Id.* at 611. The Examiner thereupon allowed the claims, stating in the Reasons for Allowance (mailed May 18, 2021) that the § 101 rejection was withdrawn in view of the amendment because, *inter alia*,

the combination of additional elements use the *fire hydrant management software system* in a specific manner over prior art systems by allowing remote users to process inspections in a standard format, track inspection compliance, and pay for inspection of an owned asset. The claim as a whole integrates the certain method of organizing human activity into a practical application.

Id. at 629 (emphasis added).

Even if we assume, as Patent Owner alleges, that Key, Sweeney, McKinney are substantially similar to Campion and Colliau applied by the Examiner, the Examiner did not consider combinations that are the same as, or similar to, those presented by Petitioner. This is so because Petitioner

presents the combination of Key, Chauhan, Sweeney, McKinney to address the limitations in the patent claims, such as “fire hydrant management software,” which the Examiner only mentions, without elaboration, when applying different prior art references, such as Campion and Colliau. *See, inter alia*, Pet. 21–27 (discussing the combination of Key, Chauhan, Sweeney, McKinney), 53, fn. 8 (“it would have been obvious that such [management] software was used for fire hydrant management”) (relying on the discussion at Pet. 21–27); Ex. 1002, 629–32.

Patent Owner points out that the Examiner stated in the Reasons for Allowance that, *inter alia*,

upon further deliberation over all the evidence at hand, that the claims are allowable. The Examiner performed an updated search and was unable to find any other non-patent literature which would teach or suggest, other otherwise render obvious, even in combination with the Campion, Silva, Cober, Elliott, Colliau, and Deaton references, the aforementioned claim limitations.

Prelim. Resp. 9 (citing Ex. 1002, 629–632). But there is no indication that the limitations newly added to the claims on which the withdrawal of the rejections was based, such as “fire hydrant management software,” were examined. There is a mention of the limitations but no explanation as why they overcome the cited prior art. Prior to said statement, the Examiner simply paraphrases the summaries of the inventions set forth in each of the applied references. Ex. 1002, 629–632.

Further, there is no discussion by the Examiner of “Annual Hydrant Inspection Procedures 2001” (the paragraph at Ex. 1002, 576, was copied from the website: <http://www.firehydrant.org./info/hinsp1.html>) or the Background of the Invention section of the ’966 Patent in combination of the

Campion or Colliau references. Thus, no evidence that these references were considered in combination with Campion and Colliau. Still further, Patent Owner does not provide reasoning why Chauhan is cumulative of “Annual Hydrant Inspection Procedures 2001” or the Background of the Invention section of the ’966 Patent, other than merely asserting that it is and that the Petition doesn’t sufficiently discuss Chauhan or the reasons to combine. Prelim. Resp. 56. As discussed below, we disagree that the Petition doesn’t sufficiently discuss Chauhan or the reasons to combine. Petitioner adds Chauhan to specifically address the newly added limitation of “fire hydrant management software,” and Patent Owner largely glosses over this aspect of the Petition.

We find that the combinations of prior art presented before the Office, involving, *inter alia*, Campion and Colliau, are not substantially the same as the combination of Key, Chauhan, Sweeney, McKinney presented in the Petition.

*whether the same or substantially the same arguments
previously were presented to the Office*

Petitioner and Patent Owner present arguments relative to limitations, such as “fire hydrant management software,” that the Office did not previously encounter. These arguments are new because no arguments were previously presented to the Office for these limitations. The arguments made during examination and the manner in which Petitioner relies on Key, Chauhan, Sweeney, and McKinney to address the limitations that led to allowance of the claims are not the same or substantially the same arguments. *Cf. Becton, Dickinson* factor (d).

Also, the arguments made during examination and the manner in which Patent Owner distinguishes the prior art are substantially dissimilar. *Cf. Becton, Dickinson* factor (d). This is so because a principal argument Patent Owner makes in distinguishing the claimed method over that of Key, Chauhan, Sweeney, and McKinney is that the claimed method uses a “fire hydrant management software,” an argument not raised before the Office. *See e.g., Prelim. Resp. 13* (“[Petitioner] fail[s] to show that any of the record prior art teaches fire hydrant management software”). This is not an argument that is the same or substantially the same as any previously before the Office.

For the reasons discussed, we find the same or substantially the same arguments were not previously presented to the Office.

2. Second step of the framework

Because the same or substantially the same art or the same or substantially the same arguments were not previously presented to the Office, we do not consider whether Petitioner has demonstrated a material error by the Office. *See Advanced Bionics*, Paper 6 at 9–11.

3. Conclusion Regarding § 325(d)

Under the circumstances of this case, we determine that exercising discretion to deny the Petition under § 325(d) is unwarranted.

B. Principles of Law for Patentability

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, “would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“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*, 815 F.3d at 1363 (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).

C. Claim Construction

For petitions filed on or after November 13, 2018, “[claims] of a patent . . . shall be construed using the same claim construction standard that would be used to construe the [claims] in a civil action under 35 U.S.C. § 282(b), including construing the [claims] in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100 (2019); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005).

Petitioner does not submit constructions for any claim terms. “Petitioner construes terms consistent with the understanding a POSA would have had at the time of the invention.” Pet. 9–10.

Patent Owner proposes that the limitation “fire hydrant management software” be construed as “[s]oftware that allows the user to input fire hydrant information, schedule maintenance and create reminders for service.” Prelim. Resp. 12–13 (citing Ex. 2001 ¶¶ 51–54; Ex. 1001, 1:63–66).

At this stage, we construe “fire hydrant management software” as management software that processes information about fire hydrant assets. This comports with Petitioner’s implicit construction. *See*, e.g., Pet. 1 (“there is nothing novel or non-obvious about the claimed methods of using *management software* and a registry to track asset inspections”) (emphasis added).

The parties’ dispute whether the combination of Key, Chauhan, Sweeney, and McKinney teaches or renders obvious using a “fire hydrant management software” as claimed. The dispute stems from the parties’ differing views of the patentable significance of the phrase “fire hydrant” in describing the “management software.”

Petitioner appears to take the view that the phrase “fire hydrant” describes the content of the data that the software processes. *See*, e.g., Pet. 28:

A POSA would have understood that there was nothing new or inventive about the particular asset to be tracked, nor does the ’966 patent purport there is, instead noting—just like in Key and the other prior art discussed above—that a fire hydrant is a “*non-/limiting* example” and “it should be readily appreciated

any owned asset may be substituted for the fire hydrant.”
EX1001, 1:34-39; EX1003 ¶¶124-139.

Patent Owner appears to take the view that “fire hydrant” relates to a functional characteristic of the software. *See, e.g.*, Prelim. Resp 36 (contending, *inter alia*, that the “fire hydrant management software” is “directed to a particular technology”). According to Patent Owner, “[t]he Challenged Claims relate to software capable of managing the substantially different needs and problems relating to fire hydrants.” *Id.* at 40 (citing Ex. 2001 ¶¶ 91–104). *See also id.* at 36 (the “fire hydrant management software” . . . [is] directed to a particular technology”), 38 (“the ‘966 Patent and Challenged Claims are directed at a much narrower technical field” [than the “the technical field of asset management, monitoring, and compliance” that Petitioner argues]) (citing Pet. 22).

Patent Owner cites Fig. 5 (reproduced above) and 8:15–38 of the ’966 patent as intrinsic evidence supporting its view. Prelim. Resp. 12. But we do not see there any discussion related to the function of the “fire hydrant management software.” “Fire hydrant management software” is not mentioned.

Patent Owner also points to this statement from the ’966 patent (Ex. 1001, 1:63–66): “A typical fire hydrant management software program allows the user to input fire hydrant information, schedule maintenance and create reminders for service.” Prelim. Resp. 13 (quoting Ex. 1001, 1:64–66; citing Ex. 2001 ¶¶ 51–54). But that statement relates to “[c]omputer software [that] has been used in the past,” not the claimed subject matter. We observe that “fire hydrant management software” as recited in claim 8 is nowhere else mentioned in the patent.

Furthermore, it appears that Mr. Williams agrees that “fire hydrant management software” is management software that processes information about fire hydrant assets. Ex. 2001 ¶ 52 (“In my view, ‘fire hydrant management’ is first and foremost a description of the scope of the type of assets that can be managed by the software.”); Prelim. Resp. 13.

In our view, at this stage, there is insufficient evidence to attribute a functional characteristic to the phrase “fire hydrant” in the “fire hydrant management software” limitation. Rather, the evidence weighs in favor of treating “fire hydrant” as nonfunctional descriptive material for being directed to the content of the data the “management software” processes. See MPEP § 2111.05 Functional and Nonfunctional Descriptive Material (R-07.2022). In that regard, we note that the ’966 patent describes the system as comprising, *inter alia*,

a database configured to store information including but not limited to; hydrant ownership, make, model, year, color, condition, rating of needed maintenance (critical, important, light, or none), specific recommended maintenance, pressure, flow, GPS location, address, time of inspection, environment conditions during inspection, landscaping, digital picture of hydrant, nozzle size and orientation, physical description of hydrant, special markings, service record, water quality, and hydrant number.

Ex. 1001, 8:4–14 (discussing Figure 4 which “shows a database relationship table in one embodiment for a web based registry for inspection compliance” (*id.* at 8:4–5)).

D. Level of Ordinary Skill in the Art

Petitioner contends,

a POSA [person of ordinary skill in the art] would have had at least a B.S. in engineering or a related field, and would have had at least two years of experience designing and/or developing asset management and compliance systems for a regulated asset or system of assets.

Pet. 6 (citing Ex. 1003 ¶¶ 16, 17, 27–29). Petitioner further contends “a higher education or skill level might make up for less experiences, and vice-versa.” *Id.* (citing Ex. 1003 ¶ 29).

Patent Owner finds that “Petitioner’s description of the qualifications of a POSA is too general” and it “fails to consider the express scope of the Challenged Claims.” Prelim. Resp. 13. According to Patent Owner, the challenged claims “are limited to a method for ‘using a fire hydrant management software and web-based registry.’” *Id.* Patent Owner argues, *inter alia*, that the prosecution history “shows that the claims were allowed after they were limited to *a field of technology relating to fire hydrant management software.*” *Id.* (emphasis added). Patent Owner contends that

[a] POSA should at minimum have knowledge of and experience in the inspection and maintenance of fire hydrants or at least similar emergency or life safety assets and software available for use in connection therewith in 2007.

Id. (citing Ex. 2001 ¶¶ 39–42).

We decline at this stage to adopt Patent Owner’s definition for the level of skill for a POSA such that it requires additional knowledge and experience with fire hydrants. The definition is predicated on Patent Owner’s view that “fire hydrant” relates to a functional characteristic of the software. *See, e.g.*, Prelim. Resp 36 (contending, *inter alia*, that the “fire

hydrant management software” is “directed to a particular technology”). For the reasons discussed in the Claim Construction section (§ II.C.), we adopt Petitioner’s implicit construction of “fire hydrant management software” which defines “fire hydrant management software” as management software that processes information about fire hydrant assets. *See, e.g.*, Pet. 1. Given that construction, it would be unnecessary for a POSA to have a level of skill that requires additional knowledge and experience with fire hydrants.

We apply Petitioner’s description of the qualifications of a POSA in our analysis.

E. Overview of the Prior Art References

1. Key (Ex. 1005)

Key relates to “a jurisdiction online management system that manages required inspections mandated by a plurality of different jurisdictions performed by non-governmental entities.” Ex. 1006 ¶ 2. Key describes a system that “provides an efficient, centralized, and web enabled process for the transfer of data between multiple jurisdictions and multiple entities.” *Id.* ¶ 15. “The system manages required inspections” and “is applicable to pressure vessels, boilers, elevators, amusement park rides, and other required jurisdictional inspections of objects.” *Id.*

Figure 1 of Key is reproduced below.

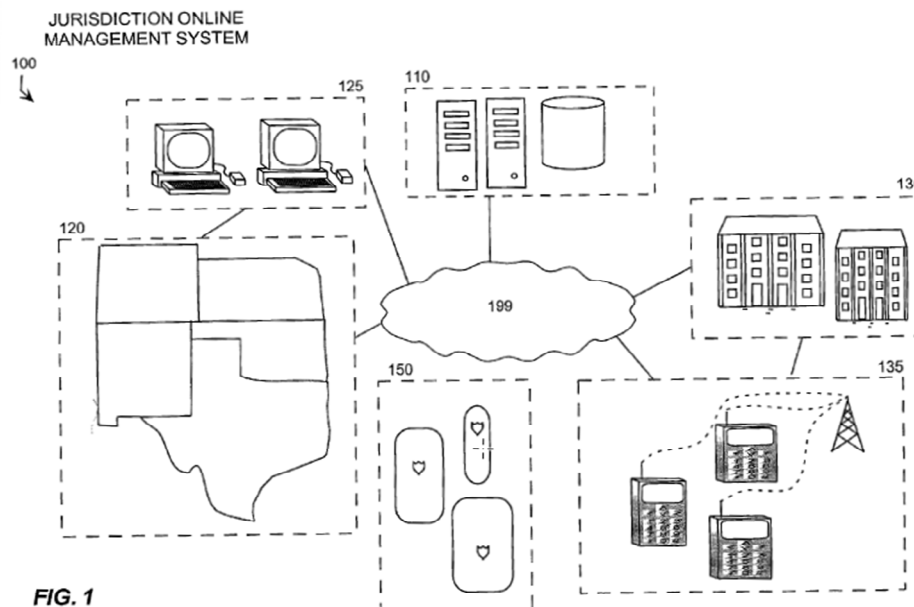


Figure 1 is a functional block diagram illustrating a jurisdiction online management system (100), including reviewers (125), regulatory entities (120), jurisdiction online manager [JOM] (110), objects (150), insurance companies (130), inspectors (135) all connected to the Internet (199). Ex. 1005 ¶¶ 44–38.

Key discloses that each regulatory entity (120) determines the required inspections and inspection frequencies. Ex. 1005 ¶ 47. Inspectors (135) “physically travel to the object’s location and perform the required inspections.” *Id.* ¶ 48. In one embodiment, an inspector (135) “can enter the inspection data directly on-line through the use of a portable computing device.” *Id.* “Reviewers **125** at each jurisdiction **120** evaluate each inspection, repair, and other data to ensure compliance with the jurisdiction’s requirements.” *Id.* ¶ 47.

The jurisdiction online manager [JOM] **110** stores object data, schedules inspections, provides the appropriate jurisdiction forms, accepts inspection data, provides inspection and repair data for jurisdictional review, accepts repair information, accepts

payment, provides inspection certificates, and provides other functions which facilitate the boiler and pressure vessel inspection process.

Id. ¶ 45. A hardware architecture for the JOM is shown in the functional block diagram illustrated in Figure 3 of Key, reproduced below. Ex. 1005 ¶ 23.

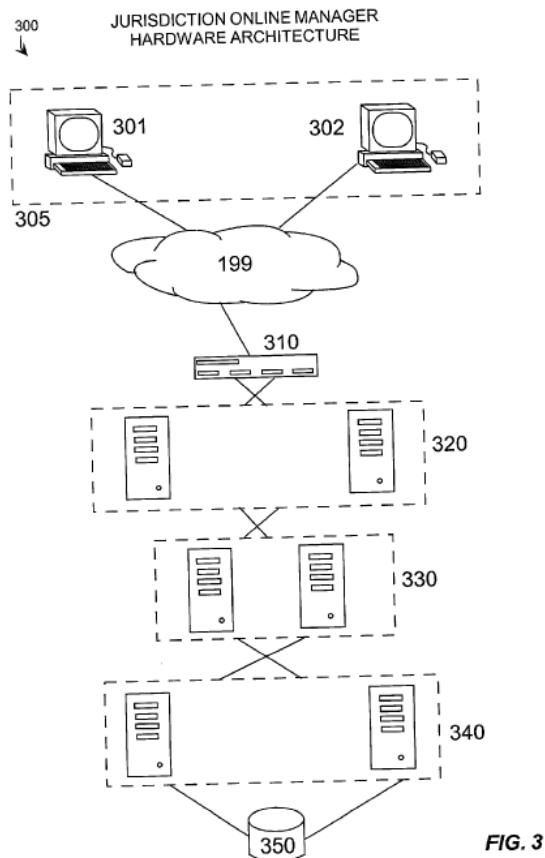


Figure 3 illustrates a hardware architecture of the JOM (110) that includes client computers (305), global computer network (199), web servers (320), and a database (350). Ex. 1005 ¶¶ 64–68.

2. Chauhan (Ex. 1016)

Chauhan generally relates to

an automated management system for managing data, outage repair, load switching, job workflow and crew dispatching, crew workflow, installation, maintenance and restoration of utility services by integrating geographic information (GIS) data with many other data sources so as to gather, transform, manipulate, analyze, and produce desired information for continuously supplying utility and relevant services.

Ex. 1016 ¶ 1.

Chauhan describes “an integrated GIS suite of applications that manages information across the entire utility,” referred to as UtilityCenter.

Ex. 1016 ¶ 39. UtilityCenter stores data in a structured query language (SQL) database. *Id.* “The system architecture allows managers or administrators to temporarily assign permissions to work crews.” *Id.* ¶ 207. In one example, “a contractor hired to do fire hydrant inspections could be given a laptop with UtilityCenter loaded on it.” *Id.*

3. Sweeney (Ex. 1006)

Sweeney relates to “methods and systems for the online condition management of a construction asset.” Ex. 1006 ¶ 2. Sweeney discloses a computerized system for the online management of a construction asset which is shown via a block diagram in Figure 1, reproduced below.

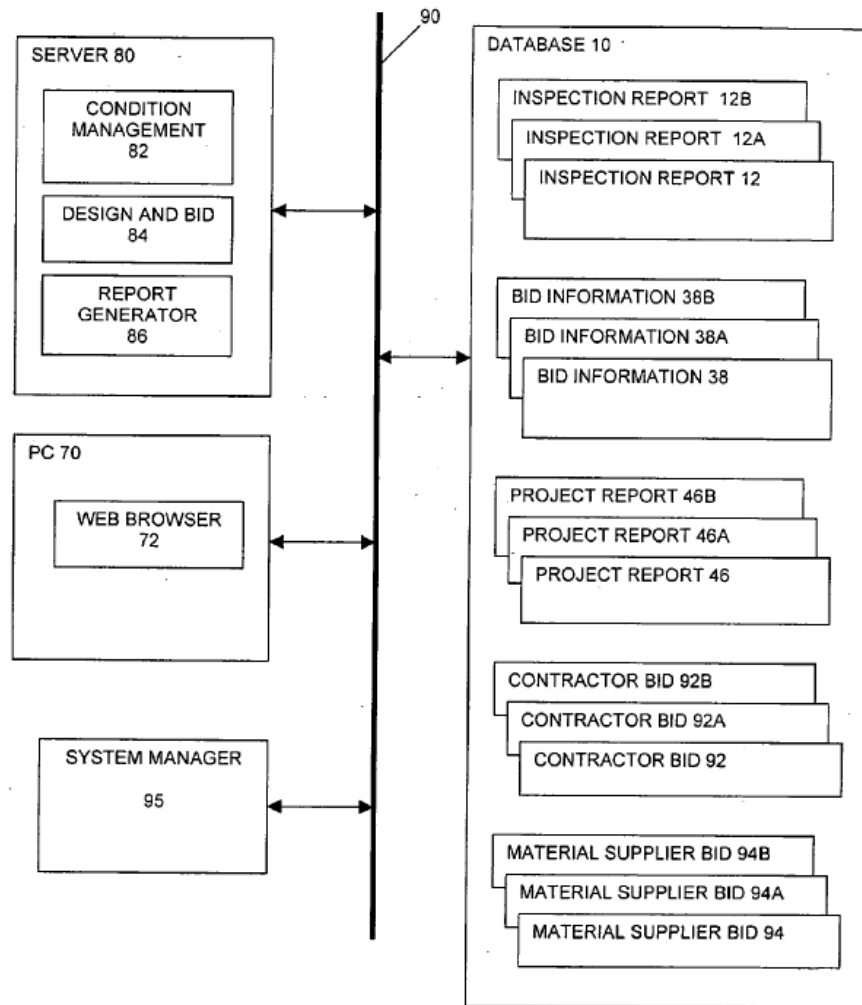


FIG. 1

Figure 1 of Sweeney shows a database (1), database (10), an online inspection report (12), server (80), web browser (72), and system manager (95). *See e.g.*, Ex. 1006 ¶ 27.

According to Sweeney, an asset owner is “provided with online access to the archived inspection report 12 via a web browser 72 running on a conventional personal computer 70.” Ex. 1006 ¶ 27. The asset owner may also be provided with “hyperlinks to the information shown in database 10.” *Id.* ¶ 39. For example, the asset owner may “view the inspection report 12 for the asset in question by clicking on a link provided on the web page for

that asset.” *Id.* ¶ 40. The server (80) may generate reports “in response to user queries from the web browser 72.” *Id.* ¶ 42. The reports may include information about an asset including the date of construction, repair history, location, and the like. *Id.*

4. McKinney (Ex. 1020)

McKinney relates to monitoring systems for servicing and verifying compliance of environmental equipment, such as wastewater treatment systems. Ex. 1020 ¶ 3. McKinney describes an interactive website where “service companies can enter a significant amount of data,” which may be used “by the service companies in the future for scheduling” future inspections. *Id.* ¶ 80. “The website may be used by companies to generate bills, renewal notices, service notices, and other comments or advisories to customers.” *Id.* The service company may also have preprinted forms mailed to a subscriber with “standardized warning letters to advise about regulations requiring renewal of the service contract.” *Id.*

F. Ground I

Petitioner challenges claims 8–16 as unpatentable under 35 U.S.C. § 103(a) over the combination of Key, Chauhan, Sweeney, and McKinney. Pet. 21–77.

1. Independent claim 8

[8pre] “A computer-implemented method for using a fire hydrant management software and a web-based registry to track requisite inspection of an owned asset comprising”

Petitioner contends that, regardless of whether the preamble is limiting², the combination of Key, Chauhan, Sweeney and McKinney discloses and renders obvious the claimed computer-implemented method comprising the claimed steps for the combined reasons set forth in the Petition with respect to each of [8a]–[8i]. Pet. 29 (citing, *inter alia*, Ex. 1003 ¶¶ 142–148); *see also id.* at 21–28.

Patent Owner argues, *inter alia*, that Petitioner has not addressed the “fire hydrant management software” in the preamble. Prelim. Resp. 17 (citing Ex. 2001 ¶¶ 139–149).

However, by contending that and providing reasons for why it would have been obvious to a POSA to apply Key to fire hydrants, Petitioner would appear to have addressed the “fire hydrant management software” limitation. Pet. 21–29. Patent Owner appears to agree. *See, e.g.*, Prelim. Resp. 18 (Mr. MacInnes “baldly opines that a POSA would have been motivated to apply Key’s system to fire hydrants”).

² At this stage of the proceeding, we do not determine whether the preamble is limiting.

[8a] “granting remote access to a web-based registry system, wherein the web-based registry is configured to run a fire hydrant management software, to at least three classes of user, wherein the three classes of user comprise: (1) an owner of an asset (2) an approval authority (3) an inspector”

Petitioner contends that Key alone or in combination with Chauhan discloses or renders obvious limitation [8a]. Pet. 29 (citing Ex. 1003 ¶¶ 149–157).

According to Petitioner, Key, for example, discloses, *inter alia*, “a ‘web interface’ that provides remote ‘access’ ‘via a web browser’ to various classes of users including (1) ‘owners of the objects’ (the claimed ‘owner of an asset’); (2) ‘jurisdiction reviewers’ or ‘authority’ of a ‘regulatory entity’ that reviews and approves of the inspection (the claimed ‘approval authority’); and (3) ‘inspectors’ (the claimed ‘inspector’).” Pet. 32 (citing Ex. 1005 ¶¶ 47–48, 70, 76–77, Figure 4 (reproduced at Pet. 33); Ex. 1003 ¶¶ 56, 81).

Patent Owner disagrees, arguing, *inter alia*, that “Petitioner[] fail[s] to show or even assert that Key discloses a web registry and fire hydrant management software accessible to the recited classes of users.” Prelim. Resp. 19. According to Patent Owner, Petitioner “completely ignore[s] the fire hydrant management software limitation.” *Id.*

We disagree. In the section discussing [8a], Petitioner refers to a previous section for a discussion explaining that “it would have been obvious that the asset could be a fire hydrant.” Pet. 33 (referring to “Section V.B.1”).

In that section, Petitioner begins by contending that “Key, Chauhan, Sweeney and McKinney are complementary references that are all in the

field of asset management, monitoring, and compliance (including, e.g., inspection, repairs, scheduling, and notices) implemented as online, web-based systems and methods using conventional computers, software, and databases.” Pet. 21 (citing Ex. 1003 ¶¶ 106, 109–121).

Petitioner then explains that “Key discloses ‘a *central* staging database for data’ where the ‘central system enables *real time* availability of current data’ and ‘*complete historical information* about the stored objects ... available online’.” *Id.* at 23 (citing Ex. 1005 ¶¶ 16–17, 69, 104–114, Figure 7; Ex. 1003 ¶¶ 78, 110). According to Petitioner, Key “discloses that its processes are ‘carried out ... by software executing in computers’ and various servers (web servers, application servers) running front-end and application software that operate to provide inspection tracking and management including a web interface.” *Id.* at 23–24 (citing Ex. 1005 ¶¶ 63, 67–70, Figure 4; Ex. 1003 ¶¶ 80–81, 147).

Petitioner concedes that “Key does not expressly disclose ‘fire hydrants’ as one of various owned assets” but indicates that it “discloses that its system and method are to be used with various objects such as boilers, elevators, amusement park rides, etc., as well as ‘*other required jurisdictional inspection of objects*,’ and, recognizes that objects ‘can be dangerous if they are not properly maintained and operated.’” Pet. 24. According to Mr. MacInness, “[a] POSITA would have been motivated and found it logical and advantageous to apply Key’s system to manage other assets, among them, fire hydrants, another asset for which inspections are jurisdictionally required.” Ex. 1003 ¶ 126; Pet. 24.

Petitioner discusses Chauhan as another example of prior art disclosing software for managing information about assets. “Chauhan

discloses a ‘UtilityCenter™ [that] is an integrated GIS [geographic information system] suite of applications that manages information across the entire utility.’” Pet. 24 (citing Ex. 1016 ¶¶ 39–42, Figure 1; Ex. 1003 ¶¶ 84–86, 128–129). Petitioner contends that Chauhan is intended for “‘**fire hydrant** inspections’” and that there is a “‘**HYDRANT** Theme’ that allows an inspector to ‘edit and view inspection fields.’” *Id.* at 24–25 (citing Ex. 1016 ¶ 207; Ex. 1003 ¶¶ 85, 127). According to Petitioner, “Chauhan discloses that its UtilityCenter has wide applicability and that the ‘**same technology**’ can be used for various other assets and applications including . . . ‘fire and police departments’” *Id.* at 25 (citing Ex. 1016 ¶¶ 42, 218; Ex. 1003 ¶¶ 114–115, 130).

These sections discuss various disclosures Petitioner contends renders obvious the use of management software to manage information concerning fire hydrant assets. In our view, this discussion sufficiently addresses the “fire hydrant management software” limitation consistent with Petitioner’s view that the phrase “fire hydrant” relates to the content of the data the software processes. Thus, we do not find at this stage, as Patent Owner argues, that Petitioner “ignore[s] the fire hydrant management software limitation.” Prelim. Resp. 19.

Patent Owner’s remaining arguments hinge on its view that the “fire hydrant management software” is functionally different from the prior art “generic” management software. *See e.g.*, Prelim. Resp. 18 (“prior art references, like Chauhan, that *generically* mention fire hydrants in one specific embodiment but conspicuously fail to address whether any of them disclose the fire hydrant management software recited as performing certain aspects of the steps in Claim 8.”) (citing Ex. 1003 ¶¶ 127–138; Ex. 2001

¶¶ 139–149). Emphasis added. Given that we adopt Petitioner’s implicit construction of “fire hydrant management software” as management software that processes information about fire hydrant assets rather than Patent Owner’s view that “fire hydrant” represents a functional distinction, these arguments do not undermine Petitioner’s position.

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key alone or in combination with Chauhan discloses or renders obvious limitation [8a].

[8b] “retrieving, by a computer-based fire hydrant management software system, real time records of assets from a database, the database being accessible and augmentable by a classes of user;”

Petitioner contends that Key alone or in combination with Chauhan discloses or renders obvious limitation [8b]. Pet. 34 (citing Ex. 1003 ¶¶ 158–164).

Petitioner contends, *inter alia*, that Key discloses a database. Pet. 34 (citing Ex. 1005 ¶¶ 16–19, Figures 3, 7 (depicting database 350); Ex. 1003 ¶¶ 78, 160). According to Petitioner, “[p]er Key, the ‘centralized system provides a hierarchical data structure that allows for easy updates and reverse delta storage’ and ‘enables **real time** availability of current data’ as well as ‘**complete historical information** about the stored objects [to] be available online.’” *Id.* (citing Ex. 1005 ¶ 17; Ex. 1003 ¶¶ 78, 161).

Petitioner further contends that “Key discloses that each of the various classes of users can access and update and add to (augment) the database and information contained therein, *e.g.*, ‘the inspector’ can ‘input the inspection information.’” Pet. 37 (citing in part Ex. 1005 ¶ 88, Figure 5; Ex. 1003 ¶ 164).

Patent Owner argues, *inter alia*, that “Petitioner ignore[s] [using fire hydrant management software as claimed], again failing to discuss it at all.” Prelim. Resp. 21. We disagree for the reasons discussed with respect to a similar Patent Owner argument directed to Petitioner’s position as to [8a].

Patent Owner also argues that, in contrast to what is recited in [8b], “Key teaches a closed centralized architecture for insurance companies to manage maintenance compliance of boilers and related assets and thus teaches closed-centric proprietary system that allows for standardization and exclusive control and data input by insurers.” Prelim. Resp. 22. However, we do not see, at this stage, such a distinction reflected in [8b]. Claim 8 does not appear to preclude a “closed centralized architecture.”

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key alone or in combination with Chauhan discloses or renders obvious limitation [8b].

[8c] “analyzing the records of assets from the database to identify notification events;”

Petitioner contends that Key discloses, or it would have been obvious to include as part of Key, step [8c]. Pet. 38 (citing Ex. 1003 ¶¶ 165–171).

Petitioner shows that Key discloses in Figure 5 that its system “***analyzes the database*** to determine those objects requiring scheduling of an inspection.” Pet. 39 (citing Ex. 1005 ¶ 80, Figure 5; Ex. 1003 ¶ 167).

Patent Owner argues that “Step [8c] depends upon the ‘fire hydrant management software’ recited in earlier limitations, as it retrieves the records of assets analyzed in this step. . . . Key does not disclose or teach in any way ‘fire hydrant management software.’” Prelim. Resp. 24.

We agree that [8c] requires analyzing records that have been retrieved by the “fire hydrant management software.” However, we do not see at this stage the difference between analyzing such records and Key’s analyzing records from a database as Petitioner contends. Pet. 39.

To the extent Patent Owner is arguing that [8c] requires the “fire hydrant management software” to perform the “analyzing,” we observe that [8c] simply calls for “analyzing” certain records from the database to identify notification events. We do not see, at this stage, any suggestion in claim 8 that the “analyzing” is limited to being performed by a “fire hydrant management software.”

Patent Owner further argues that

the data attributes underlying records of fire hydrants and other similar life safety and emergency assets are very different than ‘general’ assets. ‘General’ assets focus on relatively basic information like when put in service, operating parameters, key sensor outputs and how they relate to various ranges or thresholds, service record, repair record, expected life, and of course inspection record. Fire/life safety/ emergency asset attributes are very specific to the type of asset, and often the associated analysis requires focus on these details to a degree that a ‘general’ asset would not.

Prelim. Resp. 24 (citing Ex. 2001 ¶¶ 155–158). This is in contrast to Petitioner’s contention that:

A POSA would have understood that there was nothing new or inventive about the particular asset to be tracked, nor does the ’966 patent purport there is, instead noting—just like in Key and the other prior art discussed above—that a fire hydrant is a “non[–]limiting example” and “it should be readily appreciated any owned asset may be substituted for the fire hydrant.”

Pet. 28 (citing Ex. 1001, 1:34–39; Ex. 1003 ¶¶ 124–139).

Given that we adopt Petitioner’s implicit construction of “fire hydrant management software” as management software that processes information about fire hydrant assets, Patent Owner’s argument, which hinges on its view that “fire hydrant” provides a functional distinction, does not undermine Petitioner’s position. Pet. 42.

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key discloses, or it would have been obvious to include as part of Key, step [8c].

[8d] “based on the analysis, notifying an owner of an asset of a notification event, wherein the notice includes a standard format description of the type of inspection, and a cost associated with the type of inspection, and wherein the notification event comprises a designatable interval in advance of an impending deadline for the inspection, and wherein the owner of the asset, upon remotely accessing the fire hydrant management software compliance registry, may update and review the status of the assets;”

Petitioner contends that “Key alone or in combination with Sweeney discloses, or it would have been obvious to include as part of Key, step [8d].” Pet. 42 (citing Ex. 1003 ¶¶ 172–190).

Petitioner shows that Key discloses, *inter alia*, “a ‘notification system’ to notify users of notification events including a designated interval in advance of upcoming inspection deadlines for the owned assets whereby notifications are sent, e.g., ‘in a known manner usually via email,’ including automatic notification to owners, based on database record analysis.” Pet. 42 (citing Ex. 1003 ¶¶ 166–171, 175). According to Petitioner, Key further discloses “‘receiving an inspection notification; and scheduling an inspection date.’” *Id.* (citing Ex. 1005, col. 19; Ex. 1003 ¶ 176).

Patent Owner argues that when properly construed, [8d] “requires that this step be based on analysis of records retrieved by the ‘fire hydrant management software.’” Prelim. Resp. 26.

We agree that [8d] requires the notifying to be based on an analysis of records retrieved by the “fire hydrant management software.” However, we do not see at this stage the difference between notifying on that basis and Key’s notifying “based on database record analysis” as Petitioner contends. Pet. 42.

Patent Owner also argues, *inter alia*, that Petitioner does not show “that the record prior art discloses ‘the notification event comprises a designatable interval in advance of an impending deadline.’” Prelim. Resp. 26. According to Patent Owner, Key “describes that the JOM automatically sets inspection dates, without describing a notification event with a designatable interval.” *Id.* (citing Ex. 1005, Figure 5 item 535, 0084, Figure 6 item 662, 0099; Ex. 2001 ¶¶ 164–165). According to Patent Owner, Key describes a “predetermined inspection deadline,” not a “notification interval to be changed, i.e., it is designatable.” *Id.* at 27 (citing Ex. 2001 ¶ 165).

In that regard, in support of Petitioner, Mr. MacInness testifies that in Key’s system, the JOM would analyze the database to determine objects that “require[] inspection *in the near future*” (*which a POSA would have understood to logically be a designated, such as 60 or 90 days from the inspection deadline*). Likewise, in Key’s system, if an object required an inspection every 90 days, and an inspection was performed today, the JOM would calculate that the next inspection was due at the next predetermined interval (i.e., in 90 days). Key provides a similar description in the context of Figure 6, whereby “the JOM updates the inspection date” and the “updated inspection date is used by

the JOM to calculate the next required inspection.” Ex. 1005 at [0099].

Ex. 1003 ¶ 167 (emphasis added); Pet. 42.

Patent Owner responds, *inter alia*, that “MacInnes glosses over that gap in Key by conflating its inspection date with the recited notification event with a designatable interval.” Prelim. Resp. 27. According to Patent Owner, the “notification event” of [8d] is “for an [interval in advance of the] inspection deadline.” *Id.*

Patent Owner’s argument does not undermine Petitioner’s position at this stage. According to [8d], a “notification event comprises a designatable interval in advance of an impending deadline for the inspection.” Ex. 1001, 15:37–38. We do not see, at this stage, any suggestion in claim 8 that the “notification event” is limited to an inspection deadline. Also, Mr. MacInness testifies that “a POSA would have understood [that to ‘analyze the database to determine objects that ‘require[] inspection in the near future’]] to logically be a designated, such as 60 or 90 days, from the inspection deadline.” Ex. 1003 ¶ 167; Pet. 42.

Patent Owner further argues that, in contrast to the “open system” of the ’966 patent, Key is a “closed system.” Prelim. Resp. 29 (citing in part Ex. 2001 ¶¶ 93–104). As with a similar argument made with respect to [8b], we do not see, at this stage, such a distinction reflected in [8d]. Claim 8 does not appear to preclude a “closed system” as we understand Patent Owner to be defining it. For example, Mr. Williams characterizes Key as disclosing a “closed” system because, for example, it is “[j]urisdiction controlled; no changes can occur without the approval of a jurisdiction.” Ex.

2001 ¶ 98. However, we do not see at this stage that claim 8 precludes the method from being “jurisdiction controlled.” Patent Owner highlights various limitations in the claim 8 method whereby one “may” perform certain actions, such as updates. Prelim. Resp. 29. But that does not preclude the actions from being controlled by a jurisdiction.

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key alone or in combination with Chauhan discloses or renders obvious limitation [8d].

[8e] “based upon the analysis, sending a standard format notice to the approval authority of the status of the assets assigned to the approval authority, and wherein the approval authority, upon accessing the web-based registry, may update and review the status of the assets assigned;”

Petition contends that Key discloses, or it would have been obvious to include as part of Key, step [8e]. Pet. 49 (citing Ex. 1003 ¶¶ 191-208).

For that part of the limitation calling for “based on the analysis, sending a standard format notice to the approval authority of the status of the assets assigned to the approval authority,” Petitioner contends, *inter alia*, that “Key discloses providing notifications to users (such as approval authorities, etc.)” Pet. 49 (citing Ex. 1003 ¶¶ 194-197). According to Petitioner, Key discloses that “‘web servers 320 also are operative to provide notifications in a known manner usually via email’ and that ‘application software [of application servers 330] ... contains the necessary logic necessary to ... provide the associated updates and any notifications.’” *Id.* (citing Ex. 1005 ¶ 68; Ex. 1003 ¶¶ 194–197).

For that part of the limitation calling for “wherein the approval authority, upon accessing the web-based registry, may update and review the

status of the assets assigned,” Petitioner contends, *inter alia*, that “Key discloses that the approval authority may remotely access the registry via a web interface, and update and review the status of the assets, such as ‘the performance of a jurisdiction review,’ ‘accept comments,’ and ‘[u]pon acceptance of a review item, the item is deleted from a task listing.’” Pet. 52 (citing Ex. 1005, *inter alia*, ¶ 65).

Patent Owner argues that when properly construed, [8e] “requires that this step is ‘based upon the analysis’ performed on asset records retrieved by the ‘fire hydrant management software’.” Prelim. Resp. 30. According to Patent Owner, “while Key does state that reviews to be performed are listed in the ‘task listing for that jurisdiction,’ such tasks are not triggered by fire hydrant management software retrieving asset records for analysis, but rather, by a user request as described in Key.” *Id.* at 31 (citing Ex. 2001 ¶ 173).

The difficulty with this argument is that we do not see, at this stage, a requirement that [8e] be *triggered* by a “fire hydrant management software” retrieving asset records for analysis. [8e] calls for “sending” “based on the analysis” which, as with [8d], requires the sending to be *based on an analysis of records* retrieved by the “fire hydrant management software.” However, the “sending” is not limited to being triggered by a “fire hydrant management software” performing [8b] so as to preclude “a user request as described in Key.” Prelim. Resp. 30.

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key alone or in combination with Chauhan discloses or renders obvious limitation [8e].

[8f] “upon logging on to a password controlled website configured to provide access to the fire hydrant management software, providing to an inspector the owner selects, the selection based upon a list of qualified inspectors that are available to inspect the asset based upon attributes including proximity to the asset, a web-based template configured to describe the asset an[d] each of the steps of the inspection;”

Petitioner contends that Key alone or in combination with McKinney and/or Sweeney discloses, or it would have been obvious to include as part of Key, [8f]. Pet. 53 (citing Ex. 1003 ¶¶ 209–222).

For “upon logging on to a password controlled website configured to provide access to the fire hydrant management software,” Petitioner contends that “Key discloses that users—including inspectors—log on to a password protected website to access the management software.” Pet. 53 (citing Ex. 1005 ¶¶ 78, 106, 115–123, Figure 8; Ex. 1003 ¶¶ 210, 157).

For “providing to an inspector the owner selects . . . a web-based template configured to describe the asset an[d] each of the steps of the inspection,” Petitioner contends, *inter alia*, that “Key further discloses that ‘the jurisdiction’s **inspection form or a similar inspection template** can be provided to the inspector’.” Pet. 55 (citing Ex. 1005 ¶¶ 18, 42, 45; Ex. 1003 ¶ 122).

For “the selection based upon a list of qualified inspectors that are available to inspect the asset based upon attributes including proximity to the asset,” Petitioner contends this “is disclosed by the combination of Key and McKinney and/or Sweeney.” Pet. 59 (citing Ex. 1003 ¶¶ 217–222). According to Petitioner, Sweeney, for example, discloses, “[t]he asset owner can be provided with online access to the submitted bids . . . in order to select[] a winning bid from the submitted bids,’ that is, the owner selects

the contractor (as applied to Key’s JOM, the qualified inspector).” *Id.* at 60 (citing Ex. 1006 ¶¶ 43–44, Figure 1; Ex. 1003 ¶ 220).

Patent Owner argues that [8f] “recites that the asset owner, when selecting an inspector, is provided a list of available inspectors from which to choose.” Prelim. Resp. 33. According to Patent Owner, unlike Key, [8f] “requires providing a list of available inspectors to the asset owner, from which the asset owner can select to arrange an inspection.” *Id.* at 34 (citing Ex. 2001 ¶¶ 176–180). At this stage, we do not read [8f] as requiring providing a list of available inspectors to the asset owner as Patent Owner argues. The inspector recited in [8f] is one the owner selects and that selection is based upon a list of qualified inspectors that are available to inspect. Whether that list has been provided to the asset owner is not expressly stated.

We have reviewed the evidence and find that, at this stage, Petitioner sufficiently shows on this record that Key alone or in combination with Chauhan discloses or renders obvious limitation [8a].

[8g]–[8i]

We have reviewed the evidence Petitioner has presented with respect to limitations [8g]–[8i] and based on that evidence we determine that at this stage Petitioner sufficiently shows on this record that Key teaches or would have rendered obvious these limitations. *See* Pet. 61–67.

Patent Owner has not responded to Petitioner’s challenge as to limitations [8g]–[8i] with any particularity at this stage. *See, generally* Prelim. Resp.

2. Motivation to Combine Key, Sweeney, Chauhan, and McKinney

In order to demonstrate obviousness, a petitioner must demonstrate that a skilled artisan would have had a reason to combine the teachings of the prior art in the manner claimed in the patent and would have had a reasonable expectation of success in doing so. *KSR*, 550 U.S. at 406 (2007). “To facilitate review, this analysis should be made explicit. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).” *Id.* at 418.

In that regard, Petitioner’s position is that, *inter alia*, the combination of Key, Chauhan, Sweeney, and McKinney renders obvious the claimed method, including using a “fire hydrant management software” as claimed. *See, inter alia*, Pet. 21–27 (discussing the combination of Key, Chauhan, Sweeney, McKinney), 53 n. 8 (“it would have been obvious that such software was used for fire hydrant management”) (relying on the discussion at Pet. 21–27). According to Petitioner, “Key, Chauhan, Sweeney and McKinney are complementary references that are all in the field of asset management, monitoring, and compliance (including, e.g., inspection, repairs, scheduling, and notices) implemented as online, web-based systems and methods using conventional computers, software, and databases.” *Id.* at 21. Petitioner explains, *inter alia*, that:

the prior art demonstrates that (i) there was a well-known need and desirability to monitor and inspect various assets to ensure compliance and proper operation, (ii) the need included to improve the monitoring/inspection process through use of web-based computer systems and databases thereby becoming more

efficient and less costly, and (iii) such assets were interchangeable within inspection compliance monitoring and reporting systems (including assets for which inspection compliance was regulated, including life/safety and non-life/safety assets). EX1003

Pet. 25 (citing, *inter alia*, Ex. 1003 ¶¶ 131–138).

At this stage, Petitioner sufficiently shows the claimed process would have been obvious to a POSA based on the combination of Key, Chauhan, Sweeney, McKinney, with a reasonable expectation of success. It is consistent with Petitioner’s implicit construction of “fire hydrant management software;” that is, as software managing information about fire hydrant assets.

Patent Owner argues, *inter alia*, that the claimed method employs a “fire hydrant management software” having a technology the combination of Key, Chauhan, Sweeney, McKinney would not have rendered obvious to a POSA with a reasonable expectation of success. *See, e.g.*, Prelim. Resp. 36 (“Challenged Claims and steps recited therein are directed toward addressing problems relating to software capable of managing assets such as fire hydrants.”), *id.* (the “fire hydrant management software” . . . [is] directed to a particular technology”), 38 (“the ‘966 Patent and Challenged Claims are directed at a much narrower technical field” [than the “the technical field of asset management, monitoring, and compliance” that Petitioner argues]) (citing Pet. 22).

Given that we adopt Petitioner’s implicit construction of “fire hydrant management software” as management software that processes information about fire hydrant assets rather than Patent Owner’s view that “fire hydrant”

provides a functional distinction, these arguments do not undermine Petitioner’s position.

We have considered all of Patent Owner’s arguments. At this stage, based on the evidence, Petitioner sufficiently shows on this record the combination of Key, Chauhan, Sweeney, and McKinney renders obvious the claimed method, including using a “fire hydrant management software” as claimed, with a reasonable expectation of success.

3. Conclusion as to Claim 8

After considering Petitioner’s and Patent Owner’s positions, including the supporting Declarations of Mr. MacInnes (Ex. 1003) and Mr. Williams (Ex. 2001), and for the reasons set forth above, we are persuaded that, based on the current record, Petitioner has demonstrated a reasonable likelihood of prevailing on its obviousness challenge to claim 8 of the ’966 patent over the combination of Key, Chauhan, Sweeney, and McKinney.

4. Claims 9–16

Building on Petitioner’s position with respect to independent claim 8, discussed above, Petitioner argues that dependent claims 9–16 are obvious over the combination of Key, Chauhan, Sweeney, and McKinney. Pet. 67–77.

Along with our reasons discussed with respect to the challenge of claim 8, we are persuaded that the evidence relied upon by Petitioner sufficiently supports Petitioner’s contentions regarding claims 9–16.

Patent Owner does not provide any specific arguments as to these claims. *See generally* Prelim. Resp.

On this record, Petitioner has demonstrated a reasonable likelihood of prevailing in demonstrating that claims 9–16 of the '966 patent are obvious over the combination of Key, Chauhan, Sweeney, and McKinney.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of claims 8–16 of the '966 patent. Accordingly, we grant the Petition and institute *inter partes* review of the '966 patent.

IV. ORDER

It is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review of claims 8–16 of the '966 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 claims 8–16 of the '966 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of *inter partes* review.

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