

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC.
Petitioner,

v.

FALL LINE PATENTS, LLC
Patent Owner.

Case IPR2018-00043
Patent 9,454,748 B2

Before MICHELLE N. WORMMEESTER, SHEILA F. McSHANE, and
JOHN R. KENNY, *Administrative Patent Judges*.

KENNY, *Administrative Patent Judge*.

DECISION
Institution of *Inter Partes* Review
35 U.S.C. § 314(a) and 37 C.F.R. § 42.108(b)

I. INTRODUCTION

Unified Patents Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”), requesting an *inter partes* review of claims 16–19, 21, and 22 of U.S. Patent No. 9,454,748 B2 (Ex. 1001, “the ’748 patent”). Fall Lines Patents, LLC (“Patent Owner”) filed a Preliminary Response (Paper 5, “Prelim. Resp.”). We have authority under 35 U.S.C. § 314 to institute an *inter partes* review if “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon considering the record developed thus far, for reasons discussed below, we institute *inter partes* review of claims 16–19, 21, and 22 of the ’748 patent.

II. BACKGROUND

A. Related Proceedings

The parties indicate that the ’748 patent is or has been involved in the following civil actions in the United States District Court for the Eastern District of Texas:

Case Caption	Number
<i>Fall Line Patents, LLC v. American Airlines Group, Inc.</i>	6:17-cv-00202
<i>Fall Line Patents, LLC v. Cinemark Holdings, Inc.</i>	6:17-cv-00203
<i>Fall Line Patents, LLC v. Grubhub Holdings, Inc.</i>	6:17-cv-00204
<i>Fall Line Patents, LLC v. Choice Hotels Int’l, Inc.</i>	6:17-cv-00407
<i>Fall Line Patents, LLC v. Uber Technologies, Inc.</i>	6:17-cv-00408

Pet. 1; Paper 4, 2–3.

According to Petitioner and Patent Owner, Civil Action No. 6:17-cv-00204 has been terminated/was dismissed. Pet. 1; Paper 4, 2–3. Patent Owner states that Civil Action No. 6:17-cv-00202 was also dismissed. Paper 4, 2–3. And Petitioner notes claims 1–14 of U.S. Patent No.

7,822,816, of which the '748 patent is a continuation, were the subject of ex parte reexamination Serial No. 90/012,829 and IPR2014-00140. Pet. 1–2.

B. Overview of the '748 Patent (Ex. 1001)

The '748 patent is directed to collecting data from a remote computing device, such as a handheld computing device, by creating and delivering a questionnaire to the remote computing device, executing the questionnaire on the remote computing device, and transmitting responses to a server via a network. Ex. 1001, [57].

Figure 1 of the '748 patent is reproduced below:

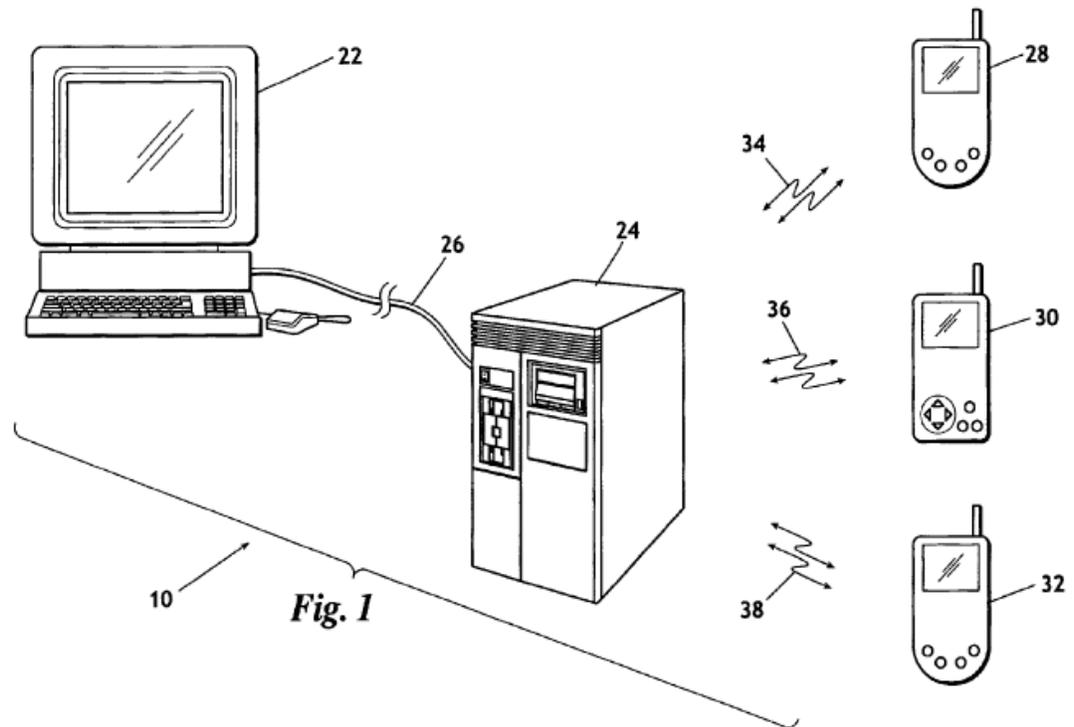


Figure 1 is a diagram of the '748 patent's system for data management. Ex. 1001, 6:57, 7:13–23. System 10 includes server 24; handheld computers 28, 30, and 32, which are operated remotely from server 24; and computer 22, which provides for administration of the system and reviewing data

collected by the system. *Id.* at 7:13–23, Fig. 1. Server 24 is connected to computer 22 via the Internet 26, a local area network, or a private wide area network. *Id.* at 7:24–28, Fig. 1. Server 24 is connected to handheld computers 28, 30, and 32 via connections 34, 36, and 38, respectively. *Id.* at 7:24–26. Connections 34, 36, and 38 are loose network connections, meaning that handheld computers 28, 30, and 32 and server 24 are tolerant of intermittent network connections. *Id.* at 7:59–62. Computer 22 is used for administrating system 10 and for reviewing data collected by the system. *Id.* at 7:21–23.

Figure 2 of the '748 patent is reproduced below:

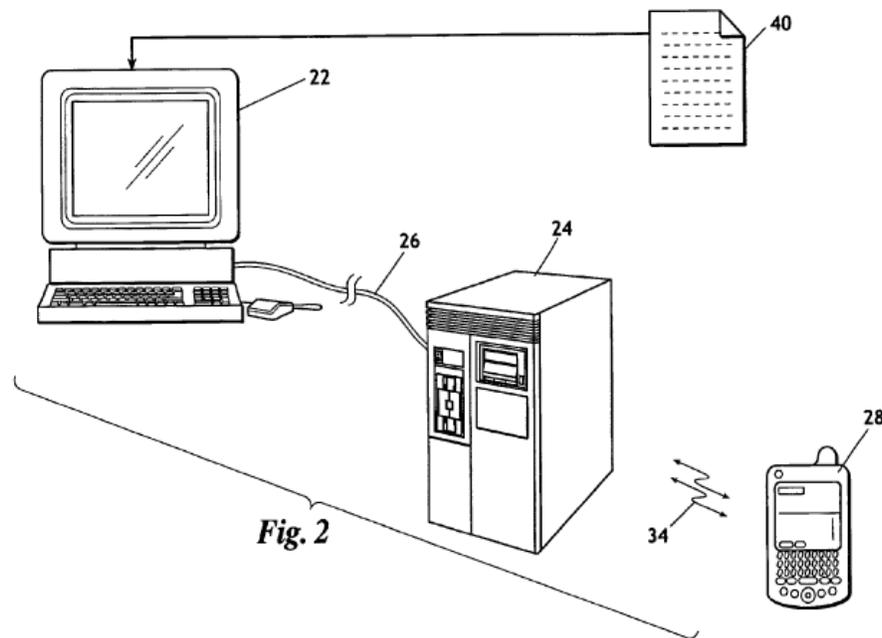


Figure 2 of the '748 patent is a diagram of system 10 as it is used for form creation. Ex. 1001, 6:58–59; 8:11–17. Computer 22 has an interface that allows a user to create and distribute a form to handheld devices using computer 22. *Id.* at 8:38–50. As the client enters questions and selects

response types, server 24 builds a stack of questions and responses, and assigns indices, or tokens, which point to each question or response. *Id.* at 8:53–56, 9:3–6. Each token can correspond to a logical, mathematical, or branching operation. *Id.* at 8:56–59, 9:3–6. When questionnaire (40) is complete, server 24 sends the stack of questions and defined responses to the handheld devices (e.g., handheld computer 28). *Id.* at 9:3–6. System 10 can incrementally update the questionnaire on the handheld devices. *Id.* at 9:14–18.

For example, system 10 can track mystery shoppers at restaurant chains. Ex. 1001, 10:37–43. System 10 can track the time it takes a mystery shopper to go through a drive through window. *Id.* at 10:41–43. When the mystery shopper enters a parking lot for a franchise, a handheld device with a GPS receiver can identify the franchise. *Id.* at 10:55–59. The device can also record the amount of time it takes for the shopper to go through a drive through line. *Id.* at 10:55–11:21.

C. Illustrative Claims

Petitioner challenges claims 16–19, 21, and 22 of the '748 patent, of which, claims 16, 19, and 21 are independent and reproduced below:

[16.0]¹ 16. A method for managing data comprising the steps of:

[16.1] (a) establishing communications between a handheld computing device and an originating computer, said handheld

¹ Petitioner labels individual phrases in claims 16, 19, and 21 as shown in brackets. For clarity, we use the bracketed labels for the phrases in these claims.

device having at least a capability to determine a current location thereof;

- [16.2.1] (b) receiving within said handheld computing device a transmission of a tokenized questionnaire
 - [16.2.2] including at least one question requesting GPS coordinates,
 - [16.2.3] said tokenized questionnaire comprising a plurality of device independent tokens;
- [16.3] (c) ending said communications between said handheld computing device and said originating computer;
- [16.4] (d) after said communications has been terminated, when said handheld computing device is at said particular location
 - [16.5] (d1) executing at least a portion of said plurality of tokens comprising said questionnaire on said handheld computing device to collect at least said current location of said handheld computing device; and;
 - [16.6] (d2) storing within said handheld computing device said current location;
 - [16.7] (d3) automatically entering the GPS coordinates into said questionnaire;
- [16.8] (e) establishing communications between said handheld computing device and a recipient computer; and,
- [16.9] (f) transmitting at least one value representative of said stored current location to said recipient computer.

[19.0] 19. A method for managing data comprising the steps of:

- [19.1] (a) establishing communications between a handheld computing device and an originating computer wherein said handheld computing device has a GPS integral thereto;

- [19.2.1] (b) receiving within said handheld computing device a transmission of a tokenized questionnaire from said originating computer,
 - [19.2.2] said tokenized questionnaire including at least one question requesting location identifying information,
 - [19.2.3] said tokenized questionnaire comprising a plurality of device independent tokens;
- [19.3] (c) ending said communications between said handheld computing device and said originating computer;
- [19.4] (d) after said communications has been ended,
- [19.5] (d1) executing at least a portion of said plurality of tokens comprising said questionnaire on said handheld computing device to collect at least one response from a first user, and,
 - [19.6] (d2) storing within said computing device said at least one response from the first user
 - [19.7] (d3) using said GPS to automatically obtain said location identifying information in response to said at least one question that requests location identifying information;
- [19.8] (e) establishing communications between said handheld computing device and a recipient computer;
- [19.9] (f) transmitting a value representative of each of said at least one response stored within said handheld computing device to said recipient computer; and,
- [19.10] (g) after receipt of said transmission of step (f), transmitting a notice of said received value representative of each of said at least one response to a second user.
- [21.0] 21. A method for managing data comprising the steps of:

[21.1] (a) within a central computer, accessing at least one user data item stored in a recipient computer, wherein said at least one data item is obtained via the steps of:

[21.2] (1) establishing communications between a handheld computing device and an originating computer wherein said handheld computing device has a GPS integral thereto;

[21.3.1] (2) receiving within said handheld computing device a transmission of a tokenized questionnaire,
[21.3.2] including at least one question requesting GPS coordinates and at least one additional question,
[21.3.3] said tokenized questionnaire comprising a plurality of device independent tokens;

[21.4] (3) ending said communications between said handheld computing device and said originating computer;

[21.5] (4) after said communications has been ended,

[21.6] (i) executing at least a portion of said plurality of tokens comprising said questionnaire on said handheld computing device,

[21.7] (ii) automatically entering the GPS coordinates into said questionnaire:

[21.8] (iii) presenting said at least one additional question to a user;

[21.9] (iv) receiving at least one response from the user to each of said presented at least one additional question,

[21.10] (v) storing at least one value representative of said GPS coordinates and said at least one response within said handheld computing device;

[21.11] (5) establishing a communications link between said handheld computing device and a recipient computer;

[21.12] (6) transmitting said stored at least one value representative of said GPS coordinates and said at least one response stored within said handheld computing device to said recipient computer; and,

[21.13] (7) storing within said recipient computer any of said transmitted GPS coordinates and said at least one value representative of said at least one response, thereby creating said at least one user data item stored in said recipient computer; and,

[21.14] (b) forming a visually perceptible report from any of said at least one stored user data item.

D. Evidence Relied Upon by Petitioner

Petitioner relies on the following references:²

	Reference	Issue/Copyright Date	Exhibit
Chan	U.S. Patent No. 6,381,603 B1	Apr. 30, 2002	Ex. 1010
Darnell	HTML 4 Unleashed ³	1998	Ex. 1007
Kari	U.S. Patent No. 6,154,745	Nov. 28, 2000	Ex. 1006
Todd	U.S. Patent No. 6,380,928 B1	Apr. 30, 2002	Ex. 1009

Petitioner also relies on declarations from Dr. A.L. Narasimha Reddy (Ex. 1005) and David Bader (Ex. 1008).

²The '748 patent is a continuation of Serial No. 10/643,516, filed Aug. 19, 2003, now U.S. Patent No. 7,822,816. The '748 patent also claims the benefit of Provisional Application No. 60/404,491, filed Aug. 19, 2002.

³ Rick Darnell, *HTML 4 Unleashed*, 3–29, 231–253 (1998).

E. Asserted Ground

Petitioner asserts that claims 16–19, 21, and 22 of the '748 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Kari, Darnell, Todd, and Chan. Pet. 5.

F. Real Parties-in-Interest

Petitioner identifies Unified Patents, Inc. as its sole real party-in-interest in this proceeding. Pet. 1. Patent Owner identifies Fall Line Patents, LLC as its sole real party-in-interest. Paper 4, 2.

III. DISCUSSION

A. Identification of Petitioner's Real Party-In-Interest

Patent Owner argues (i) the Petition should be denied because Petitioner has not identified all of its real parties-in-interest, or (ii) in the alternative, this IPR should be stayed so Patent Owner can conduct discovery to determine whether Petitioner has disclosed the real parties-in-interest. Prelim. Resp. 28.

Petitioner bears the burden of correctly identifying the real parties-in-interest, but the Board “generally accept[s] the petitioner’s identification of real parties-in-interest at the time of filing the petition.” *See Zerto, Inc. v. EMC Corp.*, IPR2014-01254, Paper 35, 6 (PTAB Mar. 3, 2015) (citing *Changes to Implement Inter Partes Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents*; 77 Fed. Reg. 48,680, 48,695 (Aug. 14, 2012)). Such identification gives rise to a rebuttable presumption that Petitioner has complied with its obligation to identify all real parties-in-interest. *Id.* at 6–7. But when a patent owner provides sufficient rebuttal evidence that reasonably brings into question the accuracy of the petitioner’s identification, the petitioner

must provide evidence that it has complied with the statutory requirement of 35 U.S.C. § 312(a) to identify all real parties-in-interest. *See Jiawei Tech. Ltd. v. Simon Nicholas Richmond*, IPR2014-00935, Paper No. 52, 5 (PTAB Aug. 21, 2015).

At this stage of the proceeding, Patent Owner has not provided sufficient evidence to reasonably bring into question the accuracy of Petitioner's identification. Prelim. Resp. 28–33. Although Patent Owner argues Petitioner's business model and public statements could make Petitioner's members real parties-in-interest, Patent Owner does not provide any evidence indicating that any of those members are real parties-in-interest in this proceeding. *Id.* Similarly, Patent Owner's observation that Petitioner in other IPRs submitted "Voluntary Interrogatory Responses," but did not do so here (Prelim Resp. 31–32) is insufficient rebuttal evidence. We do not require evidence beyond a petitioner's identification of real parties-in-interest in the absence of rebuttal evidence that such identification is erroneous or incomplete. *Unified Patents Inc. v. Digital Stream IP, LLC*, IPR2016-01749, Paper 22, 6–8 (PTAB Mar. 9, 2018). The fact that Petitioner did not submit Voluntary Interrogatory Responses in the instant case does not constitute such rebuttal evidence.

B. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable interpretation in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b). Under this standard, we presume that a claim term carries its "ordinary and customary meaning," which "is the meaning the term would have to a person of ordinary skill in the art in question" at the time of the invention. *In re Translogic Tech., Inc.*,

504 F.3d 1249, 1257 (Fed. Cir. 2007) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc); see also *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016) (“Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history,” citing *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1362 (Fed. Cir. 2015).). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Finally, only terms which are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. See *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng’g. Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner requests that we construe the terms “GPS integral thereto,” and “token,” and that we partially construe the terms “originating computer,” “recipient computer,” and “central computer.” Pet. 9–13. Patent Owner does not address whether we should construe these terms, does not propose any alternative construction of these terms, and does not propose that we construe any other terms. For purposes of this Decision, and on this record, we construe the terms “GPS integral thereto,” and “token” and partially construe “originating computer” “recipient computer,” and “central computer.”

1. “*GPS integral thereto*”

Petitioner asserts that the broadest reasonable construction of “GPS integral thereto,” as recited in claims 19 and 21, is “Global Positioning

System equipment integral thereto.” Pet. 9. This proposed construction is supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 44–47. Petitioner argues, with supporting testimony from Dr. Reddy, that GPS is a known acronym for the Global Positioning System and an ordinarily skilled artisan would know that the entire Global Positioning System includes multiple satellites. Pet. 9 (citing Ex. 1005 ¶¶ 44, 45; Ex. 1013, 3–4). According to Petitioner, an ordinarily skilled artisan would understand that a handheld computing device could not integrate the entire Global Positioning System. *Id.* (citing Ex. 1005 ¶ 45); *see also* Ex. 1005 ¶ 46. Dr. Reddy testifies that this understanding is consistent with the Specification, which uses the acronym “GPS” to refer to a “GPS receiver.” Ex. 1005 ¶ 47 (citing Ex. 1001, 5:47–48, 10:56–57). Consequently, Petitioner argues, an ordinarily skilled artisan would have understood the term “GPS integral thereto” to refer to GPS equipment integral to the handheld computing device, such as a GPS receiver. *Id.* (citing Ex. 1001, 5:47–48, 10:56–57). Patent Owner provides no counterargument.

For purposes of this Decision, we adopt Petitioner’s proposed construction and construe “GPS integral thereto” to be “Global Positioning System equipment integral thereto.”

2. “token”

“[T]oken” as used in the claims of the ’748 patent and in the claims of U.S. Patent 7,822,816 (“’816 patent”) (Ex. 3001), of which the ’748 patent is a continuation, has been previously construed three times: (i) in *RPX Corp. v. Macrosolve, Inc.*, Case No. IPR 2014-00140, (ii) in *Macrosolve, Inc. v. Antenna Software, Inc.*, Civil Action No. 6:11-cv-287 MHS-KNM in the Eastern District of Texas, and (iii) during prosecution of the ’748 patent.

In the Institution Decision in *RPX Corp.*, Case IPR2014-00140, the Board adopted Petitioner’s (unopposed) proposed construction of the term “token,” as used in the claims of the ’816 patent, as: “a distinguishable unit of a program, such as an index, an instruction, or a command that can represent something else such as a question, answer, or operation.”⁴ Ex. 1012, 10. The Board found that the proposed construction was the broadest reasonable construction consistent with the Specification of the ’816 patent. *Id.* (citing Ex. 1001 in that IPR (’816 patent) (Ex. 3001 in this IPR), 8:40–46, 60–64, 5:12–17, 12:1–2).

In *Macrosolve*, Civil Action No. 6:11-cv-287 MHS-KNM, the District Court for the Eastern District of Texas construed “token,” as used in the claims of the ’816 patent, as: “any non-reducible element of the computer code that is being parsed.” Ex. 1011, 13–14 (emphasis omitted).

During prosecution of the ’748 patent, the Examiner found “token” to have “a special meaning (i.e., logical, mathematical or branching operation) . . .,” citing to paragraph 54 of the Specification, which published as Pub. No. US 2011/0040831 (Ex. 3002). Ex. 1002, 2554.⁵ Paragraph 54 of that publication does not address tokens, but paragraph 59 states: “Each token preferably corresponds to a logical, mathematical, or branching operation” Ex. 3002 ¶¶ 54, 59; *see also* Ex. 1001, 8:56–59.

Petitioner argues that we should adopt the construction for “token” provided in *RPX Corp.*, Case IPR2014-00140. Pet. 10–11. To support that

⁴ *RPX Corp.*, IPR2014-00140 terminated prior to the completion of trial. IPR2014-00140, Paper 13, 2 (PTAB June 20, 2014).

⁵ For Exhibit 1002, we cite to the exhibit page numbers appended to the exhibit.

proposed construction, Petitioner relies on the testimony of Dr. Reddy, who refers to dictionary definitions. *Id.*; Ex. 1005 ¶ 50. Petitioner contends that the Specification does not define the term “token,” but instead merely describes examples or preferred embodiments of tokens. Pet. 10.

Specifically, Dr. Reddy references the Dictionary of Computer Science (Ex. 1016) and the Dictionary of Scientific and Technical Terms (Ex. 1017). Ex. 1005 ¶ 50. Dr. Reddy testifies that he interprets the Dictionary of Computer Science as defining “token” as “a meaningful unit program, such as a name, constant, reserved word, or operator.” *Id.* For “token,” the Dictionary of Computer Science refers to its definition for lexical analysis, which is: “The initial phase in the compilation of a program during which the program is split up into meaningful units. These units could, for example be names, constants, reserved words, or operators The units recognized by the analyzer are known as tokens.” Ex. 1016, 111, 204 (emphases omitted).

The Dictionary of Scientific and Technical Terms defines “token” as “[a] distinguishable unit in a sequence of characters.” Ex. 1017, 1940. Based on these dictionary definitions, Dr. Reddy testifies, in conclusion, that an ordinarily skilled artisan would interpret “token,” as the panel did in *RPX Corp.*, Case No. IPR2014-00140, to be “a distinguishable unit of a program, such as an index, an instruction, or a command that can represent something else such as a question, answer, or operation.” Ex. 1005 ¶¶ 51–54.

Petitioner further argues, and Dr. Reddy provides supporting testimony, that the patentability analysis in the Petition would be the same, however, if “token” were given the construction provided by the Eastern

District of Texas, rather than the construction used in *RPX Corp.*, Case No. IPR2014-00140. Pet. 10–11; Ex. 1005 ¶¶ 51–54.

Petitioner argues that the construction provided during prosecution of the '748 patent is too narrow because the pertinent portion of the Specification merely states that each token preferably corresponds to a logical, mathematical, or branching operation and that preference does not define the scope of the term “token.” Pet. 10 (citing Ex. 1001 8:56–59).

Patent Owner provides no counterargument.

On this record, the Examiner’s finding of a special meaning for the term “token,” is questionable because the portion of the Specification referenced during prosecution merely expresses a preference for tokens to be logical, mathematical or branching operations (Ex. 3002 ¶ 59), and “[i]t is a familiar axiom of patent law . . . that the scope of the claims is not limited to the preferred embodiments described in the specification.” *See Fuji Photo Film Co. v. International Trade Comm’n*, 386 F.3d 1095, 1106 (Fed. Cir. 2004) (citing *Cordis Corp. v. Medtronic Ave, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003)). For purposes of this Decision, we will adopt Petitioner’s proposed construction for “token” as used in *RPX Corp.*, Case IPR2014-00140. The Specification of the '816 patent at issue in *RPX Corp.*, Case IPR2014-00140., is substantially the same as the '748 patent of the present case. We have reviewed portions of the '748 patent Specification—in particular those that appear to be parallel to those of the '816 patent that were referenced in the claim construction in *RPX Corp.*, Case IPR2014-01140—and Petitioner’s proposed construction is consistent with the broadest reasonable term use in view of the Specification. *See e.g.*, Ex. 1001, 5:21–26, 8:53–59, 8:66–9:2. Accordingly, for purposes of this

Decision, we construe “token” as “a distinguishable unit of a program, such as an index, an instruction, or a command that can represent something else such as a question, answer, or operation.”

3. “*originating computer*”/“*recipient computer*”/“*central computer*”

Petitioner requests that we partially construe the terms “originating computer” (recited in claims 16, 19, and 21), “recipient computer” (recited in claims 16, 19, and 21), and “central computer” (recited in claim 21) as encompassing a computer having the ability to perform functions associated with an originating computer, a recipient computer, and/or a central computer (i.e., the same computing device can be the “originating computer,” the “recipient computer,” and the “central computer.”). Pet. 11–13. This proposed partial construction is supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 55–60.

Dr. Reddy testifies that an ordinarily skilled artisan would understand that an originating computer and a recipient computer can be the same computer because, in the Specification, server 24 is both an originating computer and recipient computer. Ex. 1005 ¶ 57. Dr. Reddy testifies that server 24 in the Specification is an originating computer because (i) communications are established between server 24 and handheld computers 28–32, and (ii) server 24 sends stacks of questions and defined responses to handheld computers 28–32. *Id.* According to Dr. Reddy, server 24 is also a recipient computer because handheld computer 28 transmits responses to server 24. *Id.* at ¶ 58. Dr. Reddy further testifies that claim 18, which depends from claim 16, also establishes that the originating computer and the recipient computer may be the same computer by reciting “said

originating computer and said recipient computer are a same computer.” *Id.* at 59.

According to Dr. Reddy, an ordinarily skilled artisan would also understand that a central computer and a recipient computer can be the same computer because claim 22, which depends from claim 21, recites “said central computer and said recipient computer are a same computer.”

Ex. 1005 ¶ 60.

Dr. Reddy testifies that the combination of these disclosures would lead an ordinarily skilled artisan to the conclusion that one computing device can perform the functions of the central computer, the originating computer and the recipient computer. Ex. 1005 ¶ 60.

Patent Owner provides no counterargument.

For purposes of this Decision, we find Petitioner’s proposed partial construction of these terms to be reasonable and construe “central computer,” “originating computer,” and “recipient computer” as encompassing a computer having the ability to perform functions associated with an originating computer, a recipient computer, and/or a central computer.

C. Analysis of the Asserted Grounds of Unpatentability

1. Principles of Law

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 skill in the art;⁶ and (4) objective evidence of nonobviousness, i.e., secondary considerations.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). We analyze the asserted ground with the principles stated above in mind.

2. *Overview of the Prior Art References*

a. *Kari (Ex. 1006)*

Kari describes a method and system for transmitting information to a user. Ex. 1006, [57]. Figure 2 of Kari is reproduced below:

⁶ Petitioner argues “A person of ordinary skill in the art at and before the priority date for the ’748 Patent (‘POSITA’) would have a bachelor’s degree in computer science, computer engineering, electrical engineering, or a related subject, or equivalent industry or trade school experience in programming software applications.” Pet. 6 (citing Ex. 1005 ¶¶ 36–40). Patent Owner does not dispute this assessment or propose an alternative assessment. For purposes of this Decision, and to the extent necessary, we find this assessment reasonable and adopt it.

⁷ Patent Owner does not contend in its Preliminary Response that such secondary considerations are present.

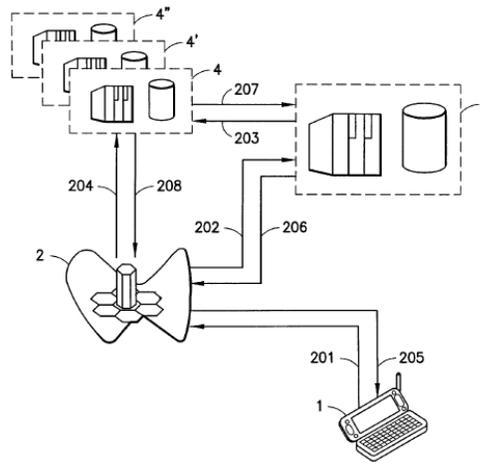


FIG. 2

Figure 2 is a reduced block chart illustrating Kari's system. Ex. 1006, 2:35–36. In this system, search terminal 1 comprises a telecommunication terminal, such as a mobile station. *Id.* at 2:58–59. Search terminal 1 can be a PDA (personal digital assistant) and can use satellite communication means (GPS). *Id.* at 3:11-16. Search terminal 1 communicates with telecommunication network 2, which can be a mobile communication network. *Id.* at 2:59–64. Connection server 3 and remote servers 4, 4', and 4'' also communicate with telecommunication network 2. *Id.* at 2:64–66.

Search terminal 1 can start a World Wide Web [WWW] browser to form a query message. Ex. 1006, 6:40–45. To do so, the user starts a connection set-up to connection server 3, then connection server 3 provides a query form to search terminal 1. *Id.* at 2:45–46. Figure 7 of Kari is reproduced below:

International Service, Inc.

Fill'er up query form

Resolved parameters

Name	George McLaren	
Level	Normal	
Age	45	
Sex	m	
Cellular phone number	+358-50-123123	
Class	Business	
Car	BMW	
Gas type	99	
Other info, search words	service, cafe	

Locate nearest:

- Fill'er up no service station
- Fill'er up 24H service station
- Fill'er up 24H service station with cafe
- Fill'er up Five Star Station
- Fill'er up Super Service Market

Send query Clear form

701 702 703 704 705

FIG.7

Figure 7 of Kari shows a query form loaded from connection server 3 to the data processor at search terminal 1. Ex. 1006, 2:45-46. The illustrated form is a blank form designed as an Internet-type WWW page. *Id.* at 6:40-49.

The user can enter data into the blank form as illustrated in Figure 8 of Kari, reproduced below:

International Service, Inc.

Fill'er up query form

Resolved parameters

Name	George McLaren	
Level	Normal	
Age	45	
Sex	m	
Cellular phone number	+358-50-123123	
Class	Business	801
Car	BMW	MB
Gas type	99	
Other info, search words	service, cafe	service, cafe, fast food, pizza

Locate nearest:

- Fill'er up no service station
- Fill'er up 24H service station
- Fill'er up 24H service station with cafe
- Fill'er up Five Star Station
- Fill'er up Super Service Market

Send query Clear form

FIG.8

Figure 8 of Kari shows a query form filled in by the user. Ex. 1006, 2:47. Reference number 801 designates parameters defined by the user. *Id.* at 15:28–31. After the query form is filled out, connection server 3 searches its databases to respond to the query. *Id.* at 15:32–35. Connection server 3 can then transmit the query form to a remote server 4, 4', or 4'' to further process the query form. *Id.* at 8:20–27; 15:62–64.

b. Chan (Ex. 1010)

Chan describes a system for accessing local information in a database. Ex. 1010, [57]. The database contains merchandise information and position coordinates of a Global Position System. *Id.* A user searches the database by sending a query, to a remote server computer, which indicates the geographical area to be searched and search criteria. *Id.* The server computer returns the search result. *Id.*

Figure 3 of Chan is reproduced below:

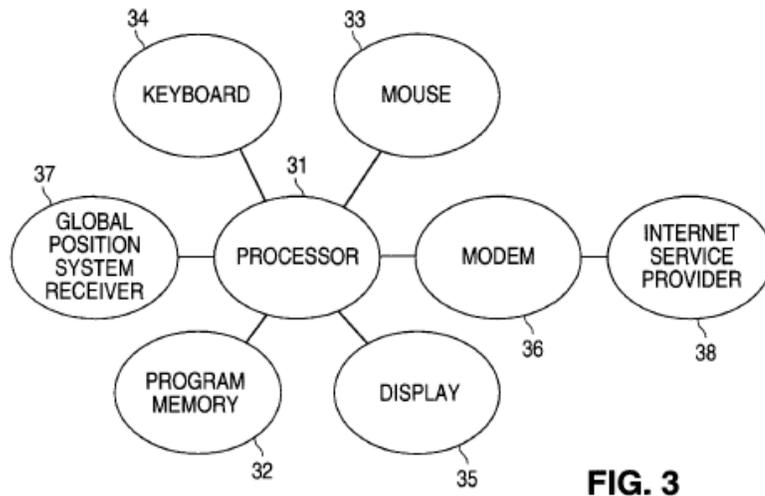


FIG. 3

Figure 3 of Chan shows end-user computer system 30 that is used to retrieve merchandise information. Ex. 1010, 3:63, 5:21–23. As shown, end-user computer system 30 includes Global Positioning System receiver 37. *Id.* at 5:23–28. End-user computer system 30 is used in the embodiment of Figure 2 of Chan as an end-user computer system. *Id.* at 5:27–32.

Figure 2 of Chan is reproduced below:

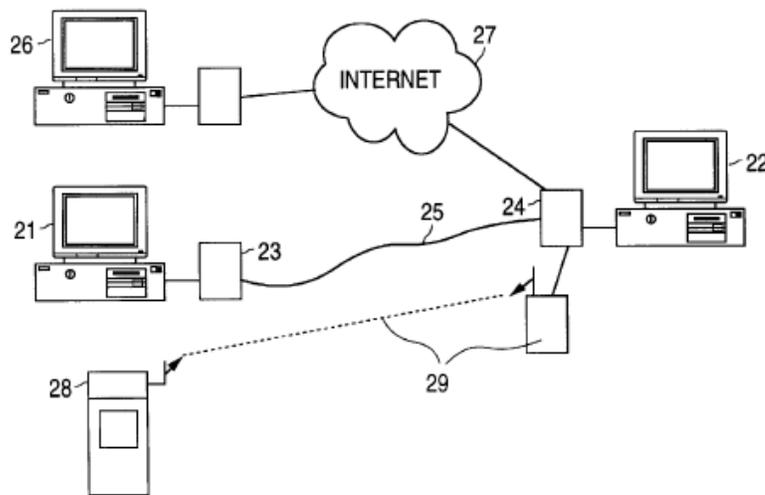


FIG. 2
(PRIOR ART)

Figure 2 of Chan shows end-user computers 21, 26, and 28 communicating with server computer 22. Ex. 1010, 4:50-51. End-user computer 21 communicates with server computer 22 via modems 23 and 24 and phone line 25. *Id.* at 4:51–53. End-user computers 26 and 28 use Internet 27 and radio frequency link 29, respectively, to communicate with server computer 22. *Id.* at 4:53–57.

The local computer in Chan can be a hand held computer or a portable computer. Ex. 1010, 3:11–12. Further, a user can install a miniature computer with a GPS receiver on a car and access the Internet through a cellular phone or a wireless connection. *Id.* at 3:12–15.

c. Darnell (Ex. 1007)

Darnell is titled “HTML 4 Unleashed” and describes itself as a complete reference to Hypertext Markup Language (HTML) 4. Ex. 1007, cover⁸. According to Darnell, HTML “is the language that puts the face on the Web” and “consists of a variety of elements called tags.” *Id.* at xxxvii. A chapter in Darnell is directed to “Building and Using HTML Forms.” *Id.* at 231. Darnell teaches that forms “are used for a variety of purposes” and “allow visitors to your site to give you input.” *Id.* at 232. Darnell further describes HTML tags: “An HTML document is composed of HTML tags: “tags...are used for everything from defining type styles and headings to inserting specialized content” Ex. 1007, xxxvii. Further, Darnell

⁸ Petitioner added page numbers to Ex. 1007, but, the Petition cites to Darnell’s original page numbering. For ease of reference, unless noted otherwise, we cite to each reference’s original page or column numbering. (Darnell’s cover is page 1, using Petitioner’s appended page numbering.)

describes the input element for HTML, providing the example reproduced below:

The INPUT Element

```
<INPUT(type=text|password|checkbox|radio|submit|image|reset|button|hidden
•|file)[name=controlName][value=controlValue][checked][disabled][readonly]
•[size=controlWidth][maxlength=wordLength][src=URL][alt=altText][usemap=U
RL]
•[align=left|center|right|justify][tabindex=tabNum][accesskey=keyCombo]
•[onfocus=script][onblur=script][onselect=script][onchange=script]
•[accept=charset] [core] [international] [events]>
```

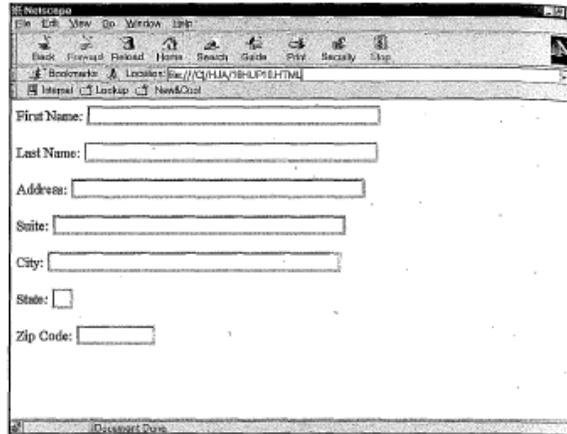
Ex. 1007, 234.

The above example illustrates the INPUT element in HTML, which, as shown, includes a type attribute in the first line. One type attribute is the form control of Text entry boxes, for which text is input. *Id.* at 234–235.

Darnell also provides exemplary code using text responses to create a form. This exemplary code and the form it produces, the latter of which is illustrated in Figure 15.9 of Darnell, are reproduced below:

```
<INPUT type="text" .name="firstname" size="40">
<INPUT type="text" name="lastname" size="40">
<INPUT type="text" name="address1" size="40">
<INPUT type="text" name="address2" size="40">
<INPUT type="text" name="city" size="40">
<INPUT type="text" name="state" size="2">
<INPUT type="text" name="zipcode" size="10">
```

FIGURE 15.9.
Text boxes.



Ex. 1007, 241–242.

As illustrated, the exemplary code includes input elements and the form it produces displays text boxes corresponding to a first name, last name, and an address.

d. Todd (Ex. 1009)

Todd describes a “questionnaire device” for use in restaurants. Ex. 1009, [57]. The device is intended to be incorporated into a book that is presented to a customer with a restaurant check. *Id.* at 5:42–45.

Figure 1 of Todd is reproduced below:

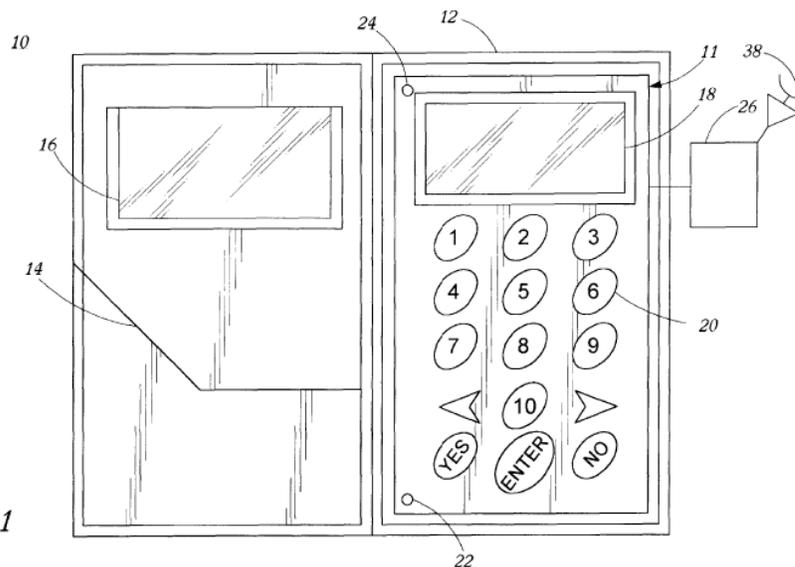


Figure 1

Figure 1 is an illustrative view of Todd's device 11. Ex. 1009, 6:19–21. Device 11 is in checkbook 12, which has pockets 14 and 16 for holding a check and a credit card, respectively. *Id.* at 7:6–13. Device 11 contains display screen 18, keypad 20, and transceiver 26 with antenna 28.⁹ *Id.* at 7:15–42. Device 11 electronically presents a series of questions, records the answers, and stores and/or transmits all or a portion of a survey response. *Id.* at [57]. The device can store responses internally. *Id.* at 5:35–40.

3. *Analysis of Claim 19*

The Petition begins its analysis of the alleged obviousness of the challenged claims with claim 19. For ease of reference, we do also.

19.0. A method for managing data

Petitioner argues that Kari describes the preamble recitation of claim 19 by describing “a method and system of transmitting information.” Pet. 16 (quoting Ex. 1006, [57]). This argument is supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 78–80. Patent Owner provides no counterargument.

On this record, after reviewing the parties' evidence and arguments, we determine that Petitioner has established sufficiently, for purposes of this Decision, that Kari would have taught the preamble recitation of “a method of managing data.”¹⁰

⁹ In the Specification, Todd identifies this antenna with numeral 28. *Id.* at 7:15–42. Figure 1 identifies it with numeral 38.

¹⁰ Neither party has requested that we determine whether the preamble is limiting. In light of our finding that the Petitioner has sufficiently shown that Kari would have taught the preamble limitation, for purposes of this Decision, we do not need to determine whether a method of managing data is a limitation of claim 19.

19.1. (a) establishing communications between a handheld computing device and an originating computer wherein said handheld computing device has a GPS integral thereto;

Petitioner argues the combination of Kari and Chan teaches limitation 19.1. Pet. 16. According to Petitioner, Kari establishes communications between search terminal 1 and connection server 3. *Id.* at 16–17 (citing Ex. 1006, 6:49–51, 6:66–7:2, 15:45–52). Petitioner argues search terminal 1 is a “mobile station,” which corresponds to a handheld computing device. *Id.* at 17 (citing Ex. 1006, 2:56–59). Petitioner further argues connection server 3 is an Internet server, which corresponds to an originating computer. *Id.* (citing Ex. 1006, 4:59–67). Further, Petitioner argues that search terminal 1 “can use satellite location means (GPS)” and, therefore, would have to include GPS equipment. *Id.* at 18.

Petitioner does not contend that Kari’s search terminal 1 has GPS equipment integral thereto. Pet. 18. Petitioner, however, argues that an ordinarily skilled artisan would have understood that there are a finite number of predictable choices for the physical arrangement of Kari’s GPS equipment and search terminal 1: the GPS equipment is either integral to or is externally connected to the search terminal (e.g., by a serial connection). *Id.* at 18–19. Petitioner argues that making the GPS equipment integral to the search terminal would have been suggested to the ordinarily skilled artisan because of efficiency. *Id.* Further, Petitioner argues an ordinarily skilled artisan would have had a reasonable expectation of success in incorporating the GPS equipment into the search terminal because it was well known prior to the ’748 patent to incorporate GPS equipment into a mobile telephone. *Id.* at 19 (citing Ex. 1014, Fig. 3; Ex. 1015, Figs. 4–5).

Petitioner further argues that Chan “teaches a computing device with GPS integral thereto by describing a ‘hand held computer or . . . portable computer’ as an ‘end-user computer system’ that ‘comprises a Global Position System receiver 37.’” *Id.* at 19 (quoting Ex. 1010, 3:11–15, 5:21–27) (emphasis omitted.). Petitioner argues that Kari and Chan are analogous art in the same field of endeavor: systems and methods for receiving and fulfilling location-based queries. *Id.* Further, Petitioner argues an ordinarily skilled artisan would have been motivated to combine Chan’s hand-held computer with an integrated GPS receiver with Kari’s systems and methods because Chan teaches that an integrated GPS receiver can continuously update current position coordinates. *Id.* at 20. Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 81–90.

Although Patent Owner indicates both Kari and Chan teach computers with internal GPS receivers, Patent Owner argues neither teaches a handheld device with an integral GPS receiver. Prelim. Resp. 24. According to Patent Owner, Kari only teaches that its handheld device can be connected to a separate GPS unit, and Chan’s miniature computer with a GPS receiver is not a handheld computer because it is installed on a car. *Id.*

On this record, after reviewing the parties’ evidence and arguments, we determine that Petitioner has established sufficiently, for purposes of this Decision, that the combination of Kari and Chan would have taught or suggested limitation 19.1. Although Patent Owner asserts that Chan’s miniature computer is not a handheld computer, this is solely attorney argument, which is contradicted by the cited teaching in Chan as well as the testimony of Dr. Reddy. *See* Ex. 1005 ¶¶ 87–88; Ex. 1010, 3:11–15, 5:21–27. Further, even if we were to accept Patent Owner’s argument, it does not

address or counter Petitioner’s argument that Kari would have suggested to an ordinarily skilled artisan incorporating a GPS receiver into Kari’s handheld device because there were a finite number of predictable choices for the physical arrangement of Kari’s GPS equipment and search terminal 1, there was rationale for doing so, and there was a reasonable expectation of success. Pet. 18–19.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.1 to be sufficient.

19.2.1 (b) receiving within said handheld computing device a transmission of a tokenized questionnaire from said originating computer

Petitioner argues that the combination of Kari and Darnell teaches limitation 19.2.1. In particular, Petitioner argues that Kari describes sending, from the connection server, a query form that is loaded and stored on the search terminal. Pet. 21 (citing Ex. 1006, 6:66–7:6). Petitioner argues that Kari “teaches ‘receiving within said handheld computing device a transmission of a’ . . . ‘questionnaire form from said originating computer.’” *Id.* (emphasis omitted).

Petitioner acknowledges that Kari does not describe its query form as tokenized, but Petitioner argues that Kari teaches that its questionnaire is “an Internet-type WWW page” and that its search terminal starts “a WWW browser.” Pet. 21 (citing Ex. 1006, 6:47–49, 64–66). Referencing Darnell, Petitioner argues that a WWW page displayed in a WWW browser would have been written in HTML with HTML tags. *Id.* (citing Ex. 1007, xxxvii). Petitioner further argues that HTML tags are distinguishable units of a program (an HTML page) that represent instructions, such as how to render a text input box. *Id.* at 21–22 (citing Ex. 1007, xxxvii, 232, 234, 241).

Accordingly, Petitioner argues that HTML tags are tokens, which comports with our construction of “token” above. *Id.* at 22. Petitioner further argues Kari’s query form would have had multiple HTML tags and, thus, multiple tokens. *Id.* at 23. Therefore, Petitioner argues that Kari’s query form is a tokenized questionnaire. *Id.* at 23.

Petitioner argues that an ordinarily skilled artisan would have combined Kari and Darnell because Darnell is a reference book that would have been obvious for an ordinarily skilled artisan to consult when implementing Kari’s teachings. Pet. 25. Petitioner argues that Kari describes searching for WWW pages, an ordinarily skilled artisan would have recognized that WWW pages are written in HTML, and Darnell is an HTML reference. *Id.* at 24–25. Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 91–99, 104–108.

In response, Patent Owner contends that Petitioner fails to establish that Kari’s handheld device has a web browser (Prelim. Resp. 24), but we disagree because Kari teaches the use of forms designed as “Internet-type WWW page[s].” Ex. 1006, 6:48–49. Further, Patent Owner relies solely on attorney argument to support this contention and does not specifically address the evidence cited by the Petitioner. Prelim. Resp. 24.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.2.1 to be sufficient.

19.2.2 said tokenized questionnaire including at least one question requesting location identifying information

Petitioner argues that Kari teaches limitation 19.2.2. Pet. 24. According to Petitioner, Kari teaches that the “user can enter the information on the location . . . manually” in Kari’s query form. *Id.* (quoting Ex. 1006, 7:11–14, 60–65). Petitioner argues that, as a result, Kari’s query form

includes at least one question requesting location information. *Id.* These arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 100–102.

Patent Owner contends that Kari fails to disclose a tokenized questionnaire requesting location information. Prelim. Resp. 24. Patent Owner’s contention, however, rests solely on attorney argument and does not specifically address the evidence cited by Petitioner. *Id.* Further, to the extent Patent Owner is arguing Kari fails to disclose a tokenized questionnaire, see our discussion above for limitation 19.2.1.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.2.2 to be sufficient.

19.2.3 said tokenized questionnaire comprising a plurality of device independent tokens

Petitioner argues that Kari and Darnell teach limitation 19.2.3. Pet. 24–25. Petitioner argues HTML tags are device independent tokens, quoting Darnell that “HTML offered a platform-independent means of marking data for interchange.” *Id.* (citing Ex. 1007, 16). Petitioner argues that Kari’s disclosure of a query form as a WWW page, combined with Darnell’s description of HTML tags, teaches a tokenized questionnaire comprising a plurality of device independent tokens. *Id.* Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶ 104.

Patent Owner argues that Petitioner fails to establish that Kari’s handheld device has a web browser, and, therefore, Petitioner has not shown that Kari teaches a tokenized HTML document with a plurality of device independent tokens. Prelim. Resp. 24. To support this assertion, however, Patent Owner relies solely on attorney argument and does not specifically address the evidence cited by Petitioner. *Id.* Further, to the extent Patent

Owner is arguing Kari fails to disclose a tokenized questionnaire, see our discussion above for limitation 19.2.1.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.2.3 to be sufficient.

19.3 (c) ending said communications between said handheld computing device and said originating computer;

Petitioner argues Kari teaches limitation 19.3. Pet. 27–28. Petitioner argues Kari teaches “that ‘the connection to connection server 3 can be cut’ once ‘the query form is loaded on the display of search terminal 1.’” *Id.* at 27 (quoting Ex. 1006, 7:14–17). Petitioner further argues “that ‘the connection server 3 has a predefined WWW page’ and that the user ‘can load the WWW page from the connection 3 and store it locally.’” *Id.* (quoting Ex. 1006, 13:45–52). Further, according to Petitioner, Kari teaches that “when ‘the user subsequently wants to make a query’ ‘if the questionnaire used was a form stored in the storing means of the search terminal 1, connection set-up is started to the connection server 3 after the form is correctly filled-in.’” *Id.* (citing Ex. 1006, 13:59–61, 14:25–28). Petitioner argues that these combined disclosures teach ending the communications between the search terminal and the connection server after the storing of the query form. *Id.* Petitioner argues an ordinarily skilled artisan would have recognized that, because if the search terminal and connection server were still in communication with each other after the query form was stored, there would be no need to subsequently perform a connection set-up. *Id.* Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 110–114. Patent Owner presents no counterargument.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.3 to be sufficient.

19.4 (d) after said communications has been ended,

Petitioner argues Kari teaches limitation 19.4 because Kari “teaches steps that occur ‘[a]fter the query form is loaded’ are performed once ‘the connection to the connection server 3 [is] cut.’” Pet. 28 (citing Ex. 1006, 7:14–17). For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding this portion of limitation 19.4 to be sufficient. Because limitation 19.4 must be read in combination with limitations 19.5, 19.6, and 19.7, we address the combinations of those limitations below.

[19.5] (d1) executing at least a portion of said plurality of tokens comprising said questionnaire on said handheld computing device to collect at least one response from a first user,

Petitioner argues Kari teaches this limitation by disclosing: “[a]t the stage when the user wants to make a query, the WWW page is loaded for example with an Internet browser...” Pet. 28 (citing Ex. 1006, 15:59–61). According to Petitioner, Kari’s disclosure of loading a WWW page with an Internet browser corresponds to executing at least a portion of said plurality of tokens on a handheld computing device, because when the WWW page is loaded, the HTML page having HTML tags (the plurality of tokens) would be rendered, or executed, by the web browser to display the form fields. *Id.* (citing Ex. 1007, 24). Petitioner argues Kari loads the WWW page to collect at least one response from a first user, because Kari “describes that ‘the WWW page is loaded ... and the questionnaire is filled in for the relevant parts.’” *Id.* at 28–29 (quoting Ex. 1006, 13:59–61). Petitioner further argues

that the WWW page is loaded after the connection to the connection server is cut. *Id.* at 29.

Petitioner's arguments are supported by testimony of Dr. Reddy. Ex. 1005 ¶¶ 118–122.

Patent Owner argues that Petitioner fails to establish that Kari teaches that its handheld device has a web browser. Prelim. Resp. 24. As discussed above for limitation 19.2.1, we disagree. Namely, we note that Kari teaches the use of forms designed as “Internet-type WWW page[s].” *See* Ex. 1006, 6:48–49.

For purposes of this Decision, we find Petitioner's evidence, argument, and explanation regarding the combination of limitations 19.4 and 19.5 to be sufficient.

19.6 (d2) storing within said computing device said at least one response from the first user;

Petitioner argues Kari and Todd teach limitation 19.6. Pet. 29. Petitioner argues Kari suggests storing a response from a first user by disclosing “the application program forms a query message on the basis of the information to be transmitted to the connection server” *Id.* (citing Ex. 1006, 8:1–5). According to Petitioner, an ordinarily skilled artisan would have understood that, upon forming the query message, Kari's query message and its response[s] from the user are stored (at least temporarily) in random access memory of the search terminal. *Id.* at 29–30. Petitioner argues that it was common for computing devices at the time of the filing of the '748 patent to temporarily store data to be transmitted. *Id.* at 30. Further, Petitioner argues Kari teaches that “the application program combines the entered information and forms a query message for example according to the hypertext mark-up language (HTML) and HTTP definitions

to be transmitted to the connection server 3.” *Id.* (citing Ex. 1006, 14:15–21). Petitioner argues that combining the entered information to form a query message would have been understood by an ordinarily skilled artisan to include at least temporarily storing the result of the formation before transmission (e.g., before Kari’s connection is established). *Id.* at 29–30.

Petitioner further argues that Todd teaches storing survey responses in a portable survey device. Pet. 30. According to Petitioner, Todd “describes a device which ‘electronically presents a series of questions, records the answers, and stores...all or a portion of the survey response.’” *Id.* (quoting Ex. 1009, [57]). Further, according to Petitioner, Todd’s “device presents a series of questions, or prompts, to the user and records the answers. [And] [t]he on-board storage is sufficiently large to allow the device to store all of the responses internally...” *Id.* (citing Ex. 1009, 5:35–40).

Petitioner argues that an ordinarily skilled artisan would have been motivated to have incorporated Todd’s teachings of storing survey responses into Kari’s system because Todd suggests storing responses when conditions for transmission are not met. Pet. 31 (citing Ex. 1009, 10:15–18, 9:67–10:1). According to Petitioner, Kari also describes situations in which conditions for transmission are not met (e.g., Ex. 1006, 8:6–15 (describing blocks 312 and 313)). *Id.* Petitioner argues an ordinarily skilled artisan would have understood Kari’s query message is analogous to Todd’s survey responses and that storing the information in the query in Kari’s device would be desirable during Kari’s connection, re-establishment, and waiting process to maintain the user’s answers until the connection is established. *Id.* at 31–32. Petitioner argues that, without such storing, Kari’s user would

have to re-enter his or her information, which would result in a non-optimal experience. *Id.* at 32. Thus, according to Petitioner, an ordinarily skilled artisan would have been motivated to incorporate Todd’s storing of survey responses into the system of Kari to remove the need for the user to re-enter query message information while a connection is being set up. *Id.*

Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 122–133. Patent Owner presents no counterargument.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding the combination of limitations 19.4 and 19.6 to be sufficient.

19.7 (d3) using said GPS to automatically obtain said location identifying information in response to said at least one question that requests location identifying information

Petitioner argues Kari teaches limitation 19.7. Pet. 34. First, Petitioner argues that Kari teaches using GPS to automatically obtain said location identifying information, quoting: “the application program reads automatically the information on the location ... the information on the location can be determined e.g. by using GPS equipment...” *Id.* (quoting Ex. 1006, 7:60–67). Petitioner further argues Kari uses this GPS equipment responsive to a question that requests location identifying information, quoting the “user can enter the information on the location...manually...,” but if the user has not done so, “the application program reads automatically the information on the location...by using GPS...” *Id.* (quoting Ex. 1006, 7:11–14, 60–67). Petitioner interprets this disclosure as teaching that the user can enter the location manually in the query form in response to a question, but if the user does not, the device uses the user’s GPS location instead. *Id.* Thus, Petitioner argues the entry of the location information is

in response to at least one question that requests location identifying information. *Id.* Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 134–139.

Patent Owner argues that Petitioner has not shown that Kari’s query form automatically obtains device location information using GPS in response to a question contained within a tokenized questionnaire. Prelim. Resp. 25–26. Patent Owner argues that instead of obtaining device location information automatically, Kari (i) has the user manually enter location information or (ii) uses a separate application program to determine the device’s location after the query form is completed (executed). *Id.* In making this argument, Patent Owner does not address the evidence cited by Petitioner, and we find this evidence to be persuasive. In particular, we find Petitioner’s interpretation that Kari’s device can use the user’s GPS location instead of manual location input is supported by the evidence. *See* Ex. 1006, 7:11–14, 60–67.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding the combination of limitations 19.4 and 19.7 to be sufficient.

19.8 (e) establishing communications between said handheld computing device and a recipient computer;

Petitioner argues that Kari teaches limitation 19.8. Pet. 35. Petitioner quotes Kari: “[t]he application program starts to reestablish connection in block 312. In block 313, it is checked if the connection is set up After the search terminal 1 has received a response from the connection server 3, i.e. the connection is established, the search terminal 1 starts transmission” *Id.* (quoting Ex. 1006, 8:6–19). Petitioner argues Kari’s description of re-establishing a connection between search terminal 1 and connection

server 3 teaches establishing communications between a handheld computing device and a recipient computer. *Id.* Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 140–142.

Patent Owner presents no counterargument. Prelim. Resp. 23–26.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.8 to be sufficient.

19.9 (f) transmitting a value representative of each of said at least one response stored within said handheld computing device to said recipient computer;

Petitioner argues Kari and Todd teach limitation 19.9. Pet. 36.

Petitioner argues Kari teaches transmitting a value representative of each response stored within said handheld computing device by disclosing “the search terminal 1 starts transmission of the query message to the connection server 3” and “the search terminal 1 advantageously sends the information contained in the query form to the connection server 3.” *Id.* at 35 (quoting Ex. 1006, 8:16–19). Petitioner further argues Kari and Todd teach storing the query message. *Id.* at 35–36. According to Petitioner, Kari teaches the content of the query message includes the data entered in, for example, Car, GasType, and SearchWords fields. *Id.* at 36 (citing Ex. 1006, 10:20–43). Petitioner argues this data corresponds to values representative of responses, and thus, the query message includes a value representative of each of said at least one response. *Id.* Petitioner further argues that Kari describes sending the information to the connection server 3, and, therefore, teaches transmitting that information to the recipient computer. *Id.* Petitioner’s arguments are supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 143–146.

Patent Owner presents no counterargument. Prelim. Resp. 23–26.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.9 to be sufficient.

19.10 (g) after receipt of said transmission of step (f), transmitting a notice of said received value representative of each of said at least one response to a second user.

Petitioner argues Kari teaches limitation 19.10. Pet. 36–38. Petitioner notes that Kari teaches “that ‘the query message sent from the search terminal 1 is processed in the connection server 3...Next, the connection server 3 transmits the information of the query message to the remote server 4, 4’, 4” selected...’” *Id.* at 36 (quoting Ex. 1006, 8:20–27). Petitioner argues an ordinarily skilled artisan would have understood Kari’s sending the information of the query message to the remote server to be for the benefit of a user of the remote server, so that user can review the information in the query message. *Id.* at 37 (citing Ex. 1009, 15:45-46). Accordingly, Petitioner argues, an ordinarily skilled artisan would have understood Kari to teach transmitting a notice of said received value representative of each of said at least one response to a second user. *Id.* at 36–37.

Patent Owner presents no counterargument. Prelim. Resp. 23–26.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 19.10 to be sufficient.

Summary regarding claim 19

After reviewing the parties’ arguments and evidence, we find Petitioner has demonstrated a reasonable likelihood of prevailing in its contention that claim 19 is unpatentable over Kari, Darnell, Todd, and Chan.

4. *Analysis of Claim 16*

Claims 16 and 19 have many similar recitations. For example, both claims recite “establishing communications between a handheld computing device and an originating computer.” Claim 16 further recites “said handheld device having at least a capability to determine a current location thereof,” whereas claim 19 recites “wherein said handheld computing device has a GPS integral thereto.”

Petitioner’s evidence, argument, and explanation for claim 16 substantially overlaps with its evidence, argument, and explanation for claim 19. For example, Petitioner relies on Kari’s disclosures regarding GPS receivers for both claim 16’s recitation that “said handheld device having at least a capability to determine a current location thereof” and claim 19’s recitation of “wherein said handheld computing device has a GPS integral thereto.” Pet. 16–20, 38.

Patent Owner’s arguments regarding claims 16 and 19 are also similar. Prelim. Resp. 21–26. For example, Patent Owner argues that Kari and Chan do not teach or suggest both element (a) of claim 16 and element (a) of claim 19 because neither Kari nor Chan teaches a hand held device that can determine its location or has an integral GPS receiver. *Id.* at 21–24. We address those issues in our discussion of claim 19 above. For purposes of this Decision, we find no further discussion of Petitioner’s evidence, argument, and explanation or Patent Owner’s arguments regarding claim 19 are necessary.

After reviewing the parties’ arguments and evidence, and for reasons given above with respect to claim 19, we find Petitioner has demonstrated a

reasonable likelihood of prevailing in its contention that claim 16 is unpatentable over Kari, Darnell, Todd, and Chan.

5. Analysis of Claim 17

Claim 17 recites the method for managing data according to claim 16 and adds the limitation of “wherein said current location of said handheld computing device is determined using GPS.” Petitioner argues Kari teaches this limitation of claim 17 because Kari “teaches that the: ‘information on the location can be determined e.g. by using GPS equipment...’” Pet. 45 (quoting Ex. 1006, 7:60–67). Petitioner’s argument is supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 181–183. Patent Owner provides no counterargument for this limitation. Prelim. Resp. 23. Based on the record before us, we find Petitioner has demonstrated a reasonable likelihood of prevailing in its contention that claim 17 is unpatentable over Kari, Darnell, Todd, and Chan.

6. Analysis of Claim 18

Claim 18 recites the method for managing data according to claim 16 and adds the limitation of “wherein said originating computer and said recipient computer are a same computer.” Petitioner argues Kari teaches this limitation of claim 18 because Kari’s connection server 3 is both an originating computer and a recipient computer. Pet. 45–46. Petitioner’s argument is supported by the testimony of Dr. Reddy. Ex. 1005 ¶¶ 184–186. Patent Owner provides no counterargument for this limitation. Prelim. Resp. 23. Based on the record before us, we find Petitioner has demonstrated a reasonable likelihood of prevailing in its contention that claim 18 is unpatentable over Kari, Darnell, Todd, and Chan.

7. Analysis of Claim 21

Claims 21 and 19 have many similar recitations, and Petitioner's evidence, argument, and explanation for claim 21 substantially overlaps with its evidence, argument, and explanation for claim 19. Pet. 16–38, 46–51. Patent Owner's arguments regarding claims 21 and 19 are also similar. Prelim. Resp. 23–28. The arguments and evidence that the parties presented for limitations 21.1, 21.13, and 21.14, however, merit some additional discussion.

21.1 within a central computer, accessing at least one user data item stored in a recipient computer, wherein said at least one data item is obtained via the steps of:

Plaintiff argues Kari teaches limitation 21.1. Pet. 46–47. Dr. Reddy testifies that Kari's connection server 3 is a central computer. Ex. 1005 ¶ 189. Dr. Reddy further testifies that connection server 3 accesses at least one user data item by transmitting its query message to remote server 4, 4', 4." *Id.* (quoting Ex. 1006, 12:32–36¹¹). According to Dr. Reddy, an ordinarily skilled artisan would understand that transmitting that query message involves accessing that message. *Id.* Dr. Reddy testifies that Kari's query message is a user data item because Kari "describes 'user-specified information . . . is added to the query message.'" *Id.* (quoting Ex. 1006, 11:31–33). Dr. Reddy also testifies that connection server 3 is also the recipient computer and that Kari teaches storing the query message into the connection server 3, citing Kari's disclosure of "[h]aving received the query message (block 401), the connection server 3 reads it into its memory (block

¹¹ Dr. Reddy cites Ex. 1006, 12:62–36, but the actual quote is at Ex. 1006, 12:32–36.

402) and store the message preferably for the time of its processing”
Id. at ¶ 190 (quoting Ex. 1006, 11:17–22). Dr. Reddy further testifies that connection server 3 obtains the query message via the steps recited by limitations 21.2 through 21.13. *Id.* at ¶ 191 (and in the paragraphs that follow in Ex. 1005). Patent Owner presents no counterargument for limitation 21.1. Prelim. Resp. 6–9, 26–28.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 21.1 to be sufficient.

21.13 storing within said recipient computer any of said transmitted GPS coordinates and said at least one value representative of said at least one response, thereby creating said at least one user data item stored in said recipient computer

Petitioner argues Kari teaches limitation 21.13. Pet. 50. Dr. Reddy testifies that connection server 3 is a recipient computer that stores Kari’s query message. Ex. 1005 ¶¶ 211–212. Further, Dr. Reddy testifies that Kari’s query message includes a user identification. *Id.* at ¶ 211 (citing Ex. 1006, 10:20). Dr. Reddy further testifies that Kari describes placing the GPS location into the query message. *Id.* at ¶¶ 136, 137. Patent Owner presents no counterarguments regarding this limitation. Prelim. Resp. 6–9, 26–28.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 21.13 to be sufficient.

21.14 (b) forming a visually perceptible report from any of said at least one stored user data item.

Petitioner argues Todd teaches limitation 21.14. Pet. 50–51. Dr. Reddy testifies that, in Todd, “computer 32 is used to . . . store an analyze survey results”; those stored survey results are analogous to Kari’s stored query messages; and Todd describes printing “reports summarizing the

survey results.” Ex. 1005 ¶ 214 (quoting Ex. 1009, 12:51–55). Further, Dr. Reddy testifies that an ordinarily skilled artisan would have understood that a printed report is a visually perceptible report. *Id.* Patent Owner presents no counterarguments regarding this limitation. Prelim. Resp. 6–9, 26–28.

For purposes of this Decision, we find Petitioner’s evidence, argument, and explanation regarding limitation 21.14 to be sufficient.

Summary regarding claim 21

After reviewing the parties’ arguments and evidence, we find Petitioner has demonstrated a reasonable likelihood of prevailing in its contention that claim 21 is unpatentable over Kari, Darnell, Todd, and Chan.

8. Analysis of Claim 22

Claim 22 recites the method according to claim 21 and adds the limitation “wherein said central computer and said recipient computer are a same computer.” Petitioner argues Kari teaches this limitation of claim 22 because Kari’s connection server 3 is both a central computer and a recipient computer. Pet. 52. Petitioner’s argument is supported by the testimony of Dr. Reddy. Ex. 1005 ¶ 220. Patent Owner provides no counterargument for this limitation. Prelim. Resp. 28. Based on the record before us, we find Petitioner has demonstrated a reasonable likelihood of prevailing in its contention that claim 22 is unpatentable over Kari, Darnell, Todd, and Chan.

9. Citation to Hjelm

Patent Owner argues that we should strike or give little weight to the Declaration of Dr. Reddy because it cites Johan Hjelm, *Creating Location Services for the Wireless Web: Professional Developer’s Guide* (2002), Ex. 1020 (“Hjelm”), which Patent Owner argues is not prior art to the ’748 patent. Prelim. Resp. 19–20. Patent Owner correctly notes that the Petition

appears to misdate Hjelm as having been copyrighted in 2001, rather than in 2002, as the reference indicates. *Id.*; Pet. v; Ex. 1020, 2. Nonetheless, Hjelm is not relied upon as prior art in the challenges to the claims of the '748 patent," nor do we rely on it in this Decision. Accordingly, for purposes of this Decision, we disregard Dr. Reddy's testimony regarding Hjelm. We will not, however, strike or disregard Dr. Reddy's other testimony.

10. Alleged Impermissible Hindsight

Patent Owner argues in conclusory form that Petitioner used impermissible hindsight in combining the teachings of Kari, Darnell, Todd, and Chan. Prelim. Resp. 20–21. As described above, based on the current record, we are not persuaded by this argument.

11. Constitutionality of Inter Partes Review

Patent Owner argues that *inter partes* review proceedings are unconstitutional, noting that a petition for certiorari was granted in *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, S. Ct. No. 16-712. Prelim. Resp. 33. As of now, the Supreme Court has not ruled in that case, and the Federal Circuit's holding that *inter partes* review proceedings are constitutional is binding. See *MCM Portfolio LLC v. Hewlett-Packard Co.*, 812 F.3d 1284 (Fed. Cir. 2015).

IV. CONCLUSION

Petitioner has demonstrated a reasonable likelihood that it would prevail in establishing that each of claims 16–19 and 21–22 is unpatentable over Kari, Darnell, Todd, and Chan. At this stage of this proceeding, we have not made a final determination with respect to the patentability of any challenged claim or the construction of any claim term.

V. ORDER

It is ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted with respect to claims 16–19, 21, and 22 of the '748 patent on the ground that those claims are unpatentable under 35 U.S.C. § 103(a) as obvious over Kari, Darnell, Todd, and Chan.

FURTHER ORDERED that no other ground of unpatentability, with respect to any claim, is instituted for trial; and

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

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