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Paper 17
Date: September 11, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDTRONIC, INC.,
Petitioner,

v.

ROBERT BOSCH HEALTHCARE SYSTEMS, INC.,
Patent Owner.

Cases IPR2014-00607 and IPR2014-00691
Patent 7,870,249 B2

Before STEPHEN C. SIU, JUSTIN T. ARBES, and MIRIAM L. QUINN, *Administrative Patent Judges.*

SIU, *Administrative Patent Judge*.

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

I. BACKGROUND

A. Introduction

Medtronic, Inc. ("Petitioner") filed two Petitions requesting *inter partes* review of claims 1–29 of U.S. Patent No. 7,870,249 B2 (Ex. 1001,[1] "the '249 patent,") pursuant to 35 U.S.C. §§ 311–19.[2] Robert Bosch Healthcare Systems, Inc. ("Patent Owner") filed a Preliminary Response ("Prelim. Resp.") in each of the two proceedings, as listed in the following chart.

Case No.	**Claims**	**Petition Paper No.**	**Preliminary Response Paper No.**
IPR2014-00607	1, 2, 6–8, and 11–13	Paper 1	Paper 16
IPR2014-00691	3–5, 9, 10, and 14–29	Paper 1[3]	Paper 16

[1] For purposes of clarity and expediency, we use Case IPR2014-00607 as representative of the two proceedings. Unless otherwise noted, all citations to "Pet.," "Prelim. Resp.," and "Ex." refer to the Petition, Preliminary Response, and Exhibits, respectively, in IPR2014-00607. Citations to "-691 Pet." and "-691 Prelim. Resp." refer to the corresponding materials in Case IPR2014-00691.

[2] Cardiocom, LLC ("Cardiocom"), a wholly-owned subsidiary of Petitioner, previously filed a petition seeking *inter partes* review of the '249 patent in Case IPR2013-00460. The Petition was denied on January 16, 2014. Ex. 1002 ("-460 Dec.").

[3] Double spacing must be used except in claim charts, headings, tables of contents, tables of authorities, indices, signature blocks, and certificates of service. 37 CFR § 42.6(a)(2)(iii). In the -691 Petition, Appendix A and Appendix B at pages 50–60 are single-spaced (not double-spaced) and are not claim charts, headings, tables of contents, tables of authorities, indices, signature blocks, or certificates of services. In light of the status of the Petition, rather than require Petitioner to refile the Petition, we will not consider pages 44–49 of the -691 Petition.

We have jurisdiction under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless "the information presented in the Petition shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.We determine based on the record that Petitioner shows, under 35 U.S.C. § 314(a), that there is a reasonable likelihood that it would prevail with respect to at least one of the challenged claims. Because we institute trial on grounds from both petitions, and to administer the proceedings more efficiently, we exercise our authority under 35 U.S.C. § 315(d) to consolidate the two proceedings and conduct the proceedings as one trial.

Petitioner relies on the following prior art:

US 5,827,180 ("Goodman")	Oct. 27, 1998	Ex. 1003
US 5,704,029 ("Wright")	Dec. 30, 1997	Ex. 1004
US 6,014,630 ("Jeacock")	Jan. 11, 2000	Ex. 1005
EP 0342859 ("Kaufman")	Nov. 23, 1989	Ex. 1006
US 5,367,667 ("Wahlquist")	Nov. 22, 1994	Ex. 1007
US 5,623,656 ("Lyons")	Apr. 22, 1997	Ex. 1004[4]

A. Bittorf & T.L. Diepgen, *Teaching Resources for Dermatology on the WWW – Quiz System and Dynamic Lecture Scripts using a HTTP–Database Demon*, AMIA, Inc. (1996) (Ex. 1008, "Bittorf").

Petitioner contends that the challenged claims are unpatentable under 35 U.S.C § 103(a) based on the following specific grounds:[5]

[4] Ex. 1004 in Case IPR2014-00691.
[5] See Pet. 9, IPR2014-00691 Pet. 7.

Reference(s)	Basis	Claims challenged
Goodman, Wright, and Kaufman	§ 103	1, 2, 6–8, 12, and 13
Goodman, Wright, Kaufman, and Wahlquist	§ 103	1–10, 12–21, and 23–29
Goodman, Wright, Kaufman, and Jeacock	§ 103	1, 2, 6–8, 12, and 13
Goodman, Wright, Kaufman, Wahlquist, and Jeacock	§ 103	1, 2, 6–8, 12, and 13
Goodman Kaufman, Wahlquist, and Lyons	§ 103	3–5, 9, 10, 14–21, and 23–29
Goodman Kaufman, Wahlquist, and Jeacock	§ 103	3–5, 9, 10, 14–21, and 23–29
Goodman, Wright, Kaufman, Wahlquist, and Bittorf	§ 103	11 and 22
Goodman, Wright, Kaufman, Wahlquist, Jeacock, and Bittorf	§ 103	11
Goodman, Kaufman, Wahlquist, Jeacock, and Bittorf	§ 103	22
Goodman, Kaufman, Wahlquist, Lyons, and Bittorf	§ 103	22

B. The ’249 Patent

The ’249 patent describes a system and method for collecting data relating to the health status of patients and communicating information to patients. Ex. 1001, 4:12. A patient is provided with a monitoring device that produces measurements of a physiological condition of the patient, records measurements, and transmits the measurements to a corresponding

remotely programmable apparatus. *Id*. at 4:47–52. The remotely programmable apparatus interacts with the patient with script programs received via a communication network from a server. *Id*. at 4:35–37.

The server contains a monitoring application that includes a script generator, a script assignor, and a report generator. *Id*. at 6:37–42. The script generator generates script programs and the script assignor assigns script programs to patients. *Id*. at 6:42–43, 8:10–11. In one embodiment, a data merge program at the server customizes queries and statements to each patient by merging personal data with the script programs. *Id*. at 12:59–61; 13:6–7. The data merge program retrieves data from a table in a database at the server and inserts the data into statements in a generic script program to create a custom script program that contains statements customized to an individual. *Id*. at 13:8–12. After the script assignor assigns the script program to the individual or patient, the server transmits the script program to the remote apparatus of the individual or patient through a communication network. *Id*. at 13:64–65; 14:8–10.

Claim 1 of the ’249 patent recites:

> 1. A method of remotely managing health care of a person, comprising:
>
> providing a remote apparatus to said person, said remote apparatus having an audio processor and an audio interface;
>
> providing a server having (i) a script generator for generating a script program, (ii) a data merge program for merging personal data relating to said person with said script program, and (iii) a script assignor for generating a respective pointer to associate said script program to said person;
>
> collecting biometric information pertaining to said person via the remote apparatus;

> sending the biometric information pertaining to said person from the remote apparatus to the server via a communication network;
>
> generating said script program with the script generator at the server based on input from a health care professional associated with said person;
>
> customizing the script program with the data merge program at the server using personal data relating to said person, wherein said script program includes (a) health information based on the collected biometric information and specific to said person, (b) a message directed to said person from said health care professional associated with said person, and (c) a program identifier, wherein said program identifier is used by said server to identify to said server the script program executed by the remote apparatus;
>
> assigning said script program to said person at said server with said script assignor based on input from said health care professional associated with said person;
>
> sending the script program to the remote apparatus via the communication network for interaction with said person; and
>
> executing the script program in the remote apparatus, wherein at least a portion of the script program is used by the audio processor to communicate with said person.

We note that the '249 patent is presently the subject of a patent infringement lawsuit brought by Robert Bosch Healthcare Systems, Inc. against Cardiocom, LLC and Abbott Diabetes Care, in the United States District Court for the Eastern District of Texas, Case No. 2:13–cv–349. *See* Pet. 3.

C. Claim Construction

The Board interprets claim terms by applying the broadest reasonable construction in the context of the specification in which the claims reside. 37 C.F.R. § 42.100(b); *see Office Patent Trial Practice Guide*, 77 Fed. Reg. 48756, 48766 (Aug. 14, 2012).

Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). 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). In this regard, however, we are careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

For purposes of this decision, and based on the record before us, we construe certain claim terms as follows.

1. "script program"

Claims 1, 14, 23, and 27 recite a "script program." In *Cardiocom, LLC v. Robert Bosch Healthcare Sys., Inc.*, a review of the same patent at issue here, we construed the term "script program" broadly but reasonably to mean "a program that contains a set of instructions capable of being executed and interpreted." Case IPR2013-00460, slip op. at 7 (PTAB Jan. 16, 2014) (Paper 23). Petitioner argues that the term should be construed as "an interpreted software program (as opposed to compiled), whose program files comprise commands, written in ASCII text, and which must be read by

an interpreter in order to be executed." Pet. 17 (citing Ex. 1009 ¶¶ 60–66). However, Petitioner does not provide sufficient evidence supporting the contention that a broad but reasonable construction of the term "script program," as would have been understood by one of ordinary skill in the art, must include, for example, being "interpreted," being "written in ASCII text" or that a "script program" "must be read by an interpreter in order to be executed."

Petitioner's declarant (Robert T. Stone, Ph.D.) avers that the '249 Patent specification discloses that a script program must be "an interpreted software program as opposed to compiled." Ex. 1009 ¶ 63 (citing Ex. 1001, 5:57–62). However, the '249 Patent specification does not appear to provide this disclosure. Instead, the '249 Patent specification discloses an apparatus that contains a microprocessor and a memory. Ex. 1001, 5:49–51. The microprocessor contains read only memory that stores firmware for controlling the apparatus. *Id*. at 5:55–56. The firmware includes a script interpreter that executes a script program and interprets script commands. *Id*. at 5:57–60. Hence, the '249 Patent specification discloses firmware (stored in a microprocessor) that executes a script program and interprets script commands. In other words, in one embodiment of the '249 Patent specification, "firmware" executes a script program and interprets script commands. Neither Petitioner nor Dr. Stone demonstrate persuasively that the '249 Patent specification also requires that a script program *must be* an "interpreted software program as opposed to compiled."

Dr. Stone also states that the '249 Patent specification discloses that a script program must contain commands "written in ASCII text." Ex. 1009 ¶ 63 (citing Ex. 1001, 7:15–50). However, the '249 Patent specification

does not appear to provide this disclosure. Instead, the '249 Patent specification discloses a table that lists "script commands [that] are representative of the preferred embodiment and are not intended to limit the scope of the invention." Ex. 1001, 7:52–54. In other words, even assuming each script command listed in Table 1 is "written in ASCII text," as Petitioner and Dr. Stone appear to imply, the '249 Patent specification merely discloses such script commands as non-limiting examples and does not appear to disclose that a script program, as would have been understood by one of ordinary skill in the art, *must* be written in ASCII text.

Dr. Stone also states that the '249 Patent specification discloses that a script program "must be read by an interpreter in order to be executed." Ex. 1009 ¶ 63 (citing Ex. 1001, 5:57–62, 9:60–65). Again, the '249 Patent specification does not appear to provide this disclosure. Instead, as described above, the '249 Patent specification discloses firmware that includes a script interpreter that executes a script program and interprets script commands. Ex. 1001, 5:56–61. The '249 Patent specification also discloses another example in which a script interpreter is used by a microprocessor to execute a script program. *Id*. at 9:64–65. We agree with Petitioner and Dr. Stone that the '249 Patent specification discloses an example in which a script interpreter executes a script program. Neither Petitioner nor Dr. Stone, however, demonstrates persuasively that the example in the '249 Patent specification would be understood by one of ordinary skill in the art , as *requiring* that a "script program" be read by an interpreter in order to be executed, under a broad but reasonable construction.

Finally, in its Petition in Case IPR2014-00691, Petitioner argues that its proposed interpretation of "script program" was adopted by the Examiner during an *ex parte* reexamination (Control No. 90/012,474) of U.S. Patent No. 6,328,273, a patent related to the '249 patent. -691 Pet. 8–9 (citing Exs. 1009 and 1013 in Case IPR2014-00691). We have considered Petitioner's argument but do not find it persuasive at this stage of the proceeding.

In view of the above, we incorporate our previous analysis in Case IPR2014-00460 and construe the term "script program" to mean a program that contains a set of instructions capable of being executed and interpreted.

2. "data merge program"

Claims 1, 14, 23, and 27 recite a "data merge program." We previously construed the term "data merge program" broadly, but reasonably, and in light of the specification, to mean a program that combines two or more sets of data into one. IPR2013-00460, Paper 23 at 8. Petitioner and Patent Owner do not appear to dispute this construction. Pet. 18–19; Prelim. Resp. 17.

We incorporate our previous analysis in Case IPR2014-00460 and continue to construe the term "data merge program" broadly, but reasonably, and in light of the specification, to mean a program that combines two or more sets of data into one.

3. "pointer"

Claim 1 recites a "pointer." Patent Owner argues that, consistent with our previous interpretation in Case IPR2013-00460, a "pointer" means "an identifier that indicates the location of an item." Prelim. Resp. 18; *see* Ex.

1002, 8–9. Petitioner does not propose a construction for this term and does not appear to dispute our previous construction of this term. At this preliminary phase, we incorporate our previous analysis in Case IPR2014-00460 and adopt Patent Owner's proposed construction of the term "pointer" to mean an identifier that indicates the location of an item.

4. "script assignor"

Claims 1, 14, 23, and 27 recite a "script assignor." Petitioner argues that, consistent with our previous interpretation in Case IPR2013-00460, a "script assignor" should be construed to mean "a program that associates a script program with an individual." Pet. 20 (citing Ex. 1001, 13:63–14:1); *see* Ex. 1002 at 9. Patent Owner argues the term should be construed to mean "a program that creates an association between a script program and an individual." Prelim. Resp. 18. Claim 1, for example, recites a script assignor for generating a respective pointer to associate said script program to said person. We note that claim 1 does not require the script assignor to "create" an association between a script program and a person. Patent Owner does not demonstrate sufficiently that a script assignor that associates a script program to a person, as explicitly required by claim 1, would have been broadly but reasonably construed by one of ordinary skill in the art to require also the "script assignor" to "create" associations. At this preliminary phase, we incorporate our previous analysis in Case IPR2014-00460 and adopt Petitioner's construction of the term "script assignor" to mean "a program that associates a script program with an individual."

II. ANALYSIS

A. Section 312(a)(2)

As an initial matter, Patent Owner argues that the Petition should be denied for failure to "identify Cardiocom as a real party-in-interest" under 35 U.S.C. § 312(a)(2). Prelim. Resp. 10. Petitioner states in its Petition in both proceedings that it is the sole real party-in-interest. Pet. 3; -691 Pet. 3. Patent Owner argues that Cardiocom also is a real party-in-interest, relying on the following facts: (1) Cardiocom previously filed a petition in Case IPR2013-00460 seeking *inter partes* review of the '249 patent; (2) Cardiocom and Petitioner both are listed as real parties-in-interest in Case IPR2013-00460;[6] (3) Cardiocom is also the named defendant in the related district court case where the '249 patent is being asserted; (4) Petitioner has the same counsel and declarant, Dr. Stone, in this proceeding as Cardiocom had in Case IPR2013-00460; and (5) Petitioner relies on many of the same prior art references as Cardiocom did in Case IPR2013-00460. Prelim. Resp. 9–10. Based on these facts, Patent Owner contends that Cardiocom "desires review" of the '249 patent and was "involved" in the filing of the Petition. *Id*. at 9–10. Patent Owner also argues that even if Petitioner were permitted to correct its Petition to identify Cardiocom, doing so would be futile because Cardiocom was served with a complaint alleging infringement of the '249 patent more than one year ago under 35 U.S.C. § 315(b). Prelim. Resp. 11.

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[6] Cardiocom listed itself as the sole real party-in-interest when it filed its petition, but later added Petitioner after Petitioner acquired Cardiocom. *See* IPR2013-00460, Paper 5 at 1, Paper 22.

Whether a non-party is a "real party-in-interest" for purposes of an *inter partes* review proceeding is a "highly fact-dependent question" that takes into account how courts generally have used the terms to "describe relationships and considerations sufficient to justify applying conventional principles of estoppel and preclusion." Trial Practice Guide, 77 Fed. Reg. at 48,759. In general, a "real party-in-interest" is "the party that desires review of the patent," and "may be the petitioner itself, and/or it may be the party or parties at whose behest the petition has been filed." *Id*. Depending on the circumstances, various factors may be considered, including whether the non-party exercises, or could exercise, control over the petitioner's participation in the proceeding, and whether the non-party is funding or directing the proceeding. *Id*. at 48,759–60.

Patent Owner has not provided a sufficient factual basis upon which to conclude, based on the current record, that Cardiocom is a real party-in-interest in this proceeding. Petitioner is the party seeking *inter partes* review, and represents that it is the sole real party-in-interest. *See* Pet. 3; -691 Pet. 3. The fact that Cardiocom previously filed a petition in another proceeding, without more, does not establish anything about which entity, or entities, are responsible for controlling, funding, or directing Petitioner's activities in *this* proceeding. Nor does the fact that both Cardiocom and Petitioner are defendants in the district court case—also a different proceeding—indicate, without more, that both entities must be involved in this proceeding. We also note that Cardiocom is a wholly-owned subsidiary of Petitioner, indicating that Petitioner has the ability to exercise some measure of control over Cardiocom, and not necessarily the reverse. Patent Owner has not pointed to sufficient facts to show, at this

stage of the proceeding, that Petitioner failed to name all real parties-in-interest, and we do not deny the Petition on that basis.

B. Section 325(d)

In Case IPR2013-00460, Cardiocom asserted similar grounds to those asserted by Petitioner in this proceeding, relying on three of the same prior art references: Goodman, Wahlquist, and Bittorf. *Compare* IPR2013-00460, Paper 5 at 5, 17–58 *with* Pet. 9, 31–59. We determined that Petitioner had not shown sufficiently that either Goodman, Wahlquist, Fu, Cohen, or Bittorf teaches a "customizing [a] script program with a data merge program located on a server using personal data relating to [an] individual," as recited in claim 27. -460 Dec. 11–15. Petitioner now relies on new references, e.g., Wright or Jeacock, which were not considered during prosecution of the '249 patent, as allegedly teaching the "data merge program" limitation. Pet. 39, 53–54.

Patent Owner argues that the Petition should be denied under 35 U.S.C. § 325(d) because (1) it relies on three of the same prior art references as the petition in Case IPR2013-00460 (i.e., Goodman, Wahlquist, and Bittorf), (2) Petitioner "knew about Wright . . . and knew, or should have known, about Kaufman as well," and (3) Petitioner "repackaged repackaged . . . arguments without making any substantive changes." Prelim. Resp. 5–6. Patent Owner also contends that Petitioner and Cardiocom have filed numerous other petitions for *inter partes* review and a request for *ex parte* reexamination of the '249 patent, creating unnecessary proceedings and expense for Patent Owner. *Id*. at 5–7 (citing, for example,

Reexamination Control No. 90/013,262, a pending *ex parte* reexamination of the '249 patent).

In determining whether to institute an *inter partes* review, "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." 35 U.S.C. § 325(d). The statutory language gives the Director the authority not to institute review on the basis that the same or substantially the same prior art or arguments were presented previously to the Office, but does not require that result. Wright, and the specific combinations of Wright and other prior art asserted by Petitioner, were not considered during prosecution of the '249 Patent or during Case IPR2013-00460. Although we are mindful of the burden on Patent Owner and the Office in analyzing the other, previously considered three references, we conclude that Petitioner's arguments regarding Wright and the "data merge program" limitation have merit, as explained herein, and we do not exercise our discretion to deny the Petition under 35 U.S.C. § 325(d).

C. Cited References

a. Overview of Goodman

Goodman discloses a system for monitoring the health of a patient in which a host computer is in communication with a health care provider's computer and a patient's computer. Ex. 1003, 1:11–13, 2:45–49. In one embodiment, the host computer receives a treatment plan for a patient from the health care provider and generates an algorithm based on the treatment plan. *Id*. at 2:54–57. The algorithm is programmed into a message device,

which is in the possession of the patient. *Id.* at 2:49–50, 57–58. The message device prompts the patient to measure and enter physiological data as dictated by the treatment plan. *Id*. at 2:59–61.

b. Overview of Wright

Wright discloses a system for computerized form completion and processing. Ex. 1004, Abstract. In one embodiment, an electronic form is sent from a personal computer ("PC") to a device, such as a personal digital assistant ("PDA"). *Id*. at col. 3, ll. 28–39. The PDA runs a forms engine that presents questions to a user and displays messages based on the response to a particular question. *Id*. at col. 3, ll. 40–51. The forms engine executes a script that, among other things, advances to the next question. *Id*.

c. Overview of Kaufman

Kaufman discloses a patient assistance system that can communicate with a remote medical computer via modem 40 and a telephone system. *See, e.g.*, Ex. 1006, 2. The system includes "[a]n audible alarm" and "voice synthesizer circuitry." *Id*. at 2-3.

d. Overview of Wahlquist

Wahlquist discloses a system for remotely performing computer diagnostic tests on personal computers. Ex. 1007, 1:7–10. A computer user calls a customer service help desk to resolve a computer issue. *Id*. at 2:8–10, 17. A representative at the customer service help desk creates a computerized case file that includes a unique case identification number,

user identification, and user's computer identification information. *Id*. at 4:41–47. The representative also selects diagnostic tests based on the user's request, the selection being used to build a script file. *Id*. at 2:17–18, 22–23. The case file and the script file are submitted by the representative to a database manager computer, and then downloaded to the user's computer. *Id*. at 5:37–39, 63–66. Subsequently, the script file is executed on the user's computer by a diagnostic program on the user's computer. *Id*. at 2:39–40, 42–43. The script file instructs the user's computer to execute desired test files and specifies the creation of various log files to record the results of the tests. *Id*. at 2:45–47.

e. Overview of Bittorf

Bittorf discloses a computer based training system for students in the field of dermatology. Ex. 1006, 46, col. 1. In the system of Bittorf, a user may design a quiz by selecting questions from a database that meet specified constraints. *Id*. at 48, col. 1.

D. Obviousness over combinations of Goodman, Wright, Kaufman, and Wahlquist

Petitioner asserts that claims 1, 2, 6–8, 12, and 13 and claims 3–5, 9, 10, 14-21, and 23-29 are obvious under 35 U.S.C. § 103(a) over Goodman, Wright, Kaufman, and Wahlquist and relies on the testimony of Dr. Robert Stone for support. Pet. 9, 31–45 (citing Ex. 1009); -691 Pet. 35–42. In support of these asserted grounds of unpatentability, Petitioner provides explanations as to how each claim limitation is disclosed or suggested by

Goodman, Wright, Kaufman, and Wahlquist and, based on the current record, articulates sufficient reasoning with a rational underpinning to justify support for the conclusion of obviousness. *See* Pet. 31–49; -691 Pet. 35–42. Upon consideration of Petitioner's analysis and supporting evidence, and taking into account Patent Owner's Preliminary Responses, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail with respect to obviousness of claims 1–10, 12–21, and 23–29 over Goodman, Wright, Kaufman, and Wahlquist.

Claim 1 recites a data merge program for merging personal data relating to said person with said script program and customizing the script program with the data merge program at the server using personal data relating to said person. Petitioner argues that Goodman discloses "logic sequences or algorithms" that are "developed specifically for a patient" and that Wright discloses creating "a derivative form" and editing or customizing "fields for the derivative form, thereby customizing a generic script program to generate a customized script program." Pet. 39 (citing Ex. 1004, 6:33–40, 8:32–38, 9:51–60). Patent Owner argues that the combination of references fails to disclose or suggest a "data merge program," as recited in claim 1, because Wright fails to disclose or suggest "using personal data in creating or editing a form." Prelim. Resp. 53. Hence, Patent Owner argues that Wright fails to disclose or suggest customizing a script program using personal data relating to a person, as recited in claim 1, for example.

As Petitioner explains, Goodman discloses "generating algorithms based on treatment plans developed for a specific patient" that are "programmed into the host computer." Pet. 41 (citing Ex. 1003, 8:37–63,

9:23–26). Goodman also discloses that the treatment plan "accepts as input at least one indicia of the patient's then current health status." Ex. 1003, 8:46–47. In other words, Goodman discloses customizing an algorithm or treatment plan (i.e., "script program") with an indicia of a patient's health status (i.e., "personal data relating to said person," as recited in claim 1, for example). Dr. Stone testifies that Wright discloses "a field editor . . . that is configured to customize a previous form" that "enables a user to edit or customize fields for the . . . form" and that customization of the form in Wright is "driven by . . . scripts to collect data from a remote user." Ex. 1009 ¶¶ 99, 100 (citing Ex. 1004, 6:33–40; 9:11–26, 51-60; 13:39–53; 27:56–62). Based on the current record, Patent Owner does not demonstrate sufficiently a difference between the personal data relating to the person, as recited in claim 1, and the data collected from the remote user, for example, as disclosed by Wright.

Claim 1 recites a script assignor for generating a respective pointer to associate said script program to said person. Petitioner argues that Goodman discloses providing treatment plans "developed specifically for a patient by a health care provider." Pet. 39 (citing Ex. 1003, 1:62–67, 2:18–21, 54–56, 8:37–63). Patent Owner argues that the combination of references fails to disclose or suggest a script assignor for generating a respective pointer to associate said script program to said person because the combination of references fails to disclose or suggest "a pointer." Prelim. Resp. 56–57.

As Petitioner explains, Goodman discloses "treatment plans" and "algorithms" that are developed specifically for a patient. Such "treatment plans" of Goodman are further used in the treatment of the corresponding patient. *See, e.g.*, Ex. 1003, 8:59–61, 9:24–28. Petitioner also explains that

Wright discloses "a form identification" that "identif[ies] the form that the data [are] associated with." Pet. 39-40 (citing Ex. 1004, 3:28-40).

Given that each of the "algorithms" (or script programs) of Goodman is developed for a specific patient and Wright discloses identification of forms (or script programs), Petitioner has made a sufficient showing that the combination of Goodman and Wright discloses or suggests associating each of the script programs (e.g., "algorithms" of Goodman) with a corresponding patient. On this record we are persuaded that if such an "algorithm" were not associated with a corresponding patient or if there were no indication of the association between the algorithm and the corresponding patient (i.e., an identifier or "pointer" to indicate which patient is associated with which algorithm), then the algorithm would not be effectively utilized to treat the patient for which it was specifically developed for (the system and user not being able to determine which algorithm to apply to a specific user). This would contradict Goodman's disclosure of the use of the algorithms to treat specific patients.

Regarding Wahlquist, Patent Owner argues that Wahlquist merely discloses that "a database manager application . . . associates a script file with a case file" but does not disclose or suggest "generating a respective pointer." Prelim Resp. 54–56. Claim 1 recites a script assignor for generating a respective pointer to associate said script program to said person. Wahlquist, however, discloses a "file which includes a unique case identification number, the user's identification, the users' computer . . . or . . . identification information." Ex. 1007, 4:44–47. Hence, Wahlquist discloses a number that identifies the user and the user's computer. Patent Owner argues that Wahlquist does not disclose or suggest generating the

identifier (or "pointer"), but does not refute sufficiently Petitioner's showing that it would have been obvious to one of ordinary skill in the art to generate the identifier (or "pointer") of Wahlquist because, at least, the file that includes the identifier is itself generated in Wahlquist. *See* -691 Pet. 23–25.

Claim 1 recites generating said script program with the script generator at the server based on input from a health care professional associated with said person. Petitioner contends that Goodman discloses "creation of algorithms based on a treatment plan from a healthcare professional." Pet. 40–41 (citing Ex. 1003, 8:37–40, 9:23–26). Petitioner has persuaded us that this limitation is taught or suggested by the cited art and, on this record, we are not persuaded by Patent Owner's arguments to the contrary. *See* Prelim. Resp. 57–58.

Claim 1 recites a script program that includes health information based on the collected biometric information and specific to said person. Petitioner argues that Goodman discloses an algorithm that "accepts as input at least one indicia of the patient's then current health status." Pet. 41 (citing Ex. 1003, 8:45–51, 9:23–26). Patent Owner argues that Goodman only discloses "accepting biometric information '<u>as input</u>' to an algorithm" and fails to disclose or suggest "a script program that '<u>includes</u>' such information" because in Goodman, "biometric information is provided by the patient when the algorithm is <u>executed</u>" but is not "inserted when the script program is <u>created</u> and prior to execution." Prelim. Resp. 59.

Goodman discloses that a patient's "physiological data obtained from medical devices . . . is collected[,] . . . analyzed and reported to the primary provider" who "reviews such data and then may adjust the patient's treatment regimen" in a "customized patient management program." Ex.

1003, 8:26–31, 34–35. In the customized patient management program, "treatment plan or guidelines" that are "provided by the primary provider" are used to develop "logic sequences or algorithms." *Id*. at 8:37–40. In one example, the algorithm includes a baseline peak flow of 650 corresponding to patient 2a. *Id*. at 9:1–20. In another example, the algorithm includes a baseline peak flow corresponding of 600 to another patient, 2b. *Id*.

In other words, physiological data (or "biometric information") for a patient is collected, then used to adjust a patient's treatment plan by a primary provider. Logic sequences or algorithms (i.e., "script programs") are developed based on the patient's (adjusted) treatment plan, which, in turn, includes the physiological data (i.e., "biometric information") of a specific patient that was previously collected. Based on the current record, we are persuaded that Goodman discloses or suggests a script program that includes health information based on collected biometric information and specific to a person.

Claim 1 recites that at least a portion of the script program is used by the audio processor to communicate with said person. Petitioner argues that Goodman discloses "algorithms programmed into the remote messaging device" and that the "devices are capable of providing audible output." Pet. 43 (citing Ex. 1003, 2:55–61, 5:29–42). Petitioner also argues that Kaufman discloses "a home unit that includes a voice synthesizer to provide audio communications to the user" and "commands [that] are used to convert digital .MSG files into synthesized audio transmissions." Pet. 43 (citing Ex. 1006, Figs. 11A–11E, 6:19–20). Patent Owner argues that Kaufman discloses using "a separate .MSG file" but does not disclose or suggest using "'a portion of the script program' to communicate with the patient." Prelim.

Resp. 60. Patent Owner, however, does not appear to dispute that Kaufman discloses "commands" that are used to convert "MSG files" into verbal prompts, as Petitioner contends, and does not show persuasively a difference between the commands to create verbal prompts and the "script program" as recited in claim 1.

Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have combined the teachings of Goodman with that of any of Wright, Kaufman, or Wahlquist because Goodman and Wright are "directed to completely different applications," "the architectures of Goodman and Kaufman render them incompatible with [one] another," and "Wahlquist is unrelated to and does not further those goals [of Goodman or Kaufman]." Prelim. Resp. 34, 37, 44.

Regarding the combination of Goodman and Kaufman, Dr. Stone testifies that Kaufman discloses "a computer based system for providing at home . . . assistance to a . . . patient" and that the system includes "patient support functions" such as "a voice synthesizer for generating audible messages to the patient, and a speech detection circuit." Ex. 1009 ¶¶ 101–102. Petitioner argues that "Kaufman describes speech recognition and synthesis systems to more easily allow for communication with a patient." Pet. 24. At this stage of the proceeding, we are persuaded that Petitioner has provided sufficient reasoning with rational underpinning to support the conclusion of obviousness. *See, e.g.*, Pet. 24–25, 27–30.

Patent Owner also argues that Goodman discloses a "portable" device and that Kaufman discloses a "system with multiple bulky components" such as "a printer and a video display" and "a stationary housing." Prelim. Resp. 37. Based on this observation, Patent Owner states that one of

ordinary skill in the art "would not have incorporated circuitry of such [large] size [of Kaufman] into the portable message device of Goodman." *Id*. at 38. Hence, Patent Owner argues that one of ordinary skill in the art would not have bodily incorporated the "bulky" system of Kaufman into the "portable" device of Goodman. However, "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." *In re Keller,* 642 F.2d 413, 425 (CCPA 1981). We are not persuaded, therefore, by Patent Owner's argument based on the current record.

With regard to the combination of Goodman and Wright, Dr. Stone testifies that Wright discloses a data merge program (i.e., a "field editor") that "is configured to customize a previous form" that "enables a user to . . . customize fields" in the form via "scripts to collect data from a remote user," and explains that it would have been obvious to one of ordinary skill in the art to have combined Goodman and Wright to include "merging patient data" and "assist[ing] in customized automation of remote monitoring." Ex. 1009 ¶¶ 99–100, 120–121. At this stage of the proceeding, we are persuaded that Petitioner has provided sufficient reasoning with rational underpinning to support the conclusion of obviousness. *See, e.g*., Pet. 27-28.

With regard to the combination of Goodman and Wahlquist, Petitioner argues that "Wahlquist teaches sending customized script programs to run diagnostics on remote devices" and "sending customized script programs to remote computing devices." Pet. 28 (citing Ex. 1007, 2:22–25, 42–43; 10:34–47). Hence, both Wahlquist and Goodman disclose systems in which

data from one location is provided to another (remote) location and the data thus received is processed. Ex. 1003, 4:41–47. At this stage of the proceeding, we are persuaded that Petitioner has provided sufficient reasoning with rational underpinning to support the conclusion of obviousness. *See, e.g.*, Pet. 28–30.

Patent Owner argues that the system of Goodman is "unrelated" to that of Wahlquist but, based on the record, does not explain sufficiently how Goodman's system of receiving data from a remote site and processing the data is "unrelated" to another system (of Wahlquist) that also receives data from a remote site and processes the data. *See* Prelim. Resp. 43–45. We are not persuaded by Patent Owner's arguments.

Patent Owner argues that Wahlquist "is neither from the same field of endeavor nor is it pertinent to the problems addressed by the '249 patent." Prelim. Resp. 38–39. A reference is analogous art to the claimed invention if: (1) the reference is from the same field of endeavor as the claimed invention (even if it addresses a different problem); or (2) the reference is reasonably pertinent to the problem faced by the inventor (even if it is not in the same field of endeavor as the claimed invention). *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). As previously discussed, Wahlquist discloses receiving data from a user (i.e., receiving a call from a computer user) and, responsive to receiving the data, processing the data (e.g., creating a computerized case file). Claim 1, for example, recites a system receiving information from a person at a remote apparatus (i.e., collecting biometric information and sending the information to a server via a network) and processing the data (i.e., generating a customized script program). Hence, both Wahlquist and the '249 patent pertain to sending data pertaining to a

user from a remote device (i.e., user's device) to a server and processing the data received at the server. On this record, Patent Owner does not demonstrate persuasively that the system of Wahlquist and the similar system of the '249 patent are not in the same field of endeavor.

Patent Owner argues that various secondary considerations of non-obviousness demonstrate that the challenged claims would not have been obvious to a person of ordinary skill in the art. Prelim. Resp. 48–51. Patent Owner argues that its "Health Buddy" remote health monitoring system was commercially successful, satisfied a long-felt need in the art, received praise from others, was different from other systems of the time, and was copied by others. *Id*. Patent Owner cites as support the Declaration of Yadin David, Ed.D. (Ex. 2004) submitted in Case IPR2013-00468 involving U.S. Patent No. 7,516,192 B2 ("the '192 patent"). *Id*. (citing Ex. 2004 ¶¶ 79, 81–86, 88–89, 95–96, 98–107, 109). Dr. David's testimony, however, is directed to the challenged claims of the '192 patent. Patent Owner does not explain how Dr. David's testimony regarding different claims is applicable to the claims being challenged in this proceeding. For example, commercial success requires evidence of a nexus, i.e., "proof that the sales [of the allegedly successful product] were a direct result of the unique characteristics of *the claimed invention*." *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996) (emphasis added). The claimed invention in each of the challenged claims is different from that recited in the '192 patent claims. Further, to the extent Patent Owner relies on other materials describing its "Health Buddy" system, Patent Owner has not provided sufficient explanation, at this stage of the proceeding, to counter Petitioner's evidence

of obviousness. *See* Prelim. Resp. 47–51 (citing Exs. 2008–12, 2023, 2024, 2033).

Petitioner has demonstrated, on this record, a reasonable likelihood of prevailing on its assertion that claim 1 is unpatentable over the combination of Goodman, Wright, Kaufman, and Wahlquist. We also are persuaded that there is a reasonable likelihood that Petitioner would prevail on the same asserted ground as to claims 2–10, 12–21, and 23–29.

E. Obviousness over Goodman, Wright, Kaufman, Wahlquist, and Bittorf

Petitioner alleges that claims 11 and 22 are obvious over Goodman, Wright, Kaufman, Wahlquist, and Bittorf. Pet. 9. Claim 11 recites that the server comprises a web server for creation of queries. Petitioner explains that Bittorf discloses "accessing a database using a web browser to create" queries. Pet. 58. Petitioner further argues that "[i]t would have been obvious to combine the known systems of Goodman and Bittorf" and provides, at this stage of the proceeding, sufficient reasoning with a rational underpinning to justify support for the conclusion of obviousness. *Id.* On this record, Petitioner has demonstrated a reasonable likelihood that it would prevail with respect to obviousness of claims 11 and 22 over Goodman, Wright, Kaufman, Wahlquist, and Bittorf.

Patent Owner argues that Bittorf "is not 'analogous art' to the claimed invention of the '249 patent." Prelim. Resp. 46. As previously discussed, a reference is analogous art to the claimed invention if: (1) the reference is from the same field of endeavor as the claimed invention (even if it addresses a different problem); or (2) the reference is reasonably pertinent to

the problem faced by the inventor (even if it is not in the same field of endeavor as the claimed invention). *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Bittorf discloses that "questions have to be entered to the database" and that "[a]nswers are given by selecting a radio button" (i.e., receiving information from a remote user). Ex. 1008, 47–48. Bittorf also discloses that answers "are stored," "evaluated and scored" (i.e., processing the entered data). *Id*. Claim 1, for example, recites a system receiving information from a person at a remote apparatus (i.e., collecting biometric information and sending the information to a server via a network) and processing the data (i.e., generating a customized script program). Hence, both Bittorf and the '249 patent pertain to sending information from a remote device (i.e., user's device) to a server and processing the data received at the server.

F. Other Grounds

Petitioner alleges additional grounds of unpatentability of claims 1, 2, 6–8, 12, and 13 based on the combination of Goodman, Wright, and Kaufman, the combination of Goodman, Wright, Kaufman, and Jeacock, and the combination of Goodman, Wright, Kaufman, Wahlquist, and Jeacock; claim 11 based on the combination of Goodman, Wright, Kaufman, Wahlquist, Jeacock, and Bittorf; claims 3–5, 9, 10, 14–21, and 23–29 based on the combination of Goodman, Kaufman, Wahlquist and one of Lyons or Jeacock; and claim 22 based on the combination of Goodman, Kaufman, Wahlquist, Bittorf, and one of Lyons or Jeacock. The Board's rules for AIA post-grant proceedings, including those pertaining to institution, are

"construed to secure the just, speedy, and inexpensive resolution of every proceeding." 37 C.F.R. § 42.1(b); *see also* 35 U.S.C. §§ 316(b), 326(b) (regulations for AIA post-grant proceedings take into account "the efficient administration of the Office" and "the ability of the Office to timely complete [instituted] proceedings"). In order to secure just, speedy, and inexpensive resolution of the proceeding, we exercise our discretion and do not institute a review based on these additional proposed grounds of unpatentability.

III. CONCLUSION

We institute an *inter partes* review of claims 1–10, 12–21, and 23–29 as unpatentable over Goodman, Wright, Kaufman, and Wahlquist, and claims 11 and 22 as unpatentable over Goodman, Wright, Kaufman, Wahlquist, and Bittorf.

The Board, however, has not made a final determination under 35 U.S.C. § 318(a) with respect to the patentability of the challenged claims.

IV. ORDER

For the reasons given, it is

ORDERED that the Petition is granted as to claims 1–29 of the '249 patent;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the '249 Patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial;

FURTHER ORDERED that the trial is limited to the following grounds: claims 1–10, 12–21, and 23–29 as unpatentable over Goodman, Wright, Kaufman, and Wahlquist, and claims 11 and 22 as unpatentable over Goodman, Wright, Kaufman, Wahlquist, and Bittorf. No other grounds are authorized;

FURTHER ORDERED that all further filings in the consolidated proceedings shall be made in Case IPR2014-00607;

FURTHER ORDERED that the case caption in Case IPR2014-00607 shall be changed to reflect the consolidation in accordance with the attached example;

FURTHER ORDERED that a copy of this Decision be entered into the file of Case IPR2014-00691; and

FURTHER ORDERED that the parties shall within five business days refile those exhibits filed only in Case IPR2014-00691 (and not Case IPR2014-00607) in Case IPR2014-00607, using unique sequential numbers as required by 37 C.F.R. § 42.63(c), and file updated exhibit lists pursuant to 37 C.F.R. § 42.63(e).

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDTRONIC, INC.,
Petitioner,

v.

ROBERT BOSCH HEALTHCARE SYSTEMS, INC.,
Patent Owner.

Cases IPR2014-00607 and IPR2014-00691
Patent 7,870,249 B2
