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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/037,871	09/26/2013	Owen Marshall	NT-00408 US/100.1252US01	9919
135878	7590	10/01/2019	EXAMINER	
Fogg & Powers LLC/Commscope 4600 W 77th St Suite 305 Minneapolis, MN 55435			DELICH, STEPHANIE ZAGARELLA	
			ART UNIT	PAPER NUMBER
			3623	
			NOTIFICATION DATE	DELIVERY MODE
			10/01/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte OWEN MARSHALL, SIMON COLLEY, KEVIN
DAVID TOWNEND, and IAN BUTLER

Appeal 2018-006406
Application 14/037,871
Technology Center 3600

Before JEREMY J. CURCURI, ADAM J. PYONIN, and
DAVID J. CUTITTA II, *Administrative Patent Judges*.

CURCURI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 4–7, 11–14, and 18–21. Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

Claims 4–7, 11–14, and 18–21 are rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Jacobs (US 8,768,738 B2, issued July 1, 2014), Stanescu (US 6,784,802 B1, issued Aug. 31, 2004), and Caveney et al. (US 2010/0120264 A1, published May 13, 2010). Final Act. 8–17.

We affirm.

STATEMENT OF THE CASE

Appellants' invention relates to "a mobile application executing on a smartphone that is used to assist a technician in carrying out electronic work orders." Abstract. Claim 4 is illustrative and reproduced below:

4. A method of performing steps of a work order, the method comprising:
 - generating an electronic work order, the electronic work order comprising a set of steps;
 - communicating the electronic work order to a mobile application executing on a smartphone;
 - receiving a user input, at the mobile application, indicating that an electronic visual indicator associated with at least one step included in the electronic work order should be visually actuated, wherein the electronic visual indicator is located on a device, distinct from the smartphone, having one or more ports to attach cables to the device, wherein the electronic visual indicator is associated with a first port of the one or more ports where a connection is changed as part of the at least one step included in the electronic work order; and
 - in response to the received user input, sending a message from the mobile application executing on the smartphone to an external entity, wherein the external entity visually actuates the electronic visual indicator in response to receiving the message.

PRINCIPLES OF LAW

We review the appealed rejections for error based upon the issues identified by Appellants, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

ANALYSIS

Contentions

The Examiner finds Jacobs, Stanescu, and Caveney teach all limitations of claim 4. Final Act. 9–15.

In particular, the Examiner finds Jacobs and Stanescu, collectively, teach

receiving a user input, at the mobile application, indicating that an electronic visual indicator associated with at least one step included in the electronic work order should be visually actuated, wherein the electronic visual indicator is located on a device, distinct from the smartphone, having one or more ports to attach cables to the device, wherein the electronic visual indicator is associated with a first port of the one or more ports where a connection is changed as part of the at least one step included in the electronic work order

as recited in claim 4. Final Act. 9–13; *see also* Ans. 5–11.

In particular, the Examiner finds Jacobs, Stanescu, and Caveney, collectively, teach “in response to the received user input, sending a message from the mobile application executing on the smartphone to an external entity, wherein the external entity visually actuates the electronic visual indicator in response to receiving the message” as recited in claim 4. Final Act. 10–14; *see also* Ans. 11–13.

Appellants present the following principal arguments:

i.

There is no teaching, or even a suggestion, in the cited portions of Jacobs regarding an indicator **associated with at least one step in the electronic work order** or indicating that such an indicator be actuated. The start or completion signal regarding a sub-order is not **an indicator** that can be **actuated** as those terms are used by one having ordinary skill in the art and in the context of claim 4.

App. Br. 7. “Contrary to language in the claims of the present application, the cited portions of Jacobs relate to a technician sending start and completion status updates to a workforce management system (WMS).”

App. Br. 7–8.

ii. “Nothing in Stanescu teaches, or even suggests, that an indication that an electronic visual indicator should be visually actuated is provided by **user input** or **user input at a mobile application of a smartphone**.” App. Br. 9. “Stanescu teaches a system where the visual indicators are **actuated automatically** upon completion of particular steps of the work order, not based on input from the user into a mobile application as claimed.” App. Br. 9

iii.

[A] combination of a user sending a start or completion message regarding a status of a work order to a WMS, as discussed in Jacobs, and separately providing an indication that an electronic visual indicator should be visually actuated, as discussed in Stanescu, does not teach or suggest “**receiving a user input, at the mobile application, indicating that an electronic visual indicator associated with at least one step included in the electronic work order should be visually actuated**” as recited in claim 4.

App. Br. 9.

iv. Jacobs, Stanescu, and Caveney do not teach “in response to the received user input, sending a message from the mobile application executing on the smartphone to an external entity, wherein the external entity visually actuates the electronic visual indicator in response to receiving the message” as recited in claim 4. *See* App. Br. 11–14. For example, Appellants argue the following: “These buttons [in Caveney] are

on the patch panel, not part of a smartphone or mobile application executing on a smartphone.” App. Br. 14.

v. The combination of references would not have been obvious. *See* App. Br. 14–15. For example, Appellants argue the following: “The system in Jacobs does not provide aid to technician for performing steps of the work order and the start or completion messages are not used for actuating an electronic visual indicator.” App. Br. 14. “[T]he system in Jacobs would no longer be capable of receiving user input to indicate the start, completion, or status of a work order because the user input would instead indicate that an electronic visual indicator should be actuated.” App. Br. 15. “[T]he principle operation of the system in Jacobs would clearly be changed by the proposed modification because the input is used for a completely different purpose than scheduling.” App. Br. 15. “[T]he system in Jacobs already includes providing status information with the start or completion messages without activating an electronic visual indicator. [T]he system in Jacobs does not include an electronic visual indicator that is actuated, so it is not clear what indicator located on an external device would be activated or what purpose this would serve for the system in Jacobs.” App. Br. 15.

Our Review

We have considered all of Appellants’ arguments presented in the Appeal Brief, as well as Appellants’ responses to the Examiner’s Answer presented in the Reply Brief.

We do not see reversible error in the Examiner’s findings. We concur with the Examiner’s conclusion of obviousness.

Appellants and the Examiner do not agree whether certain limitations are to be given patentable weight. As we find the issue is not determinative, we give patentable weight to all limitations in our analysis.

Regarding Appellants' arguments (i)–(iii) and the “receiving a user input” step, we find this limitation is taught by the collective teachings of Jacobs and Stanescu.

For example, Jacobs discloses “[t]his is facilitated by having technicians communicate a start or completion signal to the workforce management system where the start or completion signal indicates the start time or completion time for a predecessor sub-order.” Jacobs col. 4, ll. 30–45.

Thus, Jacobs teaches “receiving a user input, at the mobile application,” as recited in claim 4.

For example, Stanescu discloses

The technician arriving in the telecom closet (TC) to perform the work order will find visual information about the changes he has to make, for example, an LED showing red or blinking. The visual aids can be made to light sequentially, in the same order the MACs have been programmed by the administrator, thus showing what connection to make, break or change. LED indicators will change from red to green upon the completion of the task sequence, then the next MAC will be highlighted.

Stanescu col. 5, ll. 11–19.

Thus, Stanescu teaches “indicating that an electronic visual indicator associated with at least one step included in the electronic work order should be visually actuated” (Stanescu’s visual indicators showing what connection to make, break, or change), “wherein the electronic visual indicator is located on a device, distinct from the smartphone, having one or more ports

to attach cables to the device” (Stanescu’s telecom closet), “wherein the electronic visual indicator is associated with a first port of the one or more ports where a connection is changed as part of the at least one step included in the electronic work order” (Stanescu’s visual indicators showing what connection to make, break, or change).

Thus, the “receiving a user input” step is taught by the collective teachings of Jacobs and Stanescu. The Examiner articulated a reason to combine the teachings of Jacobs and Stanescu that is rational on its face and supported by evidence drawn from the record. *See* Final Act. 12–13 (citing Stanescu col. 2: 15–23) (“enables the remote activation of indicators located on external devices immediately from any location which is more cost effective and provides real time status information to confirm changes while minimizing human error”).

In reaching our conclusion, we emphasize that the references of the combination may be considered in any order. In short, Stanescu teaches the recited electronic visual indicator. Stanescu col. 5, ll. 11–19. However, Stanescu does not specifically teach the recited user input at the mobile application indicating that the indicator should be actuated. However, Jacobs teaches user input related to a work order. Jacobs col. 4, ll. 30–45. An ordinarily skilled artisan would have recognized that Stanescu would be improved by receiving a user input as taught by Jacobs, for the purpose of indicating that the indicator should be actuated. *See* Final Act. 12–13 (citing Stanescu col. 2: 15–23).

Thus, Appellants’ arguments (i)–(iii) are unpersuasive because, for reasons explained above, the combined teachings of the references teach the argued limitation.

Regarding Appellants' argument (iv) and the "in response to the received user input, sending a message" step, we find this limitation is taught by the collective teachings of Jacobs, Stanescu, and Caveney.

For example, Jacobs discloses "[t]his is facilitated by having technicians communicate a start or completion signal to the workforce management system where the start or completion signal indicates the start time or completion time for a predecessor sub-order." Jacobs col. 4, ll. 30–45.

Thus, Jacobs teaches "sending a message from the mobile application executing on the smartphone to an external entity" as recited in claim 4 because Jacobs sends the start or completion signal.

For example, Stanescu discloses

The technician arriving in the telecom closet (TC) to perform the work order will find visual information about the changes he has to make, for example, an LED showing red or blinking. The visual aids can be made to light sequentially, in the same order the MACs have been programmed by the administrator, thus showing what connection to make, break or change. LED indicators will change from red to green upon the completion of the task sequence, then the next MAC will be highlighted.

Stanescu col. 5, ll. 11–19.

Thus, Stanescu teaches "wherein the external entity visually actuates the electronic visual indicator in response to receiving the message" as recited in claim 4 because Stanescu's visual indicators show what connection to make, break, or change.

Thus, Jacobs and Stanescu collectively teach "sending a message from the mobile application executing on the smartphone to an external entity,

wherein the external entity visually actuates the electronic visual indicator in response to receiving the message” as recited in claim 4.

For example, Caveney discloses

[T]he first button 49a may be a “confirmation key” that a technician can press to indicate that a step has been completed. The second button 49b may be a “next key” to indicate that the technician wishes to move on to the next operation or command in certain installation or removal procedures.

Caveney ¶ 39.

Thus, Caveney teaches “in response to the received user input” as recited in claim 4 because Caveney moves through the work process based on user input.

Thus, the “in response to the received user input, sending a message” step is taught by the collective teachings of Jacobs, Stanescu, and Caveney. The Examiner articulated a reason to combine the teachings of Caveney with Jacobs and Stanescu that is rational on its face and supported by evidence drawn from the record. *See* Final Act. 14 (citing Caveney ¶¶ 5–6) (enables a record of any changes or inputs to be made assuring that the routing of patch cords is always known and that future changes are completed correctly. Furthermore, such a record helps avoid human error through improved control and verification of work order execution implemented by network technicians”).

Thus, Appellants’ argument (iv) is unpersuasive because, for reasons explained above, the combined teachings of the references teach the argued limitation.

Regarding Appellants’ argument (v) and obviousness, these arguments are unpersuasive because the Examiner articulated reasons to combine the teachings of Jacobs, Stanescu, and Caveney that are rational

and supported by evidence drawn from the record. *See* Final Act. 12–14 (citing Stanescu col. 2: 15–23, Caveney ¶¶ 5–6). Appellants’ arguments relating to Jacobs alone are unavailing because they do not address the combined teachings of the references. Further, a skilled artisan would have recognized that Stanescu would be improved by receiving a user input as taught by Jacobs, for the purpose of indicating that the indicator should be actuated. Thus, the combination does not render Jacobs unsatisfactory for its intended purpose or change the principle of operation of Jacobs.

We, therefore, sustain the Examiner’s rejection of claim 4.

We also sustain the Examiner’s rejection of claims 5–7, 11–14, and 18–21, which are not separately argued with particularity. *See* App. Br. 16–17.

ORDER

The Examiner’s decision rejecting claims 4–7, 11–14, and 18–21 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED