



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/384,361	12/20/2016	J. Carey Smith	1527-508 Div. II CIP	5690
1009	7590	02/03/2020	EXAMINER	
KING & SCHICKLI, PLLC 800 CORPORATE DRIVE, SUITE 200 LEXINGTON, KY 40503			FREAY, CHARLES GRANT	
			ART UNIT	PAPER NUMBER
			3746	
			NOTIFICATION DATE	DELIVERY MODE
			02/03/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

laura@iplaw1.net
uspto@iplaw1.net

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte J. CAREY SMITH, RICHARD A. OLESON,
RICHARD M. AYNLEY, RICHARD W. FIZER, JOHN B. LANGSTON,
MARK A. TOY, and ELIOS KLEMO

Appeal 2019-002161
Application 15/384,361
Technology Center 3700

Before STEFAN STAICOVICI, JEREMY M. PLENZLER, and
LISA M. GUIJT, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–3 and 5–12. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Delta T, LLC, f/k/a Delta T Corporation. Appeal Br. 2.

CLAIMED SUBJECT MATTER

The claims are directed to a fan system. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A fan system, wherein the fan system comprises:
 - (a) a hub, wherein the hub is configured to rotate;
 - (b) a plurality of fan blades mounted to the hub;
 - (c) a motor, wherein the motor is in communication with the hub, wherein the motor is operable to rotate the hub;
 - (d) a motor controller in communication with the motor, wherein the motor controller is configured to control operation of the motor; and
 - (e) a control panel in communication with the motor controller, wherein the control panel comprises an input port for receiving data relating to operation of the fan system such that the control panel communicates with the motor controller to control the fan based on the data received via the input port.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Mehta	US 5,528,229	June 18, 1996
Richmond	US 2009/0212939 A1	Aug. 27, 2009
Knibbe	US 2010/0214948 A1	Aug. 26, 2010

REJECTIONS

Claims 1–3 and 6–9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mehta and Richmond.

Claims 5 and 10–12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mehta, Richmond, and Knibbe.

OPINION

Mehta and Richmond

Claim 1

The Examiner finds that Mehta teaches the limitations recited in claim 1, but “does not disclose that [its] control panel comprises an input port configured to receive data relating to operation of the fan system or that the data is received from an external electronic device in the form of an external controller or an HVAC centralized controller.” Final Act. 6–7. The Examiner finds that “Richmond discloses a control panel (Figs. 1 and 2) in the form of a remote controller which has an input port (205) for receiving data relating to operation of the controlled device (such as a ceiling fan or an HVAC unit, [0003]) and a display 106.” *Id.* at 7. The Examiner reasons that

it would have been obvious . . . to modify the control panel of Mehta to include a control panel/ port remote control and centralized or external control system as taught by Richmond in order to allow for the simple portable control of a remote device, such as a ceiling fan, while also allowing for the expanded advanced control of any connected devices by an external controller (see abstract of Richmond).

Id. The Examiner considers the remote controls in both Mehta and Richmond to correspond to a “control panel” as recited in claim 1. *See* Ans. 9–10.

The Examiner explains that “the whole disclosure and purpose of the Richmond reference is to provide and allow for the more advanced control of a controlled system (such as a ceiling fan or HVAC system) beyond the limited capabilities of prior art standalone remote controls, i.e. control panels.” Ans. 9–10. The Examiner finds that “Richmond teaches that an external electronic device/control system can be connected, by a port, to a

control panel which is in communication with and controlling an associated controlled device, such as a fan or HVAC.” *Id.* at 11 (citing Richmond ¶ 29). The Examiner additionally cites paragraphs 20, 31, 32, 34, 46, and 53 of Richmond as supporting this finding. *Id.* at 11–13.

Appellant does not dispute the Examiner’s findings related to Mehta. Appellant contends that “Mehta already includes a ‘remote control and centralized (?) or external control system,’ so this cannot be a reason for combining the reference teachings.” Appeal Br. 4. In its Reply Brief, Appellant contends that the Examiner’s rationale changed in the Answer. *See* Reply Br. 1 (referring to “[t]he Examiner’s undesignated new grounds of rejection”), 2 (addressing the “more advanced control” provided by Richmond). Appellant contends that “‘allowing for the expanded advanced control of the fan or HVAC system by an external electronic device/control system’ is not a ‘reason why’ a skilled artisan would combine the features, but rather simply a statement of what happens if A+B are combined.” *Id.* at 2.

As for Richmond’s teachings, Appellant contends that

[w]hile receiving and storing data from the controlled device is described, nowhere is there any mention whatsoever in Richmond of an input port for “receiving data relating to operation of the fan system such that the control panel communicates with the motor controller to control the fan based on the data received via the input port.”

Final Act. 4 (emphasis omitted); *see also* Reply Br. 3 (repeating same).

We agree with the Examiner that Richmond’s dockable remote control with “USB interface 205” teaches a “control panel compris[ing] an input port for receiving data relating to operation of the fan system such that the control panel communicates with the motor controller to control the fan

based on the data received via the input port,” as required by claim 1. Richmond explains that its remote control “a USB interface 205 allows the computer to communicate with microprocessor 204, and read and write the flash memory contained within microprocessor 204.” *Id.* ¶ 39. “This internal flash memory contains the executable program, configuration settings, and data to or from the controlled system,” and “[w]hen the unit is docked to a computer, USB interface 205 allows the computer software to utilize radio 202 to perform advanced capabilities and control functions with the controlled system.” *Id.*

As for the rationale for the proposed combination, we agree that Richmond, itself, provides motivation. As noted above, Appellant acknowledges that Mehta teaches a remote control for its system. Richmond is directed to “[i]mprovements in a portable hand-held radio frequency wireless remote control,” including “software control of remote devices when connected (docked) to a computer by way of a direct electrical I/O connection . . . to expand the capabilities of portable compact radio frequency wireless remote controls . . . for advanced control functions without significantly compromising their small size or low cost.” Richmond, Abstract. Richmond specifically references its applicability to “HVAC control.” *Id.* ¶ 3. That is, Richmond expressly explains that it is desirable to improve existing remote controls, such as Mehta’s remote control, in the manner described in Richmond because those improvements enhance control functionality.

For at least these reasons, we are not apprised of error in the rejection of claim 1.²

Claim 3

Claim 3 depends from claim 1, and further recites that “the input port is configured to receive data from the motor controller.” The Examiner finds that Richmond’s “remote control has a radio 202 allowing for two-way communication (claim 3) and a microprocessor 204 and memory 211 which, as detailed in [0029], can receive both software and data used to control the fan or other remotely controlled device.” Final Act. 7. Appellant responds that “[n]owhere does this account for the requirement that the input port receives and provides data (via control panel) to a motor controller of a fan.” Appeal Br. 5. We agree with Appellant.

Without further explanation, the Examiner has failed to establish sufficiently that Richmond teaches USB interface 205, which the Examiner finds corresponds to the recited input port, “is configured to receive data from the motor controller.” The Examiner does not cure this deficiency in the Answer. Rather, the Examiner simply states that “[t]he Mehta base reference already teaches the ceiling fan having a motor controller communicating with a control panel.” Ans. 14. The Examiner does not propose modifying Mehta in any manner where the input port (USB interface 205 from Richmond) is used to communicate with the motor

² The Examiner determines that although the “‘motor controller . . . configured to control operation of the motor’ in claims 1 and 10” “do[es] not use the word ‘means,’” it is “nonetheless being interpreted under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph.” Final Act. 4. Appellant does not dispute that construction.

controller in Mehta. Nor does the Examiner address the deficiency identified by Appellant relative to the findings made in the Final Action regarding Richmond teaching the features of claim 3. “[A] radio 202 allowing for two-way communication” in Richmond is not an “input port . . . configured to receive data from the motor controller,” particularly where the Examiner already made a finding that Richmond’s USB interface 205 corresponds to the recited input port.

For at least these reasons, we do not sustain the Examiner’s decision to reject claim 3.

Claim 6

Claim 6 is similar to claim 1, but recites “means for receiving data relating to operation of the fan system from a remote source and transmitting the data to the motor controller,” rather than a “control panel.” Appellant contends that “the ‘means plus function’ limitation and functional requirements are not discussed on pages 6–7 of the final Office Action.” Appeal Br. 6; *see also* Reply Br. 4 (repeating similar contentions). In the Answer, the Examiner explains that “the ‘means for receiving . . . and transmitting . . .’ of claim 6 . . . will be referred to as control panel.” Ans. 3–4. That is, the Examiner treats the limitation like the control panel recited in claim 1.

We agree that 35 U.S.C. § 112 ¶ 6 applies to the “means for receiving data . . . and transmitting the data” recited in claim 6. When 35 U.S.C. § 112 ¶ 6 applies, “the ‘broadest reasonable interpretation’ that an examiner may give means-plus-function language is that statutorily mandated in paragraph six.” *In re Donaldson*, 16 F.3d 1189, 1194–95 (Fed. Cir. 1994) (en banc). A means-plus-function limitation “shall be construed to cover the

corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, sixth paragraph. “[T]he PTO [i]s required by statute to look to [the] specification and construe the “means” language recited in the . . . claim . . . as limited to the corresponding structure disclosed in the specification and equivalents thereof.” *In re Donaldson*, 16 F.3d at 1195.

Although the Examiner did not set forth a rigid analysis of the “means-plus-function” language in the claim, we are not apprised of reversible error because, as noted above, the Examiner explains that the “means for receiving data . . . and transmitting the data” is a control panel like that recited in claim 1. The structure described in the Specification that corresponds to the means-plus-function limitation is that from claim 1. *See, e.g.*, Spec. ¶ 125 (describing remote control 500, with the remote control functionality corresponding to the “means for transmitting, and port 501, generally, and without detail, which corresponds to the “means for receiving”). Appellant does not dispute the Examiner’s findings regarding these particular elements or the rationale provided for the proposed modifications.

For at least these reasons, we are not apprised of error in the rejection of claim 6.

Mehta, Richmond, and Knibbe

Claim 5

Claim 5 depends from claim 1 and further recites that “the input port couples the fan with a centralized HVAC control system.” In the rejection of claim 5, the Examiner relies on the finding from the rejection of claim 1 regarding Richmond’s USB interface 205 corresponding to the recited input

port. *See* Final Act. 8 (“As set forth above Mehta in view of Richmond disclose the invention substantially as claimed” including “a control panel and an external controller [which] can control a fan, such as a ceiling fan, or an HVAC system.”). The Examiner acknowledges that “Mehta in view of Richmond do not specifically discuss controlling both a fan and an HVAC system with an external controller/HVAC controller.” *Id.* (emphasis omitted).

The Examiner finds that “Knibbe et al disclose an expanded environmental control system including a number of controlled elements including both a fan 5 and HVAC system (see [0025]) that are controlled by a control panel 7, 9 that is also communicating with a central/HVAC control system 10.” *Id.* The Examiner reasons that

it would have been obvious . . . to utilize the control panel and the external electronic controller of Mehta in view of Richmond to control multiple devices, such as a fan and an HVAC system, in order to have greater control over an environment by controlling additional multiple devices which effect the environment.

Id. Appellant does not dispute the Examiner’s rationale for the rejection of claim 5. Rather, Appellant contends that “the inclusion of the Knibbe reference fails to offer any additional teachings related to the use of the input port as described in the claim.” Appeal Br. 6.

In the Answer, the Examiner clarifies that Knibbe teaches the recited input port connection required by claim 5. *See* Ans. 16 (referencing the direct connection discussed in paragraph 25 of Knibbe). The Examiner explains that Knibbe “makes clear that the control panel 7, 9 communicates with an external electronic device/control system 10 to control and variety of devices or nodes which include ceiling fans and HVAC systems at the same

time.” *Id.* at 15 (citing Knibbe ¶ 25). Appellant responds that “[t]he Examiner’s position regarding claim 5 still fails to account for the express requirement that the input port couples the fan with a centralized HVAC control system, which may then be used to control the fan” and “overlooks the point that none of the cited references disclose, teach, or suggest an input port that couples a fan with a centralized HVAC control system.” Reply Br. 4.

Appellant’s contentions are not persuasive of Examiner error. Knibbe discusses “a central controller 10.” Knibbe ¶ 25. The Examiner finds that “the skill level of one of ordinary skill in the art is high and this person would recognize the central controller 10 which controls the HVAC system to be a centralized HVAC control since it performs this function.” Ans. 15. Appellant acknowledges this finding, and responds that the Examiner has failed to provide evidence supporting the finding. Reply Br. 4. Appellant however, does not offer any explanation as to why one skilled in the art would not consider Knibbe’s central controller 10 to be a centralized HVAC control. The Examiner’s evidence is paragraph 25 of Knibbe, which expressly describes controller 10 as a *central* controller for “any type of luminaire, sensor, switch, HVAC (heating, ventilation and air-conditioning) device or window blind [that] may be included in the network.” Appellant’s general allegations do not identify error in the Examiner’s findings.

For at least these reasons, we are not apprised of error in the Examiner’s rejection of claim 5.

Claims 10–12

Independent claim 10 and is similar to claim 1, with the “control panel” recited being broader in scope than that recited in claim 1.

Specifically, claim 10 recites that the “control panel [is] in communication with the motor controller and the HVAC control system” and “includ[es] an input port,” without any further limitation regarding the “input port.” The Examiner finds that “in Knibbe the control panel is represented by control module 9 and the external electronic device/centralized HVAC controller is represented by the central controller 10.” Ans. 16. The Examiner again cites paragraph 25 of Knibbe as supporting this finding. *See, e.g., id.*

Appellant contends that “Knibbe . . . at best describes a control for a fan and an HVAC unit, not one for communicating with both a fan and an HVAC control system.” Appeal Br. 7. Appellant does not dispute the Examiner’s finding that Knibbe’s control module 9 is a “control panel” or that Knibbe’s central controller 10 is a “HVAC controller.” Knibbe explains that “local control module 9 stores control data and instructions for controlling the nodes of the network” and that local control module 9 and central controller 10 communicate with one another. Knibbe ¶ 25. Without further explanation from Appellant, we are not apprised of error in the Examiner’s findings.

For at least these reasons, we are not apprised of error in the Examiner’s rejection of claim 10.

Claims 11 and 12 depend from claim 10. Appellant’s sole contention regarding those claims is that the Examiner “does not identify these features in any of the cited references.” Reply Br. 5; *see also* Appeal Br. 7. This is not persuasive of error because these features are accounted for in the Examiner’s rejection. *See, e.g.,* Final Act. 8 (“Knibbe . . . disclose[s] an expanded environmental control system including a number of controlled elements including both a fan 5 and HVAC system (see [0025]) that are

controlled by a control panel 7, 9 that is also communicating with a central/HVAC control system 10.”).

CONCLUSION

The Examiner’s decision to reject claims 1, 2, and 5–12 are affirmed.
The Examiner’s decision to reject claim 3 is reversed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–3, 6–9	103(a)	Mehta, Richmond	1, 2, 6–9	3
5, 10–12	103(a)	Mehta, Richmond, Knibbe	5, 10–12	
Overall Outcome			1, 2, 5–12	3

TIME PERIOD FOR RESPONSE

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

AFFIRMED-IN-PART