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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* WAYNE R. DAVIS

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Appeal 2019-003394  
Application 14/937,479  
Technology Center 2400

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Before JEAN R. HOMERE, ADAM J. PYONIN, and NABEEL U. KHAN,  
*Administrative Patent Judges.*

PYONIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's rejection of claims 1–35, which constitute all of the claims pending in this appeal. Appeal Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> Herein, “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Rockwell Automation Technologies, Inc. Appeal Br. 2.

## STATEMENT OF THE CASE

### *Introduction*

The claimed subject matter is directed to a motor “drive system that includes a server (and appropriate software).” Spec. ¶ 15. Claims 1, 23, and 31 are independent. Appeal Br. 21–25. Claim 1 is reproduced below for reference:

1. A motor system, comprising:
  - a housing;
  - a motor drive disposed within the housing;
  - a drive module integrated in the motor drive within the housing and comprising a plurality of power electronic switches that are switched in operation in response to control signals to control application of power to an electric motor;
  - drive control circuitry in the housing that generates the control signals in operation; and
  - an add-on adapter disposed in the housing and communicatively coupled to the drive control circuitry, the adapter comprising a network server configured to communicate data for a web page relating to operation of the electric motor and to interact with the drive control circuitry to control the electric motor based upon user interaction with the web page.

### *References and Rejections*

The Examiner relies on the following prior art:

<b>Name</b>	<b>Reference</b>	<b>Date</b>
Navab	US 2002/0069013 A1	June 6, 2002
Batke	US 2002/0156837 A1	Oct. 24, 2002
Papadopoulos	US 6,587,884 B1	July 1, 2003
Birzer	US 6,757,568 B2	June 29, 2004
Ware	US 2004/0236443 A1	Nov. 25, 2004
PowerFlex Communications, <i>EtherNet/IP Adapter, 22-COMM-E FRN 1.xxx, User Manual by Rockwell Automation</i> , January 2004 (“PowerFlex”)		

Claims 1–6, 8–13, 16 and 19–35 are rejected under U.S.C. § 103(a) as being unpatentable over PowerFlex, Batke and Birzer. Final Act. 11.

Claim 7 is rejected under pre–AIA 35 U.S.C. § 103(a) as being unpatentable over PowerFlex, Batke, Birzer, and Papadopoulos. Final Act. 18.

Claims 14, 15, and 18 are rejected under pre–AIA 35 U.S.C. § 103(a) as being unpatentable over PowerFlex, Batke, Birzer, and Ware. Final Act. 19.

Claim 17 is rejected under pre–AIA 35 U.S.C. § 103(a) as being unpatentable over PowerFlex, Batke, Birzer, and Navab. Final Act. 20.

#### ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments. Arguments Appellant could have made but chose not to make are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). We disagree with Appellant that the Examiner erred and adopt as our own the findings and reasons set forth by the Examiner, to the extent consistent with our analysis below. We add the following primarily for emphasis.

#### *Control an Electric Motor*

Appellant argues the Examiner’s rejection of claim 1 is in error because the “combined references do not teach or suggest operating power electronic switches to control an electric motor” as claimed. Appeal Br. 7 (emphasis omitted). Appellant contends that “PowerFlex only discusses *viewing the operation of a motor*, Batke merely teaches controlling control device without specifying that the control device includes drive control

circuitry that controls the operation of power electronic switches, and Birzer merely discusses retrieving documentation from an integrated controller.”  
*Id.* at 8.

Appellant separately attacks Batke and Birzer for limitations that the Examiner does not rely on them for. *Compare* Appeal Br. 9 (“Batke does not teach interacting with drive control circuitry, but rather, *with control devices*, such as programmable logic controllers (PLCs).”) and Appeal Br. 13 (“Birzer cannot obviate control of a motor drive.”) *with* Final Act. 11 (“PowerFlex disclosed a motor drive system”), Ans. 5–6 (“The difference between PowerFlex and the claimed invention is the function of the web server in the adapter,” and relying on “Batke in view of Birzer” for these remaining limitations.). Appellant’s arguments against Batke and Birzer individually do not show the Examiner’s reliance on PowerFlex is in error.

We are not persuaded the Examiner errs in finding “PowerFlex clearly disclosed motor drives such as PowerFlex 40,” which teaches “operating power electronic switches to control an electric motor” in response to control signals generated by drive control circuitry, as claimed. Ans. 7. First, PowerFlex teaches “each of the PowerFlex drive and OSI devices is a motor drive,” and we agree with the examiner that “the function of a motor drive is to control the motor.” Ans. 6; PowerFlex page G-2 (“motor drive such as a PowerFlex 4-Class drive.”); PowerFlex 3-11 (“If the adapter is transmitting control I/O to the drive.”); *cf.* Spec. ¶ 5 (“Drives can be used to control motors . . . Exemplary medium voltage AC drives include, for example, the Allen-Bradley PowerFlex 7000 family of drives manufactured by Rockwell Automation, Inc. of Milwaukee, Wis., the beneficial assignee of the present

application.”).<sup>2</sup> Second, the Examiner further finds—and Appellant does not challenge—that operating power electronic switches to control an electric motor is inherent in the drive of PowerFlex. *See* Ans. 6 (“one of ordinary skill in the art would recognize that ‘electronic switches’ (electronic components or devices that can switch an electrical circuit) must be included in a drive module to be able to control an electric motor.”); *see also* Reply Br. 2. Appellant does not show the Examiner’s findings are in error.

We agree with the Examiner that PowerFlex teaches or suggests operating switches to control<sup>3</sup> a motor, as claimed. *See* Final Act. 11. Therefore, we are not persuaded the Examiner errs in finding PowerFlex teaches or suggest the recited “‘plurality of power electronic switches that are switched in operation in response to control signals to control application of power to an electric motor; drive control circuitry in the housing that generates the control signals in operation’ . . . as part as part of the function and component of a motor drive for controlling electric motor.” Ans. 17, 18. Accordingly, we are not persuaded the Examiner’s rejection is in error.

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<sup>2</sup> Separately, we note PowerFlex further describes motor control. *See, e.g.*, PowerFlex page 7-6 (“This example program enables you to: . . . Control the drives using various Logic Command bits (Stop, Start, etc.) and Reference.”); page G-6 (“The Logic Command is used to control the PowerFlex drive (e.g., start, stop, direction).”).

<sup>3</sup> Appellant contends the claims require “directly power[ing] the power electronic switches” and controlling the motor drive “without the use of intermediary controllers.” Appeal Br. 13, 15. Although not relied on for our decision herein, we note that such narrow construction would require reading disclosed embodiments out of the claims. *See, e.g.* Spec. ¶¶ 58, 62, 63, and 64.

*Server to Operate Drive Control Circuitry Via a Web Page*

Appellant argues “one of ordinary skill in the art would not find it obvious to combine the teachings of PowerFlex, Batke, and Birzer to use a server to operate drive control circuitry via a web page” as required by claim 1. Appeal Br. 16. Appellant contends “neither Batke nor Birzer teaches sending control signals via a web page to control power electronic switches, such as the power electronic switches of PowerFlex,” and “generally suggesting using a web access method and system to enable interaction between users and control devices does not obviate the specific manner to control drive control circuitry of an electric motor.” Reply Br. 2, 5; *see also* Appeal Br. 9–11, 15, 16.

Appellant does not persuade us the Examiner errs in finding the limitations of claim 1 to be obvious in view of the combined teachings of the references. That is, Appellant argues the references only disclose a “general suggestion” whereas the claim recites a “specific manner,” but Appellant does not persuade us of any *recited* specificity that is lacking in the references. *See* Reply Br. 3, 4. Rather, we agree with the Examiner that one of ordinary skill would find the recitations of claim 1 to be obvious in view of the combined teachings of PowerFlex, Birzer, and Batke. *See* Advisory Act. 2.

As discussed above, PowerFlex teaches a motor control drive including circuitry that generates control signals in operation and controls an electric motor (*see* Ans. 12); PowerFlex further teaches an add-on adapter disposed in the housing and communicatively coupled to the drive control circuitry, the adapter comprising a network server configured to communicate data for a web page. *See* PowerFlex Fig. 2.3; page 3–10, page

9–1 (“instructions on how to monitor the adapter and connected PowerFlex drive using the adapter’s web interface”); Final Act. 11. Birzer, as cited by the Examiner, teaches an integrated controller having web server functionality and a drive that controls an electric motor. *See* Birzer Figs. 14 (depicting a control program for the integrated controller), 15; 7:56–65; claim 7; Advisory Act. 2. Batke, as cited by the Examiner, teaches a control device having a server to communicate web pages and to interact with drive circuitry to control an industrial operation. *See* Batke ¶ 14 (“[T]he present invention relates to an industrial control system for controlling an industrial process. The industrial control system includes a plurality of control devices each of which contributes to the controlling of the controlled process. Each control device includes a respective web server program.”); Advisory Act. 2. Appellant does not present evidence or sufficient technical reasoning to persuade us the Examiner’s reliance on PowerFlex, Bizer, and Batke for these teachings is in error.

Nor does Appellant challenge the Examiner’s obviousness rationale. *See* Reply Br. 2–6. We find the Examiner’s analysis to be reasonable. *See* Ans. 16; Final Act. 12. Accordingly, Appellant does not show the Examiner errs in finding one of ordinary skill would find the limitations of claim 1 to be obvious in view of the combining teachings of PowerFlex, Bizer, and Batke. *See* 37 C.F.R. § 41.37(c)(1)(iv) (“arguments or authorities not included in the appeal brief will be refused consideration by the Board for purposes of the present appeal”); *cf. In re Baxter Travenol Labs.*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for [patentable] distinctions over the prior art.”). Rather, we agree with the Examiner that



one of ordinary skill would modify PowerFlex's motor drive add-on adapter with Batke's teachings of web based remote controlling of industrial processes and Birzer's web server and motor control, in order to control PowerFlex's motor in the manner claimed. *See* Ans. 16, 17. Accordingly, we find the limitations of claim 1 are obvious in view of the combined teachings of the cited references.

We sustain the Examiner's obviousness rejection of independent claim 1. Appellant does not present additional substantive arguments with respect the remaining claims. *See* Appeal Br. 17–20. Thus, we sustain the Examiner's rejection of these claims for the reasons discussed above.

#### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–6, 8–13, 16, 19–35	103(a)	PowerFlex, Batke, Birzer	1–6, 8–13, 16, 19–35	
7	103(a)	PowerFlex, Batke, Birzer, Papadopoulos	7	
14, 15, 18	103(a)	PowerFlex, Batke, Birzer, Ware	14, 15, 18	
17	103(a)	PowerFlex, Batke, Birzer, Navab	17	
<b>Overall Outcome</b>			1–35	

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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