



# 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.
13/716,470	12/17/2012	Pankaj V. Kalore	2008P10185US02	2438
28524	7590	03/20/2020	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 3501 Quadrangle Blvd Ste 230 Orlando, FL 32817			SHAIKH, MERAJ A	
			ART UNIT	PAPER NUMBER
			3763	
			NOTIFICATION DATE	DELIVERY MODE
			03/20/2020	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):

ipdadmin.us@siemens.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* PANKAJ V. KALORE

---

Appeal 2018-003207  
Application 13/716,470  
Technology Center 3700

---

Before MICHAEL L. HOELTER, JAMES P. CALVE, and  
SUSAN L. C. MITCHELL, *Administrative Patent Judges*.

HOELTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1–21. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as “Siemens Industry, Inc.” Appeal Br. 3.

### CLAIMED SUBJECT MATTER

The disclosed subject matter “relates to actuators, and more specifically, actuators for use in building control systems.” Spec. 1.<sup>2</sup> Apparatus claims 1 and 9, and method claim 14, are independent. Claim 1 is illustrative of the claims on appeal and is reproduced below.

1. An actuator comprising:
  - a) at least one drive arrangement configured to generate output mechanical power from input electrical power;
  - b) a communication line port configured to connect to a single external communication line and to obtain electrical power from the communication line; and
  - c) a processing device configured by programming instructions to obtain a first information from the single external communication line via the communication line port, and adjust an operation of the at least one drive arrangement based on the first information and based upon information identifying electrical power available for use as input electrical power from at least the single external communication line.

### EVIDENCE

Name	Reference	Date
Park et al. (“Park”)	US 2002/0159400 A1	Oct. 31, 2002
Mullin	US 2007/0152613 A1	July 5, 2007
Finkam et al. (“Finkam”)	US 2007/0205297 A1	Sept. 6, 2007
Beisheim et al. (“Beisheim”)	US 2007/0209653 A1	Sept. 13, 2007
Caliendo et al. (“Caliendo”)	US 2008/0051024 A1	Feb. 28, 2008
Coulter et al. (“Coulter”)	EP 0 695 918 A1	Feb. 7, 1996

---

<sup>2</sup> Appellant’s Specification lacks both paragraph and line numbering. We thus reference Appellant’s Specification via page number only.

## REJECTIONS

Claims 1–4, 6–11, and 13 rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over Coulter, Park, and Beisheim.

Claim 5 is rejected under 35 U.S.C. § 103(a) as unpatentable over Coulter, Park, Beisheim, and Caliendo.

Claim 12 is rejected under 35 U.S.C. § 103(a) as unpatentable over Coulter, Park, Beisheim, and Mullin.

Claims 14–16, 18, 20, and 21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Coulter, Park, Finkam, and Beisheim.

Claims 17 and 19 are rejected under 35 U.S.C. § 103(a) as unpatentable over Coulter, Park, Finkam, Beisheim, and Caliendo.

## ANALYSIS

*The rejection of claims 1–4, 6–11, and 13  
as unpatentable over Coulter, Park, and Beisheim*

Appellant argues claims 1–4, 6–11, and 13 (i.e., all the claims) together. *See* Appeal Br. 7–10. We select claim 1 for review, with the remaining claims (i.e., claims 2–4, 6–11, and 13) standing or falling with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner primarily relies on Coulter for disclosing the limitations of claim 1, but acknowledges that Coulter “does not explicitly teach” that “first information is obtained from the communication line” and that “the communication line port [is also] configured to obtain electrical power from the single external communication line.” Final Act. 3. The Examiner relies on Park for disclosing a “single external communication line (Ethernet cable 30 used to transmit data signals and reference voltages, paragraph 4).” Final Act. 3; *see also* Ans. 4. The Examiner further relies on

Beisheim for disclosing receipt of the recited first information. *See* Final Act. 3. The Examiner also provides reasons for combining each of Park and Beisheim with Coulter. *See* Final Act. 3–4.

Appellant disagrees with the Examiner’s assessment of these references and reproduces, in its entirety, Paragraph 4 of Park, which was relied upon by the Examiner, stating “nothing in the cited portions of *Park*, namely paragraph 4 . . . , discloses information and electrical power obtained from a single external line . . . .” *See* Appeal Br. 8–9, Final Act. 3. We likewise replicate the entirety of Paragraph 4 of Park below.

[0004] The typical Ethernet system comprises at least one LAN card **10** embodied in, e.g., a personal computer (PC), and a switching hub **20**, which are connected to each other through an unshielded twisted pair (UTP) cable **30** consisting of 4 or 8 signal lines. For instance, among the 8 signal lines, the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 6<sup>th</sup> signal lines are used as output lines TX+ and TX- and input lines RX+ and RX-, respectively, to transmit or receive Ethernet data and the remaining 4 signal lines are used as reference voltage levels of the input and output lines.

Appellant’s Specification also describes use of a similar Ethernet cable to that described by Park above when describing its “communication line.” Spec. 7 (“The communication line 326 may suitably be an Ethernet cable” and that “[a] common Ethernet cable configuration includes eight conductors” of which four are used for communication and four are used to carry power); *see also id.* at 6 (“communication line 20 may suitably be any of IP/Ethernet/RS-485/RS-222/RS-232/Optic Fiber/Power Line”); *see also* Ans. 4 (where the Examiner addresses these passages in Appellant’s Specification).

Further, Appellant’s claim 1 is silent regarding the magnitude of the power to be received via this communication line. Instead, claim 1 simply

recites a port configured “to obtain electrical power from the communication line” and also a processing device “identifying electrical power available for use as input electrical power” from this communication line. This silence regarding the magnitude of power to be transmitted via this communication line is consistent with Appellant’s Specification which states, “the instantaneous power received from the communication line 20 may be typically insufficient to power the actuator 26.” Spec. 6. Thus, Appellant’s Specification contemplates a communication line whose instantaneous power is less than that required “to power the actuator 26.” Spec. 6. Indeed, Appellant’s Specification describes the use of an energy management unit 28 to accumulate energy from the communication line 20 in energy storage devices to provide power to actuator 26 on a periodic basis to supplement the power in communication line 20. Spec. 6. These features are not recited in claim 1, however. Paragraph 4 of Park (like claim 1) is also silent as to the magnitude of power provided through this line, only discussing “reference voltage levels” (along with data) being conveyed through Park’s communication line 30.

Upon replicating Paragraph 4 of Park above, Appellant emphasizes that the claimed communication port [is] configured to obtain first information and electrical power from a single external communication line.” Appeal Br. 9; *see also id.* at 10. Appellant does not explain how Park’s similar, and single, Ethernet cable 30 is unable to accomplish this task as discussed above with respect to Paragraph 4 of Park. *See* Ans. 4–5.

Appellant further contends, “[n]owhere the word ‘power’ is utilized in the disclosure of Park.” Reply Br. 2. This distinction is not persuasive since Park discusses the transmission of a “voltage” (Park ¶ 4), and Appellant

does not elaborate as to how such a discussion would fail to at least suggest to one skilled in the art the transmission of some degree of electrical power as well, particularly in view of the understanding in the art that a common Ethernet cable configuration (like Park's) includes four conductors used for communication and four conductors used to carry power. *See Spec. 7.*

Appellant also contends that Park's Ethernet cable, being an unshielded twisted pair (UTP) cable, "is not the type of cable[] the artisan would use to pass electric power along with data on an Ethernet implementation." Reply Br. 2. This argument by Appellant is not persuasive because claim 1 merely refers to a "communication line" (and not any particular type thereof). As such, Appellant fails to be persuasive that Park's Ethernet cable is not a "communication line" consistent with how this term is employed in Appellant's Specification. *See Spec. 6, 7.*

Appellant further argues that "*Coulter* clearly fails to disclose the claimed communication line port." Appeal Br. 9. This is because if *Coulter* fails to disclose the recited single communication line (i.e., "information and electrical power"), "**then it goes to reason that *Coulter* cannot disclose**" the recited port as well. Appeal Br. 9. Here, Appellant is focusing on *Coulter* alone, and is not also taking into account the Examiner's reliance on the teachings of Park (and *Beisheim* as needed) for such disclosure. *See Final Act. 3.* Thus, Appellant is not persuasive of Examiner error by arguing the art individually. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Appellant also contends, "nothing in *Beisheim* cures the deficiencies of *Coulter* and *Park*, as *Beisheim* also fails to disclose the claimed communication line port, single external communication line, and

processing device.” Appeal Br. 10. However, as noted above, Beisheim was not specifically relied upon for such teachings, but instead for the receipt of the recited first information. *See* Final Act. 3. Consequently, we are not persuaded the Examiner erred by the stated reliance on the combined teachings of Coulter and Park (and Beisheim). *See* Final Act. 2–3.

Accordingly, and based on the record presented, we are not persuaded of Examiner error. We sustain the Examiner’s rejection of claims 1–4, 6–11, and 13 as unpatentable over Coulter, Park, and Beisheim.

*The remaining rejections of claims 5, 12, and 14–21*

As noted above, in rejecting claims 5, 12, and 14–21, the Examiner relied on the teachings of Coulter, Park, and Beisheim in combination with the teachings of Caliendo (claim 5), Mullin (claim 12), Finkam (claims 14–16, 18, 20, 21), and Finkam and Caliendo (claims 17, 19). In each instance, Appellant contends that the additionally cited reference “fails to overcome the deficiencies of *Coulter* in view of *Park* and *Beisheim*” (or language to that effect). Appeal Br. 10–12. Appellant’s contentions are not persuasive of Examiner error. We sustain the Examiner’s rejections of claims 5, 12, and 14–21.

CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–4, 6–11, 13	103(a)	Coulter, Park, Beisheim	1–4, 6–11, 13	
5	103(a)	Coulter, Park, Beisheim, Caliendo	5	

Appeal 2018-003207  
Application 13/716,470

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
12	103(a)	Coulter, Park, Beisheim, Mullin	12	
14–16, 18, 20, 21	103(a)	Coulter, Park, Finkam, Beisheim	14–16, 18, 20, 21	
17, 19	103(a)	Coulter, Park, Finkam, Beisheim, Caliendo	17, 19	
<b>Overall Outcome</b>			1–21	

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

AFFIRMED