US009410552B2

(12) **United States Patent**
Pierson

(10) **Patent No.: US 9,410,552 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **CURRENT SWITCH WITH AUTOMATIC CALIBRATION**

(75) Inventor: **David Pierson**, Portland, OR (US)

(73) Assignee: **Veris Industries, LLC**, Tualatin, OR (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 418 days.

(21) Appl. No.: **13/562,847**

(22) Filed: **Jul. 31, 2012**

(65) **Prior Publication Data**

US 2013/0088213 A1 Apr. 11, 2013

Related U.S. Application Data

(60) Provisional application No. 61/543,626, filed on Oct. 5, 2011.

(51) **Int. Cl.**

G01R 11/32	(2006.01)
F04D 27/00	(2006.01)
H02M 1/00	(2006.01)
F04D 25/08	(2006.01)
H02P 27/04	(2016.01)
H02P 29/02	(2016.01)
G01R 1/00	(2006.01)
G01N 1/00	(2006.01)

(52) **U.S. Cl.**

CPC ***F04D 27/001*** (2013.01); ***F04D 25/08*** (2013.01); ***H02M 1/00*** (2013.01); ***H02P 27/047*** (2013.01); ***H02P 29/027*** (2013.01); *G01N 1/00* (2013.01); *G01R 1/00* (2013.01)

(58) **Field of Classification Search**

CPC H02M 1/00; G01R 1/00; G01N 1/00; G01N 2201/00; G01Q 10/00; H02J 1/00; H02P 1/00; H02P 2101/00; G06F 1/00; G06F 2101/00

USPC 324/74, 76.19, 76.22, 76.41, 76.69, 324/674, 681, 707

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,100,171	A	6/1914	Brown
1,455,263	A	5/1923	Oberfeil
1,569,723	A	1/1926	Dickinson
1,800,474	A	4/1931	Scherer
1,830,541	A	11/1931	Harris
1,871,710	A	8/1932	Lenehan
2,059,594	A	11/1936	Massa, Jr.
2,411,405	A	11/1946	Yuhas

(Continued)

FOREIGN PATENT DOCUMENTS

EP	1531334 A2	5/2005
JP	5083776	4/1993

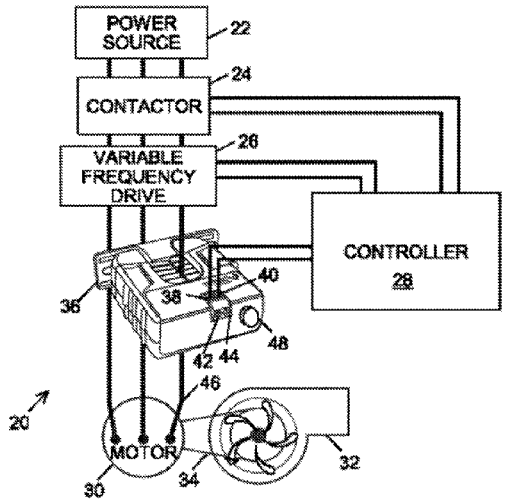
OTHER PUBLICATIONS

Description of KT® 6300, 6400 Split-Core kW/kWH Transducers . . . Enercept KT®, 1 page by Hawkeye® (by Veris Industries, Inc.), at least one year prior to filing date (1997) (unavailable month).

(Continued)

Primary Examiner — Huy Q Phan
Assistant Examiner — Temilade Rhodes-Vivour
(74) *Attorney, Agent, or Firm* — Chernoff Vilhauer McClung & Stenzel, LLP

(57) **ABSTRACT**

A current switch that can be reset when it is not powered automatically calibrates itself when the circuit monitored by the current switch is energized.

17 Claims, 7 Drawing Sheets