

(12) **United States Patent**
Goodson

(10) **Patent No.:** **US 9,093,831 B2**
(45) **Date of Patent:** **Jul. 28, 2015**

(54) **ELECTRICAL WIRING SYSTEM AND METHOD**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/619,619**

(22) Filed: **Feb. 11, 2015**

(65) **Prior Publication Data**

US 2015/0155694 A1 Jun. 4, 2015

Related U.S. Application Data

(63) Continuation-in-part of application No. 13/455,686, filed on Apr. 25, 2012.

(51) **Int. Cl.**
H02G 13/00 (2006.01)
H02H 9/00 (2006.01)
H02H 9/04 (2006.01)

(52) **U.S. Cl.**
CPC **H02G 13/80** (2013.01)

(58) **Field of Classification Search**
USPC 361/117
See application file for complete search history.

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(57) **ABSTRACT**

An electrical wiring system/method implementing transient voltage suppression is disclosed. The system/method incorporates HOT, NEUTRAL, GROUND wiring in conjunction with a series drop resistor (SDR) on the HOT conductor that supplies current to the load device. Parallel shunting metal oxide varistors (MOV's) are used in conjunction with corresponding shunt diode rectifiers (SDRs) to suppress transients on the HOT conductor to either the GROUND conductor and/or NEUTRAL conductor. The parallel shunting MOV/SDR pairs may be integrated into a singular structure that is encapsulated in an insulating material to permit implementation of the transient protection wiring system/method into electrical loads and common power distribution equipment such as electrical outlets and power strips.

30 Claims, 64 Drawing Sheets

