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**Goodson**

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

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(58) **Field of Classification Search**  
CPC ..... **H02H 9/04; H02H 9/046**  
USPC ..... **361/111**  
See application file for complete search history.

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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.

(56) **References Cited**

This patent is subject to a terminal disclaimer.

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(21) Appl. No.: **14/789,270**

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(Continued)

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**Related U.S. Application Data**

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(63) Continuation of application No. 14/619,619, filed on Feb. 11, 2015, now Pat. No. 9,093,831, which is a continuation of application No. 14/619,755, filed on Feb. 11, 2015, now Pat. No. 9,093,832, which is a continuation-in-part of application No. 13/455,686, filed on Apr. 25, 2012, now abandoned, said application No. 14/619,619 is a continuation-in-part of application No. 13/455,686, filed on Apr. 25, 2012, now abandoned.

(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 (MOVs) 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.

(51) **Int. Cl.**

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<b>H02G 1/14</b>	(2006.01)
<b>H02H 3/16</b>	(2006.01)

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

CPC ..... **H02G 13/80** (2013.01); **H02G 1/14** (2013.01); **H02H 9/005** (2013.01); **H02H 9/04**

**150 Claims, 64 Drawing Sheets**

