



# ClampStar Newsletter

November 16, 2011

Greetings,

Welcome to the ClampStar newsletter. This monthly newsletter is where we periodically highlight a variety of unique and interesting ClampStar stories and offer educational, industry related tips.

This month, guest author Jonathon Woodworth of AressterWorks completes his very informative, four-part series on Lightning Protection of Power Systems - Then and Now.

## CLICK TO SEE:

- ✓ Demo Video
- ✓ Utility Photos
- ✓ IR Video
- ✓ Test Reports
- ✓ Installation Video
- ✓ Past Articles

## Lightning Protection of Power Systems - Then and Now - Part 4

By Jonathan Woodworth [ArresterWorks](#)

It is hard to imagine, but the transistor radio of the 1950's and the high power surge arresters in common use today are intimately tied together technically and developmentally. Let me explain.

## Custom ClampStar

Do you have an upcoming connector repair or up-rate project? Give us a call, or click [here](#). One of our application engineers will be happy to discuss your project.

## Next Month's Topic

"Compression Dies"  
(Click [here](#) to automatically receive future editions of this newsletter.)

## Classic Connectors

*Before Your Lines Fall Give Us A Call*  
800-269-1462

**United States Patent Office** 3,503,029  
Patented Mar. 24, 1970

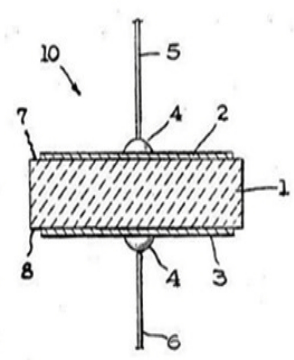
---

1

3,503,029  
**NON-LINEAR RESISTOR**  
Michio Matsuoka, Hirakata-shi, Japan, assignor to Matsushita Electric Industrial Co., Ltd., Osaka, Japan  
Filed Apr. 19, 1968, Ser. No. 722,634  
Int. Cl. H01c 7/10; H01b 1/08  
U.S. Cl. 338—20 12 Claims

**ABSTRACT OF THE DISCLOSURE**

A non-linear resistor comprising a sintered wafer of zinc oxide having opposite surfaces one of which has an electrical resistance higher than that of another surface and two electrodes applied to said opposite surfaces, at least one of said two electrodes being in a non-ohmic contact with said one surface having a higher electrical resistance.



The development of the Metal Oxide Varistor (MOV), which is the heart of the modern surge arrester, did not happen overnight. There were many characters and many breakthroughs that made it possible. The MOV arrester was also the beginning of the end for the two giants in surge protection: GE and Westinghouse.

[Read more.....](#)

## Alabama Power Repairs Hot Splice In 8 Minutes and 23 seconds!

Following annual line surveys at Alabama Power, with the discovery of some hot (aged) splices found with IR Thermography, a decision was made to utilize the advantage of a helicopter to quickly and efficiently install ClampStar units over the hot splices to restore their electrical and mechanical integrity. An EHV Live-Line crew from Haverfield Aviation was brought in for the installations, along with some additional work installing some marker balls. A couple of the splices were located in areas where it would have required significant time and funding to access with a bucket truck



The conductor was 1033.5 ACSR, and being energized at 230kV, corona shields were installed on the CSF-1302-048 ClampStar units. These were the first ClampStar units this particular crew had seen, and personnel from Classic Connectors, Inc., were on site to answer any questions the crew might have. The additional photos which follow show how easily the ClampStar units were installed. Complete with a very thorough conductor cleaning, Haverfield installed the CSF-1302-048, complete with corona shields, in 8 minutes and 23 seconds! A number of Alabama Power personnel on hand all had the same statement - "We should have been doing this for years!"

[Click here to see more Alabama Power installation photos](#)

If you're ready to start experiencing all the benefits that ClampStar has to offer, please contact us and we'll be sure to get you 'connected'.

Sincerely,

Chris Costanzo  
Director, Marketing and Communications  
[NA Classic Connectors, Inc.](#)  
800-269-1462 Ext. 1

©2010 CLASSIC CONNECTORS, INC. All rights reserved  
800.269.1462 Proudly Made in the USA