

Title (en)  
SURGE ARRESTER WITH MOVABLE SUPPORTS TO MAINTAIN ITS VARISTORS

Publication  
**EP 0413618 A3 19920520 (FR)**

Application  
**EP 90402181 A 19900727**

Priority  
CA 608517 A 19890816

Abstract (en)  
[origin: US4989115A] Disclosed is a station or distribution surge arrester of the type comprising a single column of varistors stacked one upon the other and centrally arranged in a cylindrical chamber provided in a casing made of an insulating material. A plurality of movable props, made of a material which is both insulating and non-elastic, are used for holding the varistors in column form centrally in the chamber, even if the varistors break diametrically as is often the case during a severe thermal shock. By holding the varistors permanently at the center of the chamber, the props ensure the non-obstruction of several vertical passages around the column, which passages allow an arc created within the surge arrester to move freely toward a pressure limiting diaphragm during failure of the latter and, thereby, reduce explosion risks to a minimum. The props are advantageously secured over a base having a diameter greater than that of the varistors, by means of bolts or pins that are capable to shear at the least overheating or overpressure generated by the arc. The props are likewise preferably trapezoidal in cross-section and are arranged in such a way that the wide base of their trapezoidal cross-sectional come to rest against the periphery of the varistors, each wide base having a length such that the sum of all of the wide bases of all of the props be slightly shorter than the perimeter of the varistors.

IPC 1-7  
**H01C 7/12**

IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)

- [A] EP 0230103 A2 19870729 - RAYCHEM GMBH [DE]
- [A] US 4424547 A 19840103 - TITUS CHARLES H [US], et al
- [A] US 4686603 A 19870811 - MOSELE JOSEPH [CH]
- [AD] EP 0275772 A1 19880727 - HYDRO QUEBEC [CA]
- [A] US 4100588 A 19780711 - KRESGE JAMES S
- [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 155 (E-743)14 Avril 1989 & JP-A-63 312 602 ( NGK INSULATORS ) 21 Décembre 1988

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