

Title (en)  
METHOD AND APPARATUS FOR PROTECTING ELECTRICAL COMPONENTS FROM A TRANSIENT ELECTROMAGNETIC DISTURBANCE TRANSMITTED ON PARALLEL POWER LINES

Title (de)  
VERFAHREN UND VORRICHTUNG ZUM SCHUTZ ELEKTRISCHER KOMPONENTEN VOR EINER TRANSIENTEN ELEKTROMAGNETISCHEN STÖRUNG, DIE AUF PARALLELEN STROMLEITUNGEN ÜBERTRAGEN WIRD

Title (fr)  
PROCÉDÉ ET APPAREIL PERMETTANT DE PROTÉGER DES COMPOSANTS ÉLECTRIQUES D'UNE PERTURBATION ÉLECTROMAGNÉTIQUE TRANSITOIRE TRANSMISE SUR DES LIGNES ÉLECTRIQUES PARALLÈLES

Publication  
**EP 4309195 A1 20240124 (EN)**

Application  
**EP 22771944 A 20220309**

Priority  
• US 202117204527 A 20210317  
• US 2022019577 W 20220309

Abstract (en)  
[origin: WO2022197509A1] A device for preventing a signal induced by hazardous EMI on a power line in a group of multiple adjacent, parallel power lines of the same phase in an electrical power system from reaching an electrical component connected to one of the multiple power lines, the device comprising at least one conductive impedance transition element having a disk-shaped structure with multiple holes for receiving the multiple adjacent power lines of the same phase, the disk-shaped structures each having an outer diameter that is greater than diameter of all of the multiple parallel power lines to deliberately create an impedance mismatch between the conductive impedance transition elements and adjacent portions of the multiple power lines. The impedance mismatch causes the conductive impedance transition elements to reflect high-frequency components of a signal induced on the multiple power lines by hazardous EMI and the high-frequency components are reflected and dissipated as heat.

IPC 8 full level  
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CPC (source: EP IL KR)  
**H01C 7/12** (2013.01 - EP IL KR); **H01C 8/04** (2013.01 - EP IL KR); **H01P 1/20** (2013.01 - KR); **H01P 1/22** (2013.01 - KR); **H02H 5/005** (2013.01 - IL KR); **H02H 9/04** (2013.01 - IL KR); **H02H 5/005** (2013.01 - EP); **H02H 9/04** (2013.01 - EP)

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