

Title (en)

Method of fixing an element in an electrical device and electrical device such as a vacuum bulb comprising at least two parts fixed using such a method

Title (de)

Verfahren zur Befestigung eines Elements in einem elektrischen Gerät und elektrisches Gerät wie ein Vakuumrohr, das mindestens zwei Teile umfasst, die gemäß einem solchen Verfahren befestigt werden

Title (fr)

Procédé de fixation d'un élément dans un appareil électrique et appareil électrique tel une ampoule à vide comportant au moins deux parties fixées suivant un tel procédé

Publication

EP 1873804 A3 20100414 (FR)

Application

EP 07354030 A 20070522

Priority

FR 0605928 A 20060630

Abstract (en)

[origin: EP1873804A2] The method involves placing expanders (19-21, 26,27) between dielectric shields (11-13), and a cylindrical enclosure (1) of an electrical device e.g. vacuum bulb. The expanders exert efforts on the shields and the enclosure to position the shields with respect to the enclosure and/or locking the shields in position with respect to the enclosure by friction between the expanders and the shields, and the expanders and the shields. The expanders position and/or maintain the shields with respect to the enclosure, by welds between the shields and the expanders, and the expanders and the enclosure. Independent claims are also included for the following: (1) an electrical device comprising an element fixed on a part of the device by using an electrical device's part fixing method (2) a vacuum bulb comprising an element fixed on a part of the device by using an electrical device's part fixing method.

IPC 8 full level

H01H 33/66 (2006.01)

CPC (source: EP US)

H01H 33/66261 (2013.01 - EP US); **H01H 33/66207** (2013.01 - EP US); **H01H 2033/66276** (2013.01 - EP US)

Citation (search report)

- [X] JP S6433821 A 19890203 - HITACHI LTD
- [X] DE 3932159 A1 19910404 - CALOR EMAG ELEKTRIZITAETS AG [DE]
- [X] JP S6489126 A 19890403 - HITACHI LTD
- [X] EP 1172834 A2 20020116 - EATON CORP [US]
- [X] JP H0465041 A 19920302 - MEIDENSHA ELECTRIC MFG CO LTD

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1873804 A2 20080102; EP 1873804 A3 20100414; CN 101098599 A 20080102; CN 104582388 A 20150429; CN 104582388 B 20200501; FR 2903221 A1 20080104; FR 2903221 B1 20131220; JP 2008016449 A 20080124; JP 5225621 B2 20130703; RU 2007124643 A 20090110; RU 2428762 C2 20110910; US 2008020631 A1 20080124; US 7820934 B2 20101026

DOCDB simple family (application)

EP 07354030 A 20070522; CN 200710127383 A 20070702; CN 201410828017 A 20070702; FR 0605928 A 20060630; JP 2007172150 A 20070629; RU 2007124643 A 20070629; US 81215307 A 20070615