

Title (en)

HOLDING FRAME FOR A PLUG-TYPE CONNECTOR

Title (de)

HALTERAHMEN FÜR EINEN STECKVERBINDER

Title (fr)

CADRE DE RETENUE POUR UN CONNECTEUR PAR ENFICHAGE

Publication

**EP 3080875 B1 20170419 (DE)**

Application

**EP 14830506 A 20141211**

Priority

- DE 102013113975 A 20131212
- DE 102013113976 A 20131212
- DE 2014100439 W 20141211

Abstract (en)

[origin: WO2015085995A1] A holding frame for a plug-type connector is intended to have good heat resistance and a high level of mechanical robustness and, when installed in a metallic plug-type connector housing, enable protective grounding while at the same time being convenient to use, in particular during the replacement of individual modules (3). To this end, it is proposed to manufacture the holding frame at least partially from spring-elastic sheet metal. For this purpose, the holding frame can have a basic portion (1) and a deformation portion (2), which are formed from different materials. The basic portion (1) is used for fixing an accommodated module in a plane. The deformation portion (2) can assume an insertion state and a holding state, wherein the insertion state permits insertion of at least one module (3) into the holding frame in a direction transverse to the plane and an accommodated module (3) is fixed in the holding state.

IPC 8 full level

**H01R 13/518** (2006.01); **H01R 13/506** (2006.01); **H01R 13/514** (2006.01); **H01R 13/652** (2006.01); **H01R 43/18** (2006.01); **H01R 43/20** (2006.01)

CPC (source: CN EP KR RU US)

**H01R 13/5025** (2013.01 - US); **H01R 13/506** (2013.01 - CN EP RU US); **H01R 13/514** (2013.01 - CN EP US); **H01R 13/518** (2013.01 - EP KR US);  
**H01R 13/6275** (2013.01 - US); **H01R 13/629** (2013.01 - US); **H01R 13/639** (2013.01 - US); **H01R 13/648** (2013.01 - KR);  
**H01R 13/652** (2013.01 - CN EP US); **H01R 43/18** (2013.01 - KR US); **H01R 43/20** (2013.01 - US); **H01R 43/22** (2013.01 - US);  
H01R 4/26 (2013.01 - US); **H01R 9/16** (2013.01 - US); **H01R 9/226** (2013.01 - US); **H01R 12/7011** (2013.01 - US); **H01R 12/91** (2013.01 - US);  
H01R 24/60 (2013.01 - US); **H01R 24/62** (2013.01 - US); **Y10T 29/49137** (2015.01 - EP US); **Y10T 29/49169** (2015.01 - EP US);  
**Y10T 29/49208** (2015.01 - EP US); **Y10T 29/49217** (2015.01 - EP US); **Y10T 29/53252** (2015.01 - EP US)

Citation (opposition)

Opponent : Phoenix Contact GmbH & Co. KG

- US 4032209 A 19770628 - RUTKOWSKI JOHN L
- DE 29812500 U1 19980910 - ILME SPA [IT]
- US 5352133 A 19941004 - SAMPSON STEPHEN A [US]
- EP 181927 B1 20100512 - HARTING ELECTRIC GMBH & CO KG [DE]
- DE 2736079 A1 19790222 - AIR LB GMBH
- "Mehrpolige Steckverbinder für die industrielle Anwendung CN.12", ILME KATALOG, 2012, Mailand, pages 156 - 157, 171, 194 - 195, XP055457299

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EP3217483A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2015085995 A1 20150618**; CA 2930052 A1 20150618; CA 2930052 C 20190115; CN 105814748 A 20160727; CN 105814748 B 20180629;  
CN 108376869 A 20180807; CN 108376869 B 20210406; DE 202014011214 U1 20180827; DE 202014011215 U1 20180827;  
DE 202014011216 U1 20180827; DE 202014011217 U1 20180827; DE 202014011218 U1 20180827; DE 202014011219 U1 20180827;  
DE 202014011449 U1 20201026; DE 202014011610 U1 20230822; DK 3080875 T3 20170710; EP 3080875 A1 20161019;  
EP 3080875 B1 20170419; EP 3217483 A1 20170913; EP 3217483 B1 20230510; EP 4280397 A2 20231122; EP 4280397 A3 20240228;  
ES 2630178 T3 20170818; JP 2016540356 A 20161222; JP 6440714 B2 20181219; KR 101798349 B1 20171115; KR 20160098357 A 20160818;  
PL 3080875 T3 20171031; RU 2650492 C1 20180416; US 10418773 B2 20190917; US 10424892 B2 20190924; US 10554007 B2 20200204;  
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DE 202014011218 U 20141211; DE 202014011219 U 20141211; DE 202014011449 U 20141211; DE 202014011610 U 20141211;  
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JP 2016538506 A 20141211; KR 20167018665 A 20141211; PL 14830506 T 20141211; RU 2016125448 A 20141211;  
US 201415030858 A 20141211; US 201615271128 A 20160920; US 201815970590 A 20180503