

Title (en)

CLAMPING FRAME FOR A CONNECTOR

Title (de)

HALTERAHMEN FÜR EINEN STECKVERBINDER

Title (fr)

CADRE DE RETENUE POUR CONNECTEUR À FICHE

Publication

EP 3217483 B1 20230510 (DE)

Application

EP 17163616 A 20141211

Priority

- DE 102013113975 A 20131212
- DE 102013113976 A 20131212
- EP 14830506 A 20141211
- 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 13/514 (2006.01); **H01R 13/506** (2006.01); **H01R 13/518** (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 (examination)

- US 4032209 A 19770628 - RUTKOWSKI JOHN L
- US 5352133 A 19941004 - SAMPSON STEPHEN A [US]
- DE 29812500 U1 19980910 - ILME SPA [IT]

Citation (opposition)

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- EP 0860906 B1 20040526 - HARTING ELECTRIC GMBH & CO KG [DE]
 - EP 2581991 A2 20130417 - WEIDMUELLER INTERFACE [DE]
 - EP 1801927 A1 20070627 - HARTING ELECTRIC GMBH & CO KG [DE]
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 - DE 29812500 U1 19980910 - ILME SPA [IT]
 - WO 2014202050 A1 20141224 - HARTING ELECTRIC GMBH & CO KG [DE]
 - DE 2736079 A1 19790222 - AIR LB GMBH
 - KNOBLAUCH GÜNTER: "Steckverbinder II, Neue Technologien", PRODUKTE UND MANAGEMENT-KONZEPTE, VERLAG RENNINGEN, 1 January 2006 (2006-01-01), pages 154 - 193, XP093032273

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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;
US 2016285194 A1 20160929; US 2017012400 A1 20170112; US 2018254591 A1 20180906

DOCDB simple family (application)

DE 2014100439 W 20141211; CA 2930052 A 20141211; CN 201480067749 A 20141211; CN 201810455849 A 20141211;
DE 202014011214 U 20141211; DE 202014011215 U 20141211; DE 202014011216 U 20141211; DE 202014011217 U 20141211;
DE 202014011218 U 20141211; DE 202014011219 U 20141211; DE 202014011449 U 20141211; DE 202014011610 U 20141211;
DK 14830506 T 20141211; EP 14830506 A 20141211; EP 17163616 A 20141211; EP 23172202 A 20141211; ES 14830506 T 20141211;
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