

Title (en)
Seal retention arrangement for electrical plug-in connectors

Title (de)
Dichtungshalteanordnung für elektrische Steckverbinder

Title (fr)
Dispositif de retenue de joint pour connecteurs enfichables électriques

Publication
EP 2654132 A1 20131023 (EN)

Application
EP 12164253 A 20120416

Priority
EP 12164253 A 20120416

Abstract (en)
The present invention relates to a receptacle housing (2, 2', 2'', 2''') for a plug element (1, 1', 1'', 1''') and/or mating plug element (100) of an electrical plug-in connector (200, 200', 200'') in a plug-in direction (P, P') of the plug-in connector (200, 200', 200''), comprising a sealing section adapted to hold a sealing element (3, 3', 3'', 3''') for sealing up between the plug element (1, 1', 1'', 1''') and the mating plug element (100), wherein the sealing section comprises at least one counter retention element (11, 11', 11'', 11''') adapted to engage with a retention element (31 a, 31 b, 31 c) formed at the sealing element in order to secure the sealing element (3, 3', 3'', 3''') against movements in the plug-in direction (P, P').. Further, the invention relates to a sealing element (3, 3', 3'', 3''') for sealing up between a plug element (1, 1', 1'', 1''') and a mating plug element (100) of an electrical plug-in connector (200, 200', 200''), an axial direction (Q) of the sealing element (3, 3', 3'', 3''') running essentially in parallel to a plug-in direction (P) for mating the plug element (1, 1', 1'', 1''') and the mating plug element (100).. In order to secure the sealing element (3, 3', 3'', 3''') in the mounted position S, the present invention provides that the at least one counter retention element (11, 11', 11'', 11''') is resiliently deflectable and in that the sealing element (3, 3', 3'', 3''') further comprises at least one retention element (31 a, 31 b, 31 c) adapted to engage with a counter retention element (11, 11', 11'', 11''') formed at least at one of the plug element (1, 1', 1'', 1''') and the counter plug-element (100) in order to secure the sealing element (3, 3', 3'', 3''') against movements in the axial direction (Q).

IPC 8 full level

H01R 13/52 (2006.01)

CPC (source: EP)

H01R 13/5219 (2013.01)

Citation (applicant)

US 7540775 B2 20090602 - ECKEL MARKUS [DE], et al

Citation (search report)

- [XY] US 5389005 A 19950214 - KODAMA SHINJI [JP]
- [Y] EP 0091770 A2 19831019 - AMP INC [US]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2654132 A1 20131023; EP 2654132 B1 20170607; WO 2013156343 A1 20131024

DOCDB simple family (application)

EP 12164253 A 20120416; EP 2013057367 W 20130409