

Title (en)
PLUG CONNECTOR

Title (de)
STECKVERBINDER

Title (fr)
CONNECTEUR EMBROCHABLE

Publication
EP 2989686 B1 20180221 (DE)

Application
EP 14721183 A 20140416

Priority
• CH 8242013 A 20130424
• CH 2014000048 W 20140416

Abstract (en)
[origin: WO2014172795A1] The invention relates to a plug connector, in particular a plug connector having a high level of electrical insulation. The plug connector was to be developed such that a mechanically stable and tight plug connection can be achieved, which additionally allows a quick and easy connection and disconnection even in harsh industrial environmental conditions. For that purpose the plug connector comprises a male plug part (1) and a female coupling part (2), wherein the male plug part (1) has a catch mechanism (3) on the circumferential surface and a locking groove (4) is provided on the female coupling part (2) to produce a bayonet-type plug connection. Here, an annular seal (5) is provided either on the circumference of the male plug part (1) ahead of the catch mechanism (3) or on the inner circumference of the female coupling part (2) shifted back with respect to the catch mechanism (3). When the plug connection is closed, the annular seal rests, exerting a sealing force, between the circumference of the male plug part (1) and the inner circumference of the female coupling part (2).

IPC 8 full level
H01R 9/03 (2006.01); **H01R 13/52** (2006.01); **H01R 13/625** (2006.01); **H01R 13/635** (2006.01); **H01R 25/00** (2006.01)

CPC (source: EP)
H01R 9/03 (2013.01); **H01R 13/5219** (2013.01); **H01R 13/625** (2013.01); **H01R 13/635** (2013.01); **H01R 25/00** (2013.01)

Citation (examination)
• US 3786396 A 19740115 - KEMMER H, et al
• DE 29708645 U1 19980917 - JOHANN & KONEN GMBH & CO [DE]

Cited by
CN112821138A; US11404816B2; US10707605B2; WO2019201676A1

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 2014172795 A1 20141030; CH 707943 A2 20141031; CN 105164860 A 20151216; CN 105164860 B 20180615; EP 2989686 A1 20160302; EP 2989686 B1 20180221; JP 2016518686 A 20160623; JP 2019040889 A 20190314; JP 6726263 B2 20200722

DOCDB simple family (application)
CH 2014000048 W 20140416; CH 8242013 A 20130424; CN 201480023121 A 20140416; EP 14721183 A 20140416; JP 2016509244 A 20140416; JP 2018234231 A 20181214