Title (en)

FAST LOCKING-UNLOCKING ELECTRICAL CONNECTOR

Publication

EP 0050575 B1 19850403 (FR)

Application

EP 81401670 A 19811022

Priority

FR 8022568 A 19801022

Abstract (en)

[origin: EP0050575A1] 1. A quick-locking-unlocking electrical connector of the type having upon one of the connector components at least one pin intended for entering at least one corresponding central socket in the other connector component, the said connector having an annular neck (6) in the outer wall of a socket (4) in a first connector component (1) and in an annular cavity (10) in the second connector component (2) an annular elastic ring (15, 21) of open contour having at least one radial projection (16) which exhibits an inwards curved surface (17) and is capable of being engaged in the annular neck in the first connector component upon bringing the two connector components together axially, a peripheral unlocking-collar (19) being provided for releasing the elastic ring from the neck in the first connector component, characterized by the fact that the annular neck (6) in the first connector component (1) exhibits a concave profile, that the cavity (10) in the second connector component (2) exhibits walls (11, 12) which slope with respect to the axis of the connector, the angle of slope (alpha) of the said walls (11, 12) with respect to a plane parallel with the axis of the connector being less than or equal to the angle (beta) between the generatrix of the peripheral surface of the socket (4) in which the said neck (6) is effected and the tangent to the said annular neck (6) at the point of intersection of the latter with the said generatrix, and that the said second connector component has means (18) of keeping the elastic ring (15, 21) in the said cavity (10).

IPC 1-7

H01R 13/627

IPC 8 full level

H01R 13/627 (2006.01)

CPC (source: EP)

H01R 13/6277 (2013.01)

Cited by

EP1249897A1; US5997333A; DE19749130C1; DE10324794B3; FR2779780A1; EP1641086A1; EP1001497A1; EP0491626A1; FR2670615A1; US5195904A; EP0141958A1; EP0161835A3; EP2362492A1; JP2017091660A; EP0887891A1; EP0762554A1; US5807129A; EP0579884A1; EP0747991A3; EP3270467A1; CN107623222A; CN111164839A; CN113189713A; US11152744B2; US8496494B2; US9819099B2; US9407029B2; US10205282B2; CN106159552A; EP3284145A4; AU2016248219B2; EP4372928A1; WO2007071479A1; WO9717739A3; US9472894B2; WO2018065612A1; WO2024104792A1; EP2142951B1

Designated contracting state (EPC)

BE CH DE GB IT LI

DOCDB simple family (publication)

EP 0050575 A1 19820428; **EP 0050575 B1 19850403**; DE 3169722 D1 19850509; DE 50575 T1 19830203; FR 2492598 A1 19820423; FR 2492598 B1 19831223

DOCDB simple family (application)

EP 81401670 Á 19811022; DE 3169722 T 19811022; DE 81401670 T 19811022; FR 8022568 A 19801022