

Title (en)

ELECTRICAL CONNECTOR WITH STRAIN RELIEF AND SEALING

Title (de)

ELEKTRISCHER VERBINDER MIT ZUGENTLASTUNG UND ABDICHTUNG

Title (fr)

CONNECTEUR ÉLECTRIQUE AVEC RÉDUCTION DE TENSION ET ÉTANCHÉITÉ

Publication

EP 4054016 A1 20220907 (EN)

Application

EP 21160909 A 20210305

Priority

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Abstract (en)

An electrical connector comprises a housing (12) and a wire (22) extending into the housing (12), the housing (12) comprising a first housing part (14) and a second housing part (18) movable relative to each other between a pre-assembled position and an assembled position along a longitudinal axis (L) of the wire (22). The electrical connector further comprises a first sealing and strain relief structure (30) comprising a housing bevel (26) formed by the first housing part (14) and defining a receptacle (26a) accommodating the wire (22) and a sealing element (34) positioned around the wire (22), a wire inlet (16) arranged in the first housing part (14) and leading into the receptacle (26a), and a positioning means (38) securing the wire (22) in the assembled position and comprising a clamping element (40) positioned around the wire (22) adjacent to the sealing element (34) on a side opposite from the wire inlet (16). Upon a relative movement of the first and second housing parts (14, 18) from the pre-assembled into the assembled position, the sealing element (34) is pressed against the housing bevel (26) and the clamping element (40) is pressed radially inward against the wire (22).

IPC 8 full level

H01R 13/58 (2006.01); **H01R 13/52** (2006.01); **H01R 43/20** (2006.01); **H01R 4/70** (2006.01); **H01R 13/506** (2006.01)

CPC (source: EP)

H01R 13/5205 (2013.01); **H01R 13/5825** (2013.01); **H01R 43/20** (2013.01); **H01R 4/70** (2013.01); **H01R 13/506** (2013.01)

Citation (search report)

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- [XY] US 2018248306 A1 20180830 - FRANKE JENS [DE], et al
- [X] US 2011009000 A1 20110113 - PAYNTER JEFFREY D [US]
- [Y] EP 0171349 A2 19860212 - HEIDEMANN HOLGER [DE]
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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

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