

Title (en)

ELECTRIC PLUG CONNECTOR AND MODULE WITH NEW DUST PREVENTION DOOR MECHANISM

Title (de)

ELEKTRISCHER STECKVERBINDER UND MODUL MIT NEUEM STAUBSCHUTZTÜRMECHANISMUS

Title (fr)

CONNECTEUR DE FICHE ÉLECTRIQUE ET MODULE AVEC NOUVEAU MÉCANISME DE PORTE DE PRÉVENTION DE POUSSIÈRE

Publication

EP 3780285 A4 20211229 (EN)

Application

EP 19903353 A 20190114

Priority

- CN 201811626201 A 20181228
- CN 2019071646 W 20190114

Abstract (en)

[origin: WO2020133599A1] Disclosed is an electric plug connector (13) with a new dust prevention door mechanism (3), the electric plug connector comprising a socket main body (1), wherein a window (2) is provided in the socket main body (1), the dust prevention door mechanism (3) is arranged in the window (2), the dust prevention door mechanism (3) comprises a dust prevention door (3-1) and a torsional spring (3-3), two opposite sides inside the window (2) are provided with dust prevention door clamping columns (2-1) allowing an upper end of the dust prevention door (3-1) to rotate, an inner side surface of the dust prevention door (3-1) is provided with an embedded torsional spring placing groove (3-2), a side wall of the torsional spring placing groove (3-2) is provided with a torsional spring fixing point, the torsional spring (3-3) is sheathed on the torsional spring fixing point, the dust prevention door (3-1) is rotationally arranged on the dust prevention door clamping columns (2-1) through the torsional spring (3-3), the rotating direction of the dust prevention door (3-1) is to rotate towards the interior of the window (2), the window (2) uses a closed window, the closed window completely covers the dust prevention door mechanism (3), and a limiting structure (4) preventing the dust prevention door from being popped outwards is arranged on the dust prevention door (3-1). In the electric plug connector (13), the dust prevention door (3-1) does not protrude out of the window (2), is less prone to being rebounded out of a docking space/window, and has a good dust prevention effect.

IPC 8 full level

H01R 13/52 (2006.01); **H01R 13/453** (2006.01); **H01R 13/66** (2006.01); **H01R 13/74** (2006.01); **H01R 24/64** (2011.01)

CPC (source: CN EP)

H01R 13/502 (2013.01 - CN); **H01R 13/52** (2013.01 - CN); **H01R 13/5213** (2013.01 - CN EP); **H01R 13/4536** (2013.01 - EP); **H01R 13/6658** (2013.01 - EP); **H01R 13/745** (2013.01 - EP); **H01R 24/64** (2013.01 - EP)

Citation (search report)

- [XAY] WO 2017100114 A1 20170615 - PANDUIT CORP [US]
- [XI] JP 3197325 U 20150514
- [YA] CN 201629444 U 20101110 - EMCOM TECHNOLOGY INC
- [A] CN 206451905 U 20170829 - SHANGHAI TIANCHENG COMMUNICATION TECH CO LTD

Cited by

CN114301835A

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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