

## 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
- See references of WO 2020133599A1

## Cited by

CN114301835A

## Designated contracting state (EPC)

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## Designated extension state (EPC)

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