

Title (en)

WATERPROOF PLUG CONNECTOR, DC PLUG AND LAMP

Title (de)

WASSERDICHTER STECKVERBINDER, GLEICHSTROMSTECKER UND LAMPE

Title (fr)

CONNECTEUR ÉTANCHE À L'EAU, FICHE À COURANT CONTINU ET LAMPE

Publication

EP 4287414 A3 20240327 (EN)

Application

EP 23170437 A 20230427

Priority

CN 202210503850 A 20220510

Abstract (en)

The invention discloses a waterproof plug connector, which comprises a DC plug and a first DC socket, the DC plug is provided with an outer cylinder with enlarged diameter; a first elastic sealing member is provided between the DC plug and the first DC socket; and a movable connecting piece is arranged between the DC plug and the first DC socket. The invention also discloses a DC plug and a lamp. The DC plug adopted is in compliance with safety regulations. After assembly the plug connector can effectively prevent problems caused by poor electrical conductivity or even loosening of the component during use; and meanwhile it can carry out a more reliable and effective waterproof function.

IPC 8 full level

H01R 13/52 (2006.01); **F21V 23/06** (2006.01); **F21V 31/00** (2006.01); **H01R 13/625** (2006.01); **H01R 13/627** (2006.01); **H01R 24/00** (2011.01);
H01R 24/58 (2011.01)

CPC (source: CN EP)

F21V 23/06 (2013.01 - EP); **F21V 31/005** (2013.01 - EP); **H01R 13/516** (2013.01 - CN); **H01R 13/521** (2013.01 - CN);
H01R 13/5219 (2013.01 - CN EP); **H01R 13/625** (2013.01 - CN EP); **H01R 13/6275** (2013.01 - EP); **H01R 13/639** (2013.01 - CN);
H01R 13/64 (2013.01 - CN); **H01R 24/005** (2013.01 - EP); **H01R 24/58** (2013.01 - EP); **H01R 2101/00** (2013.01 - EP)

Citation (search report)

- [XY] CN 210576814 U 20200519 - SHENZHEN NS TECH CO LTD
- [XI] US 2017033517 A1 20170202 - YOSHIOKA YUKI [JP], et al
- [X] CN 209282509 U 20190820 - SHENZHEN TRONIXIN PREC ELECTRONICS CO LTD
- [XY] CN 211404870 U 20200901 - ZHONGSHAN GLAMOR OPTOELECTRONICS TECH CO LTD
- [X] CN 113708135 A 20211126 - SELF ELECTRONICS CO LTD
- [XI] CN 111853572 A 20201030 - SELF ELECTRONICS CO LTD
- [XI] CN 110043812 A 20190723 - SELF ELECTRONICS CO LTD

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4287414 A2 20231206; EP 4287414 A3 20240327; CN 114899649 A 20220812

DOCDB simple family (application)

EP 23170437 A 20230427; CN 202210503850 A 20220510