Title (en)

PLUG-AND-SOCKET CONNECTION DEVICE

Title (de

STECKVERBINDUNGSEINRICHTUNG

Title (fr)

DISPOSITIF DE CONNEXION MALE-FEMELLE

Publication

EP 1713649 A1 20061025 (DE)

Application

EP 04804124 A 20041221

Priority

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- DE 202004000387 U 20040112

Abstract (en

[origin: WO2005065972A1] The invention relates to a plug-and-socket connection device for the automatic, e.g. multipolar electrical connection of a vehicle trailer, particularly of a semitrailer, to a towing vehicle, particularly to a semitrailer unit. The plug-and-socket connection device comprises a socket (D) and a plug (S), which can be mounted on the vehicle trailer (e.g. the plug S) or on the towing vehicle (e.g. the socket D), they can be aligned with one another when coupling the vehicle trailer to the towing vehicle, and can be displaced while being guided by a drive (10) provided in the form of an, e.g. piston/cylinder assembly relative to one another between an (advanced) connecting position and a (retracted) position of rest. Preferably, an e.g. cover (5) of the socket (D) can be opened by displacing, with the aid of the drive (10), the contact insert (1), which is accommodated in the socket and which supports the contact sleeves (11, 12), in the direction of the connecting position, and can be closed once again when retracting the contact insert (1) into the position of rest. The invention is characterized in that the plug (S) is mounted so that it laterally yields in an elastic manner against the action of at least one retaining spring (213, 213') that is fixed, on one side, to the plug (S) and, on the other side, to a fastening flange (210) that can be fastened to a vehicle (towing vehicle or vehicle trailer).

IPC 8 full level

B60D 1/64 (2006.01); H01R 13/631 (2006.01)

CPC (source: EP US)

H01R 13/6315 (2013.01 - EP US)

Cited by

US11491832B2; US11084342B2; US10670479B2; US11135882B2; US10696109B2; US10940726B2; US11221262B2

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DOCDB simple family (application)

DE 202004000387 U 20040112; CN 200480007006 A 20041221; DE 502004006223 T 20041221; EP 04804124 A 20041221; EP 2004014526 W 20041221; US 54453704 A 20041221