

Title (en)
AN ELECTRICAL CONNECTOR SYSTEM

Title (de)
ELEKTRISCHES STECKVERBINDERSYSTEM

Title (fr)
SYSTÈME DE CONNECTEUR ÉLECTRIQUE

Publication
EP 4089850 A1 20221116 (EN)

Application
EP 22172476 A 20220510

Priority
NO 20210576 A 20210511

Abstract (en)
An electrical connector system comprising a first connector (100; 200; 300; 400; 1200; 1400) to be associated with a vehicle and a second connector (500; 1500; 1900) to be associated with a trailer for the vehicle. The first connector has an opening with an assembly of electrical sockets (102; 303; 1212; 1409), and a pair of magnets (105; 307; 1203; 1403) are located adjacent the opening (104; 306). The second connector (500; 1500; 1900) has an assembly of electrical pins (501; 1501; 1913) to engage the electrical sockets (102; 303; 1212; 1409). A pair of magnet anchors (504; 1525; 1908) is located on the second connector (500; 1500; 1900) at end regions of a largest cross-sectional dimension thereof to releasably engage the pair of magnets (105; 307; 1203; 1403) on the first connector upon joining of the first and second connectors and interaction of the pins and sockets.

IPC 8 full level
H01R 13/62 (2006.01); **H01R 13/717** (2006.01); **H01R 24/00** (2011.01); **H01R 24/86** (2011.01); **H01R 31/06** (2006.01)

CPC (source: EP)
H01R 13/6205 (2013.01); **H01R 13/7175** (2013.01); **H01R 24/005** (2013.01); **H01R 24/86** (2013.01); **H01R 31/06** (2013.01); **H01R 2201/26** (2013.01)

Citation (applicant)
• US 6478619 B1 20021112 - WIECHMANN WAYNE [US]
• EP 2760089 A1 20140730 - WESTFALIA AUTOMOTIVE GMBH [DE]
• WO 9326062 A1 19931223 - DILL SYSTEMS CORP [US]
• EP 1148600 A1 20011024 - MEMBER S SPA [IT]
• US 5816825 A 19981006 - SEKIMORI TOSHIYUKI [JP], et al

Citation (search report)
• [YD] EP 2760089 A1 20140730 - WESTFALIA AUTOMOTIVE GMBH [DE]
• [YD] US 5816825 A 19981006 - SEKIMORI TOSHIYUKI [JP], et al
• [Y] US 7874844 B1 20110125 - FITTS JR DARRELL LYNN [US]
• [YD] EP 1148600 A1 20011024 - MEMBER S SPA [IT]
• [Y] JP 2009199942 A 20090903 - PANASONIC ELEC WORKS CO LTD
• [A] US 2017028800 A1 20170202 - GHANNAM MAHMOUD YOUSEF [US], et al
• [A] CN 112448206 A 20210305 - RELIANCE CONTROLS CORP

Designated contracting state (EPC)
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