

Title (en)

MECHATRONIC PLUG-IN CONNECTOR SYSTEM

Title (de)

MECHATRONISCHES STECKVERBINDERSYSTEM

Title (fr)

SYSTÈME MÉCATRONIQUE DE CONNEXION ENFICHABLE

Publication

EP 2742565 B1 20170315 (DE)

Application

EP 12750994 A 20120710

Priority

- DE 102011109920 A 20110810
- EP 2012002913 W 20120710

Abstract (en)

[origin: CA2844268A1] The invention relates to a mechatronic plug-in connector system (S) having a main contact (8) and an auxiliary contact (9) which lags during an unplugging operation and with a semiconductor electronic (10) which is series-connected to the auxiliary contact (9) and is parallel-connected to the main contact (8) for extinguishing an arc produced during the unplugging operation, wherein the semiconductor electronic (10) has two series-connected semiconductor switches (10a, 10b) and an energy accumulator (10e) which is connected to the semiconductor switches (10a, 10b) and which for charging taps the arc voltage produced between the semiconductor switches (10a, 10b) during the unplugging operation. The invention further relates to a multiple plug system (Sn) having at least two plug-in connectors (S) each having a main contact (8) and a lagging auxiliary contact (9) and with a semiconductor electronic (10) which is common to the plug-in connectors (S) and is series-connected to each of the auxiliary contacts (9) via a diode (17).

IPC 8 full level

H01R 13/66 (2006.01); **H01R 13/703** (2006.01)

CPC (source: EP US)

H01R 13/665 (2013.01 - US); **H01R 13/7038** (2013.01 - EP US)

Citation (examination)

DE 202009004198 U1 20100812 - ELLENBERGER & POENSGEN [DE]

Cited by

WO2021122811A1; WO2021122812A1; DE102019135128A1; CN114830461A; DE102019135122A1; EP4078738B1; EP4078737B1

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

DOCDB simple family (publication)

DE 102011109920 A1 20130214; **DE 102011109920 B4 20211007**; CA 2844268 A1 20130214; CA 2844268 C 20180918; CN 103748747 A 20140423; CN 103748747 B 20161019; DE 202012013486 U1 20170221; EP 2742565 A1 20140618; EP 2742565 B1 20170315; JP 2014522088 A 20140828; JP 5855750 B2 20160209; US 2014154904 A1 20140605; US 9478917 B2 20161025; WO 2013020626 A1 20130214

DOCDB simple family (application)

DE 102011109920 A 20110810; CA 2844268 A 20120710; CN 201280039060 A 20120710; DE 202012013486 U 20120710; EP 12750994 A 20120710; EP 2012002913 W 20120710; JP 2014524285 A 20120710; US 201414176520 A 20140210