

Title (en)
ELECTRICAL CONTROL DEVICE

Title (de)
ELEKTRISCHES STEUERGERÄT

Title (fr)
APPAREIL DE COMMANDE ÉLECTRIQUE

Publication
EP 3014961 A1 20160504 (DE)

Application
EP 14726886 A 20140524

Priority
• DE 102013010843 A 20130628
• EP 2014001406 W 20140524

Abstract (en)
[origin: WO2014206515A1] The invention relates to an electrical control device (10, 70, 90) comprising a housing (12) for accommodating a printed circuit board (14), on which an electronic circuit (18) is arranged, wherein the printed circuit board (14) rests at least regionally on a metallic heat sink (24) forming a lower housing part (20) and is completely covered by an upper housing part (22), and in which the two housing parts (20, 22) are joined to one another by means of a force-fitting connection and are sealed off from one another by means of a circumferential sealing element (44). In addition, provision is made for the upper housing part (22) to be formed with a plastics material and for the lower housing part (20) to have a plug-type connection (46) formed integrally on said housing lower part and having at least two press-in contacts (48, 50) for electrically connecting the printed circuit board (14) to an external electrical circuit. As a result, the housing (12) has a simple structural and vibration-resistant design which enables cost-effective mass production. Furthermore, by virtue of the two housing parts (20, 22) being closed, the electrical connection of the printed circuit board (14) to an external electrical circuit automatically takes place, which external electrical circuit may be, for example, the vehicle electrics of any vehicle.

IPC 8 full level
H05K 5/00 (2006.01)

CPC (source: EP US)
H05K 5/0008 (2013.01 - US); **H05K 5/0013** (2013.01 - US); **H05K 5/0052** (2013.01 - EP US); **H05K 5/0069** (2013.01 - EP US); **H05K 5/061** (2013.01 - EP); **H05K 7/20436** (2013.01 - EP); **H05K 7/205** (2013.01 - US)

Citation (search report)
See references of WO 2014206515A1

Cited by
CN106793602A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102013010843 A1 20141231; CN 105265031 A 20160120; EP 3014961 A1 20160504; US 2016128208 A1 20160505; WO 2014206515 A1 20141231; WO 2014206515 A9 20150319

DOCDB simple family (application)
DE 102013010843 A 20130628; CN 201480031021 A 20140524; EP 14726886 A 20140524; EP 2014001406 W 20140524; US 201414897519 A 20140524