

Title (en)  
ELECTRONIC MODULE FOR A CONTROL UNIT

Title (de)  
ELEKTRONIKMODUL FÜR EIN STEUERGERÄT

Title (fr)  
MODULE ÉLECTRONIQUE POUR APPAREIL DE COMMANDE

Publication  
**EP 2777072 A1 20140917 (DE)**

Application  
**EP 12769608 A 20120904**

Priority  
• DE 102011085918 A 20111108  
• DE 102012213916 A 20120806  
• EP 2012067165 W 20120904

Abstract (en)  
[origin: WO2013068146A1] Electronic module (1) for a vehicle, comprising a covering element (4), a component-carrier printed circuit board element (2), a carrier element (7) having a first side and a second side, a printed circuit board element (3) and at least one contact-connection element (6), designed to provide a conductive contact-connection between component-carrier printed circuit board element (2) and printed circuit board element (3), wherein the covering element (4) and component-carrier printed circuit board element (2) are arranged on the first side of the carrier element (7), characterized in that the printed circuit board element (3) is arranged on the second side of the carrier element (7), the carrier element (7) has at least one opening (21), and the contact-connection element (6) is led through the opening (21).

IPC 8 full level  
**H01L 23/053** (2006.01); **H01L 23/055** (2006.01); **H01L 23/057** (2006.01); **H01L 23/10** (2006.01); **H05K 5/06** (2006.01)

CPC (source: EP US)  
**H01L 23/057** (2013.01 - EP US); **H01L 23/10** (2013.01 - EP US); **H05K 1/0271** (2013.01 - US); **H05K 5/003** (2013.01 - US); **H05K 5/0082** (2013.01 - EP US); **H05K 5/06** (2013.01 - US); **H01L 2224/48227** (2013.01 - EP US); **H01L 2224/48245** (2013.01 - EP US); **H01L 2224/48247** (2013.01 - EP US); **H01L 2224/49175** (2013.01 - EP US); **H01L 2924/16152** (2013.01 - EP US); **H05K 1/14** (2013.01 - EP US); **H05K 3/368** (2013.01 - EP US); **H05K 2201/10151** (2013.01 - US); **H05K 2203/049** (2013.01 - EP US)

Citation (search report)  
See references of WO 2013068146A1

Citation (examination)  
DE 102005002813 A1 20060810 - BOSCH GMBH ROBERT [DE]

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 102012213916 A1 20130508**; CN 104025284 A 20140903; EP 2777072 A1 20140917; KR 20140098069 A 20140807; US 2015022976 A1 20150122; US 9763344 B2 20170912; WO 2013068146 A1 20130516

DOCDB simple family (application)  
**DE 102012213916 A 20120806**; CN 201280054627 A 20120904; EP 12769608 A 20120904; EP 2012067165 W 20120904; KR 20147012209 A 20120904; US 201214352436 A 20120904