

Title (en)
ELECTRONICS MODULE COMPRISING ALPHA-RADIATION PROTECTION FOR A TRANSMISSION CONTROL UNIT AND TRANSMISSION CONTROL UNIT

Title (de)
ELEKTRONIKMODUL MIT ALPHASTRAHLENSCHUTZ FÜR EINE GETRIEBESTEUEREINHEIT SOWIE GETRIEBESTEUEREINHEIT

Title (fr)
MODULE ÉLECTRONIQUE AVEC PROTECTION CONTRE UN RAYONNEMENT ALPHA POUR UNE UNITÉ DE COMMANDE DE TRANSMISSION AINSI QU'UNITÉ DE COMMANDE DE TRANSMISSION

Publication
EP 3271942 A1 20180124 (DE)

Application
EP 16700986 A 20160119

Priority
• DE 102015205051 A 20150320
• EP 2016050952 W 20160119

Abstract (en)
[origin: WO2016150582A1] Disclosed is an electronics module (12) for a transmission control unit (10) and a corresponding transmission control unit (10). The electronics module (12) comprises a printed circuit board element (14) comprising an electronic circuit (18), which is arranged on a mounting surface (16) of the printed circuit board element (14) and has at least one unmounted semi-conductor element (20) which is arranged with a contact surface (22) on the mounting surface (16). The electronic circuit (18) is fully covered by a protective compound (26). The electronics module (12) is characterised in particular in that on a surface (28) of the semi-conductor element (20), which surface is arranged opposite the contact surface (22), a protective layer (30) is arranged for protecting the semi-conductor element (20) from ionising radiation, wherein the protective layer (30) has a surface emission rate of alpha radiation which is lower than a surface emission rate of alpha radiation of the protective compound (26). In this way, the semi-conductor element (20) can be protected from radiation-induced damage.

IPC 8 full level
H01L 23/556 (2006.01); **H05K 1/14** (2006.01)

CPC (source: EP)
F16H 61/0006 (2013.01); **H01L 23/556** (2013.01); **H05K 3/284** (2013.01); **H05K 5/0082** (2013.01); **H01L 2224/48091** (2013.01); **H01L 2224/48227** (2013.01); **H01L 2924/181** (2013.01); **H01L 2924/19107** (2013.01); **H05K 1/142** (2013.01); **H05K 2203/0126** (2013.01); **H05K 2203/1322** (2013.01)

Citation (search report)
See references of WO 2016150582A1

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