

Title (en)

SYSTEM COMPRISING AN ELECTRICAL COMPONENT AND AN ELECTRICAL CONNECTING LEAD FOR SAID COMPONENT, AND METHOD FOR THE PRODUCTION OF SAID SYSTEM

Title (de)

ANORDNUNG EINES ELEKTRISCHEN BAUELEMENTS UND EINER ELEKTRISCHEN VERBINDUNGSLEITUNG DES BAUELEMENTS SOWIE VERFAHREN ZUM HERSTELLEN DER ANORDNUNG

Title (fr)

CONFIGURATION D'UN COMPOSANT ELECTRIQUE ET D'UNE LIGNE DE RACCORDEMENT ELECTRIQUE DE CE COMPOSANT, ET PROCEDE DE REALISATION ASSOCIE

Publication

EP 1719172 A1 20061108 (DE)

Application

EP 05701558 A 20050119

Priority

- EP 2005050218 W 20050119
- DE 102004009296 A 20040226

Abstract (en)

[origin: WO2005083785A1] The invention relates to a system (1) comprising at least one electrical component (2) that is provided with at least one electrical contact surface (20), at least one electrical connecting lead (3) for electrically contacting the contact surface of the component, and at least one electrical insulating layer (4) which is disposed on the component and encompasses at least one opening (42). Said opening (42) is continuous in the direction of the thickness of the insulating layer (4) and is arranged so as to lie opposite the contact surface of the component. The insulating layer is provided with a lateral surface (43) that delimits the opening while the electrical connecting lead is provided with at least one metallization layer (30) located on the lateral surface. The inventive system is characterized in that the metallization layer is oriented at an angle to the contact surface such that a section of the connecting lead which is mounted on the insulating layer largely disconnects the insulating layer and the component from each other in a mechanical manner. For this purpose, the metallization layer is preferably a few µm thick. Said mechanical disconnection allows the connecting lead, the insulating layer, and the component to be made of materials having different thermal expansion coefficients. The inventive system is used above all for large-area electrical contacting of power semiconductor components.

IPC 8 full level

H01L 23/538 (2006.01); **H01L 21/60** (2006.01); **H01L 23/482** (2006.01); **H01L 23/485** (2006.01)

CPC (source: EP KR US)

H01L 23/482 (2013.01 - KR); **H01L 23/5389** (2013.01 - EP US); **H01L 24/02** (2013.01 - US); **H01L 24/24** (2013.01 - EP US);
H01L 24/82 (2013.01 - EP US); **H01L 24/05** (2013.01 - EP); **H01L 2224/24051** (2013.01 - EP US); **H01L 2224/24225** (2013.01 - EP US);
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H01L 2924/13091 (2013.01 - EP US); **H01L 2924/15787** (2013.01 - EP US); **H01L 2924/351** (2013.01 - EP US)

C-Set (source: EP US)

1. **H01L 2924/1301** + **H01L 2924/00**
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3. **H01L 2924/351** + **H01L 2924/00**
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