

Title (en)

Making electrical contact between metals and resistive elements.

Title (de)

Elektrischer Kontakt zwischen Metallen und Widerstandselementen.

Title (fr)

Contact électrique entre métaux et éléments résistifs.

Publication

EP 0307007 A2 19890315 (EN)

Application

EP 88115948 A 19850912

Priority

- US 65092084 A 19840914
- US 66301484 A 19841019
- US 73540885 A 19850517

Abstract (en)

In an electrical device comprising first and second members having different resistivities, a thin contact layer of intermediate resistivity is provided between the first and second members. The contact layer, (which may comprise a conductive polymer) is intimately bonded to the member of highest resistivity (which may comprise a second conductive polymer) e.g., by a printing process. The member of lowest resistivity may comprise a third conductive polymer, in which case it may be intimately bonded to the intermediate contact layer, e.g., by a printing process, or it may comprise a metallic member, in which case good electrical contact may be made merely by pressing the metallic member against the contact layer even when the contact area is large and/or long, and even when the pressure is sufficiently low to permit, if necessary, relative movement of the metallic member and the contact layer without disrupting the bond between the contact layer and the resistive element. A preferred device comprises four or more members of different resistivities. The members are arranged adjacent each other in order of decreasing resistivity. The least resistive member preferably comprises a metal and the other members conductive polymer materials.

IPC 1-7

H05B 3/06; **H05B 3/14**; **H05B 3/34**

IPC 8 full level

H01C 7/00 (2006.01); **H01C 7/02** (2006.01); **H05B 3/06** (2006.01); **H05B 3/12** (2006.01); **H05B 3/14** (2006.01); **H05B 3/20** (2006.01); **H05B 3/34** (2006.01)

CPC (source: EP)

H01C 7/027 (2013.01); **H05B 3/06** (2013.01); **H05B 3/146** (2013.01); **H05B 3/34** (2013.01); **H05B 2203/006** (2013.01); **H05B 2203/013** (2013.01); **H05B 2203/017** (2013.01); **H05B 2203/02** (2013.01)

Cited by

FR2694472A1; IT201700048690A1; CN111096068A; US2020163161A1; US8895152B2; WO2018203207A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0307007 A2 19890315; **EP 0307007 A3 19890412**; **EP 0307007 B1 19930113**; AT E74480 T1 19920415; DE 3585761 D1 19920507; DE 3586994 D1 19930225; DE 3586994 T2 19930819; EP 0176284 A1 19860402; EP 0176284 B1 19920401; JP 2554617 B2 19961113; JP S6199292 A 19860517

DOCDB simple family (application)

EP 88115948 A 19850912; AT 85306477 T 19850912; DE 3585761 T 19850912; DE 3586994 T 19850912; EP 85306477 A 19850912; JP 20418185 A 19850913