

Title (en)  
Electrical resistor and method of manufacturing the same

Title (de)  
Elektrischer Widerstand und Verfahren zu seiner Herstellung

Title (fr)  
Résistance électrique et son procédé de fabrication

Publication  
**EP 0841668 B1 20070110 (DE)**

Application  
**EP 97119468 A 19971106**

Priority  
DE 19646441 A 19961111

Abstract (en)  
[origin: EP0841668A1] Electrical measuring or power resistor comprises a laminated structure of a resistance alloy metal foil(2), a substrate(1) with good heat conductivity and an adhesive layer(3) between them of an electrically insulating material, preferably a plastic containing a heat conducting powder. In a process for manufacturing a number of resistors the resistance foil(2) is etched and pressed at elevated temperature with the substrate(1) and an intervening adhesive layer(3) before the entire laminate is cut into individual resistors. In a process for manufacturing resistors with connector contact layers(4) on the outer side of the resistance foil(2) the specific areas at which connector contacts are to be positioned are formed by a lithographic process on the outer side of the resistance foil facing away from the substrate(1) and these areas are then coated with metal. The partially metallised resistance foil(2) is then etched to create the resistance structures. In a process for separating the laminate into individual resistors the substrate(1) is etched through to the adhesive layer(3) along the desired parting lines and then pressure is applied to the side of the laminate facing away from the substrate so that the adhesive layer bridges(52) still remaining are broken through and the resistors separated.

IPC 8 full level  
**H01C 1/084** (2006.01); **H01C 1/142** (2006.01); **H01C 7/00** (2006.01); **H01C 7/18** (2006.01); **H01C 13/00** (2006.01); **H01C 17/00** (2006.01); **H01C 17/07** (2006.01); **H01C 17/24** (2006.01); **H01C 17/28** (2006.01)

CPC (source: EP)  
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Cited by  
DE10338041B3; DE10139323C1; DE10122468C1; EP3514806A1; CN110070969A; US10964459B2; US9620267B2; US8013713B2; WO2008055582A1; WO2022252657A1; US10083781B2; US10418157B2; US10438729B2

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