

Title (en)  
ELECTRICAL HEATING ARRANGEMENT

Publication  
**EP 0054901 B1 19840926 (DE)**

Application  
**EP 81110491 A 19811216**

Priority  
DE 3048452 A 19801222

Abstract (en)  
[origin: US4404463A] An electrical heating device is disclosed for heating a plate which, for example, is used for heating the outside rear view mirror of a vehicle. The heating device includes a positive temperature coefficient resistor constructed as a resistive body in the form of a flat cylindrical ring. One flat surface of the ring is seated upon the plate to be heated which is used as one electrical terminal of the resistor. Another metal plate is seated against the other flat surface of the ring and serves as the second electrical terminal and also as a heat distributing plate for the resistive body. A two part fastening means comprising a headed shank and a press-on nut is provided, with the shank extending through the plates and the resistive body to press them against one another to obtain good electrical and thermal conduction.

IPC 1-7  
**H05B 3/14**; **H05B 3/06**

IPC 8 full level  
**H01C 1/14** (2006.01); **H05B 3/06** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)  
**H01C 1/1406** (2013.01 - EP US); **H05B 3/06** (2013.01 - EP US); **H05B 3/14** (2013.01 - EP US)

Cited by  
EP0521181A1; EP0388044A3; FR2589025A1

Designated contracting state (EPC)  
FR GB SE

DOCDB simple family (publication)  
**EP 0054901 A1 19820630**; **EP 0054901 B1 19840926**; DE 3048452 A1 19820722; DE 3048452 C2 19830825; US 4404463 A 19830913

DOCDB simple family (application)  
**EP 81110491 A 19811216**; DE 3048452 A 19801222; US 33173081 A 19811217