

Title (en)
Manufacturing method for a flexible, multilayered, mechanically resistant element as low-voltage heating element for planar radiators and flexible planar radiator

Title (de)
Verfahren zur Herstellung eines mechanisch belastbaren, flexiblen Schichtverbundes als Niederspannungs-Heizelement für flächenförmige Temperaturstrahler und flächenförmiges flexibles Heizelement

Title (fr)
Méthode de fabrication d'un élément flexible multicouche, mécaniquement résistant comme élément de chauffage à bas voltage pour radiateurs planes et radiateur plane flexible

Publication
EP 0719074 A3 19970122 (DE)

Application
EP 95250312 A 19951222

Priority
DE 4447407 A 19941224

Abstract (en)
[origin: EP0719074A2] Flexible, flat, composite heating element is produced by laminating a dielectric textile fabric or mat carrier layer (1) with a load bearing fibre layer (2) comprising electrically conductive fibres, esp. carbon, in random, woven or knitted form, and a covering layer (3) of a dielectric textile. The layers (1,2,3) are needled together. In a process variation the electrically conductive layer (2) is coated or pre-impregnated with plastic before or during application to the carrier layer (1) to maintain fibre position. The heating element is claimed and comprises a carrier layer (1) and a conductive layer (2) mechanically connected to the carrier (1) and comprising electrically conductive, non-metallic fibres whose positions are fixed. An additional load-bearing cover layer (3) may be placed over the conductive layer (2). In both cases current connectors are located at both ends (4,5).

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H05B 3/34 (2013.01); **H05B 2203/011** (2013.01); **H05B 2203/013** (2013.01); **H05B 2203/017** (2013.01); **H05B 2203/034** (2013.01)

Citation (search report)

- [X] DE 2014940 A1 19701126
- [A] FR 2681753 A1 19930326 - SCB SARL [FR]

Cited by
GB2414910A; FR2764678A1; EP2827069A3; EP3438563A1; AT414073B; DE19726689B4; DE19726689B8; EP2023688A1; USD911038S; US10841980B2; US10925119B2; WO2009018960A1

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