

Title (en)

Heating device with heating elements for a water bed

Title (de)

Heizungsvorrichtung mit elektrischen Heizelementen für Wasserbetten

Title (fr)

Dispositif de chauffage à éléments chauffants pour lit d'eau

Publication

EP 1145670 B1 20050316 (DE)

Application

EP 01108340 A 20010403

Priority

DE 10017816 A 20000410

Abstract (en)

[origin: EP1145670A2] The device has electrical heating elements between a bed frame and safety foil and regulates the temperature of a metal plate beneath the safety foil. The heating elements are connected to the plate via a thermally conducting coating and consist of current and heat conducting metal elements held together by current conducting coupling elements and positive temperature coefficient heating elements that generate heat when carrying current. The device has electrical heating elements between a bed frame and safety foil and regulates the temperature of a metal plate fitted beneath the safety foil of a water bed core, The heating elements are thermally connected to the underside of the plate in a flat housing via a thermally conducting coating. The heating elements consist of several current and heat conducting metal elements (15-18) held together by force and/or shape locking by current conducting coupling elements (25,26) and positive temperature coefficient heating elements (19-24) held between them that generate heat when carrying current.

IPC 1-7

A47C 21/04; **A47C 27/08**; **H05B 3/00**

IPC 8 full level

A47C 21/04 (2006.01); **A47C 27/08** (2006.01); **H05B 3/00** (2006.01); **H05B 3/12** (2006.01); **H05B 3/26** (2006.01)

CPC (source: EP US)

A47C 21/048 (2013.01 - EP US); **A47C 27/085** (2013.01 - EP US); **H05B 3/12** (2013.01 - EP US); **H05B 3/262** (2013.01 - EP US); **H05B 2203/021** (2013.01 - EP US)

Cited by

CN101785614A; CN105640126A; CN106037336A; CN105326258A; CN102028363A; DE102015002478A1; DE202013003828U1; DE202013004462U1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1145670 A2 20011017; **EP 1145670 A3 20020508**; **EP 1145670 B1 20050316**; AT E290805 T1 20050415; DE 10017816 A1 20011018; DE 10017816 C2 20021114; DE 50105581 D1 20050421; US 2001030186 A1 20011018; US 6426488 B2 20020730

DOCDB simple family (application)

EP 01108340 A 20010403; AT 01108340 T 20010403; DE 10017816 A 20000410; DE 50105581 T 20010403; US 82665801 A 20010405