

Title (en)

ENGINEERED FOAMS AND FOAM MATTRESS CONSTRUCTIONS

Title (de)

MANIPULIERTE SCHAUMSTOFFE UND SCHAUMSTOFFMATRATZENKONSTRUKTIONEN

Title (fr)

PRODUCTION DE MOUSSES SYNTHÉTIQUES ET DE MATELAS EN MOUSSE

Publication

**EP 2806771 A4 20150325 (EN)**

Application

**EP 13741433 A 20130125**

Priority

- US 201261590505 P 20120125
- US 2013023151 W 20130125

Abstract (en)

[origin: WO2013112840A1] The present invention is of foam mattress constructions made and engineered foams which contain additives for improved mechanical and thermal properties. In accordance with one aspect of the disclosure and inventions, there is provided engineered foam for use as a layer in a foam mattress construction having multiple layers including a top layer of foam and at least one additional layer of foam, and a coating of phase change material applied to a top surface of the top layer of foam. Surface application of phase change material to a top surface of a top layer of foam of a foam mattress provides more efficient transfer of heat away from a body on the mattress and reduced heat accumulation at the body-mattress interface.

IPC 8 full level

**A47C 21/04** (2006.01); **A47C 27/05** (2006.01); **A47C 27/14** (2006.01); **A47C 27/15** (2006.01)

CPC (source: EP US)

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**A47C 27/144** (2013.01 - EP US); **A47C 27/15** (2013.01 - EP US); **Y10T 428/24504** (2015.01 - EP US); **Y10T 428/24802** (2015.01 - EP US);  
**Y10T 428/24942** (2015.01 - EP US); **Y10T 428/2495** (2015.01 - EP US); **Y10T 428/249981** (2015.04 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2013112840A1

Cited by

LU101825B1; US10045633B2; WO2021240012A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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ES 2583207 T3 20160919; US 2015067967 A1 20150312

DOCDB simple family (application)

**US 2013023151 W 20130125**; DK 13741433 T 20130125; EP 13741433 A 20130125; ES 13741433 T 20130125; US 201314374613 A 20130125