

Title (en)  
EMBOSSSED NON-WOVEN FABRIC HAVING A THREE-DIMENSIONAL STRUCTURE

Title (de)  
GEPRÄGTER VLIESTOFF MIT DREIDIMENSIONALER STRUKTUR

Title (fr)  
ETOFFE NAPPEE GAUFREE A STRUCTURE TRIDIMENSIONNELLE

Publication  
**EP 1448361 A2 20040825 (DE)**

Application  
**EP 02790397 A 20021118**

Priority  
• AR P010105436 A 20011121  
• EP 0212903 W 20021118

Abstract (en)  
[origin: WO03043806A2] The invention relates to a three-dimensionally embossed non-woven fabric, which is comprised of fibers and/or filaments (3) oriented primarily in the moving direction (2) of the machine, and has zones (5, 7) with regularly alternating elevations (4a, 8a) and indentations (4b, 8b), which are separated from one another by non-embossed areas (6) that are continuous in the moving direction (2) of the machine. These non-embossed areas constitute a proportion ranging from 5 % to 50 % with regard to the entire surface of the non-woven fabric (1) and the elevations (4a, 8a) and indentations (4b, 8b), when viewed from the opposite side, form indentations or elevations respectively, whereby the surfaces (10a, 10b) delimited by the elevations give the non-woven fabric an apparent thickness ranging from 0.5 mm to 5.5 mm.

IPC 1-7  
**B31F 1/00**

IPC 8 full level  
**B31F 1/07** (2006.01); **D06C 23/04** (2006.01); **B32B 3/00** (2006.01); **B32B 5/00** (2006.01); **D04H 1/44** (2006.01); **D04H 1/54** (2012.01); **D04H 3/14** (2012.01); **D04H 11/00** (2006.01); **D04H 13/00** (2006.01); **D06C 23/00** (2006.01)

CPC (source: EP KR US)  
**B31F 1/07** (2013.01 - EP KR US); **D04H 1/435** (2013.01 - EP KR US); **D04H 1/54** (2013.01 - EP KR US); **D04H 1/64** (2013.01 - EP KR US); **D04H 3/12** (2013.01 - EP KR US); **D04H 3/14** (2013.01 - EP KR US); **B31F 2201/0733** (2013.01 - EP KR US); **B31F 2201/0738** (2013.01 - EP KR US); **B31F 2201/0784** (2013.01 - EP KR US); **Y10T 156/1023** (2015.01 - EP US); **Y10T 428/24479** (2015.01 - EP US); **Y10T 428/24612** (2015.01 - EP US); **Y10T 428/24628** (2015.01 - EP US); **Y10T 428/2495** (2015.01 - EP US)

Citation (search report)  
See references of WO 03043806A2

Cited by  
EP2392713A1; DE102010017255A1; DE102010017255B4; WO2011131333A1; DE102010018169A1; DE102007053087A1; EP2058116A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**WO 03043806 A2 20030530; WO 03043806 A3 20030918**; AR 031489 A1 20030924; AT E334813 T1 20060815; AU 2002366221 A1 20030610; AU 2002366221 A8 20030610; BR 0106472 A 20040309; CA 2468027 A1 20030530; CA 2468027 C 20070918; CN 1310746 C 20070418; CN 1589199 A 20050302; DE 50207743 D1 20060914; EP 1448361 A2 20040825; EP 1448361 B1 20060802; JP 2005509758 A 20050414; JP 4210598 B2 20090121; KR 100592617 B1 20060626; KR 20050044583 A 20050512; MX PA04004846 A 20040730; RU 2004119034 A 20050310; RU 2266823 C2 20051227; US 2005008825 A1 20050113; US 7678442 B2 20100316

DOCDB simple family (application)  
**EP 0212903 W 20021118**; AR P010105436 A 20011121; AT 02790397 T 20021118; AU 2002366221 A 20021118; BR 0106472 A 20011218; CA 2468027 A 20021118; CN 02823239 A 20021118; DE 50207743 T 20021118; EP 02790397 A 20021118; JP 2003545465 A 20021118; KR 20047007820 A 20040521; MX PA04004846 A 20021118; RU 2004119034 A 20021118; US 49604804 A 20040902