

Title (en)  
VOLUME NONWOVEN FABRIC

Title (de)  
VOLUMENVLIESTOFF

Title (fr)  
NON-TISSE DESTINE A DONNER DU VOLUME

Publication  
**EP 3164535 A1 20170510 (DE)**

Application  
**EP 16750836 A 20160811**

Priority  
• EP 15181388 A 20150818  
• EP 2016069151 W 20160811

Abstract (en)  
[origin: CA2993887A1] The invention relates to methods for producing a volume nonwoven fabric, comprising the following steps: a) provision of a nonwoven fabric raw material, containing fiber balls and binding fibers, b) provision of an air-laying device, which has at least two spiked rollers, between which a gap is formed, c) processing of the nonwoven fabric raw material in the device in an air-laying method, wherein the nonwoven fabric raw material passes through the gap between the spiked rollers, wherein fibers or fiber bundles are pulled from the fiber balls by the spikes, d) laying on a laying apparatus, and e) thermal bonding, whereby the volume nonwoven fabric is obtained. The invention further relates to a volume nonwoven fabric comprising a volume-providing material, to uses thereof, and to textile materials.

IPC 8 full level  
**D04H 1/00** (2006.01); **A47G 9/02** (2006.01); **D04H 1/02** (2006.01); **D04H 1/42** (2012.01); **D04H 1/54** (2012.01); **D04H 1/70** (2012.01); **D04H 1/72** (2012.01); **D04H 1/732** (2012.01)

CPC (source: EP KR RU US)  
**A47G 9/02** (2013.01 - KR); **D04H 1/00** (2013.01 - EP KR US); **D04H 1/005** (2013.01 - KR); **D04H 1/02** (2013.01 - EP KR US); **D04H 1/42** (2013.01 - EP KR RU US); **D04H 1/54** (2013.01 - EP KR RU US); **D04H 1/558** (2013.01 - EP US); **D04H 1/70** (2013.01 - EP KR US); **D04H 1/72** (2013.01 - EP KR US); **D04H 1/732** (2013.01 - EP KR RU US); **A47G 9/02** (2013.01 - EP US); **A47G 9/08** (2013.01 - EP US); **A47G 9/10** (2013.01 - EP US)

Cited by  
EP4124684A1

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)  
**EP 3133196 A1 20170222; EP 3133196 B1 20201014**; CA 2993887 A1 20170223; CA 2993887 C 20201006; CN 107923091 A 20180417; CN 107923091 B 20210226; DE 202016008648 U1 20181025; DK 3164535 T3 20181015; EP 3164535 A1 20170510; EP 3164535 B1 20180808; ES 2689082 T3 20181108; JP 2018530680 A 20181018; JP 6571271 B2 20190904; KR 102035803 B1 20191023; KR 20180019735 A 20180226; PL 3164535 T3 20190329; RU 2673762 C1 20181129; TW 201713817 A 20170416; TW I610004 B 20180101; US 10876234 B2 20201229; US 2018230630 A1 20180816; WO 2017029191 A1 20170223

DOCDB simple family (application)  
**EP 15181388 A 20150818**; CA 2993887 A 20160811; CN 201680047643 A 20160811; DE 202016008648 U 20160811; DK 16750836 T 20160811; EP 16750836 A 20160811; EP 2016069151 W 20160811; ES 16750836 T 20160811; JP 2018507670 A 20160811; KR 20187002138 A 20160811; PL 16750836 T 20160811; RU 2018109358 A 20160811; TW 105125922 A 20160815; US 201615751491 A 20160811