

Title (en)
VOLUME NONWOVEN FABRIC

Title (de)
VOLUMENVLIESTOFF

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

Publication
EP 3164535 B1 20180808 (DE)

Application
EP 16750836 A 20160811

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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
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Citation (opposition)
Opponent : Primaloft, Inc.
• DE 102014002060 A1 20150820 - FREUDENBERG CARL KG [DE]
• CA 2940026 A1 20150827 - FREUDENBERG CARL KG [DE]
• WO 2015124548 A1 20150827 - FREUDENBERG CARL KG [DE]
• WO 2005044529 A1 20050519 - FORMFIBER DENMARK APS [DK], et al
• WO 2016100616 A1 20160623 - PRIMALOFT INC [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

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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

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