

Title (en)
DIFFERENTIALLY ENTANGLED NONWOVEN FABRIC FOR USE AS WIPES

Title (de)
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Title (fr)
TISSU NON TISSE A ENCHEVETREMENTS DE FIBRES DIFFERENTS DESTINE A ETRE UTILISE COMME LINGETTE

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Application
EP 02801025 A 20021011

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Abstract (en)
[origin: WO03031710A1] The invention is directed to a hydroentangled nonwoven wipe, the outer surface of which exhibits highly entangled fibers whereas the inner layer exhibits lightly entangled fibers. In particular, the present invention contemplates that a fabric is formed from a fibrous batt that is subjected to fluidic energy, preferably hydraulic energy, applied to one or both faces of a fibrous batt. The hydraulic energy is moderated against the basis weight of the fibrous batt to achieve the degree of surface entanglement desired. Wipes formed in accordance with the present invention exhibit a sufficient degree of strength, softness and non-linting performance, while providing the necessary resistance to tearing and abrasion, to facilitate use in a wide variety of applications utilizing wipes, such as graphic arts and lithography.

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Citation (search report)
• [PX] WO 0231249 A1 20020418 - POLYMER GROUP INC [US]
• [X] EP 0602881 A1 19940622 - DEXTER CORP [US]
• [X] WO 9823804 A1 19980604 - KIMBERLY CLARK CO [US]
• [X] EP 0473325 A1 19920304 - DU PONT [US]
• [XD] US 4647490 A 19870303 - BAILEY ALAN S [ZA], et al
• [A] WO 0159194 A1 20010816 - POLYMER GROUP INC [US]
• [AD] US 3485706 A 19691223 - EVANS FRANKLIN JAMES
• See references of WO 03031710A1

Cited by
EP1688522B2

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DE FR

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WO 03031710 A1 20030417; DE 60219358 D1 20070516; DE 60219358 T2 20071213; EP 1461483 A1 20040929; EP 1461483 A4 20050309; EP 1461483 B1 20070404; US 2003124942 A1 20030703

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