

Title (en)

METHOD AND DEVICE FOR BONDING A NON-WOVEN FIBRE PRODUCED BY THE AIR-LAY METHOD

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERFESTIGUNG EINES NACH DEM LUFTLEGEVERFAHREN HERGESTELLTEN VLIESES

Title (fr)

PROCEDE ET DISPOSITIF POUR CONSOLIDER UN NON TISSE PRODUIT PAR FLUX D'AIR

Publication

EP 1294971 B1 20050323 (DE)

Application

EP 01907450 A 20010116

Priority

- DE 10001957 A 20000118
- EP 0100406 W 20010116

Abstract (en)

[origin: WO0153589A1] The conventional method for production of a multiple-layer, non-woven fibre is by means of the air-lay method, with thermal bonding using bonding fibres. The same method can be applied to a composite non-woven fibre with an intermediate pulp layer. This method of bonding does not reduce the later pilling wear and hardly influences the inner composition of the layers of the composite. According to the invention, the outer non-woven fibre is preferably made from a bicomponent fibre and treated by hydrodynamic needling for bonding, such that not just the surface is bonded, but also the layers are bonded to each other.

IPC 1-7

D04H 13/00; D04H 1/46

IPC 8 full level

D04H 1/46 (2006.01); **D04H 1/48** (2012.01); **D04H 1/49** (2012.01); **D04H 1/498** (2012.01); **D04H 1/54** (2012.01); **D04H 1/556** (2012.01);
D04H 13/00 (2006.01)

CPC (source: EP KR US)

D04H 1/407 (2013.01 - KR); **D04H 1/425** (2013.01 - KR); **D04H 1/48** (2013.01 - EP US); **D04H 1/49** (2013.01 - EP KR US);
D04H 1/498 (2013.01 - EP US); **D04H 1/54** (2013.01 - EP US); **D04H 1/556** (2013.01 - EP US); **D04H 1/732** (2013.01 - KR);
D04H 13/00 (2013.01 - EP US); **D04H 18/04** (2013.01 - EP US)

Cited by

GB2397827B

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0153589 A1 20010726; AT E291656 T1 20050415; BR 0107670 A 20021008; CA 2396976 A1 20010726; CN 1395636 A 20030205;
DE 10001957 A1 20010719; DE 50105700 D1 20050428; EA 003594 B1 20030626; EA 200200773 A1 20030227; EP 1294971 A1 20030326;
EP 1294971 B1 20050323; ES 2239125 T3 20050916; IL 150720 A0 20030212; IL 150720 A 20070704; JP 2003527495 A 20030916;
KR 20020071936 A 20020913; US 2003101556 A1 20030605

DOCDB simple family (application)

EP 0100406 W 20010116; AT 01907450 T 20010116; BR 0107670 A 20010116; CA 2396976 A 20010116; CN 01803853 A 20010116;
DE 10001957 A 20000118; DE 50105700 T 20010116; EA 200200773 A 20010116; EP 01907450 A 20010116; ES 01907450 T 20010116;
IL 15072001 A 20010116; IL 15072002 A 20020711; JP 2001553443 A 20010116; KR 20027008980 A 20020711; US 16990902 A 20020927