

Title (en)
METHOD AND DEVICE FOR PRODUCTION OF COMPOSITE NON-WOVEN FIBRE FABRICS BY MEANS OF HYDRODYNAMIC NEEDLING

Title (de)
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON VERBUNDVLIESSTOFFEN MITTELS HYDRODYNAMISCHER VERNADELUNG

Title (fr)
PROCEDE ET DISPOSITIF POUR PRODUIRE DES NON TISSES COMPOSITES PAR ENCHEVETREMENT PAR EAU

Publication
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Application
EP 01911482 A 20010113

Priority

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- EP 0100383 W 20010113

Abstract (en)
[origin: WO0153588A2] A conventional method for the production of a composite non-woven fibre from at least one spun non-woven fibre and subsequent application of a wood pulp layer to the above for production of a hygiene product is known. Accordingly, the spunbonded non-woven fibre is hydrodynamically needled, before the application of the pulp layer, in order to increase the fluid dispersion properties. Consequently, the pulp layer can no longer be needled, as the pulp would be washed out through the non-woven fibre. Due to the required abrasion resistance a bonding of the non-woven fibre is, however, necessary. According to the invention, the above problem is resolved, whereby a non-woven fibre is compressed or calendered with compressed air, as a pre-bonding treatment, before coating with the super-absorbent material, then the woodpulp layer is applied and both are bonded with a hydrodynamic water needling, followed by drying. A further calendering can be added. A further pre-bonded, in other words, calendered spunbonded, or card non-woven fibre can be applied to the spunbonded non-woven fibre as support layer, or the reverse.

IPC 8 full level
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Citation (opposition)
Opponent :

- EP 0830470 B1 20021106 - KIMBERLY CLARK CO [US]
- DE 19927785 C2 20030220 - SANDLER AG [DE]
- US 3620903 A 19711116 - BUNTING WILLIAM WALLAR JR, et al
- US 4808467 A 19890228 - SUSKIND STUART P [US], et al

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DE102005034821A1; EP1748101A3

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WO 0153588 A2 20010726; WO 0153588 A3 20020425; AT E293180 T1 20050415; BR 0107640 A 20021008; BR 0107640 B1 20110712; CA 2392835 A1 20010726; CA 2392835 C 20080527; CN 1395635 A 20030205; CN 1395635 B 20100929; EA 004031 B1 20031225; EA 200200772 A1 20030227; EP 1250482 A2 20021023; EP 1250482 B1 20050413; EP 1250482 B2 20090610; ES 2240423 T3 20051016; ES 2240423 T5 20091113; IL 150636 A0 20030212; US 2003106195 A1 20030612; US 6836938 B2 20050104

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