

Title (en)

Device for the treatment of fabrics especially with hydrodynamic needling

Title (de)

Vorrichtung zur Behandlung von insbesondere einem Gewebe mittels hydrodynamischer Vernadelung

Title (fr)

Dispositif pour le traitement de tissus en particulier par aiguilletage hydrodynamique

Publication

EP 1621655 A1 20060201 (DE)

Application

EP 05009653 A 20050503

Priority

DE 102004036906 A 20040729

Abstract (en)

The jets displace, spread, homogenize and split fibers of the threads. The nozzle beam (3') is aligned over its length across the full width of the product web (1) at uniform clearance from it (1). It is angled with respect to the longitudinal direction of the product web (1). In addition, all nozzle holes in the rows are not at right angles, but are inclined, hence the water jets are directed at an angle against the product web. Angle of inclination is preferably 10[deg] from the vertical. There are two parallel rows of nozzles with both sets of jets inclined at the same angle. Numbers of nozzle beams are included, with rows of jets inclined oppositely, but through the same angle. Further nozzle dispositions and arrangements are described. The product web is carried on a horizontal belt.

IPC 8 full level

D04H 18/04 (2012.01); **D06C 29/00** (2006.01)

CPC (source: EP US)

D04H 18/04 (2013.01 - EP US); **D06C 29/00** (2013.01 - EP US)

Citation (search report)

- [X] US 6253429 B1 20010703 - ZOLIN PAUL F [US]
- [X] WO 03006224 A1 20030123 - TEXTILE ENHANCEMENTS INTERNATI [US]
- [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 533 (C - 1259) 11 October 1994 (1994-10-11)

Cited by

EP4053320A1; EP1748098A1; CN115029868A; US7562427B2; US7562424B2; DE102021105196A1

Designated contracting state (EPC)

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