

Title (en)

Apparatus for making a material web

Title (de)

Maschine zur Herstellung einer Materialbahn

Title (fr)

Dispositif pour la fabrication d' une bande de matériau

Publication

EP 1156154 A3 20020717 (DE)

Application

EP 01105627 A 20010307

Priority

DE 10024296 A 20000517

Abstract (en)

[origin: EP1156154A2] The roller (10) has an air jet (18) unit (16) to ventilate behind the web (12), which blows into its separation region (20). Preferred features: The jet blows directly into the separation region, and the blowing unit is supplied with compressed air. The unit has nozzles, blowing perforations, slots and/or other similar outlet openings (22). It includes at least one blast pipe and extends over the full width of the web. The jet is directed partially over the roller surface (24). Jet velocity is adjustable. It is selected in accordance with spacing from the separation region. Distribution of the outlets varies over the width of the web. It differs between center and edges, spacing of the openings being smaller or greater at the edges. The device is integral with a roller scraper or is fastened to one, and includes a cover. Size and/or number of openings accords with machine speed, weight of paper, pulp consistency and/or paper type. Examples of circular nozzle openings have diameter 2 - 12 mm, preferably 4 - 8 mm. Jet exit velocity exceeds 35 m/s, preferably exceeding 50 m/s. The roller is formed by a drying cylinder. The blowing unit simultaneously ventilates the hood over the roller or drying cylinder. It is operated at the temperature of the hood air supply. The roller is formed by the first cylinder of a drying section of the plant. At least one of the cylinders from the second to the fifth in the drying section, has a unit as described. The roller is a smooth pressing roller. The blowing unit has different transverse zones, especially at the edges. It only blows at the edges.

IPC 1-7

D21F 5/04; **D21F 3/02**

IPC 8 full level

D21F 3/02 (2006.01); **D21F 5/04** (2006.01)

CPC (source: EP US)

D21F 3/0272 (2013.01 - EP US); **D21F 5/042** (2013.01 - EP US)

Citation (search report)

- [X] US 5881472 A 19990316 - GRUNDER THOMAS K [US], et al
- [X] DE 19548303 A1 19970626 - VOITH SULZER PAPIERMASCH GMBH [DE]
- [X] EP 0692569 A2 19960117 - ANDRITZ PATENTVERWALTUNG [AT]
- [X] US 5337490 A 19940816 - GRIFFIN EDWARD R [US], et al

Cited by

EP1316644A1; EP1353007A1

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