

Title (en)
Moist paper forming device for paper machine.

Title (de)
Formiervorrichtung für Papiermaschine.

Title (fr)
Dispositif de formation pour machine à papier.

Publication
EP 0405154 A1 19910102 (EN)

Application
EP 90110145 A 19900529

Priority
JP 14220489 A 19890606

Abstract (en)
Disclosed is a moist paper forming device for a paper machine, having: upper (9) and lower (3) looped wires for carrying a stock while dewatering it to form moist paper; an introduction roll (16) disposed to constitute a throat part for seizing the moist paper between the upper and lower wires; a shoe box (10) incorporating a plurality of upwardly convex and curvilinearly arranged shoe blades (21); and an auto-slice (18) for scraping the dehydration water. The device further comprises: a dewatering roll (50) wound with the upper and lower wires and the moist paper at a curvature prescribed in the same direction as that of a curvature of the shoe blades; a save-all (51) for collecting the dewatered water; a vacuum dewatering unit (52) having slots; a central roll (12) wound with the upper and lower wires and the moist paper at a curvature prescribed in an opposite direction to that of the dewatering roll; and a vacuum dewatering unit (7) for moving the moist paper to the lower wire. Based on this construction, the "crushing" can be prevented with a less amount of contamination on the upper wire but a higher stabilized paper quality.

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D21F 1/48; **D21F 9/00**

IPC 8 full level
D21F 9/02 (2006.01); **D21F 1/48** (2006.01); **D21F 9/00** (2006.01)

CPC (source: EP KR)
D21F 1/00 (2013.01 - KR); **D21F 1/48** (2013.01 - EP); **D21F 9/003** (2013.01 - EP); **D21F 9/02** (2013.01 - KR)

Citation (search report)
• [Y] AT 382655 B 19870325 - ESCHER WYSS GMBH [DE]
• [Y] DE 3447509 A1 19850801 - MITSUBISHI HEAVY IND LTD [JP]
• [A] DE 3138133 A1 19830324 - ESCHER WYSS GMBH [DE]

Cited by
US5783045A; DE10116364A1; EP0576798A1; DE4141607A1; US5507918A; WO9742374A1

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