

Title (en)

A FORMING APPARATUS FOR FORMING A WEB FROM STOCK

Title (de)

FORMIERVORRICHTUNG ZUR FORMUNG EINER FASERSTOFFBAHN

Title (fr)

APPAREIL DE FORMAGE D'UNE BANDE A PARTIR DE PATE A PAPIER

Publication

EP 0723613 B1 19981216 (EN)

Application

EP 94927335 A 19940831

Priority

- GB 9321401 A 19931016
- US 9409974 W 19940831

Abstract (en)

[origin: WO9511338A1] A forming apparatus (10) is disclosed for forming a web (W) from stock (S) ejected from a headbox (12). The apparatus (10) includes a fourdrinier wire (14) which defines a substantially horizontal section (16) having a first and a second end (18, 20). A headbox (12) is disposed adjacent to and above the first end (18) of the horizontal section (16) for ejecting the stock (S) onto the fourdrinier wire (22) between the first and the second end (18, 20) of the section (16). A looped forming wire (22) cooperates with and is disposed above the horizontal section (16) such that the fourdrinier wire (14) and the forming wire (22) define therebetween an elongate forming section (24) for removing water from the stock (S), the forming section (24) having an upstream and a downstream end (26, 28). A curved forming shoe (30) is disposed adjacent to the upstream end (26) of the forming section (24) and on an opposite side of the fourdrinier wire (14) relative to the headbox (12). The arrangement is such that during movement of the fourdrinier wire (14) over the curved shoe (30), water (32) is thrown centrifugally from the stock (S) to the forming wire (22). A vacuum slot (34) is disposed on an opposite side of the wires (14, 22) relative to the shoe (30) for conveying the water (32) removed centrifugally through the forming wire (22). A curved inverted vacuum box (36) is disposed immediately downstream relative to the vacuum slot (34) and on the same side of the wires (14, 22) as the vacuum slot (34). The curved box (36) defines a curved face (38) for guiding the wires (14, 22). The curved face (38) is curved in an opposite sense relative to the curved forming shoe (30). A looped blanket (40) is disposed on the same side of the wires (14, 22) as the shoe (30), the blanket (40) being disposed adjacent to and on the opposite side of the wires (14, 22) relative to the curved face (38). The blanket (40) cooperates with the fourdrinier wire (14) for pressing the fourdrinier wire (14) against the curved face (38) for urging a further portion of water (42) away from the formed web (W) and through the forming wire (22).

IPC 1-7

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

IPC 8 full level

D21F 1/48 (2006.01); **D21F 1/52** (2006.01); **D21F 5/14** (2006.01); **D21F 9/00** (2006.01)

CPC (source: EP KR)

D21F 1/48 (2013.01 - EP KR); **D21F 9/003** (2013.01 - EP KR)

Citation (examination)

WO 9113206 A1 19910905 - BELOIT CORP [US]

Cited by

CN103669087A

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

WO 9511338 A1 19950427; BR 9407827 A 19970506; CA 2174228 A1 19950427; CN 1039931 C 19980923; CN 1133077 A 19961009; DE 69415338 D1 19990128; DE 69415338 T2 19990715; EP 0723613 A1 19960731; EP 0723613 B1 19981216; FI 961654 A0 19960415; FI 961654 A 19960415; GB 9321401 D0 19931208; JP 2686853 B2 19971208; JP H08512367 A 19961224; KR 960705108 A 19961009; PL 313915 A1 19960805

DOCDB simple family (application)

US 9409974 W 19940831; BR 9407827 A 19940831; CA 2174228 A 19940831; CN 94193812 A 19940831; DE 69415338 T 19940831; EP 94927335 A 19940831; FI 961654 A 19960415; GB 9321401 A 19931016; JP 51179295 A 19940831; KR 19960701926 A 19960415; PL 31391594 A 19940831