Title (en)

WEB FORMING METHOD AND APPARATUS

Publication

EP 0371786 A3 19901122 (EN)

Application

EP 89312431 A 19891129

Priority

FI 885606 A 19881201

Abstract (en)

[origin: EP0371786A2] A method for forming a paper or paperboard web from a fibrous material in the wire section of a paper making machine or equivalent machine comprising a bottom wire loop (2;102) with the main portion of its top run being horizontal or substantially horizontal, and a top wire loop (10;110) working in conjunction with the bottom wire loop; wherein in the method fibre slurry coming out of the headbox (1;101) of the paper making machine is fed to the first part (2a; 102a) of the top run of said bottom wire loop (2;102), which forms the first dewatering zone after which the partly formed fibre layer is led to the second dewatering zone, in the area of which said top wire loop (10;110) moves to cover said partly formed fibre layer in such a way that water removal from the fibre layer continues it least in two stages in the area of said second dewatering zone, whereupon the top wire loop (10;110) is separated from the nearly formed web (W) that is led to follow the run of the bottom wire loop (2;102) forward to the next processing stages of the web (W), wherein the method is characterized in that in the single-wired dewatering zone (2a;102a), after the initial water removal is carried out through the bottom wire (2;102), water removal through the bottom wire (2;102) is prevented by means of an element group (9; 109) operating in contact with the inner surface of the horizontal top run of the bottom wires; that in said water-removal prevention area water is removed from the web (W) through the top wire in the first stage or stages of the double-wired second dewatering zone, which stages comprise a relatively long, planar wire table extending from the headbox to the forming roll (6 in Fig. 1), or from the headbox to the last supporting element (109 in Fig. 2); and that after the first dewatering stage or stages of the double-wired zone water is removed in a curved double-wired dewatering zone (b) (Fig. 1) or zones (Ro, C) (Fig. 2), after which the web (W) is led to follow the bottom wire (2;102).

IPC 1-7

D21F 1/48: D21F 9/00

IPC 8 full level

D21F 1/00 (2006.01); D21F 1/48 (2006.01); D21F 3/00 (2006.01); D21F 9/00 (2006.01)

CPC (source: EP KR)

D21F 1/00 (2013.01 - KR); D21F 1/48 (2013.01 - EP); D21F 3/00 (2013.01 - EP); D21F 9/003 (2013.01 - EP)

Citation (search report)

- [A] EP 0136000 A2 19850403 BELOIT WALMSLEY LTD [GB]
- [A] DE 2808939 A1 19790906 VOITH GMBH J M
- [A] DE 3315023 A1 19831110 VALMET OY [FI]
- [A] FR 2510153 A1 19830128 FELDMUEHLE AG [DE]
- [A] WO 8303109 A1 19830915 VALMET OY [FI]
- [A] DE 3329833 A1 19840301 AHLSTROEM OY [FI]
- [AP] WO 8904397 A1 19890518 ESCHER WYSS GMBH [DE]

Cited by

EP1619300A1; EP1676951A1; EP1116822A3; DE19680959B4; US5552021A; US5573643A; DE4026953A1; EP0475921A1; DE4330546A1; US6071381A; DE4219292A1; DE4141607A1; US5507918A; US6322669B1; WO9110775A1; WO9511338A1; WO9307336A1; US6716315B2; US7189309B2; US8758571B2; WO2012087214A1; EP3165642B1

Designated contracting state (EPC)

AT DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0371786 A2 19900606; **EP 0371786 A3 19901122**; CA 2004123 A1 19900601; CN 1045828 A 19901003; FI 885606 A0 19881201; FI 885606 A 19900602; JP H02191792 A 19900727; KR 900010147 A 19900706

DOCDB simple family (application)

EP 89312431 Å 19891129; CA 2004123 Å 19891129; CN 89109546 Å 19891201; FI 885606 Å 19881201; JP 31087289 Å 19891201; KR 890017916 Å 19891201