

Title (en)

DISPLACEMENT DEWATERING A WEB USING COMPRESSED GAS

Title (de)

VERDRÄNGUNGSENTWÄSSERUNG EINER BAHN MITTELS DRUCKGAS

Title (fr)

DÉSHYDRATATION PAR DÉPLACEMENT D'UNE BANDE À L'AIDE DE GAZ COMPRIMÉ

Publication

EP 4230792 A1 20230823 (EN)

Application

EP 23156339 A 20230213

Priority

US 202263372095 P 20220211

Abstract (en)

Apparatus, methods, and fabrics for dewatering a nascent paper web, carried in a web sandwich, in a dewatering section of a papermaking machine. Water is driven from the web by a combination of mechanical pressure and compressed air, both typically applied in a nip. The mechanical pressure and air pressure can be applied in the same nip, or in separate nips, where the mechanical pressure is applied upstream, in the papermaking machine, from the air pressure application. The mechanical pressure can be lower than pressures used in conventional press sections of known papermaking machines. Air pressure is that pressure which can be contained in a seal section between the web sandwich and the structure supplying the air. Fabrics supporting the nascent paper web through the air dewatering station have limited lateral air flow under compressed air conditions, whereby air flows generally perpendicularly through the web being dewatered.

IPC 8 full level

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CPC (source: EP US)

D21F 1/78 (2013.01 - US); **D21F 3/0272** (2013.01 - EP); **D21F 3/04** (2013.01 - US); **D21F 7/083** (2013.01 - US)

Citation (search report)

- [X] EP 0818573 A2 19980114 - VOITH SULZER PAPIERMASCH GMBH [DE]
- [X] EP 0304561 A1 19890301 - ESCHER WYSS GMBH [DE]
- [X] US 2003056925 A1 20030327 - BECK DAVID A [US]

Designated contracting state (EPC)

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Designated extension state (EPC)

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