

Title (en)

Dryer section of a machine for manufacturing a paper or board web

Title (de)

Trockenpartie einer Maschine zur Herstellung einer Papier- oder Kartonbahn

Title (fr)

Section de séchage d'une machine de fabrication de papier ou carton

Publication

EP 1156155 A2 20011121 (DE)

Application

EP 01105067 A 20010302

Priority

DE 10024358 A 20000517

Abstract (en)

Web (14) and screen (12) pass through a guidance section (10), where the web is subjected to pressurized gas causing alternate lifting and resting against the screen, along the running direction (L) of the web. Preferred features: At least one web guidance unit is included, implemented as a suspension dryer. The screen passes through the guidance section in a straight line. A series of nozzles (16) along the path of the web, exert gas pressure on it. Nozzle beams are located on both sides of the screen. At least one compressed gas driven web guidance unit is located before the first drying cylinder. The gas is air. At least one web drying hood with an impinging blast dryer is included, employing hot air or steam. The web is passed over a larger support- or suction roller with impinging flow dryer. This precedes the first drying cylinder. The impinging flow dryer follows the pressurized gas driven web guidance system. The web leaving the first drying cylinder, or first withdrawn from a smooth heated surface, is already more than 58%-65% dry. Following the last press nip of a pressing section, at least one inventive guidance unit is included. Further alternative arrangements based on the foregoing principles are described. Gas permeability of the screen for the guidance unit exceeds 300 cfm, preferably exceeding 500 cfm. Further equipment for pressing, alternative drying arrangements, vertical rising, falling and angled guidance sections, and transfer arrangements are described. In a lower temperature guidance section, gas at 20 degrees C-150C is employed.

Abstract (de)

In einer Trockenpartie einer Maschine zur Herstellung einer Materialbahn, insbesondere Papier- oder Kartonbahn, ist wenigstens eine Bahnführungseinrichtung vorgesehen, durch die die Materialbahn zusammen mit einem Sieb hindurchgeführt und in der die Materialbahn so mit Druckgas beaufschlagbar ist, daß sie in Bahnaufrichtung abwechselnd vom Sieb abgehoben ist und an diesem anliegt. <IMAGE>

IPC 1-7

D21F 5/18; **D21F 5/00**

IPC 8 full level

D21F 5/00 (2006.01); **D21F 5/18** (2006.01)

CPC (source: EP US)

D21F 5/00 (2013.01 - EP US); **D21F 5/18** (2013.01 - EP US); **D21F 5/185** (2013.01 - EP US)

Cited by

CN110552230A; EP1895048A1; EP1564329A1; WO2011006176A1

Designated contracting state (EPC)

DE FI SE

DOCDB simple family (publication)

EP 1156155 A2 20011121; **EP 1156155 A3 20031112**; **EP 1156155 B1 20070214**; CA 2347611 A1 20011117; DE 10024358 A1 20011122; DE 50112021 D1 20070329; US 2001042316 A1 20011122; US 6493962 B2 20021217

DOCDB simple family (application)

EP 01105067 A 20010302; CA 2347611 A 20010516; DE 10024358 A 20000517; DE 50112021 T 20010302; US 85276801 A 20010511