

Title (en)

APPARATUS AND METHOD OF GENERATING STOCK TURBULENCE IN A FOURDRINIER FORMING SECTION

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERZEUGUNG VON STOFFTURBULENZ IM BLATTBILDNER EINER LANGSIEBPAPIERMASCHINE

Title (fr)

APPAREIL ET PROCEDE DE PRODUCTION DE TURBULENCES DE PATE DANS UNE SECTION DE MISE EN FEUILLE A TABLE PLATE

Publication

EP 1005588 B1 20040121 (EN)

Application

EP 99926201 A 19990617

Priority

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- US 29089899 A 19990414

Abstract (en)

[origin: WO9966121A1] A method and apparatus for generating turbulence in stock to deflocculate the stock in an open surface forming section of a paper making machine comprises a dewatering box (2) providing vacuum assisted drainage and which has a set of dewatering elements that impart turbulence into relatively thick stock layers carried at machine operating speeds of equal up to about 400 m/min, for the production of paper products having a basis weight generally in excess of about 160 gsm. Each set of elements includes a lead-in element (5), at least one intermediate element (6, 7), and a trailing element (8). The path of the forming fabric (13) is deflected downwardly as it passes over the intermediate elements, which are inclined at an angle of from about 0 DEG to about 10 DEG from a plane defined by forming fabric supporting surfaces on the lead-in and riser elements. This vertical movement initiates turbulence and agitation in the stock, which acts both to deflocculate the stock and to diminish the possibility of sheet sealing. The apparatus is useable in combination with other known formation and drainage devices which are located either upstream or downstream to augment their performance with thicker, slower moving stock layers.

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