

Title (en)

Headbox structure for a fiber web machine

Title (de)

Stoffauflauf für eine Maschine zur Herstellung einer Faserstoffbahn

Title (fr)

Caisse de tête pour une machine de production d'une bande de matière fibreuse

Publication

EP 2784213 A1 20141001 (EN)

Application

EP 13161554 A 20130328

Priority

EP 13161554 A 20130328

Abstract (en)

The invention pertains to a headbox structure for a fiber web machine. The headbox structure comprises a headbox having a turbulence generator and a nozzle chamber having two converging walls (21, 22) forming a nozzle outlet (24). The turbulence generator has at least three diffusers (1, 3, 5, 7, 9) creating turbulence in liquids supplied into each respective diffuser (1, 3, 5, 7, 9) via feeding means (25, 27, 29) for feeding pulp suspension and/or water as the liquids. Each of the diffusers (1, 3, 5, 7, 9) has an outlet into the nozzle chamber (24). A central diffuser (1) of the at least three diffusers (1, 3, 5, 7, 9) has two blades (11, 13) arranged at its outlet and extending into the nozzle chamber in a converging manner. The blades (11, 13) separate a liquid flowing through the central diffuser (1) from liquids flowing through adjacent diffusers (3, 5, 7, 9). One or more of the adjacent diffusers (3, 5, 7, 9) has an additional blade (15, 17) arranged at the outlet, and the additional blade (15, 17) has a shorter length than the adjacent blade (11, 13) of the central diffuser (1).

IPC 8 full level

D21F 1/02 (2006.01)

CPC (source: EP)

D21F 1/02 (2013.01); **D21F 1/026** (2013.01); **D21F 1/028** (2013.01)

Citation (applicant)

WO 2009115479 A1 20090924 - VOITH PATENT GMBH [DE], et al

Citation (search report)

- [X] US 2003131964 A1 20030717 - ERIKSON JAN ANDERS [SE], et al
- [X] US 4376014 A 19830308 - BERGSTROM JAN I
- [X] WO 0125532 A1 20010412 - METSO PAPER INC [FI], et al

Cited by

EP3757287A1; US11512431B2; EP3540117A1; US11214927B2; WO2018229333A1; EP3540118A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2784213 A1 20141001; **EP 2784213 B1 20160518**; CN 104074089 A 20141001

DOCDB simple family (application)

EP 13161554 A 20130328; CN 201410090206 A 20140312