

Title (en)

Method of treating a fiber web and a calender for treating a fiber web

Title (de)

Verfahren zur Behandlung einer Faserstoffbahn und Kalandrier zur Behandlung einer Faserstoffbahn

Title (fr)

Procédé de traitement d'une bande de matière fibreuse et calandre de pour traiter une bande de matière fibreuse

Publication

EP 3012371 A1 20160427 (EN)

Application

EP 14189733 A 20141021

Priority

EP 14189733 A 20141021

Abstract (en)

The invention relates to a method of treating a fiber web, in which the fiber web (W) is calendered in at least one calender nip (N) formed between two calender rolls (15,16) or in a calender comprising a belt zone, which is formed by a belt guided along surface of a calender roll, in which method before the calender in running direction of the fiber web (W) at least one side of the fiber web is cooled by at least one spray cooler (11, 12; 21, 22) before calendering such that temperature of the fiber web (W) is below or at low level of the glass transition temperature range (T_{gr}). The invention also relates to a calender, which comprises at least one calender nip (N) formed between two calender rolls (11, 12) or a belt calendering zone, which is formed by a belt guided along surface of a heated calender roll. The calender further comprises at least one spray cooler (11, 12; 21, 22) for cooling and moisturizing at least one side of the fiber web (W) before calendering such that temperature the fiber web (W) is below or at low level of the glass transition temperature range (T_{gr}).

IPC 8 full level

D21G 1/00 (2006.01)

CPC (source: EP)

D21G 1/0093 (2013.01)

Citation (applicant)

- EP 2682520 A1 20140108 - METSO PAPER INC [FI]
- "Papermaking Science and Technology", 2009, PAPER ENGINEERS' ASSOCIATION, pages: 404

Citation (search report)

- [X] DE 202013011389 U1 20140120 - METSO PAPER INC [FI]
- [XD] EP 2682520 A1 20140108 - METSO PAPER INC [FI]
- [X] US 6207020 B1 20010327 - ANDERSON DENNIS W [US]
- [X] DE 102005053968 A1 20070516 - VOITH PATENT GMBH [DE]
- [A] WO 0175224 A1 20011011 - METSO PAPER INC [FI], et al

Cited by

US10094067B2; WO2017017316A1

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)

DE 202015105426 U1 20151026; CN 205152719 U 20160413; EP 3012371 A1 20160427

DOCDB simple family (application)

DE 202015105426 U 20151014; CN 201520809259 U 20151019; EP 14189733 A 20141021