

Title (en)

Calender roll and method for driving a calender roll

Title (de)

Kalenderwalze und Verfahren zum Betreiben einer Kalenderwalze

Title (fr)

Rouleau de et procédé d'entraînement pour un rouleau de calandre

Publication

EP 1619303 A1 20060125 (DE)

Application

EP 05104709 A 20050601

Priority

DE 102004035630 A 20040722

Abstract (en)

The channels contain devices (18) differentiating the volumetric flowrate of thermal fluid between them. The device is a constriction; preferably it is an adjustable throttling valve. The device (18) includes a pump. A roller casing (2) end face is connected to a stub shaft (4), the device being located near this connection. The device is an insert (19) in the thermal fluid channel. At the insert location, the channel cross section is enlarged (20) : Volumetric flowrate is differentiated between channels, by +/-50% at most. Locations of minimum and maximum heat transfer are set; these rotate with the roller and are displaced by 180[deg]. Thermal medium flowrate differentiation is a function of roller flexure, thus on the inside of the curvature, a greater volumetric flow is passed than on its outside. To carry out compensation, the roller is heated to operational temperature. Its flexure is determined. The volumetric flowrate in the heating channels is then adjusted in order to compensate the flexure, removing it. An independent claim is included for the corresponding method of operation.

IPC 8 full level

D21G 1/02 (2006.01)

CPC (source: EP)

D21G 1/0266 (2013.01); **D21G 1/0286** (2013.01); **F28F 5/02** (2013.01)

Citation (search report)

- [X] DE 1811690 A1 19700702 - KRAUSS MAFFEI AG
- [X] DE 20104079 U1 20010705 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]

Designated contracting state (EPC)

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