Title (en)

Calenderroll

Title (de)

Kalanderwalze

Title (fr)

Rouleau de calandre

Publication

EP 0959257 B1 20040908 (DE)

Application

EP 99109487 A 19990512

Priority

DE 19822531 A 19980519

Abstract (en)

[origin: EP0959257A1] The calender roller, with a core and an elastic cladding over its working width, has an internal heat compensation system to ensure that the roller temperature at the axial ends is almost equal to the temperature at the axial center of the roller. A thermal insulation (8) is outside the working width (4) of the roller. The thermal insulation (6) covers a section at the periphery (7) of the roller and also a part of the end side (8). The insulation (6) projects from the roller cladding (3), with an increased thickness outside the working width which is thicker than the maximum cladding (3) thickness within the working width. The thermal conductivity of the insulation (6) is less than the thermal conductivity of the roller cladding (3) by at least a factor of 5. The roller has a journal heating, using heat from an axially inner zone (4) of the roller assembly. The roller is tubular, with a closed hollow zone (15) which holds a fluid (16) which can be vaporized. The end sides of the hollow zone (15) each have a roller journal (11), with a heat exchange surface at the inner sides. The heat exchange surface has a larger surface area than the cross-section of the hollow zone (15), on a plane at right angles to the rotary axis (18). The roller has a heat conductor, with inlays of a good conductive material. An external pump recirculates the heat carrier fluid.

IPC 1-7

F16C 13/00; D21G 1/02

IPC 8 full level

D21G 1/02 (2006.01); **F16C 13/00** (2006.01)

CPC (source: EP)

D21G 1/0266 (2013.01); **D21G 1/0286** (2013.01)

Cited by

EP1686273A1; CN107291117A; US8100817B2; WO2005111303A1

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DOCDB simple family (publication)

EP 0959257 A1 19991124; **EP 0959257 B1 20040908**; AT E275701 T1 20040915; CA 2272205 A1 19991119; DE 19822531 A1 19991209; DE 19822531 B4 20061130; DE 59910425 D1 20041014

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