

Title (en)

Method for heating a roll and a heatable roll, in particular a press roll for a paper machine.

Title (de)

Verfahren zur Heizung einer Walze und beheizter Walze, insbesondere einer Presswalze für eine Papiermaschine.

Title (fr)

Procédé pour le chauffage d'un rouleau et rouleau chauffé, en particulier un rouleau de presse pour machine à papier.

Publication

**EP 0597814 A1 19940518 (EN)**

Application

**EP 93850196 A 19931019**

Priority

- FI 924754 A 19921020
- FI 925634 A 19921211
- US 1774593 A 19930216

Abstract (en)

A heatable roll (10), in particular a press roll or equivalent for a paper machine, which roll is in direct contact with the paper web and a method for heating a roll are disclosed. The roll is heated by flowing a heat transfer medium into the roll. The medium is preferably arranged to circulate in bores (16) formed into a roll mantle in proximity to an outer face of the roll. The outer face of the roll is provided with a coating (18) made of a ceramic, metal-ceramic mixture, porous metal or an equivalent material whose thermal conductivity and modulus of elasticity are lower than the corresponding properties of the material of the roll body. The coating is porous, and its thickness is from about 0.03 mm to about 6 mm, preferably from about 0.05 mm to about 2 mm. <IMAGE>

IPC 1-7

**D21F 3/08**

IPC 8 full level

**D21F 3/08** (2006.01)

CPC (source: EP)

**D21F 3/08** (2013.01)

Citation (search report)

- [Y] EP 0425464 A1 19910502 - VALMET PAPER MACHINERY INC [FI]
- [DY] US 4738752 A 19880419 - BUSKER L H [US], et al
- [PX] US 5171404 A 19921215 - ELLIS ERIC R [US], et al
- [DA] US 4704776 A 19871110 - WATANABE ATSUO [JP], et al
- [DA] EP 0471655 A1 19920219 - VALMET PAPER MACHINERY INC [FI]

Cited by

DE19957795B4; US6708407B2; DE10023291A1; EP0870867A3; WO2013004732A1; WO0058554A1; WO9715720A1; US6200248B1

Designated contracting state (EPC)

AT DE FR GB IT SE

DOCDB simple family (publication)

**EP 0597814 A1 19940518; EP 0597814 B1 19971210; AT E161059 T1 19971215; CA 2108624 A1 19940421; DE 69315673 D1 19980122;**  
DE 69315673 T2 19980409

DOCDB simple family (application)

**EP 93850196 A 19931019; AT 93850196 T 19931019; CA 2108624 A 19931018; DE 69315673 T 19931019**