

Title (en)

WATER-RESISTANT, REPULPABLE, HYDROPHILIC AND SOFT TOUCH PAPER

Title (de)

WASSERFESTES, AUFSCHLUSSBARES, HYDROPHILES PAPIER MIT WEICHEM GRIFF

Title (fr)

PAPIER RESISTANT A L'EAU, REPULPABLE, HYDROPHILE ET AU TOUCHER DOUX

Publication

EP 1623071 A1 20060208 (FR)

Application

EP 04742393 A 20040330

Priority

- FR 2004000792 W 20040330
- FR 0305102 A 20030425

Abstract (en)

[origin: FR2854175A1] Water-resistant, repulpable, hydrophilic paper with a soft feel containing wet strength improvers, is obtained by treatment with a composition containing a polyorganosiloxane with sterically-hindered piperidyl functional groups attached to silicon. Water-resistant, repulpable, hydrophilic paper with a soft feel, made from pulp containing resin(s) (A) as wet strength improver, possibly with wet strength promoter(s) (B). The pulp or the paper is also brought into contact with a composition (D) containing polyorganosiloxane(s) (C) with at least one siloxy group substituted with at least one silicon-linked, sterically-hindered piperidyl functional group (V) of formula (I) or (II), in which R 4>2-18C alkylene, 2-20C alkylene-carbonyl, (2-12C alkylene)-cyclohexylene (in which the cyclohexylene ring carries an OH group and optionally one or two 1-4C alkyl groups), -R 7>-O-R 7>-, -R 7>-COO-R 7>- or -R 8>-O-R 9>-OCO-R 8>-; R 7>1-12C alkylene (optionally substituted with 1 or 2 OH groups); R 8>, R 9>2-12C alkylene (optionally with one OH group); U : -O- or -NR 10>-; R 10>H, 1-6C alkyl or a divalent group of formula (Ia) in which R 11> is attached to N and R 4> is attached to Si; R 11>1-12C alkylene; R 5>= 1-3C alkyl or phenyl; R 6>H, R 5> or -O*; R 4>a trivalent group of formula -(CH 2) m-CH(CO-) 2 or (Ib); m, p : 2-20; U : -O- or -NR 12>-; R 12>H or 1-6C alkyl . An independent claim is also included for a method for the production of such paper from pulp containing (A) and possibly (B), in which the pulp or the paper is brought into contact with a composition (D) as above. [Image] [Image] [Image].

IPC 1-7

D21H 23/76; D21H 21/20; D21H 21/22; D21H 17/59

IPC 8 full level

D21H 23/76 (2006.01); **D21H 17/59** (2006.01); **D21H 21/20** (2006.01); **D21H 21/22** (2006.01)

CPC (source: EP)

D21H 23/76 (2013.01); **D21H 17/59** (2013.01); **D21H 21/20** (2013.01); **D21H 21/22** (2013.01)

Citation (search report)

See references of WO 2004097113A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2854175 A1 20041029; **FR 2854175 B1 20060106**; EP 1623071 A1 20060208; JP 2006525441 A 20061109; WO 2004097113 A1 20041111

DOCDB simple family (application)

FR 0305102 A 20030425; EP 04742393 A 20040330; FR 2004000792 W 20040330; JP 2006505767 A 20040330