

Title (en)

INTERNAL SIZING PROCESS IN THE MANUFACTURE OF PAPER, CARDBOARD, BOARDS AND OTHER CELLULOSIC MATERIALS

Publication

EP 0187666 B1 19891102 (DE)

Application

EP 86100189 A 19860108

Priority

DE 3500408 A 19850108

Abstract (en)

1. Process for the internal sizing in the production of paper, cardboard, paperboard and other cellulose-containing materials with and without filling materials and/or pigments by natural or synthetic sizing agents under neutral to weakly basic pH conditions without the use of aluminium salts, characterised in that one carries out the sizing with the addition of a cationic dicyandiamide resin based on a condensation product of dicyandiamide with formaldehyde and at least one inorganic or organic acid and/or at least one ammonium or amine salt thereof.

IPC 1-7

D21D 3/00; D21H 3/54

IPC 8 full level

D21H 17/50 (2006.01)

CPC (source: EP US)

D21H 17/50 (2013.01 - EP US)

Citation (examination)

EP 0082373 A1 19830629 - HERCULES INC [US]

Cited by

EP2511419A1; WO2007053681A1; US7682438B2; US10036123B2

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0187666 A1 19860716; EP 0187666 B1 19891102; AT E47733 T1 19891115; CA 1274059 A 19900918; DE 3500408 A1 19860710; DE 3666709 D1 19891207; DK 2986 A 19860709; DK 2986 D0 19860103; FI 81861 B 19900831; FI 81861 C 19901210; FI 855199 A0 19851231; FI 855199 A 19860709; NO 165810 B 19910102; NO 165810 C 19910410; NO 855124 L 19860709; US 5026457 A 19910625

DOCDB simple family (application)

EP 86100189 A 19860108; AT 86100189 T 19860108; CA 499052 A 19860106; DE 3500408 A 19850108; DE 3666709 T 19860108; DK 2986 A 19860103; FI 855199 A 19851231; NO 855124 A 19851218; US 31711389 A 19890228