

Title (en)

PROCESS FOR MANUFACTURE OF PAPER HOLDING CLAY OR OTHER FILLERS

Publication

EP 0209538 B1 19900523 (EN)

Application

EP 86900327 A 19851210

Priority

SE 8500162 A 19850115

Abstract (en)

[origin: WO8604370A1] A process for manufacture of paper holding clay or other mineral filler according to which the filler is first intimately mixed with a proportion, for example 20% of a pulp, preferably a mechanical pulp, with a high content of fines, that is, fibrils and lamellas scaled off the fibre walls. After this mixing the blend is continuously precipitated with a polymer, for example polyacryl amide, whereby voluminous flocs of fines and occluded filler particles are formed. This floc suspension is then continuously pumped into the furnish before the paper machine. Results from laboratory studies and test runs on pilot paper machines are presented to indicate that the process will give paper a better formation, a more uniform filler distribution in the z-direction, a higher strength, a lower density, a lower air permeability, a higher stiffness, a higher light scattering ability and a higher opacity. The consumption of retention aid will not be higher than in a normal procedure of flocculating the filler while in the furnish.

IPC 1-7

D21H 17/68

IPC 8 full level

D21H 17/37 (2006.01); **D21H 17/69** (2006.01); **D21H 23/76** (2006.01)

CPC (source: EP)

D21H 17/375 (2013.01); **D21H 17/69** (2013.01); **D21H 23/765** (2013.01)

Citation (examination)

- Pulp Technol & Treatment for Paper (1978), Miller Freeman Publins p 160, 177-179, 257-260, 277-280, 664, 676-677.
- Journal of Pol Sci: Pol Lett Ed, Vol 20, 615-620 (1982), Alinec, B, et al "Cationic Latex in Fiber-Clay Paper Composites".
- Svensk papperstidning 1983: 1o, p. 40-41, 44, 47-48, 51, Fineman I.

Cited by

US6156118A

Designated contracting state (EPC)

FR

DOCDB simple family (publication)

WO 8604370 A1 19860731; DE 3590715 C2 19901018; DE 3590715 T1 19870129; EP 0209538 A1 19870128; EP 0209538 B1 19900523; FI 80742 B 19900330; FI 80742 C 19900710; FI 863682 A0 19860911; FI 863682 A 19860911; GB 2181464 A 19870423; GB 2181464 B 19880203; GB 8622077 D0 19861022; SE 455318 B 19880704; SE 8500162 D0 19850115; SE 8500162 L 19860716

DOCDB simple family (application)

SE 8500514 W 19851210; DE 3590715 A 19851210; DE 3590715 T 19851210; EP 86900327 A 19851210; FI 863682 A 19860911; GB 8622077 A 19851210; SE 8500162 A 19850115