

Title (en)

POLYMER COMPOSITION FOR IMPROVED RETENTION, DRAINAGE AND FORMATION IN PAPERMAKING

Title (de)

POLYMERZUSAMMENSETZUNG ZUR VERBESSERUNG DER RETENTION, DER ENTWÄSSERUNG UND DER BLATTBILDUNG BEI DER PAPIERHERSTELLUNG

Title (fr)

COMPOSITION POLYMERES PERMETTANT D'AMELIORER LES CARACTERISTIQUES DE RETENTION, DE DRAINAGE ET DE FORMATION AU COURS DE LA FABRICATION DU PAPIER

Publication

EP 1029125 A4 20011010 (EN)

Application

EP 99923105 A 19990514

Priority

- US 9910763 W 19990514
- US 8565398 P 19980515

Abstract (en)

[origin: WO9960209A1] The invention relates to a cationic polymer composition for improving the retention, drainage, and formation properties of paper and paperboard products. The cationic polymer composition comprises at least two coagulants where the first coagulant is a polynucleate aluminum silicate - sulphate compound containing a chloride molecule (PASS-C) and the second coagulant is selected from the group consisting of a polydadmac, a polyamine, a polyethylene imine, a polycyanogunidine, and a copolymer containing a DMDAAC. These two coagulants may be blended together and can be added to the pulp stock or slurry anywhere in the paper machine wet-end as the polymer composition is not shear-sensitive. The ratios of the two coagulants in the blend may range from about 1:1 to 1:4 and from about 1:1 to about 4:1. The polymer composition can be used alone in the paper making process or it can be used in combination with a flocculant (polyacrylamide) to enhance the dewatering efficiency. The flocculant is added after the shearing stages and after the addition of the polymer composition.

IPC 1-7

D21H 21/10; **D21H 21/16**; **D21H 17/63**; **D21H 17/66**; **B01D 21/01**; **C02F 5/10**; **D21H 17/68**; **D21H 17/71**

IPC 8 full level

B01D 21/01 (2006.01); **D21H 21/10** (2006.01); **D21H 17/37** (2006.01); **D21H 17/45** (2006.01); **D21H 17/56** (2006.01); **D21H 17/66** (2006.01); **D21H 23/14** (2006.01); **D21H 23/76** (2006.01)

CPC (source: EP)

B01D 21/01 (2013.01); **D21H 21/10** (2013.01); **D21H 17/375** (2013.01); **D21H 17/455** (2013.01); **D21H 17/56** (2013.01); **D21H 17/66** (2013.01); **D21H 23/14** (2013.01); **D21H 23/765** (2013.01)

Citation (search report)

- [A] US 5149400 A 19920922 - HAASE DIETER [CA], et al
- [A] US 5069893 A 19911203 - HAASE DIETER [CA], et al
- [A] US 5516405 A 19960514 - DE WITT JAMES A [CA]
- [A] US 4284611 A 19810818 - GANCY ALAN B, et al
- See references of WO 9960209A1

Designated contracting state (EPC)

DE ES FI FR GB IT SE

DOCDB simple family (publication)

WO 9960209 A1 19991125; AU 3995299 A 19991206; EP 1029125 A1 20000823; EP 1029125 A4 20011010; NO 20003884 D0 20000728

DOCDB simple family (application)

US 9910763 W 19990514; AU 3995299 A 19990514; EP 99923105 A 19990514; NO 20003884 A 20000728