

Title (en)  
Papermaking process

Title (de)  
Papierherstellungsverfahren

Title (fr)  
Procédé de fabrication du papier

Publication  
**EP 0805234 B1 20020703 (EN)**

Application  
**EP 97107188 A 19970430**

Priority  
US 64167196 A 19960501

Abstract (en)  
[origin: EP0805234A2] The claimed invention comprises a papermaking process comprising forming an aqueous cellulosic papermaking slurry, subjecting the slurry to one or more shear stages, adding to the slurry a mineral filler prior to at least one of the shear stages, adding to the slurry after the addition of the mineral filler and prior to at least one of the shear stages an effective amount of a dispersion polymer selected from the group consisting of copolymers of acrylamide and dimethylaminoethylacrylate methyl chloride quaternary salt (DMAEA.MCQ), dimethylaminoethylmethacrylate methyl chloride quaternary salt (DMAEM.MCQ), dimethylaminoethylacrylate benzyl chloride quaternary salt (DMAEA.BCQ) and dimethylaminoethylmethacrylate benzyl chloride quaternary salt (DMAEM.BCQ) and diallyldimethylammonium chloride (DADMAC), shearing the slurry, adding a microparticle selected from the group consisting of organics such as copolymers of polyacrylic acid, inorganics such as bentonite and silica sol, draining the slurry to form a sheet, and drying the sheet to form a paper sheet.

IPC 1-7  
**D21H 23/14**

IPC 8 full level  
**D21H 23/14** (2006.01); **D21H 17/37** (2006.01); **D21H 17/45** (2006.01); **D21H 17/67** (2006.01); **D21H 17/68** (2006.01)

CPC (source: EP)  
**D21H 23/14** (2013.01); **D21H 17/37** (2013.01); **D21H 17/375** (2013.01); **D21H 17/455** (2013.01); **D21H 17/675** (2013.01); **D21H 17/68** (2013.01)

Cited by  
US7318881B2; CN1323211C; KR100681327B1; US8172983B2; NO329568B1; US2013059949A1; EP1216260A4; US8778140B2; EP0953680A1; AU748735B2; AU750335B2; CZ301092B6; CZ301693B6; US6310124B1; US10145067B2; WO0011053A1; WO2013125968A1; WO03050354A1; WO03100169A1; US6235205B1; US6262168B1; US6238521B1; US8747617B2; US6630530B1; US7306700B1; US9752283B2; WO9955965A1; WO9955962A3; US11518695B2; US6818100B2; US6846384B2; US6918995B2; US7488402B2

Designated contracting state (EPC)  
DE ES FI FR GB IT SE

DOCDB simple family (publication)  
**EP 0805234 A2 19971105; EP 0805234 A3 19990721; EP 0805234 B1 20020703**; AU 1915897 A 19971106; AU 729008 B2 20010125; BR 9701967 A 19980915; CA 2204050 A1 19971101; CA 2204050 C 20060620; DE 69713677 D1 20020808; DE 69713677 T2 20021031; ES 2176553 T3 20021201; ID 16844 A 19971113; MX 9703180 A 19980531; MY 123120 A 20060531; NO 326449 B1 20081208; NO 972022 D0 19970430; NO 972022 L 19971103

DOCDB simple family (application)  
**EP 97107188 A 19970430**; AU 1915897 A 19970429; BR 9701967 A 19970430; CA 2204050 A 19970430; DE 69713677 T 19970430; ES 97107188 T 19970430; ID 971428 A 19970429; MX 9703180 A 19970430; MY PI9701894 A 19970430; NO 972022 A 19970430