

Title (en)

PROCESS FOR MAKING PAPER.

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PAPIER.

Title (fr)

PROCEDE DE PRODUCTION DE PAPIER.

Publication

EP 0320512 A4 19890427 (EN)

Application

EP 86906454 A 19861031

Priority

JP 9439785 A 19850430

Abstract (en)

[origin: EP0320512A1] Pulp slurry is formed into paper under neutral or alkaline condition in the presence of filler, sizing agent and cationic polymer as paper quality improver. The cationic polymer is prep'd. by copolymerisation of 40 to 99, pref. 50 to 90 mol % acrylamide cpd. of formula (I) $\text{CH}_2=\text{C}(\text{R}1)\text{CONH}_2$ (where R1 is H or methyl) and 1 to 60, pref. 2 to 50 mol % inorganic or organic salt of diallylamine cpd. of formula (II) $(\text{CH}_2=\text{C}(\text{R}2)\text{CH}_2)_2\text{N}-\text{R}3$ (where R2 is H or methyl R3 is H or 1-6C alkyl) opt. in the presence of vinyl monomer copolymerisable with the acrylamide cpd. and/or diallylamine cpd. The acrylamide cpd. is acrylamide or methacrylamide. The diallylamine cpd. includes diallyamine, diallylmethylamine, diallylethylamine, diallybutylamine, etc. The salt includes hydrochloric, nitric, sulphuric, phosphoric, formic, acetic and propionic acid salts. The vinyl monomer includes nonionic monomer such as methyl (meth) acrylate, (meth) acrylonitrile, styrene and vinyl acetate, cationic monomer such as dimethylaminoethyl (meth) acrylate, vinyl pyridine and vinyl pyrrolidone. The vinyl monomer is used in amt. below 40 mol %. The cationic polymer is used in amt. 0.01 to 2, pref. 0.05 to 1 % (solids) of dry weight of paper.

IPC 1-7

C08F 220/56; C08F 226/04; D21H 3/38

IPC 8 full level

C08F 220/00 (2006.01); **C08F 20/52** (2006.01); **C08F 26/00** (2006.01); **C08F 26/02** (2006.01); **C08F 220/56** (2006.01); **C08F 226/04** (2006.01); **C08L 33/24** (2006.01); **C08L 39/00** (2006.01); **C08L 39/02** (2006.01); **D21H 17/37** (2006.01); **D21H 17/45** (2006.01)

CPC (source: EP)

D21H 17/45 (2013.01)

Citation (search report)

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- [YD] CHEMICAL ABSTRACTS, vol. 77, no. 22, 27th November 1972, page 122, abstract no. 154203v, Columbus, Ohio, US; & JP-A-72 12 521 (HAMANO DYE WORKS CO. LTD) 18-04-1972
- See references of WO 8803194A1

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US5853542A; EP0414496A1; US5750781A; CN102391419A; EP2199463A4; WO9710387A1

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