

Title (en)

Neutral sizing agent for rough paper masses using cationic polymer dispersions.

Title (de)

Neutralleimungsmittel für Rohpapiermassen unter Verwendung von kationischen Kunststoffdispersionen.

Title (fr)

Produit d'encollage neutre pour masses de papier brut utilisant des dispersions polymères cationiques.

Publication

EP 0416427 B1 19940216 (DE)

Application

EP 90116422 A 19900828

Priority

DE 3929226 A 19890902

Abstract (en)

[origin: EP0416427A1] Neutral sizing of raw cellulose pulp in a conventional aqueous suspension at a neutral pH for producing sized, acid-free raw paper by bulk sizing with the use of aqueous cationic copolymer dispersions having a minimum cation activity of 20 $\mu\text{mol/g}$ of solid, more than half of the cationic charge being located on the surface of the dispersion copolymer particles, in combination with polymeric retention aids, the weight ratio of the polymeric retention aid to the cationic dispersion copolymer being preferably 0.3:1 to 0.005:1, in a quantity of up to 2 % by weight of cationic dispersion copolymer, relative to the dry weight of the raw cellulose fibres. The bulk sizing is effected by intensive mixing of the neutral size components with the raw cellulose fibre suspension, with the proviso that either the polymeric retention aid is first added and the cationic plastic dispersion is then metered in, or the two agents are metered separately at the same time into the cellulose fibre suspension, if appropriate with the additional use of inert fillers, pigments, dyestuffs and conventional auxiliaries, and subsequent isolation of the acid-free raw paper in the conventional manner, if appropriate as raw paper webs or raw paper boards, and drying of the bulk-sized neutral raw paper. In the combination according to the invention with the polymeric retention aid, the cationic polymer dispersion surprisingly shows a synergistic increase in its bulk-sizing effect in the neutral pH range.

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IPC 8 full level

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