

Title (en)

METHOD FOR PRODUCING PAPER, PAPERBOARD, AND CARDBOARD

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PAPIER, PAPPE UND KARTON

Title (fr)

PROCÉDÉ DE FABRICATION DE PAPIER, DE PAPIER-CARTON ET DE CARTON COMPACT

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Abstract (en)

[origin: WO2012175392A1] The invention relates to a method for producing paper, paperboard, and cardboard, comprising dewatering a paper material having filler material and having at least one water-soluble amphoteric copolymer, forming sheets in the wire section, and then pressing the paper in the press section, wherein the at least one water-soluble amphoteric copolymer is metered and added to a paper material having a fiber concentration in the range from 20 to 40 g/L, then the paper material is diluted to a fiber concentration in the range from 5 to 15 g/L, the diluted paper material is dewatered to form a sheet and the sheet is pressed in the press section to a solids content of G(x) wt % or greater, and G(x) is calculated as $G(x) = 48 + (x - 15) \cdot 0.4$, where x stands for the numerical value of the minimum solids content (in wt%) to which the sheet is pressed, wherein the water-soluble amphoteric copolymer can be obtained by polymerizing a mixture of a) 20 to 60 mol% of acrylamide relative to the total moles of the monomers used for polymerization, b) 20 to 60 mol%, relative to the total moles of the monomers used for polymerization, of at least one cationic monomer, c) 20 to 60 mol%, relative to the total moles of the monomers used for polymerization, of at least one anionic monomer selected from monoethylene unsaturated C3- to C5-carboxylic acids, monoethylene unsaturated C3- to C5-dicarboxylic acids, sulfonic acids, phosphonic acids, and/or the salts of said acids, d) 0 to 30 mol%, relative to the total moles of the monomers used for polymerization, of one or more monoethylene unsaturated monomers different from the monomers (a), (b), and (c), and e) 0 to 5 mol%, relative to the total moles of the monomers used for polymerization, of one or more compounds comprising at least two ethylene unsaturated double bonds in the molecule, wherein the amount of the difference between the proportions of the cationic and the anionic monomers in mol%, each relative to the total moles of the monomers used for polymerization, is a maximum of 10 mol%.

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