Title (en)

METHOD FOR PRODUCING SINGLE-LAYER OR MULTI-LAYER PAPER

Title (de)

VERFAHREN ZUR HERSTELLUNG VON EINLAGIGEM ODER MEHRLAGIGEM PAPIER

Title (fr)

PROCÉDÉ DE FABRICATION DE PAPIER MONOCOUCHE OU MULTICOUCHE

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Application

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Abstract (en)

[origin: WO2019076703A1] The invention relates to a method for producing dried single-layer or multi-layer paper, comprising the following steps for a single-layer paper: (A) dewatering a first aqueous fibrous material suspension, whereby a first fibrous material web is produced having a dry content of between 14 wt.-% and 25 wt.-%; (D-1) dewatering the first fibrous material web by pressing, whereby a partially dewatered first fibrous material web is produced; (E-1) spraying at least one flat side of the partially dewatered first fibrous material web with a spraying solution or spraying suspension, such that a sprayed partially dewatered first fibrous material web is produced; (F-1) dewatering the sprayed partially dewatered first fibrous material web with the application of heat, such that the dried single-layer paper is produced; or, for a multi-layer paper, comprising the preceding step (A) and the following steps: (B) dewatering a second aqueous fibrous material suspension, such that a second fibrous material web is produced having a dry content between 14 wt.% and 25 wt.%; (C) joining the first fibrous material web to the second fibrous material web in such a way that the two fibrous material webs contact each other across all of one flat side, such that a layer composite is produced; (D-2) dewatering the layer composite by pressing, such that a partially dewatered layer composite is produced; (E-2) spraying at least one flat side of the partially dewatered layer composite with a spraying solution or spraying suspension, such that a sprayed layer composite is produced; (F-2) dewatering the sprayed layer composite by the application of heat, such that the dried multi-layer paper is produced; wherein the spraying solution or spraying suspension contains (e-a) water and (e-b) at least one water-soluble polymer P, which can be obtained by the polymerisation of (i) 40 to 85 mol. % of a monomer of formula (I), in which R1 = H or C1-C6-alkyl, (ii) 15 to 60 mol.% of one or more ethylenically unsaturated monomers that are different from a monomer of formula (I), wherein the total quantity of all monomers (i) and (ii) is 100 mol.%, and optionally by a subsequent partial or complete hydrolisation of the units of monomers of formula (I) polymerised into the polymer P with the formation of primary amino or amidine groups, the proportion of water being at least 75 wt.% relative to the spraying solution or the spraying suspension.

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