

Title (en)

CELLULOSE MATERIAL PLASTICIZATION AND VISCOSITY CONTROLLED CELLULOSIC MATERIAL

Title (de)

PLASTIFIZIERUNG VON CELLULOSE MATERIALIEN UND VISKOSITÄTSKONTROLLIERTES CELLULOSE MATERIAL

Title (fr)

PLASTIFICATION DE MATIÈRE CELLULOSIQUE ET MATIÈRE CELLULOSIQUE À VISCOSITÉ CONTRÔLÉE

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Application

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Abstract (en)

[origin: WO2020229722A1] The invention relates to method for producing viscosity controlled cellulosic material having a viscosity value in a range between 150 ml/g and 500 ml/g in a continuous process, the method comprising the following steps: i) forming a cellulose-water mixture (15) comprising water and chemically treated wood-based cellulosic material, the cellulose-water mixture (15) having a dry matter content between 3% and 20%, ii) treating the formed cellulose-water mixture (15) in a plasticization step (100) at a temperature between 130°C and 200°C, and a pressure between 3 bars and 15 bars, at least 5 minutes and 120 minutes at the most, while mixing the cellulose-water mixture (15), and feeding hot water and/or water steam to the cellulose-water mixture, thereby obtaining a treated mixture (18), and iii) depressurizing the treated mixture (18) in a depressurizing step (105) in a controlled manner, thereby obtaining the viscosity controlled cellulosic material (20). This invention further relates to a viscosity controlled cellulosic material and a system for producing viscosity controlled cellulosic material.

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