

Title (en)

METHOD AND APPARATUS FOR OBTAINING FIBRES FROM AT LEAST ONE PLANT STEM AND USE OF A LIQUID OR GAS STREAM THEREIN

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GEWINNUNG VON FASERN AUS MINDESTENS EINEM PFLANZENSTÄNGEL SOWIE VERWENDUNG EINES FLÜSSIGKEITS- ODER GASSTRAHLS DAZU

Title (fr)

PROCÉDÉ ET DISPOSITIF D'OBTENTION DE FIBRES À PARTIR D'AU MOINS UNE TIGE DE PLANTE ET USAGE D'UN JET DE LIQUIDE OU DE GAZ À CET EFFET

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Application

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Abstract (en)

[origin: WO2016074807A1] The present invention relates to a method for obtaining fibres from at least one plant stem or from plant bast. Various methods for obtaining fibres from plant stems are known from the prior art. In this case, they are usually mechanically stripped of woody components, in part after having been biologically premacerated. In principle, it is also known to subsequently wash the obtained fibres and to free them of residual foreign matter. The problem addressed by the present invention is that of specifying a corresponding method which is superior to the conventional method and is suitable for obtaining fibres for further processing with less energy input and fewer process waste even in the case of plant stems that are hard to break down. According to the invention, the at least one plant stem is treated with at least one high-speed liquid jet or high-speed gas jet, wherein the at least one plant stem has a moisture content of at least 25% and/or vegetable glues, in particular the pectin and hemicelluloses, of the plant stem are in a swollen state at the start of the treatment with the high-speed liquid jet or high-speed gas jet.

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