

Title (en)
SYSTEM AND METHOD FOR OBTAINING FIBRES FROM FEEDSTOCK CONTAINING LIGNOCELLULOSE, MORE PARTICULARLY FROM STRAW

Title (de)
ANLAGE UND VERFAHREN ZUR GEWINNUNG VON FASERN AUS LIGNOZELLULOSEHALTIGEM AUFGABEGUT, INSBESONDERE AUS STROH

Title (fr)
SYSTÈME ET PROCÉDÉ D'OBTENTION DE FIBRES À PARTIR D'UNE CHARGE D'ALIMENTATION CONTENANT DE LA LIGNOCELLULOSE, PLUS PARTICULIÈREMENT DE LA PAILLE

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Abstract (en)
[origin: WO2022171905A1] The invention relates to a system and a method for obtaining fibres (40) from feedstock (20) containing lignocellulose, more particularly from straw, having: a digester (5) for pretreating the feedstock (20) under the effect of heat, pressure and moisture; a refiner (7) for fiberising the pretreated feedstock (20) by means of two refiner tools (9, 10) which rotate coaxially in the refiner housing relative to one another and form a grinding gap (11); and a conveying device (6) for conveying the pretreated feedstock (20) from the digester (5) to the refiner (7). The conveying device (6) comprises a screw conveyor (14) having a screw trough (23) and an endless screw (48), circulating therein, with at least one screw flight (29), which opens axially into the refiner (7) via an inlet opening (26) in the refiner housing. To counteract material particles being released from the remaining feedstock, the invention proposes that the endless screw (48) of the screw conveyor (14) is driven at a rotational speed of at least 400 rpm, preferably 500 rpm or more. In this way, the feedstock (29) can be fed to the refiner as a uniform material stream.

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