

Title (en)

APPARATUS FOR PROCESSING FIBRE SUSPENSIONS USED FOR THE PRODUCTION OF PAPER OR CARDBOARD

Title (de)

GERÄT ZUM AUFBEREITEN VON FÜR DIE PAPIER- BZW. PAPPEPRODUKTION VORGESEHENEN FASERSUSPENSIONEN

Title (fr)

APPAREIL DE PREPARATION DE SUSPENSIONS DE FIBRES DESTINEES A LA PRODUCTION DE PAPIER OU DE CARTON

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Application

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Abstract (en)

[origin: WO9723688A1] An apparatus is disclosed for processing fibre suspensions, in particular extracted from used paper, which contain particles which are also suspended and which need to be separated from the useful fibres in the suspension and whose volume weight is different from the volume weight of the fibers. The apparatus has a drum-shaped outer casing (10) which in the area of its inflow end is provided with an inlet (50) for the fibre suspension to be processed and holds a body (26) which is rotationally symmetrical around the axis of the casing. At its outflow end, the outer casing (10) has a stationary discharge pipe (60) (light-weight impurities outlet) which is concentric to the axis of the casing and receives a first fraction of the suspension (light-weight impurities) with specific light-weight particles to be separated from the suspension, as well as a useful material outlet (74) for a second fraction of the suspension which contains useful fibres (useful material). A rotary drive generates a rotary flow component around the axis (18) of the casing in the ring-shaped space between the outer casing (10) and the rotationally symmetrical body (26). In order to discharge heavy impurities, but above all to reduce costs due to wear, this apparatus has a stationary outer casing and useful material outlet and the rotationally symmetrical body is designed as a rotationally symmetrical partition wall (56) around the axis of the casing and which forms together with the circumferential wall of the outer casing a ring-shaped outer chamber (58) whose face towards the rotor is open and whose opposite face is closed. At an axial distance from its open face, the ring-shaped outer chamber (58) has an outlet (66) for a third fraction of the suspension which contains specific heavy particles (heavy impurities fraction) to be separated. The outlet (74) of useful materials communicates with the outflow end of an inner ring-shaped chamber (70) located between the partition wall and the light impurities discharge pipe.

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