

Title (en)
Method and container for stacking high consistency pulp

Title (de)
Verfahren und Behälter zum Stapeln von hochkonsistentem Papierfaserstoff

Title (fr)
Méthode et récipient pour stocker une pulpe à consistance élevée

Publication
EP 0965682 A1 19991222 (DE)

Application
EP 99111616 A 19990616

Priority
DE 19826879 A 19980617

Abstract (en)
To store and dilute paper fiber pulp with a high consistency, it is held in an initial storage zone (1) for the required dwell time. It is then passed into a second zone (2) for dilution into a pulp consistency which can be pumped. A circulation flow (3) is in the second zone (2), which takes off the high consistency pulp. It is then taken off as a suspension (S) through a sieve (5) held free by a cleaner (4). The high consistency paper fiber pulp has a crumble structure, formed of used paper for recycling which has been broken down, cleaned and then thickened. In the first zone (1), the pulp has a solid content of 20-40% to be bleached chemically. The pulp taken from the second zone (2) has a solid content of max. 8%. The cleaner (4) breaks down or grinds fiber clumps, and the cleaner (4) generates the circulation flow (3). The circulation flow (3) action is supported by a propeller (7), with its hydraulic propulsion on the same alignment as the sieve cleaner (4) so that the propeller (7) generates a pressure and the sieve cleaner (4) exerts a suction on the circulation flow (3). The propeller (7) and sieve cleaner (4) rotate in opposite directions, and face each other concentrically. The cleaner (4) develops a specific working level of 3-15 kWh/tonne. The paper fiber pulp is transferred from the first (1) to the second (2) zone through a steadily decreasing flow cross section surface, where the downstream flow cross section is max. 80% of the upstream flow cross section. The second zone (2) is placed under the first zone (1). An Independent claim is included for an assembly with a vessel to hold the paper fiber pulp. The second zone (2) has a stirring propeller (7) and a sieve assembly (8). The sieve unit (8) has at least one sieve (5) and a sieve cleaner (4), for the diluted paper fiber pulp to be taken through the sieve (5). Preferred Features: The propeller (7) and the sieve unit (8) are opposite each other, at the lower side walls of the vessel. The propeller (7) generates a horizontal propulsion flow, or the flow from the propeller (7) is at an angle of 0-30 degrees. The sieve (5) is a flat plate, with openings.

Abstract (de)
Das Verfahren dient zum Stapeln und Verdünnen von hochkonsistentem Papierfaserstoff. Dieser wird dazu in einem ersten Volumen (1) über die gewünschte Verweilzeit hinweg gestapelt und anschließend in ein zweites Volumen (2) gebracht, in dem unter Verdünnung eine pumpfähige Suspension hergestellt wird. Im zweiten Volumen (2) wird eine Zirkulationsströmung (3) erzeugt, welche den hochkonsistenten Papierfaserstoff abträgt. Er wird dann als Suspension (S) durch ein von einem Räumer (4) freigehaltenes Sieb (5) hindurch abgezogen. <IMAGE>

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D21B 1/342 (2013.01); **D21D 5/28** (2013.01)

Citation (applicant)
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