Title (en)

SLUDGE DRYING PROCESS

Publication

EP 0379657 B1 19910911 (DE)

Application

EP 89120565 A 19891107

Priority

DE 3902446 A 19890127

Abstract (en)

[origin: US4970803A] A sand layer is fluidized by a gas stream or current in a fluidized bed dryer and indirectly heated by immersed stationary heat-exchanger tubes. The sludge to be dried is continuously fed under pressure in a pumpable conditon from above onto the fluidized sand layer. The sludge is coagulated in the fluidized sand layer to form sludge lumps. Here, the sludge lumps are successively dried from the surface down to the core thereof, and the already dried layers of the sludge lumps are successively abraded by the fluidized sand, whereby the sludge lumps are entirely comminuted and the dry matter thereof is pulverized to form dust. This product dust is continuously discharged together with the exhaust-gas stream from the fluidized bed dryer and continuously separated as a product from the exhaust-gas stream. The gas stream or current freed from dust is partially recycled in a closed circuit back to the fluidized bed dryer for fluidization of the sand layer.

IPC 1-7

F26B 3/08; F26B 21/04

IPC 8 full level

C02F 11/12 (2006.01); **F26B 3/08** (2006.01); **F26B 3/084** (2006.01); **F26B 3/088** (2006.01); **F26B 21/04** (2006.01)

CPC (source: EP US)

F26B 3/084 (2013.01 - EP US); **F26B 3/088** (2013.01 - EP US); **F26B 21/04** (2013.01 - EP US)

Cited by

DE4028397C1; EP0537637A1; US5283959A; US8434241B2; WO2008122137A1

Designated contracting state (EPC)

AT BE CH ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0379657 A1 19900801; **EP 0379657 B1 19910911**; AT E67299 T1 19910915; CA 2006507 A1 19900727; CA 2006507 C 19940208; DE 3902446 C1 19900705; DK 21590 A 19900730; DK 21590 D0 19900126; ES 2024707 B3 19920301; FI 895755 A0 19891201; JP H02237700 A 19900920; NO 894789 D0 19891130; NO 894789 L 19900730; US 4970803 A 19901120

DOCDB simple family (application)

EP 89120565 A 19891107; AT 89120565 T 19891107; CA 2006507 A 19891222; DE 3902446 A 19890127; DK 21590 A 19900126; ES 89120565 T 19891107; FI 895755 A 19891201; JP 1630790 A 19900129; NO 894789 A 19891130; US 45948090 A 19900102