

Title (en)
APPARATUS FOR DEWATERING PREVIOUSLY-DEWATERED MUNICIPAL WASTE-WATER SLUDGES USING HIGH ELECTRICAL VOLTAGE

Title (de)
METHODE UND VORRICHTUNG ZUR ENTWÄSSERUNG VON VORENTWÄSSERTEN KOMMUNALEN ABWASSERSCHLÄMMEN MITTELS HOCHSPANNUNG

Title (fr)
APPAREIL SERVANT A DESHYDRATER LES BOUES D'EAUX USEES MUNICIPALES PREALABLEMENT DESHYDRATEES A L'AIDE DE DECHARGES ELECTRIQUES A HAUTE TENSION

Publication
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Application
EP 97946649 A 19971112

Priority
US 9720631 W 19971112

Abstract (en)
[origin: CA2307724A1] The present invention is directed to a pulsed electric-field system, apparatus and method for the effective disinfecting and dewatering previously-dewatered, biologically active waste-water sludges (e.g., municipal waste-water sludge) in an efficient manner, so as to dramatically reduce the resulting volume of the inert waste material which has to be disposed of by the municipality. The method employed sequentially consists of hydraulically pressurizing (24, 26) the previously dewatered sludge, pre-heating (32) the previously dewatered sludge to a predetermined temperature range, exposing the previously dewatered sludge to high energy pulsing electrical discharges (42), pressure separation (52) of the resulting solids and liquid fraction, and final pressure extrusion (70) of the separated solids through nozzles.
[origin: CA2307724A1] The present invention is directed to a pulsed electric-field system, apparatus and method for the effective disinfecting and dewatering previously-dewatered, biologically active waste-water sludges (e.g., municipal waste-water sludge) in an efficient manner, so as to dramatically reduce the resulting volume of the inert waste material which has to be disposed of by the municipality. The method employed sequentially consists of hydraulically pressurizing (24, 26) the previously dewatered sludge, pre-heating (32) the previously dewatered sludge to a predetermined temperature range, exposing the previously dewatered sludge to high energy pulsing electrical discharges (42), pressure separation (52) of the resulting solids and liquid fraction, and final pressure extrusion (70) of the separated solids through nozzles.

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