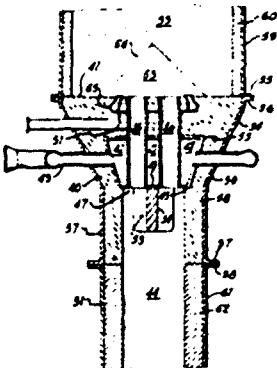


Improved method and apparatus are disclosed for regenerating wet spent carbon containing volatile impurities wherein the wet spent carbon is dried in a drying zone utilizing incinerated reactivation zone gaseous effluent. The improvement of the invention provides that the portion of reactivation zone gaseous effluent used to dry the wet spent carbon in the drying zone is continuously recycled to the reactivation zone for incineration to remove any volatile impurities which may have been removed from the wet spent carbon during drying. The balance of the reactivation zone gaseous effluent may be discharged into the atmosphere without further incineration.

4338187

SOLIDS FEEDING DEVICE AND SYSTEM

Robert Gartside; Herman Woebcke; assigned to Stone & Webster Engineering Corporation

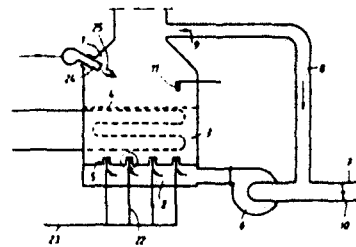


An apparatus and process for delivering fluidization gas to a bed of particulate solids to selectively locally fluidize the solids above a delivery conduit in communication with a reaction chamber. Also an apparatus and process for intimately mixing hydrocarbon feed with the particulate solids at the end of the delivery conduit in the reaction chamber.

4338074

FLUIDIZED BED COMBUSTION CHAMBERS

Lars-Goran Johansson; assigned to Stal-Laval Turbin AB



An assembly and method for heating a fluidized bed combustion chamber to ignition temperature, wherein a heated gas flows through heat exchange tubes extending into the fluidized bed to provide sufficient heat for raising the temperature of the bed material and the combustion air to allow for ignition of the combustion fuel. A conduit system is provided for selectively recycling combustion air through the combustion chamber during the ignition process.

4337143

PROCESS FOR OBTAINING PRODUCTS FROM TAR SAND

Francis V. Hanson; Jan Miller; Ales Oblad; assigned to University of Utah