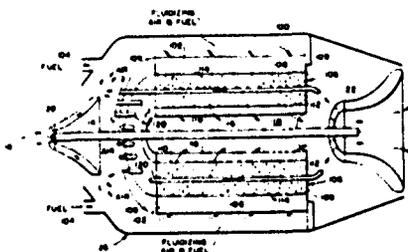


flow regulation necessary for even fluidization above the slope plate. To make investment casting molds, a gravity rainsander device is coupled with a fluidized bed. When slurry used in the mold making process drips from a pattern it falls into the fluidized bed thereby converting the errant drops into particulate balls which are conveniently removed.

4338781

ROTATING FLUIDIZED BED COMBUSTOR

William H. Belke; George Grim; assigned to Caterpillar Tractor Co.

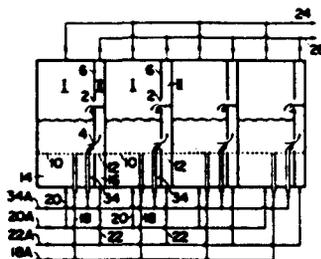


A rotating fluidized bed combustor particularly adaptable for mounting on conventional gas turbine engines comprising an annular fluidized bed, defined by inner and outer spaced apart coaxial, cylindrical, perforated walls, which rotates about the longitudinal axis of the cylinders. Compressed air and solid or liquid fuel enter the bed through the outer perforated wall and fluidize the bed. The air reacts with the fuel within the bed to produce hot combustion gas which exits the bed together with unreacted compressed air, through the inner perforated wall. When employed with gas turbine engines, the gases exiting the bed are directed into the guide vanes of the gasifier turbine. Cooling tubes pass substantially longitudinally through the rotating fluidized bed and compressed air is directed through the tubes to absorb combustion heat from the bed.

4338283

FLUIDIZED BED COMBUSTOR

Koya Sakamoto; Yutaka Yoneda; Naoki Fujiwara; Shigehito Takamoto; assigned to Babcock Hitachi Kabushiki Kaisha



A fluidized bed combustor wherein a combustion chamber and a regeneration chamber are both contained in a single hollow body is provided. These two chambers are formed by vertically partitioning the body by a partition wall, which has an upper opening and a lower one, and also each have a perforated plate at the bottom part thereof on which a heat transfer medium containing a desulfurizing agent is placed and fluidized. The desulfurizing agent is transferred from the combustion chamber through the lower opening to the regeneration chamber and circulated by overflow through the upper opening again to the combustion chamber. Various modifications of the above-mentioned fundamental embodiment are proposed. Combustion and desulfurization are automatically and effectively carried out in make an apparatus to give a high percentage desulfurization, make an apparatus compact, and reduce an initial cost and a running cost thereof.

4338198

TWO STAGE FLUID BED REGENERATION OF SPENT CARBON

George N. Brown; assigned to Westvaco Corporation