screen and cling to the surfaces of the filter elements from which they may be intermittently dislodged by an air blast directed into these elements from the clean-air unit. The dislodged particles fall into a recovery compartment of the housing which lies below the level of the chamber bottom, this bottom sloping down toward the recovery compartment whereby particles dropping to the chamber floor can slide directly into that compartment underneath the apertured screen. A flexible conduit connects the recovery compartment with the spray gun for recirculation of the particles which, after passing through a strainer, are reconditioned by a fluidized bed in the recovery compartment. Cutouts in the sidewalls and a slot in the roof of the booth enable the introduction and withdrawal of workpieces suspended from above.

4354439

METHOD OF AND A DEVICE FOR FEEDING SOLID FUEL IN A FLUIDIZED BED HEARTH

Fritz Baunack assigned to Babcock-BSH AG vormals Buttner-Schilde-Haas AG



In the method of feeding pulverized solid fuels into a fluidized bed hearth, the granular solid fuel is first delivered into a fuel distributing space where it is fluidized by means of a whirling stream of air and the fine granular components of the fluidized fuel are pneumatically fed through an array of feeding pipes into the fluidized bed formed in the combustion space of the hearth. The device for performing the method includes heat-resistant feeding pipes uniformly distributed between the combustion space and projecting into the fuel distributing space to immerse into the fuel distributing fluidized bed of fuel. The fluidizing air of stream is introduced into the distributing chamber to act both as the fuel conveying medium and as a combustion air in the combustion space.

4354354

SYSTEM FOR RECOVERY OF SULFUR DIOXIDE IN AN MHD POWER PLANT

Stanley Wysk; James Clark assigned to Combustion Engineering Inc



The seed, in the form of K2SO4, is fed into an MHD combustor, mechanically recovered, and recycled. Sulfur dioxide in the discharge of the MHD channel is recovered downstream by a fluidized bed of lime/limestone.

4353730

GRANULATING PROCESS

Bunji Kinno; Hiroshi Hirayama; Tetsuzo Honda assigned to Toyo Engineering Corporation; Mitsui Toatsu Chemicals Incorporate



Disclosed is a granulating process which comprises the steps of providing a plurality of spouted bed granulation zones arranged in series and one or more fluidizing zones for cooling and drying purposes each disposed between two adjacent ones of the granulation zones, introducing priming granules of a particulate material into the first-stage granulation zone while spraying thereinto an adherent and solidifiable liquid together with a gas stream to enlarge the priming granules, cooling and drying the enlarged granules in the succeeding fluidizing zone, passing the resulting granules through the other granulation zones and fluidizing zones successively, and withdrawing the granules enlarged to a desired particle size from the laststage granulation zone. Also disclosed is an apparatus for carrying out this granulating process.

4353709

GRANULATION PROCESS

Susumu Nioh; Hiroshi Hirayama; Tetsuzo Honda; Takashi Nagahama; Masaki Naruo assigned to Mitsui Toatsu Chemicals Incorporated; Toyo Engineering Corporation



There is disclosed a process of granulation comprising dropping as liquid droplets the melt of a substance solidifiable by cooling or drying through a zone having a sufficient vertical distance to allow solidification of the droplets, forming a fluidized bed of the solidified droplets on the bottom of the said zone, spraying the same or a different melt from the above mentioned substance as fine liquid grains along with a gas stream into the fluidized bed thereby forming a spouted bed of the solidified droplets in the fluidized bed, coating and enlarging the solidified droplets with the fine liquid grains inside the spouted bed, and discharging the obtained large sized granules from the fluidized bed. There is also disclosed an apparatus for practicing the process.

4352718

METHOD FOR TREATING PARTICULATE MATERIAL

Gusta Grun assigned to Claudius Peters AG

There is disclosed a method and apparatus for treating particulate material. The said material is injected into a chamber. The material subsequently thereto is sprayed with a moistening material. At



the same time gases are introduced at the top of the chamber and at the bottom thereof whereby the moisture on the particulate material is evaporated at a controlled rate. The parameters are such that the applied moisture has an opportunity to penetrate the particulate material for a short period of time to achieve some agglomeration before the moisture is evaporated. A fluidized bed is maintained at the bottom of the chamber and the treated particulate material is removed in this fashion.

4351861

DEPOSITION OF COATINGS FROM VAPORIZED REACTANTS

Vern A Henery assigned to PPG Industries Inc