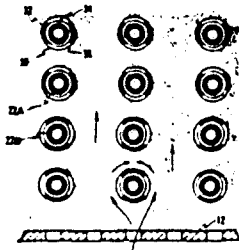


particles is measured. The ratio of the two pressure drops represents the ratio of the fluid velocity and minimum fluidizing velocity under the operating conditions and can be used as control factor.

4335785

**APPARATUS AND METHOD FOR CONTROLLING HEAT TRANSFER BETWEEN A FLUIDIZED BED AND TUBES IMMERSED THEREIN**

James L. Hodge; Anthony E. Cerkanowicz



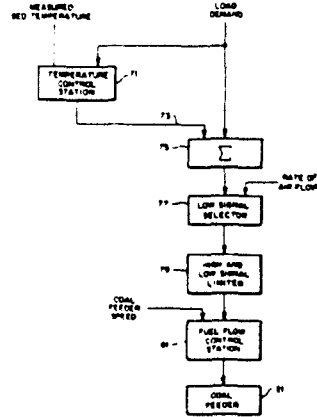
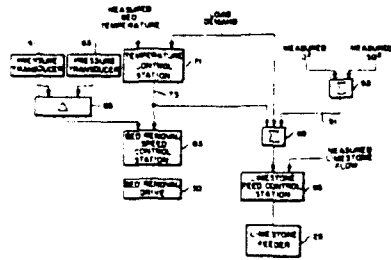
In a fluidized bed of solid particles having one or more heat between the fluidized particles and a fluid flowing through the immersed heat exchange tubes is controlled by rotating an arcuate shield apparatus about each tube to selectively expose various portions of the tube to the fluidized particles.

4335683

**FLUIDIZED BED HEAT EXCHANGER WITH CONTROL TO RESPOND TO CHANGES IN DEMAND**

Robert L. Criswell; Michael C. Polagye; assigned to Foster Wheeler Energy Corporation

In a fluidized boiler system, the rate of fuel flow and bed depth are simultaneously controlled in response to variations in a



load demand signal representing the need for steam output from the system. When the load demand changes, the rate of fuel flow is varied accordingly to provide a change in the bed temperature to thus provide a rapid response to the change in the demand signal. At the same time, the system changes the rate of flow of limestone to the bed and the rate of removal of spent particulate material of the bed to change the bed depth to respond more slowly to the change in the demand signal. As the depth of the fluidized bed approaches a value corresponding to the demand signal, the temperature of the bed will change back toward a median value.

4335662

**SOLID FUEL FEED SYSTEM FOR A FLUIDIZED BED**

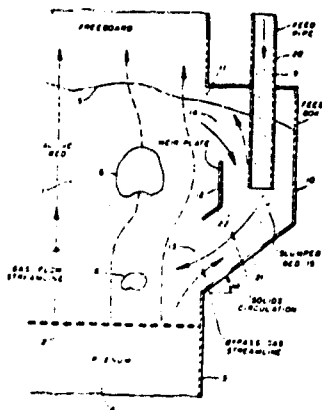
Brian Jones; assigned to Combustion Engineering Inc.

A fluidized bed for the combustion of coal, with limestone, is replenished with crushed coal from a system discharging the coal laterally from a station below the surface level of the bed. A compartment, or feed box, is mounted at one side of the bed and its interior separated from the bed by a weir plate beneath which the coal flows laterally into the bed while bed material is received into the compartment above the plate to maintain a predetermined minimum level of material in the compartment.

4335661

### FLUIDIZED BED HEAT EXCHANGER HAVING AN AIR ASSISTED BED DRAIN

Robert D. Stewart; Thomas E. Taylor; assigned to Foster Wheeler Energy Corporation

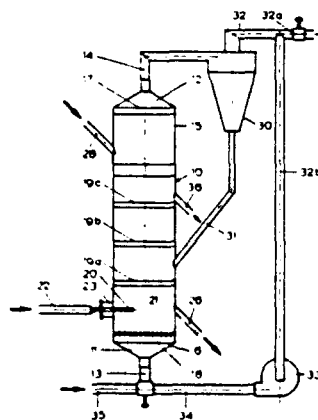


A fluidized bed heat exchanger in which a perforated plate is disposed within a housing for supporting a bed of particulate material. Air is passed through the plate to fluidize the particulate material and nozzles are provided for distributing air across the inlet end of a drain pipe for the spent particulate material to insure a continuous draining of the material.

4334898

### DEVICE FOR THE PRODUCTION OF SOLID ALUMINUM CHLORIDE

Gerhard Zhuber-Okrog; Ernst Kowolik; Haspeter Alder; Hans P. Mueller; assigned to Swiss Aluminium Ltd



A device for producing solid aluminum chloride from gas containing gaseous aluminum chloride by means of a fluidized bed condenser. Between the inlet pipe for carrier gas and an outlet pipe for residual or waste gas there is a distributor plate with openings in the form of nozzles, at least one cooling facility, a feeding facility for the supply of gas containing gaseous aluminum chloride and a facility for drawing off the solid aluminum chloride. The outlet pipe for waste or residual gas is connected to the inlet pipe for carrier gas via a separator which separates out fine particulate aluminum chloride, which is then fed back to the bed to act as nuclei.

4334056

### METHOD FOR POLYTROPICALLY PRECIPITATING POLYAMIDE POWDER COATING COMPOSITIONS WHERE THE POLYAMIDES HAVE AT LEAST 10 ALIPHATICALLY BOUND CARBON ATOMS PER CARBONAMIDE GROUP