the reactor controls the flow path of particles in the fluidized bed to enhance mixing and maintain uniform reactor temperatures. Means are additionally provided to introduce polymer particles into the reaction chamber in a controlled manner as well as ignition means to continuously ignite gases in the reactor, promoting the burning reaction. In accordance with the subject method, the bulk of the polymer waste is substantially reduced and useful heat energy is recovered.

4426958

FLUIDIZED BED COMBUSTOR AND COAL GUN-TUBE ASSEMBLY THEREFOR

William S Hosek, Edward Garruto assigned to Curtiss-Wright Corporation



A coal supply gun assembly for a fluidized bed combustor which includes heat exchange elements extending above the bed's distributor plate assembly and in which the gun's nozzles are disposed relative to the heat exchange elements to only discharge granular coal material between adjacent heat exchange elements and in a path which is substantially equidistant from adjacent heat exchange elements.

4427364

FLUIDIZABLE BED COMBUSTION CHAMBER

Jorge Bergkvist, Finspong, Sweden assigned to Stal-Laval Turbin AB

A fluidizable bed combustion chamber com-



prises an intermediate partition (2,7) which divides the chamber into an upper combustion space (1a) and a lower plenum (1b) and which is provided with means (4.4a.8) for injecting fuel into the upper combustion space in which, during use of the combustion chamber, a bed of fluidized material (6) is created. The intermediate partition is composed of a plurality of nested modules (7), each of polygonal shape and having a substantially centrally positioned fuel supply member (8). Each corner surface (9) of each module is upwardly inclined in the direction away from the center of the module, and these corner surfaces are provided with openings (10) enabling air to be injected into the upper combustion space from the plenum chamber. Preferably, the modules are of regular polygonal shape, for example triangular, quadratic or hexagonal.

4429471

FLUIDIZED BED AIR DISTRIBUTOR

Stephen L Goodstine, Glen D Jukkola assigned to Conoco Inc



Fluidized bed apparatus comprising a fluidized chamber having a grid plate below said chamber, a feed gas channel below said grid plate, and a fluidized bed gas distributor, said fluidized bed gas distributor comprising a nipple, a cap, and a bushing, wherein said cap is provided with at least one gas distribution passage, and said nipple includes a central nipple passage and said bushing includes a central bushing passage, said cap being attached to a first end of said nipple said bushing being attached to a second end of said nipple.