

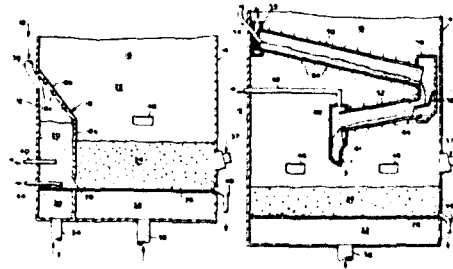
Klaus-Rudol Meyer; Karl-Hein Hornung; Rainer Feldmann; Hans-Jurge Smigerski; assigned to Chemische Werke Huls AG

Polyamide powder coating compositions for the coating of metals at high temperatures are obtained by the precipitation method from polyamides having at least 10 aliphatically bound carbon atoms per carbonamide group, copolyamides having at least 70% of these polyamides and mixtures of homopolyamides and copolyamides having at least 70% of these polyamides. A. For the preparation of powder coating compositions useful in the fluidized bed coating method the polyamides with 10 or more carbon atoms and having a relative viscosity between 1.4 and 1.8 are added to at least twice the amount by weight of ethanol and while the mixture is being mechanically mixed in a closed vessel is converted into a solution at temperatures between 130 degrees and 150 degrees C. This solution is adjusted to a precipitation temperature of between 100 degrees and 125 degrees C. while avoiding the formation of local sub-cooling and is agitated under an inert gas atmosphere to suppress boiling. Without further heat supply, powders with a grain size distribution of at least 99.5% by eight between 40 and 250 microns are precipitated at a low angular speed of agitation. When the particle formation is terminated, the suspension formed is cooled to at least 70 degrees C. and following partial mechanical separation of the ethanol, first drying takes place at reduce pressure with wall temperatures at not more than 100 degrees C. with mild mechanical agitation and after the onset of friability the wall temperatures can be increased up to 150 degrees C. with stronger mechanical agitation. B. For the preparation of powder coating compositions useful in the electrostatic coating method the method of A is modified in the precipitation step by using a higher angular speed of agitation for the purpose of preparing a grain size distribution of 100% by weight smaller than 100 microns.

4333909

**FLUIDIZED BED BOILER UTILIZING PRECALCINATION OF ACCEPTORS**

Robert D. Stewart; Robert L. Gamble; assigned to Foster Wheeler Energy Corporation



A fluidized bed boiler, and a method of operating same in which air is passed through a grate to fluidize a bed of particulate material containing fossil fuel disposed on the grate. A raw acceptor for the sulfur produced as a result of the combustion of the fuel is introduced into the housing and confined within an area of the housing isolated from the bed of particulate material. The area containing the acceptor is maintained at conditions optimal for calcining the acceptor, after which the latter is introduced into the fluidized bed.

4333445

**FLUIDIZED BED SOLAR ENERGY HEATER**

Donald M. Lee

