

Title (en)

METHOD AND APPARATUS FOR CONTROLLING THE TEMPERATURE OF THE BED OF A BUBBLING BED BOILER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BETT-TEMPERATURKONTROLLE EINES DAMPFKESSELS MIT EINER STATIONÄREN WIRBELSCHICHT

Title (fr)

PROCEDE PERMETTANT D'AGIR SUR LA TEMPERATURE DU LIT D'UNE CHAUDIERE A LIT EN EBULLITION ET APPAREIL CORRESPONDANT

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Application

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Abstract (en)

[origin: WO9715784A1] The present invention relates to a method and assembly for controlling the bed temperature in a fluidized-bed boiler, particularly in boilers fired with coal or other fuels of high heat value but difficult to gasify. Above the fluidized bed (6), but below the freeboard (8), is arranged a cooling zone (19) and the fluidizing gas is injected into a portion of the bed at an excess rate per unit area, whereby over the area of increased fluidizing gas injection, the bed is expanded upward into the cooling zone, wherefrom unburned combustible material and the particulate matter of the bed can fall back in the bed. The gas injection (9) with the higher flow rate is arranged to the center of the fluidized bed, whereby the return circulation can occur past the waterwall portions enclosing the cooling zone, thus facilitating efficient heat transfer from the refluxed bed material in the form of radiation absorbed by the heat transfer surfaces of the cooling zone waterwalls.

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