

Title (en)

A METHOD FOR REDUCING NITROGEN OXIDE EMISSIONS OF A BUBBLING FLUIDIZED BED BOILER

Title (de)

VERFAHREN ZUR REDUZIERUNG VON STICKOXIDEMISSIONEN EINES KESSELS MIT BLASENBILDENDEM WIRBELBETT

Title (fr)

PROCEDE DESTINE A REDUIRE LES EMISSIONS D'OXYDE D'AZOTE D'UNE CHAUDIERE A LIT FLUIDISE BOUILLONNANT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2006084954A1] A method for reducing nitrogen oxide emissions of a bubbling fluidized bed boiler burning biofuel and an air distribution system for a bubbling fluidized bed boiler biofuel. A fluidized bed (2) is arranged in the lower part of a furnace (1) of the bubbling fluidized bed boiler, which is fluidized by means of fluidizing gas, which comprises at least primary air. Fuel is fed to the fluidized bed (2), which dries and pyrolyzes into pyrolysis gas comprising volatile matter of fuel, which gas rises upwards in the furnace and burns there. Secondary air is supplied above the fluidized bed (2) from secondary air nozzles (6), and tertiary air is supplied above the secondary air nozzles (6). A part of primary air is supplied in connection with fuel feeding in such a manner that the fuel is forced substantially on the surface of the fluidized bed (2), thus pyrolyzing entirely, and at least a part of the pyrolysis gases formed in the pyrolysis is burnt by means of primary air in such a manner that the air coefficient in relation to the volatile matter of fuel in the pyrolysis gases is in the substoichiometric area.

IPC 8 full level

F23C 10/00 (2006.01); **F23C 10/22** (2006.01); **F23G 5/30** (2006.01); **F23G 7/10** (2006.01); **F23K 3/02** (2006.01)

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