

Title (en)
FUEL COMBUSTOR.

Title (de)
BRENNSTOFFKOPF.

Title (fr)
BRULEUR.

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Application
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Abstract (en)
[origin: WO8203261A1] A combustor and a corresponding method for its operation, wherein the fuel, which is pulverized coal in the illustrative embodiment, is first reacted with at least a portion of oxidizer gas flow directed to the head end (20) of the combustor. Combustion in the head end proceeds at a substantially lower stoichiometric ratio than the overall ratio for the combustor, which therefore operates at a relatively low temperature and high thermodynamic efficiency, while maintaining good slag removal characteristics. Of the several embodiments disclosed, one group has an oxidizer inlet (12) from which oxidizer gas splits into a component directed toward the head end, where the first phase of combustion takes place, head-end and a component directed toward the exit end (18), where a second phase of combustion takes place. In another group of embodiments, oxidizer is directed only toward the head-end, and the resultant exiting gas is rich in combustibles.

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Citation (search report)
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