

Title (en)  
PULVERIZED COAL BOILER

Title (de)  
KOHLENSTAUBKESSEL

Title (fr)  
CHAUDIÈRE AU CHARBON PULVÉRISÉ

Publication  
**EP 2083216 A4 20130306 (EN)**

Application  
**EP 07831257 A 20071106**

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Abstract (en)  
[origin: US2010031858A1] The present invention provides a highly reliable pulverized coal boiler that ensures suppression of a rise in flame temperature caused during the combustion of an unburnt gas in a furnace when combustion air is supplied from after-air ports so as to reduce the concentration of thermal NO<sub>x</sub> generated during the combustion. A pulverized coal boiler (100) according to the present invention comprising a furnace (1), burners (2) provided on the wall of the furnace for supplying pulverized coal to the inside of the furnace and burning the pulverized coal, and an after-air port (3 or 61) provided on the wall of the furnace at a position downstream of the burner for supplying combustion air to the inside of the furnace, the pulverized coal boiler further comprising: a spray nozzle (6) disposed near a jet port (3 or 60) of the after-air port for supplying water, steam, or two fluids including water and steam to the inside of the furnace; whereby the water, the steam, or the two fluids including water and steam are sprayed from the spray nozzle are supplied to the inside of the furnace together with the combustion air supplied from the after-air port.

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Citation (search report)  
• [XA] US 2006115779 A1 20060601 - YAMAMOTO KENJI [JP], et al  
• [A] US 5915310 A 19990629 - HURA HARJIT S [US], et al  
• [XP] JP 2007139266 A 20070607 - BABCOCK HITACHI KK  
• See references of WO 2008056650A1

Cited by  
CN104089279A; CN104089299A; CN105003912A

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