

Title (en)

Burner, fuel combustion method and boiler retrofit method

Title (de)

Brenner, Verbrennungsverfahren und Kessel-Umstellverfahren

Title (fr)

Brûleur, procédé de combustion et méthode d'adaption d'une chaudière existante

Publication

**EP 1580486 A1 20050928 (EN)**

Application

**EP 05003484 A 20050218**

Priority

JP 2004086006 A 20040324

Abstract (en)

In a burner of construction having a primary nozzle (4), a secondary nozzle (8) and a tertiary nozzle (9), a partition wall (1, 2) partitioning the secondary nozzle (8) and the tertiary nozzle (9) and having a flow path change member (3) provided thereon, the partition wall (2) is formed so as to be movable in parallel to the burner axis to control jetting speeds and flow rates of secondary air and tertiary air, whereby it is possible to cool the burner constituent members while reducing NOx. The partition wall (1, 2) is composed of a fixed wall (1) and a movable wall (2). The burner comprises a bypass passage (16, 19) through which tertiary air in the tertiary nozzle (9) bypasses the tertiary nozzle to flow into the secondary nozzle (8) or the primary nozzle (4).

IPC 1-7

**F23D 1/00; F23L 13/06; F23N 3/04**

IPC 8 full level

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CPC (source: EP KR US)

**F23C 7/008** (2013.01 - EP US); **F23D 1/04** (2013.01 - KR); **F23D 23/00** (2013.01 - KR); **F23D 2900/00003** (2013.01 - EP US);  
**F23D 2900/11402** (2013.01 - EP US)

Citation (search report)

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DE FI GB

DOCDB simple family (publication)

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CA 2496644 A1 20050924; CA 2496644 C 20090707; CN 1321288 C 20070613; CN 1673620 A 20050928; JP 2005273973 A 20051006;  
JP 4261401 B2 20090430; KR 20060042080 A 20060512; US 2005211142 A1 20050929

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