

Title (en)  
COMBUSTION APPARATUS FOR A GAS BOILER

Title (de)  
VERBRENNUNGSVORRICHTUNG FÜR EINEN GASKESSEL

Title (fr)  
APPAREIL DE COMBUSTION POUR UNE CHAUDIÈRE À GAZ

Publication  
**EP 2084455 A1 20090805 (EN)**

Application  
**EP 07746197 A 20070426**

Priority  
• KR 2007002038 W 20070426  
• KR 20060120649 A 20061201

Abstract (en)  
[origin: WO2008066223A1] Disclosed is a combustion apparatus of a gas boiler. The combustion apparatus of the gas boiler includes a structure that can improve a TDR of a burner, and can increase an efficiency of a gas boiler by preventing oxygen concentration of exhaust gas from being rapidly increased in a low output area. The combustion apparatus includes: an air blower for supplying air required for combustion; a proportion control valve for controlling a supply flow rate of gas; a nozzle part connected to the proportion control valve, the nozzle part supplying gas according to opening and closing of auxiliary valves and including a plurality of nozzles connected in parallel with one another; a mixing chamber for mixing the air supplied from the air blower and the gas passed through the nozzle part, and then supplying the mixed air and gas to a burner surface; and a controller for controlling the number of rotations of the air blower according to opening and closing of the proportion control valve and the auxiliary valves, so as to supply only an amount of air as much as that required for combustion.

IPC 8 full level  
**F23D 14/02** (2006.01); **F23D 14/60** (2006.01); **F23N 1/00** (2006.01); **F23N 1/02** (2006.01)

CPC (source: EP KR US)  
**F23D 14/02** (2013.01 - EP US); **F23D 14/34** (2013.01 - EP US); **F23D 14/60** (2013.01 - EP KR US); **F23D 14/62** (2013.01 - EP US); **F23D 14/70** (2013.01 - EP US); **F23N 1/02** (2013.01 - KR); **F23N 3/00** (2013.01 - KR)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2008066223 A1 20080605**; CN 101553692 A 20091007; CN 101553692 B 20110323; EP 2084455 A1 20090805; EP 2084455 A4 20140402; JP 2010511143 A 20100408; JP 4792112 B2 20111012; KR 100805630 B1 20080220; US 2010047728 A1 20100225

DOCDB simple family (application)  
**KR 2007002038 W 20070426**; CN 200780043934 A 20070426; EP 07746197 A 20070426; JP 2009539168 A 20070426; KR 20060120649 A 20061201; US 51601707 A 20070426