

Title (en)
Burner apparatus and methods

Title (de)
Brennervorrichtung und Verfahren

Title (fr)
Appareil de brûleur et procédés

Publication
EP 2148137 A3 20101020 (EN)

Application
EP 09251881 A 20090727

Priority
US 22062308 A 20080725

Abstract (en)
[origin: EP2148137A2] A burner assembly for and method of combusting fuel gas in a furnace is provided. The burner assembly (10) includes a burner tile (18) having a burner throat (48) disposed therethrough. Combustion air is conducted through the burner throat into a combustion zone in the furnace. A pilot assembly (20) is used to generate a pilot flame (62) within the burner throat. Fuel gas is injected into an ignition zone (80) located outside the burner throat and ignited therein. The pilot flame (62) generated in the burner throat (48) can be used to ignite the fuel gas in the ignition zone (80). The ignited fuel gas is admixed with combustion air in the combustion zone. The burner assembly can be operated without admixing a significant amount of fuel gas with combustion air in the burner throat, which can help control the formation of undesirable nitrogen oxides (NO_x).

IPC 8 full level
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CPC (source: EP KR US)
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F23M 5/025 (2013.01 - EP US)

Citation (search report)
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• [X] US 5980243 A 19991109 - SURBEY DAVID J [US], et al
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• [A] EP 0809072 A2 19971126 - TOYOTA MOTOR CO LTD [JP]

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EP2956719A4; US9803855B2; US10571124B2

Designated contracting state (EPC)
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EP 09251881 A 20090727; AR P090102840 A 20090724; AU 2009202864 A 20090714; BR PI0902485 A 20090727; CN 200910161606 A 20090722; EP 09251886 A 20090727; JP 2009172666 A 20090724; KR 20090066915 A 20090722; MX 2009007707 A 20090717; TW 98124444 A 20090720; US 22062308 A 20080725