

Title (en)

CONTROL SYSTEM FOR A BURNER WITH PERFORATED FLAME HOLDER

Title (de)

STEUERSYSTEM FÜR EINEN BRENNER MIT PERFORIERTEM FLAMMENHALTER

Title (fr)

SYSTÈME DE COMMANDE POUR UN BRÛLEUR COMPORTANT UN PORTE-FLAMME PERFORÉ

Publication

EP 3683501 A1 20200722 (EN)

Application

EP 19152400 A 20190117

Priority

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Abstract (en)

A combustion system includes a perforated flame holder, a preheating fuel distributor, a main fuel distributor, an oxidant source, an array of sensors, and a controller. The oxidant source outputs an oxidant. The preheating fuel distributor supports a preheating flame configured to preheat the perforated flame holder by outputting a preheating fuel when the combustion system is in a preheating state. The main fuel source outputs a main fuel in the standard operating state. The perforated flame holder is configured to support a combustion reaction of the main fuel and the oxidant in the standard operating state. The sensors are configured to sense parameters of the preheating flame and the perforated flame holder and to output sensor signals to the controller. The controller executes software instructions that include adjusting the flow of the main fuel, the preheating fuel, and the oxidant responsive to the sensor signals.

IPC 8 full level

F23D 14/14 (2006.01); **F23D 14/22** (2006.01); **F23D 14/70** (2006.01); **F23N 5/00** (2006.01); **F23N 5/08** (2006.01); **F23N 5/24** (2006.01)

CPC (source: EP)

F23D 14/145 (2013.01); **F23D 14/70** (2013.01); **F23N 5/003** (2013.01); **F23N 5/082** (2013.01); **F23N 5/242** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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