

Title (en)

PARTIALLY TRANSITIONED FLAME START-UP OF A PERFORATED FLAME HOLDER

Title (de)

TEILWEISE ÜBERGELEITETER FLAMMENSTART EINES PERFORIERTEN FLAMMENHALTERS

Title (fr)

DÉMARRAGE DE FLAMME À TRANSITION PARTIELLE D'UN STABILISATEUR DE FLAMME PERFORÉ

Publication

**EP 3325877 A4 20190320 (EN)**

Application

**EP 16847110 A 20160912**

Priority

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- US 2016051343 W 20160912

Abstract (en)

[origin: WO2017048638A1] A combustion system includes a perforated flame holder configured to hold a main combustion reaction substantially between input and output faces thereof. A main fuel nozzle is positioned to emit a main fuel stream toward the input face. An igniter assembly is configured to ignite a preheat flame supported by the main fuel stream between the main fuel nozzle and the perforated flame holder, and to selectably control a degree of ignition of the fuel stream by the preheat flame. During a start-up of the combustion system, the perforated flame holder is preheated by the preheat flame. When the flame holder reaches a start-up temperature, the preheat flame is shifted from fully igniting to partially igniting the fuel stream, allowing fuel and oxidant to reach the flame holder. A flame is ignited in the flame holder while the preheat flame burns. The preheat flame is then released.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] WO 2015070188 A1 20150514 - CLEARSIGN COMB CORP [US]
- [A] WO 2015123381 A1 20150820 - CLEARSIGN COMB CORP [US]
- [A] WO 2014127306 A1 20140821 - CLEARSIGN COMB CORP [US]
- See references of WO 2017048638A1

Cited by

EP3449183B1

Designated contracting state (EPC)

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