Title (en)

LOW NOx BURNER APPARATUS AND METHOD

Title (de)

BRENNER MIT NIEDRIGEM NOx-GEHALT UND VERFAHREN

Title (fr)

APPAREIL BRÛLEUR À FAIBLE PRODUCTION DE NOx ET PROCÉDÉ

Publication

EP 3414490 A4 20191120 (EN)

Application

EP 16884234 A 20161230

Priority

- US 201614991258 A 20160108
- US 2016069466 W 20161230

Abstract (en)

[origin: WO2017120114A1] A burner apparatus for a fired-heater system and a method of burner operation wherein the burner fuel is ejected outside of the burner wall from a surrounding fuel discharge ring, or from a lateral elongate ejection bar in the case of a flat flame burner, to a combustion zone projecting from the forward end of burner wall. The burner apparatus and method reduce NOx production by a combination of enhanced internal flue gas recirculation and staged fuel operation.

IPC 8 full level

F23D 14/02 (2006.01); **F23D 14/22** (2006.01); **F23D 14/28** (2006.01); **F23D 14/32** (2006.01); **F23D 14/46** (2006.01); **F23D 14/48** (2006.01); **F23D 14/58** (2006.01); **F23D 14/70** (2006.01)

CPC (source: EP US)

F23C 9/006 (2013.01 - US); **F23D 14/02** (2013.01 - US); **F23D 14/22** (2013.01 - EP US); **F23D 14/24** (2013.01 - EP US); **F23D 14/36** (2013.01 - EP US); **F23D 14/48** (2013.01 - EP US); **F23D 14/58** (2013.01 - US); **F23D 14/583** (2013.01 - EP US); **F23D 14/70** (2013.01 - EP US)

Citation (search report)

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- [XA] US 4411617 A 19831025 - MAKSIM JR JOHN [US]
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- [A] US 5257927 A 19931102 - LANG JERRY M [US]
- See also references of WO 2017120114A1

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

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WO 2017120114 A1 20170713; CA 3009668 A1 20170713; CA 3009668 C 20240130; CN 108603659 A 20180928; CN 108603659 B 20210504; EP 3414490 A1 20181219; EP 3414490 A4 20191120; EP 3414490 B1 20210915; US 2017198902 A1 20170713

DOCDB simple family (application)

US 2016069466 W 20161230; CA 3009668 A 20161230; CN 201680078267 A 20161230; EP 16884234 A 20161230; US 201614991258 A 20160108