Title (en)

GAS BURNER WITH LOW NOX EMISSION

Title (de)

GASBRENNER MIT NIEDRIGER NOX-EMISSION

Title (fr)

BRÛLEUR À GAZ À FAIBLE ÉMISSION DE NOX

Publication

EP 4253838 A1 20231004 (EN)

Application

EP 22166388 A 20220401

Priority

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Abstract (en)

The invention provides a gas burner for burning a fuel gas using fuel staging, said gas burner having a center line A and comprising:- a primary fuel gas discharge opening (2) for introducing a first fraction of said fuel gas as primary fuel gas into a primary flame region (P) on said center line A for in operation fuelling a primary flame;- a series of main fuel gas discharge openings (3) for introducing a second fraction, larger than said first fraction, of said fuel gas as main fuel gas at a main flame region (M) downstream around said primary flame for in operation fuelling a main flame;- a series of exhaust gas return discharge openings (4) extending in said gas burner for introducing recirculated exhaust gas around said primary flame region (P) upstream of said primary flame for in operation introducing said exhaust gas into said main fuel before it ignites by said primary flame.

IPC 8 full level

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CPC (source: EP)

F23D 14/22 (2013.01); **F23D 14/58** (2013.01); F23C 2201/20 (2013.01); F23C 2202/20 (2013.01); F23D 2214/00 (2013.01)

Citation (applicant)

- JP 2018076979 A 20180517 - TOYOTA MOTOR CORP
- CN 111121023 A 20200508 - UNIV TSINGHUA

Citation (search report)

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- [X] US 5284438 A 19940208 - MCGILL EUGENE C [US], et al
- [A] WO 2012091963 A1 20120705 - AIR LIQUIDE [FR], et al
- [A] WO 0163176 A1 20010830 - JOHN ZINK CO LLC [US]

Designated contracting state (EPC)

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