

(12) International Application Status Report

Received at International Bureau: 24 September 2018 (24.09.2018)

Information valid as of: 20 March 2019 (20.03.2019)

Report generated on: 16 July 2019 (16.07.2019)

(10) Publication number:

WO2019/049046

(43) Publication date:

14 March 2019 (14.03.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/IB2018/056780

(22) Filing Date:

05 September 2018 (05.09.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

62/554,327 (US)

(31) Priority date(s):

05 September 2017 (05.09.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

62/690,185 (US)

26 June 2018 (26.06.2018)

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

F23D 14/02 (2006.01); **F23D 14/64** (2006.01); **F23N 5/18** (2006.01)

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(54) Title (EN): LOW NOX AND CO COMBUSTION BURNER METHOD AND APPARATUS

(54) Title (FR): PROCÉDÉ ET APPAREIL ASSOCIÉS À UN BRÛLEUR DE COMBUSTION À FAIBLES ÉMISSIONS DE NOX ET DE CO

(57) Abstract:

(EN): Emissions of NO_x and/or CO are reduced at the stack by systems and methods wherein a primary fuel is thoroughly mixed with a specific range of excess combustion air. The primary fuel- air mixture is then discharged and anchored within a combustion chamber of a burner. Further, the systems and methods provide for dynamically controlling NO_x content in emissions from a furnace by adjusting the flow of primary fuel and of a secondary stage fuel, and in some cases controlling the amount or placement of combustion air into the furnace.

(FR): Les émissions de NO_x et/ou de CO sont réduites au niveau d'un conduit d'évacuation par des systèmes et des procédés dans lesquels un combustible primaire est intimement mélangé avec une plage spécifique d'air de combustion en excès. Le mélange combustible primaire-air est ensuite évacué et introduit dans une chambre de combustion d'un brûleur. En outre, les systèmes et les procédés permettent de réguler de manière dynamique la teneur en NO_x dans des émissions provenant d'un four par réglage de l'écoulement de combustible primaire et d'un combustible d'étage secondaire, et, dans certains cas, réguler la quantité ou le placement de l'air de combustion dans le four.

International search report:

Received at International Bureau: 02 March 2019 (02.03.2019) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM