

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 December 2020 (17.12.2020)



(10) International Publication Number
WO 2020/249482 A1

(51) International Patent Classification:

F23D 14/12 (2006.01) *F23G 7/06* (2006.01)
F23D 14/70 (2006.01) *F23D 14/58* (2006.01)

(21) International Application Number:

PCT/EP2020/065647

(22) International Filing Date:

05 June 2020 (05.06.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1908276.7 10 June 2019 (10.06.2019) GB

(71) Applicant: **EDWARDS LIMITED** [GB/GB]; Innovation Drive, Burgess Hill Sussex RH15 9TW (GB).

(72) Inventors: **SEELEY, Andrew James**; Edwards Limited, Kenn Business Park, Kenn Road, Clevedon Somerset BS21 6TH (GB). **STONES, Ian David**; Edwards Limited, Innovation Drive, Burgess Hill Sussex RH15 9TW (GB). **PRICE, Duncan Michael**; Edwards Limited, Kenn Business Park, Kenn Road, Clevedon Somerset BS21 6TH (GB).

(74) Agent: **NORTON, Ian**; Edwards Limited, Innovation Drive, Burgess Hill Sussex RH15 9TW (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): 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,

(54) Title: INLET ASSEMBLY FOR AN ABATEMENT APPARATUS

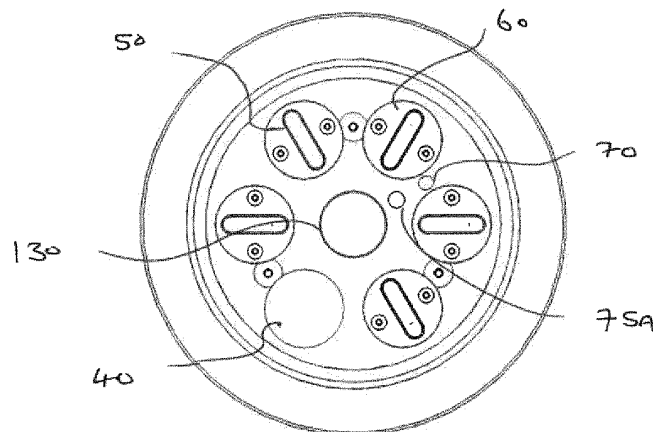


Figure 2

(57) Abstract: An inlet assembly for an abatement apparatus and a method are disclosed. The inlet assembly is for an abatement apparatus and comprises: an inlet nozzle defining a non-circular inlet aperture coupleable with an inlet conduit providing an effluent gas stream for treatment by the an abatement apparatus, at least one outlet aperture and a nozzle bore extending along a longitudinal axis between the non-circular inlet aperture and the outlet aperture for conveying the effluent gas stream from the non-circular inlet aperture to the outlet aperture for delivery to a treatment chamber of the abatement apparatus, the nozzle bore defining an inlet portion extending from the non-circular inlet aperture, a flow-dividing structure positioned downstream of the inlet portion and configured to separate the effluent gas stream into at least a pair of effluent gas streams and an outlet portion extending to the outlet aperture and configured to convey the pair of effluent gas streams to the treatment chamber of the an abatement apparatus. In this way, multiple effluent gas streams are generated or produced by the inlet assembly which helps to improve the performance of the abatement apparatus, particularly at low flow rates.

[Continued on next page]

SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))