



- (51) **International Patent Classification:**
B01D 53/14 (2006.01) *B01D 47/00* (2006.01)
- (21) **International Application Number:**
PCT/CA2015/050030
- (22) **International Filing Date:**
16 January 2015 (16.01.2015)
- (25) **Filing Language:**
English
- (26) **Publication Language:**
English
- (30) **Priority Data:**
61/928,726 17 January 2014 (17.01.2014) US
- (71) **Applicant:** MARINE EXHAUST SOLUTIONS INC.
[CA/CA]; Suite 700, 201 Notre Dame Street W, Montreal,
Québec H2Y 1T4 (CA).
- (72) **Inventors:** JENKINS, Garth E.; 5 Haszard Pt Lane, Strat-
ford, Prince Edward Island C1B 2N9 (CA). SAMPSON,

Kiley G.; 115 Brook St., Fletchers Lake, Nova Scotia B2T
1A5 (CA). DUMONT, David S.; 17300 1st Ave NW,
Shoreline, Washington 98177 (US). MOUSAVI, Seyed
Milad; apt 2101, 2121 st-Mathieu, Montreal, Québec H3H
2J3 (CA).

(74) **Agent:** SARKIS, Marcelo; c/o Prima IP Incorporated,
Suite 206, 294 Rink Street, Peterborough, Ontario K9J
2K2 (CA).

(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, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
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,

[Continued on next page]

(54) **Title:** MARINE EXHAUST GAS CLEANING SYSTEM

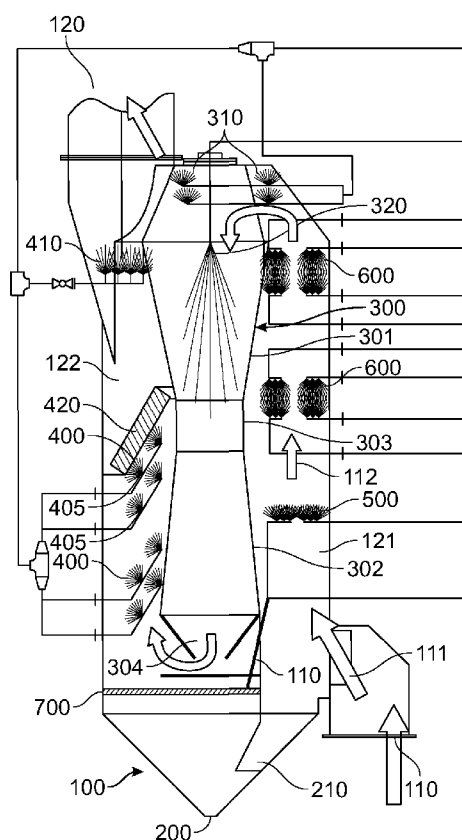


FIG. 1

(57) **Abstract:** A marine exhaust gas scrubbing device including an enclosure having a first end and a second end, an exhaust gas inlet, at least one quencher, at least one pre-treater, at least one venturi component including a venturi inlet and a venturi outlet, an impingement basket, at least one demister, an exhaust gas outlet, and a receiver, and a process for scrubbing a marine exhaust gas including cooling the exhaust gas, pre-treating the exhaust gas, washing the exhaust gas, mixing the exhaust gas and exhausting the scrubbed exhaust gas.



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.

SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(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,

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

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