



- (51) International Patent Classification:
A61L 2/20 (2006.01)
- (21) International Application Number:
PCT/US2014/051914
- (22) International Filing Date:
20 August 2014 (20.08.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/867,971 20 August 2013 (20.08.2013) US
- (72) Inventor; and
(71) Applicant : LEE, James, D. [US/US]; 25 Glenbrook Road, #508, Stamford, CT 06902 (US).
- (74) Agents: ALTMANN, Curtis, R. et al.; 555 12th Street, NW, Washington, DC 20004-1206 (US).
- (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, LT, 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,

[Continued on next page]

(54) Title: METHODS FOR IMPROVING RESPIRATORY SYSTEM HEALTH AND INCREASING THE CONCENTRATION OF HYPOTHIOCYANATE ION IN VERTEBRATE LUNGS

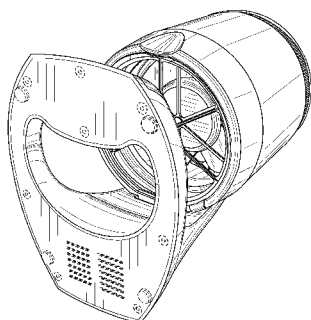


FIG. 1A

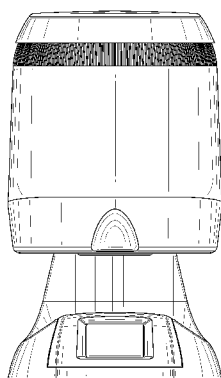


FIG. 1B

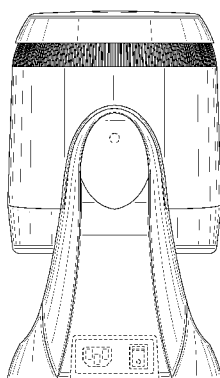


FIG. 1C

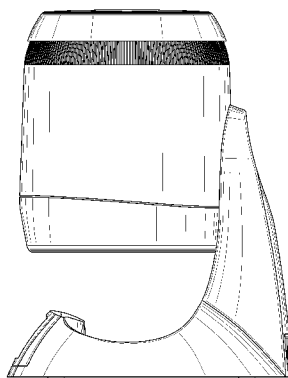


FIG. 1D

(57) Abstract: The present disclosure relates to methods and devices to improve respiratory system health, increase resistance to infection, and increase the hypothiocyanate ion in mammalian lungs. The methods generally comprise: generating a Hydrogen Peroxide Gas that is non-hydrated and free of ozone, and directing the gas comprising primarily Hydrogen Peroxide Gas into an environment and exposing a subject to the environment such that the Hydrogen Peroxide Gas acts to the increase of the hypothiocyanate ion in mammalian lungs.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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))*