

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 August 2023 (24.08.2023)



(10) International Publication Number
WO 2023/159158 A4

(51) International Patent Classification:
A61L 2/20 (2006.01) *A61L 9/16* (2006.01)

(21) International Application Number:
PCT/US2023/062785

(22) International Filing Date:
17 February 2023 (17.02.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/268,164 17 February 2022 (17.02.2022) US

(71) Applicant: **CSP TECHNOLOGIES, INC.** [US/US]; 960
West Veterans Boulevard, Auburn, Alabama 36832 (US).

(72) Inventors: **TIFFT, Brian**; c/o CSP Technologies, Inc.,
960 West Veterans Boulevard, Auburn, Alabama 36832
(US). **ANDERSON, Gary**; c/o CSP Technologies, Inc.,
960 West Veterans Boulevard, Auburn, Alabama 36832

(US). **BELFANCE, John**; c/o CSP Technologies, Inc., 960
West Veterans Boulevard, Auburn, Alabama 36832 (US).

(74) Agent: **GORNISH, David B.** et al.; CSP Technologies Inc.,
c/o Eckert Seamans Cherin & Mellott, LLC, Two Liberty
Place, 50 S. 16th Street, 22nd Floor, Philadelphia, Pennsyl-
vania 19102 (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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE,
KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
LY, MA, MD, 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, ST, SV, SY, TH, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA,
ZM, ZW.

(54) Title: SYSTEMS, APPARATUS AND METHODS FOR STERILIZING AN OBJECT USING A SELF-CONTAINED
STERILIZATION CHAMBER

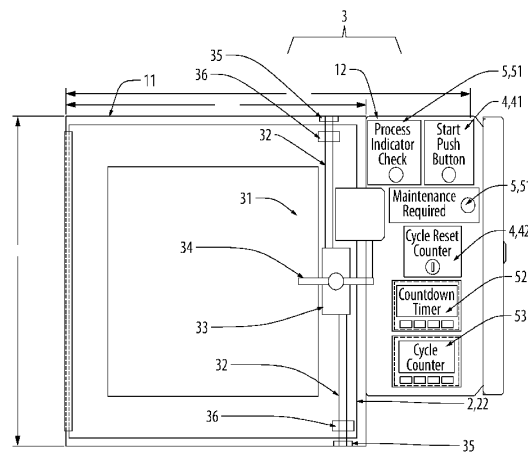


FIG. 1

(57) Abstract: Disclosed are systems for providing safe, conveniently onsite, quick and effective ways to deliver antimicrobial and antiviral treatment to objects. Further disclosed is an isolation unit for sterilizing objects, the isolation having a lockable hatch that enables access, when unlocked, to a sterilization chamber within the isolation unit. The hatch remains locked until a sterilization operation is completed. Further, the hatch is prevented from being opened until the sterilization operation is completed. This feature prevents potentially harmful sterilizing chemicals from emitting out of the sterilization chamber, among other possible benefits.

[Continued on next page]

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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)*)
- with amended claims (*Art. 19(1)*)

(88) Date of publication of the international search report:

05 October 2023 (05.10.2023)

Date of publication of the amended claims:

21 December 2023 (21.12.2023)