



Publication Year	2022
Acceptance in OA	2025-03-28T10:05:41Z
Title	DEVICE AND METHOD FOR DISINFECTING A WORKING VOLUME IN AN ARTIFICIAL SPACE ENVIRONMENT VIA SOLAR UV RADIATION
Authors	ATTINA', Primo, BIANCO, Andrea, CORTECCHIA, Fausto, DIOLAITI, Emiliano, LESSIO, Luigi, LOMBINI, Matteo, MACCHI, Alberto, MALAGUTI, Giuseppe, PARESCHI, Giovanni, Pelizzo, Maria Guglielmina
Handle	http://hdl.handle.net/20.500.12386/36969

(12) International Application Status Report

Received at International Bureau: 03 June 2022 (03.06.2022)

Information valid as of: 01 December 2023 (01.12.2023)

Report generated on: 28 March 2025 (28.03.2025)

(10) Publication number:

WO2022/254398

(43) Publication date:

08 December 2022 (08.12.2022)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/IB2022/055198

(22) Filing Date:

03 June 2022 (03.06.2022)

(25) Filing language:

Italian (IT)

(31) Priority number(s):

102021000014657 (IT)

(31) Priority date(s):

04 June 2021 (04.06.2021)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

A61L 2/10 (2006.01); **A61L 9/20** (2006.01); **B64G 1/00** (2006.01); **F21V 9/00** (2018.01); **G02B 6/00** (2006.01)

(71) Applicant(s):

ISTITUTO NAZIONALE DI ASTROFISICA [IT/IT]; Viale del Parco Mellini, 84 00136 Roma (IT) *(for all designated states)*

(72) Inventor(s):

ATTINA, Primo; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
BIANCO, Andrea; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
CORTECCHIA, Fausto; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
DIOLAITI, Emiliano; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
LESSIO, Luigi; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
LOMBINI, Matteo; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
MACCHI, Alberto; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
MALAGUTI, Giuseppe; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
PARESCHI, Giovanni; c/o ISTITUTO NAZIONALE DI ASTROFISICA Viale del Parco Mellini, 84 00136 ROMA (IT)
PELIZZO, Maria Guglielmina; c/o CONSIGLIO NAZIONALE DELLE RICERCHE Piazzale Aldo Moro, 7 00185 ROMA (IT)

(74) Agent(s):

STUDIO TORTA S.P.A.; Via Viotti, 9 10121 Torino (IT)

(54) Title (EN): DEVICE AND METHOD FOR DISINFECTING A WORKING VOLUME IN AN ARTIFICIAL SPACE ENVIRONMENT VIA SOLAR UV RADIATION

(54) Title (FR): DISPOSITIF ET PROCÉDÉ DE DÉSINFECTION D'UN VOLUME DE TRAVAIL DANS UN ENVIRONNEMENT D'ESPACE ARTIFICIEL PAR RAYONNEMENT UV SOLAIRE

(57) Abstract:

(EN): Device for disinfecting at least one working volume (5) in an artificial space environment (2), comprising a concentrator (6) of solar radiation associated with the at least one working volume (5), and filtering means (7) for selecting at least one spectral band of the solar radiation comprising UVC radiation coupled to the concentrator (6).

(FR): Dispositif de désinfection d'au moins un volume de travail (5) dans un environnement d'espace artificiel (2), comprenant un concentrateur (6) de rayonnement solaire associé audit volume de travail (5), et des moyens de filtrage (7) pour sélectionner au moins une bande spectrale du rayonnement solaire comprenant un rayonnement UVC couplé au concentrateur (6).

International search report:

Received at International Bureau: 10 September 2022 (10.09.2022) [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, IQ, IR, IS, IT, JM, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW

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