

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 August 2022 (04.08.2022)



(10) International Publication Number
WO 2022/164963 A1

(51) International Patent Classification:
A01G 9/24 (2006.01)

(21) International Application Number:
PCT/US2022/013995

(22) International Filing Date:
27 January 2022 (27.01.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/199,838 28 January 2021 (28.01.2021) US

(71) Applicant: **HELIPONIX, LLC** [US/US]; P.O. Box 3357,
Evansville, IN 47732 (US).

(72) Inventors: **BALL, Ivan, Lee**; c/o Heliponix, LLC, P.O.
Box 3357, Evansville, IN 47732 (US). **MASSEY, Scott,
Thomas**; c/o Heliponix, LLC, P.O. Box 3357, Evansville,
IN 47732 (US).

(74) Agent: **EISENBERG, Andrew, L.** et al.; Lee & Hayes,
P.C., 601 W. Riverside Ave., Suite 1400, Spokane, WA
99201 (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, DJ, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, 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.

(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))

(54) Title: SYSTEM FOR MONITORING ENCLOSED GROWING ENVIRONMENT

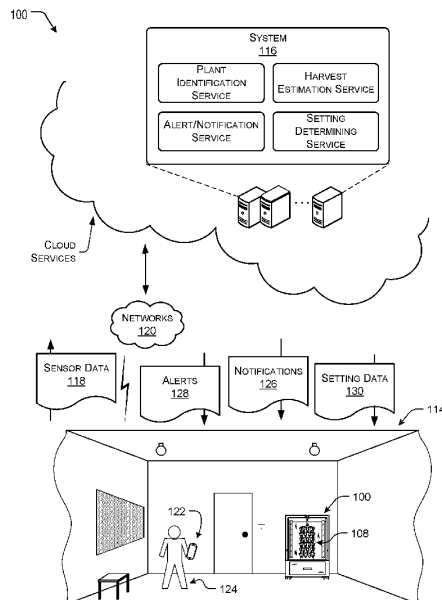


FIG. 1

(57) Abstract: A system associated with an enclosure (100) for providing a controlled environment for growing of plants, produce, and the like. The system may be configured to provide customized illumination to individual plants based on the plant species, size, health, and/or stage of lift. In some cases, the system may include multiple sensors for capturing data (118) associated with the enclosure (100) to, thereby, identify plants and provide customized illumination.

WO 2022/164963 A1