

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 May 2019 (09.05.2019)



(10) International Publication Number
WO 2019/090313 A1

(51) International Patent Classification:

A01G 9/02 (2018.01) A01G 9/08 (2006.01)
A01G 9/00 (2018.01) A01G 9/12 (2006.01)

(21) International Application Number:

PCT/US2018/059400

(22) International Filing Date:

06 November 2018 (06.11.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/582,078 06 November 2017 (06.11.2017) US

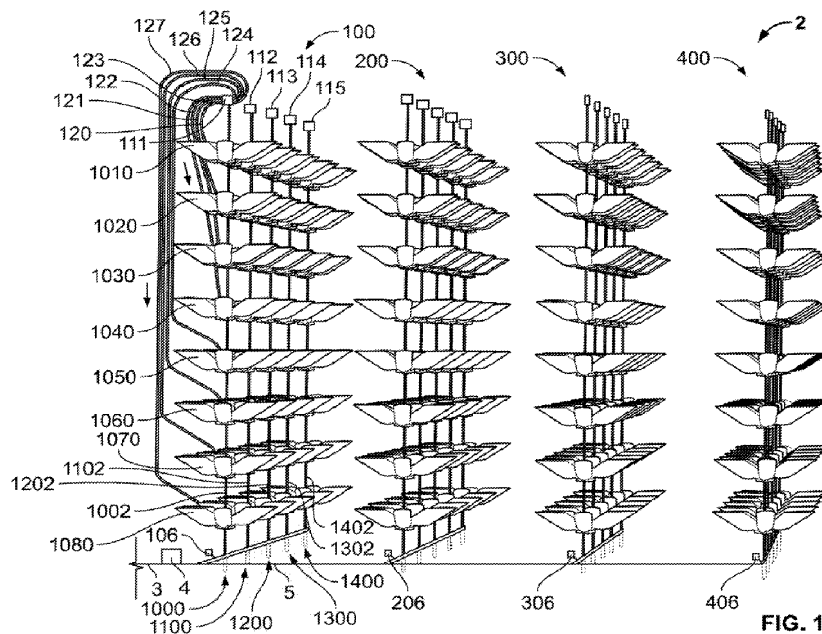
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, 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, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(54) Title: VERTICALLY MOUNTED CROPPING AND IRRIGATION SYSTEM



(57) Abstract: In one embodiment, the present disclosure relates to a vertically oriented plant growth system (2) that includes a plurality of tower arrays (100, 200, 300, 400), each tower array having a plurality of towers (1000, 1100, 1200, 1300, 1400). Each tower is vertically mounted and includes a plurality of hub structures (1010-1080, 1110-1180, 1210-1280, 1310-1380, 1410-1480) thereon for growing crops. The individual hub structures include attached bottles (1012A-F, 1022A-F, 1032A-F, 1042A-F, 1052A-F, 1062A-F, 1072A-F, 1082A-F) that are sized to support soil sufficient for plant growth and prevent the escape of water. Through the supply of pressurized water to flow control devices above each tower of the tower arrays, soil in each bottle is irrigated with water received at a controlled flow rate to grow crops using minimal space and without reliance on particular soil conditions.

[Continued on next page]

(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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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