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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 March 2018 (15.03.2018)

WIPO | PCT

(10) International Publication Number
WO 2018/049182 A3

(51) International Patent Classification:
C12M 3/00 (2006.01) *C05F 11/08* (2006.01)
C12M 1/34 (2006.01) *C07K 17/00* (2006.01)
A01N 63/00 (2006.01)

(21) International Application Number:
PCT/US2017/050711

(22) International Filing Date:
08 September 2017 (08.09.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/385,057 08 September 2016 (08.09.2016) US

(71) Applicant: **LOCUS SOLUTIONS, LLC** [US/US]; 30500 Aurora Road, Suite 180, Solon, OH 44139 (US).

(72) Inventors: **FARMER, Sean**; 17230 NE 11th Avenue, North Miami Beach, FL 33162 (US). **ZORNER, Paul, S.**; 1720 Hygeia Avenue, Encinitas, CA 92024 (US). **ALIBEK, Ken**; 30500 Aurora Road, Suite 180, Solon, OH 44139 (US). **ADAMS, Kent**; 8870 Darrow Rd, Suite F106-239, Twinsburg, OH 44087 (US). **DIXON, Tyler**; 521 South Francis St., Kent, OH 44240 (US).

(74) Agent: **SALIWANCHIK, David, R.** et al.; Saliwanchik, Lloyd & Eisenschenk, PO Box 142950, Gainesville, FL 32614-2950 (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, 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.

(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,

(54) Title: DISTRIBUTED SYSTEMS FOR THE EFFICIENT PRODUCTION AND USE OF MICROBE-BASED COMPOSITIONS

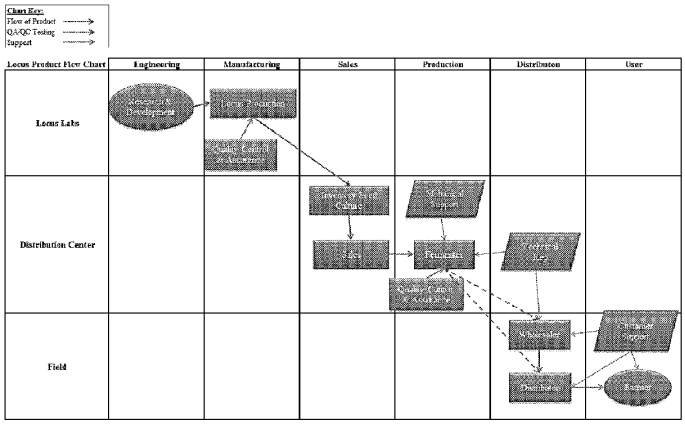


FIG. 1

(57) Abstract: The invention relates to systems and methods for effective production and use of microorganisms and/or the fermentation broth in which they are produced. Advantageously, the system is cost-effective, scalable, quick, versatile, efficacious, and helpful in reducing resistance to chemical compounds and residue that concerns consumers.

[Continued on next page]

WO 2018/049182 A3

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))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
26 April 2018 (26.04.2018)