

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/039789 A1

(43) International Publication Date
24 February 2022 (24.02.2022)

(51) International Patent Classification:

A01N 25/10 (2006.01) *C08L 67/04* (2006.01)
A61L 29/16 (2006.01) *A01P 1/00* (2006.01)
A61P 31/04 (2006.01) *A01P 3/00* (2006.01)

(21) International Application Number:

PCT/US2021/021894

(22) International Filing Date:

11 March 2021 (11.03.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/068,401 21 August 2020 (21.08.2020) US

(71) Applicant: **MEREDIAN BIOPLASTICS, INC.** [US/US];
140 Industrial Boulevard, Bainbridge, GA 39817 (US).

(72) Inventors: **LEGGETT, Carol, G.**; 1219 Old 84, Whigham, GA 39897 (US). **VAN TRUMP, Phillip**; 17 High Gate Trail, Decatur, GA 30030 (US). **LEGGETT, Thomas, K., III**; 1889 Star Shoot Parkway, Lexington, KY 40509 (US). **MULLINS, Russell**; 211 Leisure Cove Drive, Lagrange, GA 30240 (US).

(74) Agent: **GONCE, J., David** et al.; Luedeka Neely Group, P.C., P.O. Box 1871, Knoxville, TN 37901 (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: ANTIMICROBIAL BIODEGRADABLE COMPOSITIONS FOR FOOD CONTACT ARTICLES

(57) Abstract: The present disclosure provides a food contact article. According to one embodiment, the food contact article includes at least one food contact surface. This at least one food contact surface is made up of at least 50 weight percent of at least one biodegradable polymer, such as polyhydroxyalkanoates, and from about 0.1 weight percent to about 1.0 weight percent of at least one antimicrobial agent.

WO 2022/039789 A1