

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
02 April 2020 (02.04.2020)



(10) International Publication Number
WO 2020/068419 A1

- (51) **International Patent Classification:**
C07C 49/623 (2006.01) C07C 49/633 (2006.01)
- (21) **International Application Number:**
PCT/US2019/050544
- (22) **International Filing Date:**
11 September 2019 (11.09.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/737,969 28 September 2018 (28.09.2018) US
- (71) **Applicant: DOW GLOBAL TECHNOLOGIES LLC**
[US/US]; 2040 Dow Center, Midland, Michigan 48674 (US).
- (72) **Inventor: PADILLA-ACEVEDO, Angela I.**; 230 Abner Jackson Parkway, Lake Jackson, Texas 77566 (US).
- (74) **Agent: PURCHASE, Claude F.**; P.O. Box 1967, Midland, Michigan 48641 (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, 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:** SYNTHESIS OF CYCLOPENTENONES

(57) **Abstract:** A method comprising synthesizing a substituted cyclopentenone compound via reaction of a substituted cycloalkyl acrylate ester in the presence of phosphorous pentoxide/methanesulfonic acid reagent to make the substituted cyclopentenone compound.



WO 2020/068419 A1