

(51) International Patent Classification:
C07C 51/34 (2006.01)(21) International Application Number:
PCT/US2012/022709(22) International Filing Date:
26 January 2012 (26.01.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/437,581 28 January 2011 (28.01.2011) US(71) Applicant (for all designated States except US): **EMERY OLEOCHEMICALS LLC** [US/US]; 4900 Este Avenue, Cincinnati, OH 45232 (US).(72) Inventor: **WALKER, Thomas, Chad**; 1513 Shirepeak Way, Independence, KY 41051 (US).(74) Agents: **CAREY, James, P.** et al.; Wood, Herron & Evans, LLP, 2700 Carew Tower, 441 Vine Street, Cincinnati, OH 45202-2917 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

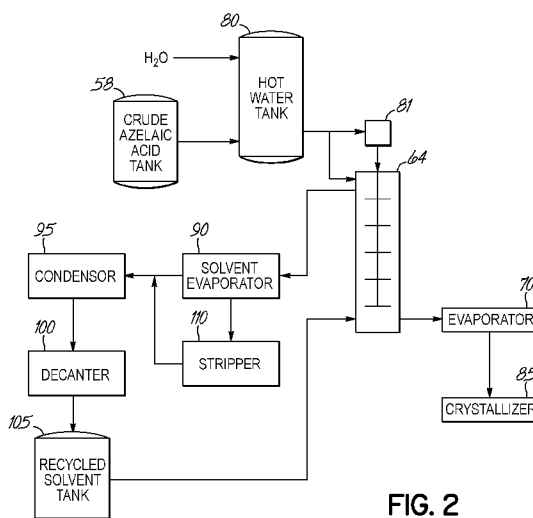
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: A METHOD OF PURIFYING A DICARBOXYLIC ACID COMPOUND

**FIG. 2**

(57) **Abstract:** A process for purifying a dicarboxylic acid that is derived from the mixed oxidation products from an ozonization of a mixture containing an ethylenically unsaturated compound having between 6 to 24 carbons, the process includes distilling the mixed oxidation products to provide a first distillate and a second distillate, partitioning the second distillate between an aqueous layer and an organic solvent layer to extract a C9 to C22 monocarboxylic acid impurity, separating the organic solvent layer from the aqueous layer, and isolating the dicarboxylic acid having a residual content of the C9 to C22 monocarboxylic acid impurity in an amount that is less than 0.5% by weight.