



(51) International Patent Classification:

C07C 67/04 (2006.01) *C07C 69/78* (2006.01)
C07C 69/24 (2006.01)

(21) International Application Number:

PCT/US2010/001276

(22) International Filing Date:

30 April 2010 (30.04.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/387,740 7 May 2009 (07.05.2009) US

(71) Applicant (for all designated States except US):

CELANESE INTERNATIONAL CORPORATION
[US/US]; 1601 West LBJ Freeway, Dallas, TX
75234-6034 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIMICH, Barbara, F.M.** [US/US]; 82B Anderson Hill Road, Bernardsville, NJ 07924 (US). **TOOMEY, Hannah, E.** [US/US]; 1301 Richmond Avenue Apt. J6, Houston, TX 77006 (US). **YAO, Qiang** [CN/US]; 4641 Southpark Drive, Baton

Rouge, LA 70816 (US). **TORRENCE, G., Paul** [US/US]; 4206 Masters Drive, League City, TX 77575 (US). **VAN DER WAAL, Jan, Cornelius** [NL/NL]; Schuttersveld 29, NL-2611 WE Delft (NL). **DOYLE, Michael, J.** [NL/NL]; Keizersgracht 36E, NL-1015 CR Amsterdam (NL).

(74) Agent: **FERRELL, Michael, W.**; Ferrells, PLLC, P.O. Box 312, Clifton, VA 20124-1706 (US).

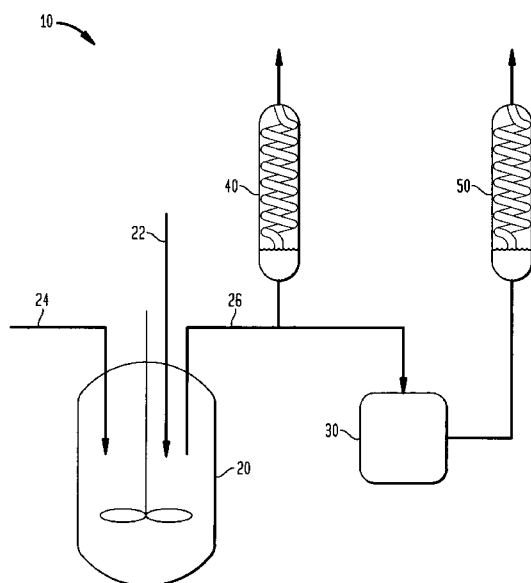
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,

[Continued on next page]

(54) Title: VINYL ESTER PRODUCTION FROM ACETYLENE AND CARBOXYLIC UTILIZING HOMOGENEOUS CATALYST

FIG. 1



(57) Abstract: A process for the selective production of vinyl ester by the reaction of a carboxylic acid with acetylene with a homogeneous catalyst is disclosed and claimed. In a preferred embodiment of this invention, reaction of benzoic acid and acetylene in the presence of Group VIII metal complex catalyst at a temperature of about 50 to 180°C results in quantitative yields of vinyl benzoate.



TM), European (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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *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:

20 January 2011

Published:

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