



(43) International Publication Date
5 July 2012 (05.07.2012)

(10) International Publication Number
WO 2012/091845 A1

- (51) International Patent Classification:
C07C 51/50 (2006.01) C07C 57/04 (2006.01)
- (21) International Application Number:
PCT/US2011/062605
- (22) International Filing Date:
30 November 2011 (30.11.2011)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/460,245 29 December 2010 (29.12.2010) US
- (71) Applicant (for all designated States except US): **ROHM AND HAAS COMPANY** [US/US]; 100 Independence Mall West, Philadelphia, PA 19106 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHARENDOFF, Marc** [US/US]; 11947 Paddock Way, Houston, TX 77063 (US). **JULIETTE, Jamie, Jerriek** [US/US]; 895 Rolling Run Court, Houston, TX 77062 (US). **MENDOZA, Joy** [US/US]; 1602 Crescent Shores Lane, Seabrook, TX 77586 (US). **SHAH, Rajesh** [IN/US]; 20410 Knolls Spring Trail, Katy, TX 77450 (US).
- (74) Agent: **HAYHURST, Paul, D.**; The Dow Chemical Company, P.O. Box 1967, Intellectual Property, Midland, MI 48641-1967 (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:

- 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))

(54) Title: METHOD FOR REDUCING EQUIPMENT FOULING IN (METH)ACRYLIC ACID PRODUCTION PROCESS

(57) Abstract: The present invention provides a method for reducing fouling of equipment during separation and purification steps of (meth)acrylic acid production by early removal of aldehyde impurities by adding a hydrazide compound well upstream of the separation and purification steps. In particular, carbodhydrazide may be added as an aldehyde scavenging agent to aqueous (meth)acrylic acid prior to dehydration and purification steps.



WO 2012/091845 A1