



(51) International Patent Classification:
C07D 301/36 (2006.01)

(21) International Application Number:
PCT/US2011/042107

(22) International Filing Date:
28 June 2011 (28.06.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/364,231 14 July 2010 (14.07.2010) US

(71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES, LLC** [US/US]; 2040 Dow Center, Midland, Michigan 48674 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ARROWOOD, Tina, L.** [US/US]; 2080 N. Lewis Road, Coleman, Michigan 48618 (US). **FLICK, Derrick, W.** [US/US]; 2637 N. Waskevich Lane, Midland, Michigan 48642 (US). **ACKFORD, John, F.** [US/US]; 6005 Schade Dr., Midland, Michigan 48640 (US).

(74) Agent: **JORDAHL, Kimberly, S.**; PO Box 517, Willernie, Minnesota 55090 (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, 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: PROCESS AND ASSEMBLY FOR PRODUCING ALKYLENE OXIDES AND GLYCOL ETHERS

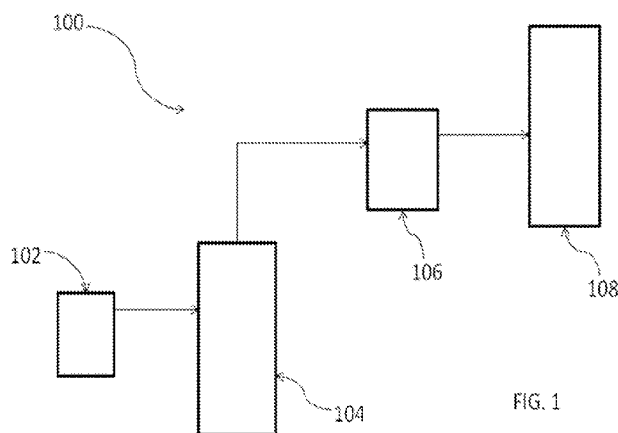


FIG. 1

(57) Abstract: There is provided a process for manipulating the amount of alkyl alcohol in a product stream, e.g., such as an alkylene oxide product stream. More particularly, and in contrast to conventional processes wherein substantially all of the alkyl alcohol must be separated and desirably recycled, in the present process, a greater amount of alkyl alcohol may be allowed to remain in a partially refined alkylene oxide product stream. The residual alkyl alcohol is subsequently substantially entirely reacted to form a downstream product, e.g., a glycol ether, which is more easily separated from the alkylene oxide product stream. Indeed, the amount of alkyl alcohol in the partially refined alkylene oxide product stream can be selected based upon the output of glycol ethers, if desired.

