

(51) International Patent Classification:
C07C 67/54 (2006.01) *C07C 67/00* (2006.01)(21) International Application Number:
PCT/US2011/023332(22) International Filing Date:
1 February 2011 (01.02.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/300,815 2 February 2010 (02.02.2010) US
61/332,699 7 May 2010 (07.05.2010) US
61/332,696 7 May 2010 (07.05.2010) US
12/974,982 21 December 2010 (21.12.2010) US(71) Applicant (for all designated States except US):
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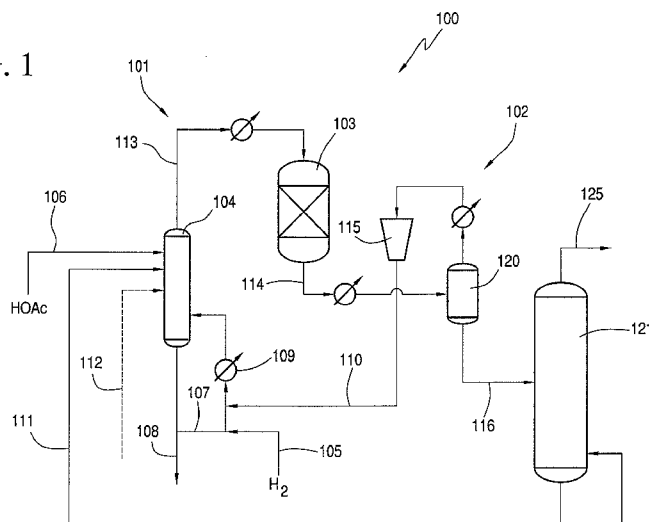
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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,

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(54) Title: PROCESS FOR VAPORIZING ACETIC ACID FOR HYDROGENATION PROCESSES TO PRODUCE ETHANOL

FIG. 1



(57) Abstract: Vaporizing acetic acid in the presence of hydrogen to provide a vapor feed stream for a hydrogenation process that produces ethanol. The vaporizer forms a vapor feed stream and a blowdown stream having a weight ratio of the vapor feed stream to the blowdown stream of at least 2:1. The acetic acid may be vaporized at a temperature below acetic acid's boiling point at the operating pressure of the reactor. The hydrogenation process produces a crude ethanol product and ethanol is separated from the crude product. In addition, at least one recycle stream comprising acetic acid and less than 1.0 wt. % compounds having a boiling point higher than acetic acid, may also be separated. The recycle streams may be introduced to the vaporizer along with acetic acid to form the vapor feed stream.



SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG). **Published:**

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