

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 February 2008 (21.02.2008)

PCT

(10) International Publication Number
WO 2008/022233 A1

(51) International Patent Classification:

B01D 11/04 (2006.01) **C07C 45/80** (2006.01)
C07C 29/86 (2006.01) **C07C 49/403** (2006.01)
C07C 31/125 (2006.01) **C07C 49/413** (2006.01)
C07C 35/08 (2006.01) **C07C 409/14** (2006.01)
C07C 45/33 (2006.01) **C07B 63/00** (2006.01)
C07C 45/53 (2006.01)

(21) International Application Number:

PCT/US2007/076061

(22) International Filing Date: 16 August 2007 (16.08.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/838,957 18 August 2006 (18.08.2006) US
60/901,053 12 February 2007 (12.02.2007) US

(71) Applicant (for all designated States except US): **INVISTA TECHNOLOGIES S.A.R.L.** [LU/US]; Talstrasse 80, CH-8001 Zurich (CH).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WHISTON, Keith** [GB/GB]; 12 Hartford Road, Darlington, Durham DL3 8EY (GB).

(74) Agent: **BREIKSS, Anne, I.**; Three Little Falls Centre/1052, 2801 Centerville Road, Wilmington, DE 19808 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(54) Title: EXTRACTION PROCESS USING AN IONIC LIQUID

(57) Abstract: A process for the separation of an alcohol from a non-polar solvent; a ketone from a non-polar solvent; an alcohol from a mixture of a ketone and a non-polar solvent; or a mixture of an alcohol and a ketone from a non-polar solvent; said process comprising contacting at least one ionic liquid with a mixture comprising a non-polar solvent and at least one of an alcohol and a ketone.

WO 2008/022233 A1