

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number
WO 2005/042506 A1

(51) International Patent Classification⁷: **C07D 301/04**

(21) International Application Number:
PCT/US2004/031568

(22) International Filing Date:
27 September 2004 (27.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/691,142 22 October 2003 (22.10.2003) US

(71) Applicant (for all designated States except US): **ARCO
CHEMICAL TECHNOLOGY, L.P.** [US/US]; Two
Greenville Crossing, 4001 Kennett Pike, Suite 238,
Greenville, DE 19807 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COCHRAN,**

Robert, N. [US/US]; 310 Carlyle Road, West Chester,
PA 19382 (US). **MILLER, Jay, F.** [US/US]; 65 Fairfield
Lane, Chester Springs, PA 19425-2222 (US).

(74) Agents: **CARROLL, Kevin, M.** et al.; Lyondell Chemical
Company, 3801 West Chester Pike, Newtown Square, PA
19073 (US).

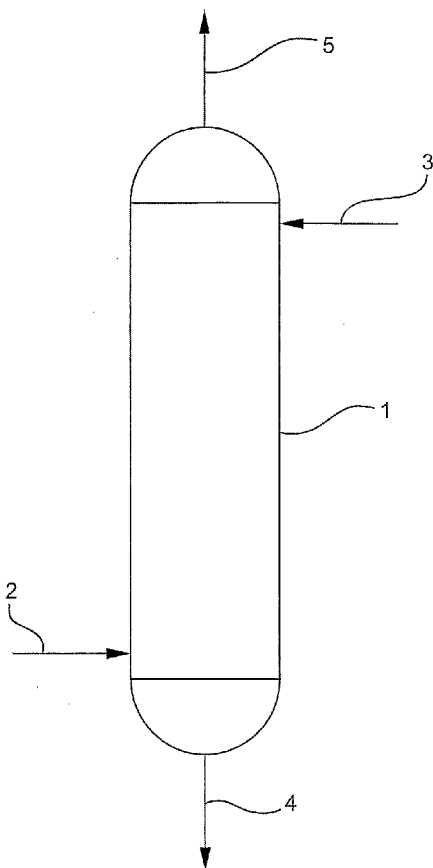
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: **PRODUCT RECOVERY FROM SUPERCRITICAL MIXTURES**

(57) Abstract: Oxidation products are recovered from a mixture of the prod-
ucts in a dense phase or supercritical solvent by a liquid-liquid extraction at
dense phase conditions.



WO 2005/042506 A1



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, IT, LU, MC, 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

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.