### (19) World Intellectual Property Organization

International Bureau



# 

(43) International Publication Date 13 September 2007 (13.09.2007)

# (10) International Publication Number WO 2007/103063 A3

(51) International Patent Classification:

C07C 51/42 (2006.01) C07C 51/265 (2006.01)

C07C 63/26 (2006.01)

(21) International Application Number:

PCT/US2007/005104

(22) International Filing Date:

27 February 2007 (27.02.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

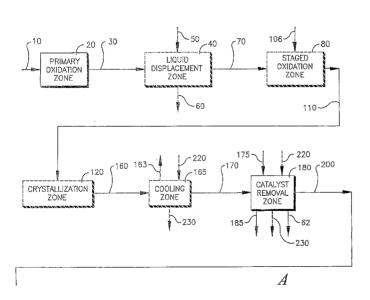
60/777,862 1 March 2006 (01.03.2006) US 11/365,080 1 March 2006 (01.03.2006) US 11/705,218 12 February 2007 (12.02.2007) US

- (71) Applicant: EASTMAN CHEMICAL COMPANY [US/US]; 200 South Wilcox Drive, Kingsport, TN 37660 (US).
- (72) Inventors: PARKER, Kenny, Randolph; 599 Tyne Gray Road, Afton, TN 37616 (US). GIBSON, Philip, Edward; 2244 Charsley Road, Kingsport, TN 37660 (US).

- (74) Agent: OWEN, Steven, A.; P.O. Box 511, Kingsport, TN 37662-5075 (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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, 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, 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, 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).

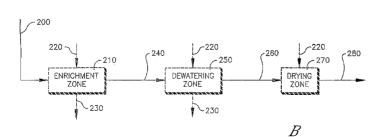
[Continued on next page]

#### (54) Title: A PROCESS TO PRODUCE A POST CATALYST REMOVAL COMPOSITION



(57) Abstract: A process is provided for producing an enriched carboxylic acid compositions produced by contacting composition comprising a carboxylic acid with an enrichment feed in an enrichment zone to form an enriched carboxylic acid composition. This invention also relates to a process and the resulting compositions for removing catalyst from a carboxylic acid composition to produce a post catalyst removal composition.





## WO 2007/103063 A3



#### 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

(88) Date of publication of the international search report:

6 December 2007

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.

## INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/005104

A. CLASSII INV. (	CLASSIFICATION OF SUBJECT MATTER INV. C07C51/42 C07C63/26 C07C51/265						
According to	International Patent Classification (IPC) or to both national classification	ation and IPC					
B. FIELDS	SEARCHED						
Minimum do CO7C	cumentation searched (classification system followed by classification	on symbols)					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched							
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)							
EPO-Internal, WPI Data, BEILSTEIN Data							
С. ДОСИМ	ENTS CONSIDERED TO BE RELEVANT						
Category*	evant passages	Relevant to claim No.					
А	WO 2006/007348 A (EASTMAN CHEM CO 19 January 2006 (2006-01-19) page 7, lines 17-26; page 12, lir page 18, lines 1-5;claims 1-31; 1	1-74					
A	25 August 1981 (1981-08-25)	JS 4 286 101 A (HASHIZUME HIROSHI ET AL)					
А	EP 1 484 306 A (EASTMAN CHEM CO [ . 8 December 2004 (2004-12-08) claims 1-30	1-74					
Further documents are listed in the continuation of Box C. X See patent family annex.							
"A" document defining the general state of the art which is not considered to be of particular relevance inverse earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but		later document published after the international filing date or priority date and not in conflict with the application but ciled to understand the principle or theory underlying the invention  (* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone (* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.					
Date of the	Date of the actual completion of the international search  Date of mailing of the international search report						
1	7 August 2007	11/10/2007					
Name and	mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer					
	NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Kleidernigg, Oliver					

### INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/005104

	ocument arch report	Publication date		Patent family member(s)		Publication date
WO 200	6007348 A	19-01-2006	CA CN EP US			19-01-2006 23-05-2007 28-02-2007 22-12-2005
US 428		25-08-1981	BE BR CA DE FR GB IT JP JP JP NL PT	1134856 / 2942375 / 2439178 / 2032920 / 1125526 / 1442224 / 55055138 / 62047864 /	A A1 A1 A1 B C A B A	21-04-1980 15-07-1980 02-11-1982 30-04-1980 16-05-1980 14-05-1986 30-05-1988 22-04-1980 09-10-1987 22-04-1980 01-11-1979
EP 148	4306 A	08-12-2004	BR CA CN JP KR MX US US	2467001 1572767 2004358465 20040108588	A A A A1	04-01-2005 05-12-2004 02-02-2005 24-12-2004 24-12-2004 08-12-2004 09-12-2004 21-04-2005