(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095549 A3

(51) International Patent Classification[7]: C10G 11/18, B01J 8/00, 8/18

(21) International Application Number: PCT/US2005/009642

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/806,563 23 March 2004 (23.03.2004) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 10/806,563 (CIP)
Filed on 23 March 2004 (23.03.2004)

(71) Applicant *(for all designated States except US)*: **W.R. GRACE & CO.-CONN.** [US/US]; 7500 Grace Drive, Columbia, MD 21004 (US).

(72) Inventors; and

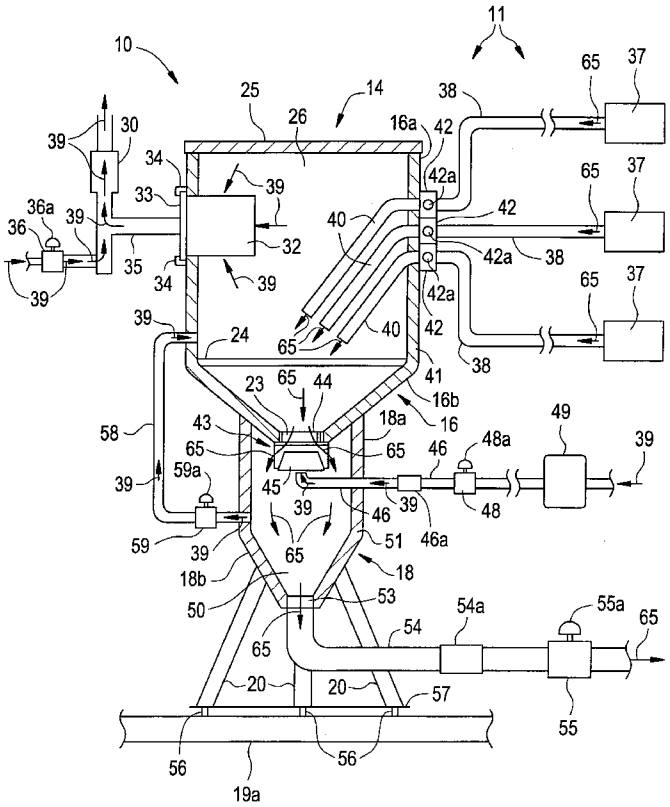
(75) Inventors/Applicants *(for US only)*: **ALBIN, Lenny, Lee** [US/US]; #20 Mayflower Street, Sulphur, LA 70663 (US). **YALURIS, George** [US/US]; 6702 Surrey Lane, Columbia, MD 21029 (US). **JORDAN, Alfred, Ferdinand** [US/US]; 936 Placid Court, Arnold, MD 21012 (US).

(74) Agents: **LEVIN, Gary, H.** et al.; Woodcock Washburn LLP, 46th floor, One Liberty Place, Philadelphia, PA 19103 (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,

[Continued on next page]

(54) Title: SYSTEM AND PROCESS FOR INJECTING CATALYST AND/OR ADDITIVES INTO A FLUIDIZED CATALYTIC CRACKING UNIT



(57) Abstract: A preferred embodiment of a system for loading catalyst and/or additives into a fluidized catalytic cracking unit includes a bin for storing at least one of the catalyst and/or additives, and a loading unit in fluid communication with the storage bin and the fluidized catalytic cracking unit on a selective basis. The loading unit is capable of being evacuated so that a resulting vacuum within the loading unit draws the catalyst and/or additive from the bin. The loading unit is also capable of being pressurized so that the catalyst and/or additive is transferred from the loading unit to the fluidized catalytic cracking unit.

WO 2005/095549 A3

MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, YU, 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, 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).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

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:
24 November 2005

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.