



(51) International Patent Classification:
C10G 35/14 (2006.01)

US]; 1430 Enclave Parkway, Houston, TX 77077-2023 (US).

(21) International Application Number:
PCT/US2009/002434

(72) Inventors; and

(22) International Filing Date:
20 April 2009 (20.04.2009)

(75) Inventors/Applicants (*for US only*): YUAN, Ed [US/US]; 1333 Eldridge Parkway, Houston, TX 77077 (US). BANKS, David [US/US]; 2303 High Landing Road, Katy, TX 77494 (US). JACKSON, Gary [US/US]; 5118 Grand Phillips Lane, Katy, TX 77450 (US). GBORDZOE, Eusebius [US/US]; 5622 Georgetown Colony Drive, Houston, TX 77084 (US). LATZSCH, Warren [US/US]; 4052 Firefly Way, Elliecott City, TX 21042 (US).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/148,918 23 April 2008 (23.04.2008) US

(71) Applicant (*for all designated States except US*): STONE & WEBSTER PROCESS TECHNOLOGY, INC. [US/

(74) Agent: FALLON, Peter, J.; Locke Lord Bissell & Liddell LLP, 885 Third Avenue, 26th Floor, New York, NY 10022 (US).

[Continued on next page]

(54) Title: IMPROVED OPERATION OF CATALYST WITHDRAWAL WELLS WITH PACKING

(57) Abstract: An improved fluidized catalyst withdrawal well containing packing or other structured internals is disclosed for improving the flow of particular solids between two apparatus, such as between a catalyst regenerator and riser reactor.

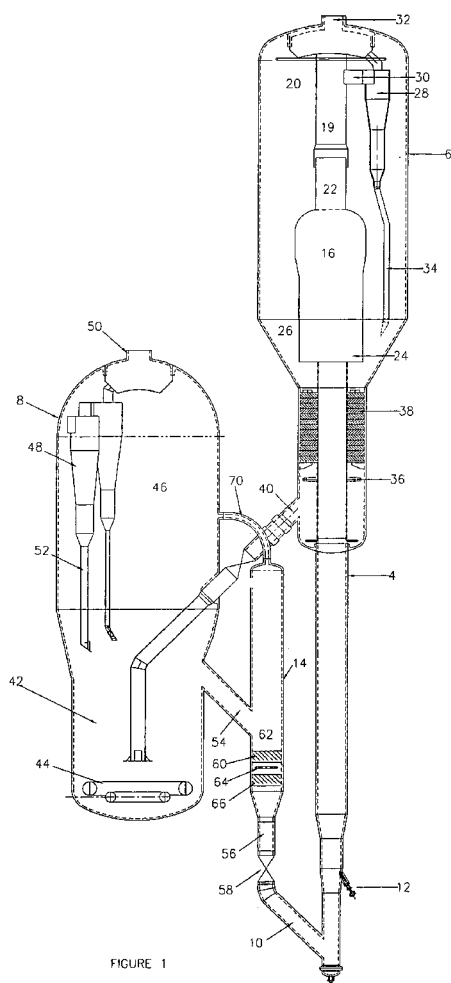


FIGURE 1



(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, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, 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 (Art. 21(3))

(88) **Date of publication of the international search report:**
30 December 2009