

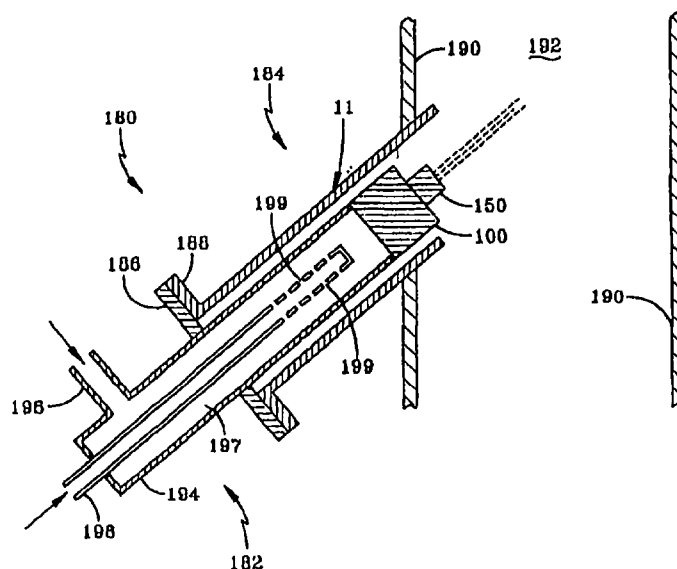
PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : F23D 14/68, C10G 9/28		A1	(11) International Publication Number: WO 00/55543
			(43) International Publication Date: 21 September 2000 (21.09.00)
(21) International Application Number: PCT/US00/07022 (22) International Filing Date: 17 March 2000 (17.03.00) (30) Priority Data: 09/271,813 18 March 1999 (18.03.99) US 09/522,210 9 March 2000 (09.03.00) US (71) Applicant: EXXONMOBIL RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). (72) Inventor: ITO, Jackson, I.; 2507 Occidental Drive, Sacramento, CA 95826 (US). (74) Agents: CROMWELL, Michael, A. et al.; ExxonMobil Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).			(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments</i>



162162

(54) Title: IMPROVED FCC FEED INJECTOR FAN TIP DESIGN**(57) Abstract**

The invention relates to fluidized catalytic cracking ("FCC") processes using a high fluid throughput and low pressure drop, liquid atomizing process and apparatus. The process comprises forming a fluid mixture of a hot feed oil and a dispersion gas, such as steam, atomizing the mixture to form droplets, and then distributing the droplets into the FCC process. The apparatus (180) comprises a nozzle (184) having an improved spray distributor (150) end section.



G00001