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(71) Applicant *(for all designated States except US)*: **EXXONMOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **TAMMERA, Robert, F.** [US/US]; 7081 Auburn Mill Road, Warrenton, VA 20187 (US). **JONES, Edward, N.** [US/US]; 14145 Compton Valley Way, Centreville, VA 20121 (US). **SMALLEY, Christopher, G.** [US/US]; 11422 Donnington Court, Manassas, VA 20111 (US). **DEIS, Phillip, A.** [US/US]; 13520 Mallard Watch Way, Clifton, VA 20124 (US). **CHEN, Alvin, U.** [US/US]; 11013 Ring Road, Reston, VA 20190 (US). **GURCIULLO, Chris, S.** [US/US]; 15014 Whippoorwill Road, Nokesville, VA 20181 (US).

(74) Agents: **BORDELON, Bruce, M.** et al.; Exxonmobil Research And Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

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[Continued on next page]

(54) Title: IMPROVED FCC REACTOR AND RISER DESIGN FOR SHORT CONTACT-TIME CATALYTIC CRACKING OF HYDROCARBONS

(57) Abstract: The present invention is an improved design and operation of a short contact time Fluid Catalytic Cracking (FCC) Reactor wherein the upper internal riser and a lower internal riser are in fluid connection with one another and provide an improved disengaging zone for entraining the vapors from the dilute phase area of the FCC reactor. Detailed preferred embodiments include improvements over the prior art to the internal central riser, riser termination apparatus, cyclone separators, and a coke mitigation baffle system, as well as associated improved fluid catalytic cracking processes utilizing the novel reactor design.

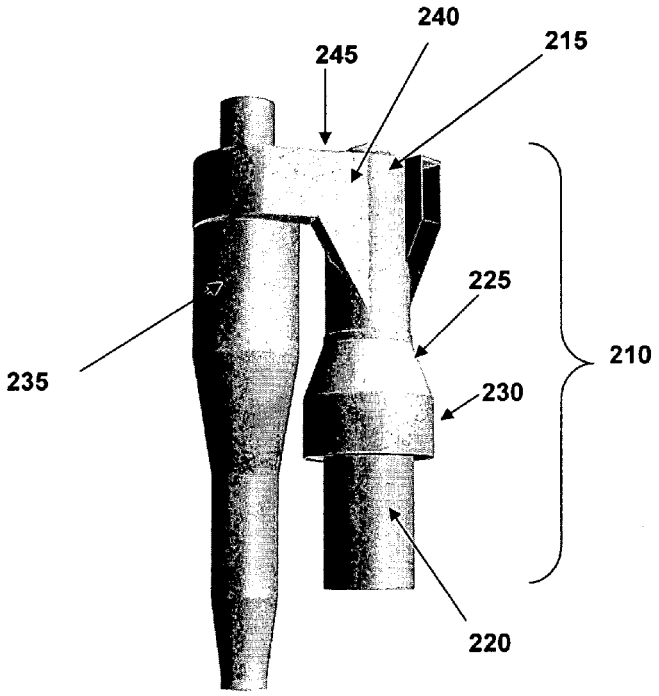

FIGURE 2

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