Title (en)

FIXED-BED, CATALYTIC REACTOR AND METHOD FOR MANUFACTURING SAME

Title (de)

KATALYTISCHER FESTBETTREAKTOR UND METHODE ZU SEINER HERSTELLUNG

Title (fr)

REACTEUR CATALYTIQUE A LIT FIXE ET PROCEDE DE FABRICATION ASSOCIE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9804342A1] A fixed-bed, catalytic, cross-flow reactor (10, 210), has a cylindrical body (14, 214), a first hemispherical end cap (16, 216) attached to a first end of the cylindrical body (14, 214), a second hemispherical end cap (18, 218) attached to a second end of the cylindrical body (14, 214). A heat-exchange-fluid inlet (20, 220) is provided on the first hemispherical end cap (16, 216), and a heat-exchange-fluid outlet (22, 222) is provided on the second hemispherical end cap (18, 218). A first tube sheet (88, 288) and a second tube sheet (90, 290) are attached in first end cap (16, 216) and second end cap (90, 290), respectively. A plurality of heat-exchange tubes (92, 292) run between the tube sheets (18, 218; 90, 290). At least one baffle (82, 84, 86, 282, 284, 286) is provided within body (14, 214) for directing flow of a process fluid within reactor (10, 210). The body (14, 214) has a product inlet (24, 224) and a product outlet (26, 226) wherein the process fluid inlet, baffle, and process fluid outlet are operable to force a process fluid to flow substantially traverse to the plurality of heat exchange tubes (92, 292). A plurality of separators (32, 34, 36 and 38) may be provided on reactor (10) to remove condensate.

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