

Title (en)

Moving bed radial flow solids-fluid contacting apparatus.

Title (de)

Wanderbettreaktor mit radialer Strömungsrichtung für Feststoff-Fluidkontakt.

Title (fr)

Appareil de contact solide-fluide à lit mouvant et courant radial.

Publication

EP 000094 A1 19781220 (EN)

Application

EP 78300023 A 19780607

Priority

US 80506277 A 19770609

Abstract (en)

The invention concerns an improved radial flow solids-fluid contacting apparatus (1) in which radial flow of fluid (liquid or gas) coacts with downward flow of the solids in particle form. The invention concerns the design and placement of particle collection scoops (8) close to the bottom of the bed (4) of particles to eliminate stagnant particle zones by improving the conditions under which particles are withdrawn from the bed. <??>The invention has particular application to a catalytic reactor and an array of arcuate funnel-shaped scoops surrounding the central pipe of such a reactor is preferred. Preferred shapes and angles of inclination to the horizontal for the scoops are disclosed.

IPC 1-7

B01J 8/12

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [AD] US 3785963 A 19740115 - BOYD D, et al
- [A] US 2941956 A 19600621 - BERGSTROM ERIC V

Cited by

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Designated contracting state (EPC)

BE CH DE FR GB LU NL

DOCDB simple family (publication)

US 4110081 A 19780829; AR 231083 A1 19840928; BE 4 T1 19791207; CH 644032 A5 19840713; DE 2856949 A1 19800103;
DE 2856949 C2 19831215; EP 000094 A1 19781220; FR 2416726 A1 19790907; FR 2416726 B1 19830311; GB 2040718 A 19800903;
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