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(54) Title: INTER-BED MIXING IN FIXED BED REACTORS

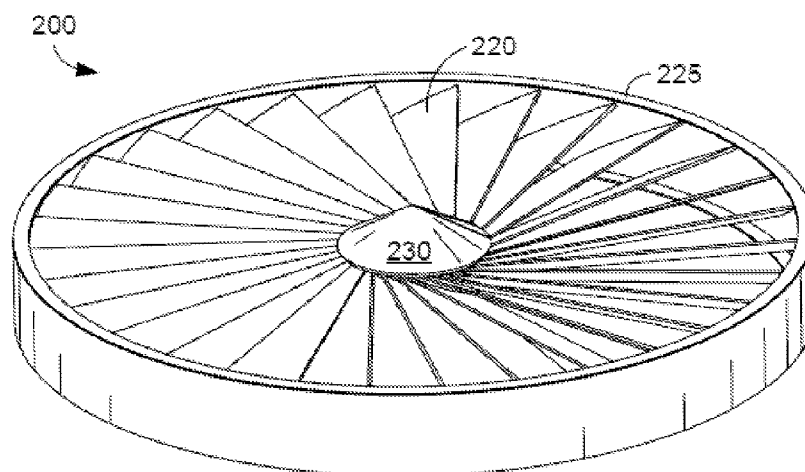


FIG. 3.

(57) Abstract: A reactor comprises a stator-type mixing device between fixed catalyst beds. The mixing device includes a plurality of blades or surfaces arranged around a central hub. The blades are arranged at an angle relative to vertical so that a fluid cannot pass vertically through the mixing device without contacting at least one blade or surface. The blades or surfaces allow the stator-type mixing device to span the full cross-sectional surface area of the reactor, so that concentration of liquids in a localized portion of the reactor cross-sectional area is reduced or minimized. For reactors where at least part of the process fluid is a liquid under reaction conditions, a distributor tray can be included below the stator-type mixing device.

