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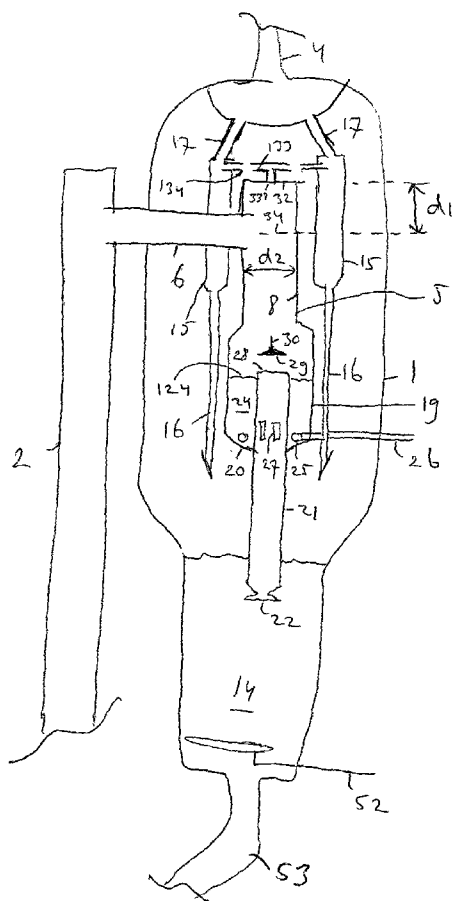
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(54) Title: FCC REACTOR



(57) Abstract: Fluid catalytic reactor vessel comprising: at its upper end a single centrally positioned primary cyclone having a gas-solids inlet fluidly connected to the downstream end of a fluid catalytic riser, which riser is positioned externally from a fluid catalytic reactor vessel; said primary cyclone further provided with a gas outlet conduit at its upper end fluidly connected to one or more secondary cyclone separators, which secondary cyclone separators are positioned in the space between the centrally positioned primary cyclone and the wall of the reactor vessel and which secondary cyclones have means to discharge solids to the lower end of the reactor vessel and means to discharge a gaseous stream poor in solids to a gas outlet of the reactor vessel; said primary cyclone further provided with a primary stripping zone at its lower end and means to discharge pre-stripped solids from the primary cyclone to the lower end of the reactor vessel; and wherein the reactor vessel further comprises at the lower end of reactor vessel a secondary stripping zone and means to discharge stripped solids from the reactor vessel.

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