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(54) Title: SLURRY HYDROCARBON SYNTHESIS WITH EXTERNAL PRODUCT FILTRATION**(57) Abstract**

A slurry hydrocarbon synthesis process employs a slurry filtration vessel external of the slurry reactor. Slurry from the reactor is passed through one or more gas and solids disengaging zones, one or more of which may be present in the reactor and vessel, to reduce the gas and solids content of the slurry before it contacts the filter in the vessel. The filter separates the slurry hydrocarbon liquid from the gas and solids as a filtrate which is sent to upgrading. Valves in gas and fluid conduits enable the filtration vessel to be isolated from the reactor for maintenance, to replace filters and to aid in controlling slurry flow through the vessel. A hydrogen rich gas may be injected into the filtration vessel to prevent catalyst deactivation. Slurry is hydraulically circulated between the reactor and vessel due to density differences while the reactor is operating.

