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(54) **Title**: HYDROPROCESSING CATALYSTS AND METHODS FOR MAKING THEREOF

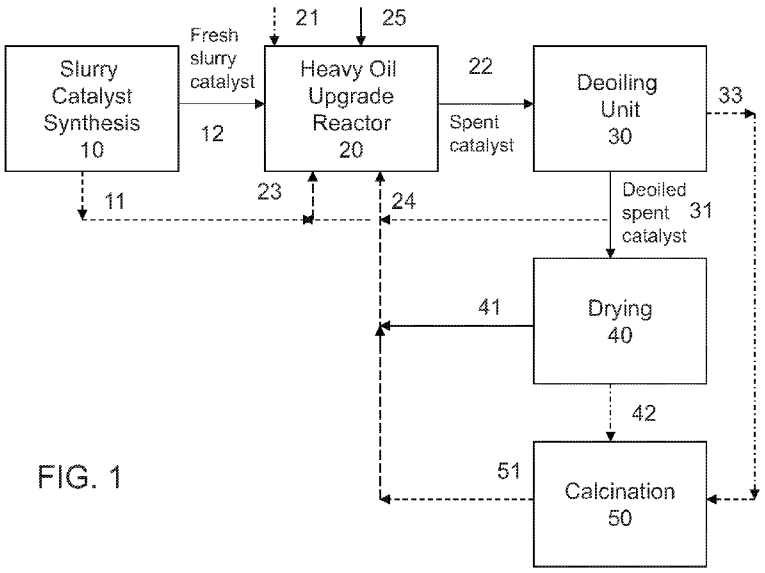


FIG. 1

(57) **Abstract**: Methods for preparing and an improved slurry catalyst feed system for heavy oil upgraded are provided. The catalyst feed system comprises a fresh slurry catalyst and a deoiled spent catalyst in an amount of at least 10% the catalyst feed system. The deoiled spent catalyst is a slurry catalyst that has been used in a hydroprocessing operation with more than 10% but less than 80% of original catalytic activity, and containing less than 10 wt. % soluble hydrocarbons as unconverted heavy oil feed. In one embodiment, the deoiled spent catalyst is first treated with a solution containing at least one of plain water, a mineral acid, an oxidizing agent, and combinations thereof to reduce the concentration of at least one metal contaminant in the deoiled spent catalyst by at least 40%.

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