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(54) Title: LAYERED CATALYST REACTOR SYSTEMS AND PROCESSES FOR HYDROTREATMENT OF HYDROCARBON FEEDSTOCKS

(57) Abstract: A layered catalyst reactor system and process for hydrotreatment of hydrocarbon feedstocks. The layered catalyst system reactors comprise vertical bed layers including a demetallization catalyst layer, multiple layers of supported hydrotreating catalyst layer, and multiple alternating layers of supported hydrocracking catalysts and self-supported hydrotreating catalysts. The arrangement of the catalyst layers mitigates the risk of temperature run-aways, with improvements in hydrotreatment performance.

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