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(54) Title: CATALYST STACKED BED SYSTEM WITH VARYING METAL CONCENTRATION FOR TRANSALKYLATION PROCESS

(57) Abstract: A catalyst stacked bed system with varying metal concentration for transalkylation and a method of transalkylation utilizing the catalyst are described. There is a first catalyst bed comprising a zeolite and a metal on top of a second catalyst bed comprising the same zeolite and metal in order to optimize performance benefits. The catalyst stacked bed system may comprise two or more catalyst beds. The first catalyst bed is positioned to contact the feed before the second (or subsequent) catalyst bed. The first catalyst bed has a total metal content of 1 wt% or more, and its total metal content is higher than the second catalyst bed. Each subsequent bed has a lower metal content than the previous bed. The metal for the first and second bed is selected from Groups 6-10 and 14 of the Periodic Table, or combinations thereof.