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(54) Title: PROCESS FOR PREPARING A MOLYBDENUM-PLATINUM-BASED CATALYST FOR THE SYNTHESIS OF BENZENE BY TRANSALKYLATION

(57) Abstract: A process for preparing a catalyst composition comprising (a) preparing a carrier comprising (i) mordenite in an amount in the range of from 20 to 80 wt%, based on total weight of carrier, (ii) ZSM-5 type zeolite in an amount in the range of from 10 to 70 wt%, based on total weight of carrier; and (iii) an inorganic binder in an amount in the range of from 10 to 50 wt%, based on total weight of carrier; (b) incorporating in the carrier molybdenum in an amount in the range of from 1 to 10 wt%, as metal based on total weight of catalyst composition, and subjecting the thus treated carrier to a temperature of from 100 to at most 300 °C and (c) incorporating in the molybdenum containing carrier obtained in step (b) platinum in an amount of from 0.005 to 1 wt%, as metal based on total weight of catalyst composition, and subjecting the thus treated carrier to a temperature of from 200 to at most 600 °C; and a process for conversion of alkylaromatic hydrocarbons containing feedstock using a catalyst prepared by said process. Process using the prepared catalyst composition for alkylaromatic hydrocarbon conversion.

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