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(54) Title: HIGH ZEOLITE CONTENT AND ATTRITION RESISTANT CATALYST, METHODS FOR PREPARING THE SAME AND CATALYZED PROCESSES THEREWITH

(57) Abstract

A calalyst composition suitable for reacting hydrocarbons, e.g., conversion processes such as fluidized catalytic cracking (FCC) of hydrocarbons, comprises attrition resistant particulate having a high level (30–85 %) of stabilized zeolites having a constraint index of 1 to 12. The stabilized zeolite is bound by a phosphorous compound, alumina and optional binders wherein the alumina added to make the catalyst is about 10 % by weight or less and the molar ratio of phosphorous (P_2O_5) to total alumina is sufficient to obtain an attrition index of about 20 or less. The composition can be used as a catalyst per se or as additive catalyst to a conventional catalyst and is especially suitable for enhancing yields of light olefins, and particularly ethylene, produced during conversion processes.