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Declarations under Rule 4.17:

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(54) Title: FINE CO-FEED FOR MAINTAINING EFFICIENT REACTOR HYDRODYNAMICS

(57) Abstract: This invention provides processes for maintaining a desired particle size distribution in an oxygenate to olefin reaction system. In one embodiment, the invention comprises replacing lost catalyst fines with less active co-catalyst particles. By adding less active co-catalyst particles to the reaction system, desirable fluidization characteristics and hydrodynamics can be maintained without affecting the overall (or primary catalyst) performance and product selectivities. The invention is also directed to a population of catalyst particles having a desirable particle size distribution well-suited for realizing ideal fluidization and hydrodynamic characteristics.

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