ABSTRACT

PROCESSES AND APPARATUSES FOR REGENERATING A CATALYST

Processes and apparatuses for regenerating catalysts used in a hydrocarbon conversion process. The catalyst is separated into a bypass portion and an adsorption portion. The bypass portion is passed to a regeneration zone where coke may be removed. A vent gas from the regeneration zone may include an active additive from the catalyst, like a halogen. The vent gas is sent to an adsorption zone which also receives the adsorption portion. In the adsorption zone, the catalyst will contact and adsorb the active additive and then pass to the regeneration zone. The amount of active additive in the vent gas from the regeneration zone and the adsorption zone is reduced.

FIG. 1