

ABSTRACT



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PROCESS AND APPARATUS FOR DETECTING A LOSS OF REACTION IN A HYDROCARBON CONVERSION REACTION

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A hydrocarbon conversion process such as an auto-thermal cracking process in which a hydrocarbon feed and a molecular oxygen-containing gas are contacted in a reaction zone in the presence of a catalyst to produce an outlet stream having an oxygen concentration which is at, near or above the flammable limit and in which process a loss
10 of reaction is detected and used as a signal to activate means for mitigating the risk of explosion downstream of the reaction zone. The loss of reaction may be detected for example by a sudden increase in oxygen concentration in the outlet stream and/or a sudden drop in temperature of the outlet stream.

15 No Figure



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