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(54) Title: PROCESS FOR THE OXIDATIVE REGENERATION OF A DEACTIVATED CATALYST AND AN APPARATUS THEREFOR

(57) Abstract: The present invention relates to a process for the oxidative regeneration of a deactivated catalyst comprising molecular sieve to provide a regenerated catalyst comprising regenerated molecular sieve, wherein said deactivated catalyst is from one or both of an oxygenate to olefin process and a olefin cracking process, an apparatus therefor and a process for the preparation of olefinic product incorporating such a regeneration process, said regeneration process comprising at least the steps of: - providing a regeneration gas stream (185) comprising oxidant; - treating the regeneration gas stream (185) with a liquid adsorbent stream (245) comprising an ethylene glycol in a contaminant absorption zone (200) to remove at least a part of one or more of any water, any alkali metal ion and any alkaline earth metal ion present in the regeneration gas stream to provide a treated regeneration gas stream (205) comprising oxidant; - regenerating a deactivated catalyst comprising molecular sieve with the treated regeneration gas stream (205) to provide a regenerated catalyst comprising regenerated molecular sieve.

