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(54) Title: PROCESSES FOR PREVENTING GENERATION OF HYDROGEN HALIDES IN AN OLIGOMERIZATION PROD-
UCT RECOVERY SYSTEM

(57) Abstract: The invention is an oligomerization process. A catalyst, a lower olefin, and a process medium are provided. The lower olefin is reacted in the presence of the catalyst to produce a product stream comprising a higher olefin product and a catalyst residue dispersed in the process medium. The resulting product stream is treated with a quenching material. The quenching material can be an aliphatic primary amine, an aliphatic secondary amine, an alcohol, or a combination of those materials. Amine quenching materials have been found to generate few or no hydrogen halides when used to quench oligomerization catalysts. Alcohol quenching materials can generate hydrogen halides in use. This problem can be alleviated by treating the product stream with a stabilizing material that forms a stable hydrogen halide salt. Exemplary stabilizing materials include aliphatic amines, aromatic amines, and metal salts of amides, butoxides, or carboxylic acids.

WO 01/47839 A1