

Abstract

A catalytic conversion process and system for producing propylene, the process comprising the steps of: 1) providing a starting material comprising olefin(s) having 4 or
5 more carbon atoms; 2) pretreating the starting material to obtain a propylene precursor comprising olefin(s) having 3×2^n carbon atoms, wherein n is an integer greater than or equal to 1; and 3) subjecting the propylene precursor to a catalytic cracking reaction to obtain a reaction product comprising propylene. The process and system can effectively improve the propylene yield.

FIG. 1