

Abstract

Disclosed is a catalytic cracking process for producing isobutane and/or light aromatics in high yield, comprising the steps of: a) providing a catalytic
5 cracking feedstock oil having a polycyclic naphthene content of greater than about 25 wt%; b) subjecting the catalytic cracking feedstock oil to a first catalytic cracking reaction and a second catalytic cracking reaction sequentially under different reaction conditions to obtain a catalytic cracking product; c) separating the resulting catalytic cracking product to obtain a
10 liquefied gas fraction comprising isobutane and a gasoline fraction comprising light aromatics; and d) optionally, recovering isobutane from the liquefied gas fraction and/or recovering light aromatics from the gasoline fraction. The process can enable the production of isobutane and/or light aromatics in high yield.

FIG. 1