

Abstract

A process for producing propylene and a low-sulfur fuel oil component, comprising the steps of: i) contacting a hydrocarbon-containing feedstock oil with a catalytic conversion catalyst for reaction under effective conditions in a catalytic conversion reactor in the absence of hydrogen to obtain a reaction product comprising propylene; ii) separating the reaction product from step i) to obtain a catalytic cracking distillate oil, and iii) subjecting the catalytic cracking distillate oil to hydrodesulfurization to obtain a low-sulfur hydrogenated distillate oil suitable for use as a fuel oil component. The process can greatly improve the propylene selectivity and propylene yield while producing more fuel oil components, significantly reduce the yield of dry gas and coke, and thus has better economic and social benefits.

Fig. 1