

Abstract

The invention relates to a hydrocracking process and system. The gas oil feedstock and hydrogen are mixed and reacted in a hydrotreating unit. The resulting reaction effluent is sent to a first hydrogenation cracking unit and reacted by contacting a hydrogenation cracking catalyst I to obtain light fraction I rich in paraffins and heavy fraction I rich in cyclic hydrocarbons. The heavy fraction I is mixed with hydrogen and reacted in a second hydrogenation cracking unit, thereby producing heavy fraction II rich in cyclic hydrocarbons. The present invention wholly realizes the high-selective directional conversion of gas oil feedstock according to the chain structure and the ring structure, and can produce chemical raw materials rich in paraffins and naphthenic speciality oil rich in cyclic hydrocarbons.

FIG.1