

Abstract

The present invention relates to the petroleum refining field, and discloses wax oil hydrocracking method and system. The method comprises: pre-hydrotreating wax oil to obtain a pre-hydrotreated material flow; controlling the pre-hydrotreated material flow and a hydrogen-containing material
5 flow to contact with a first hydrocracking catalyst to obtain a first hydrocracked material flow, and dividing the first hydrocracked material flow into two parts, i.e., a first hydrocracked material flow **A** and a first hydrocracked material flow **B**; controlling the first hydrocracked material flow **B** and a hydrogen-containing material flow to contact with a second hydrocracking catalyst to obtain a second hydrocracked material flow, and then separating and fractionating the second hydrocracked
10 material flow to obtain a hydrocracked tail oil product; controlling the first hydrocracked material flow **A**, at least a part of the hydrocracked tail oil product, and a hydrogen-containing material flow to contact with a hydrogenation isocracking catalyst to obtain a hydrogenation isocracked material flow, and then separating and fractionating the obtained hydrogenation isocracked material flow. The method and system provided in the present invention can meet the demand for producing naphtha
15 product, jet fuel product, diesel oil product, and tail oil product that are of different specifications.

Fig. 1