ABSTRACT OF THE DISCLOSURE

Petroleum wax feeds having a low oil content are converted to high viscosity index lubricants by a two-step hydrocracking-hydroisomerization process in which the wax feed is initially subjected to hydrocracking under mild conditions with a conversion to lube range products of between generally 30 and 40 weight percent of the feed. The hydrocracking is carried out at a hydrogen pressure of at least 800 psig (5617 PkPaa) using an amorphous catalyst which preferentially removes the aromatic components present in the initial feed. The hydrocracked effluent is then subjected to hydroisomerization in a second step using a low acidity zeolite beta catalyst. The second stage may be operated at high pressure by cascading the first stage product into the second stage or at a lower pressure, typically from 200 to 1000 psig (1480 to 6996 PkPaa). The second stage catalyst is preferably a noble metal containing zeolite beta catalyst. The second stage is carried out at relatively low temperature, typically from 600° to 650°F (316 to 343°C). A final dewaxing step to target pour point may be used.