ABSTRACT OF THE DISCLOSURE

Petroleum waxes are converted to high Viscosity Index lubricants by a synergistic process which employs two catalysts. Viscosity Index and yield are greater for product of the integrated catalyst process than they are for the product of either of the catalysts alone. The wax feed which may be pretreated by mild hydrocracking, is first subjected to isomerization in the presence of hydrogen over a low acidity zeolite isomerization catalyst which effects a preferential isomerization of the paraffin components in the feed to less waxy, high V.I. isoparaffins. The isomerization is operated at a pressure of at least 5617 kPa_{abs} hydrogen partial pressure (reactor inlet). The catalyst is preferably a noble metal containing zeolite beta catalyst which contains boron as a framework component of the zeolite in order to give a low alpha value, typically below 20. The isomerization is carried out at a temperature of 345°C with conversion in the range of 10 to 40 wt.% of the feed. The product of the isomerization process is then contacted with a shape-selective catalyst in order to further reduce the pour point. Preferably ZSM-22, ZSM-23 or ZSM-35 is used. The shape-selective catalyst preferably contains noble metals such as Pd or Pt.