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 CHEVRON RES & TECHN *WO 9009-363-A

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 Lubricating oil prodn. from waxy feeds - by isomerisation on
 alumino:phosphate molecular sieve catalyst
 C90-118885 R(AT BE CH DE DK ES FR GB IT LU NL SE) N(AU
 CA JP)

Prod. of lubricating oils is effected by isomerising a waxy
 feed at 15-2000 psig using a catalyst comprising:

- (a) an intermediate-pore-size non-zeolitic molecular
 sieve (I) contg. tetrahedral AlO_2 and PO_2 units; and
- (b) at least one Group VIII metal.

ADVANTAGES

The prods. have a low pour point, a high V.I., a low
 viscosity for their boiling range (giving reduced frictional
 resistance, reduced engine wear and increased fuel
 efficiency), high oxidative and thermal stability, and low
 volatility.

PREFERRED CONDITIONS

The feed is a gas oil, lubricating oil stock, synthetic
 oil, foote oil, slack wax or de-oiled wax with a wax content
 of at least 25% (esp. at least 80%) and a paraffinic C content

E(31-P2D) H(4-E, 7-A, 7-G4, 7-G6) N(6-B)

of at least 70% (esp. at least 90%).

Isomerisation is effected at 200-475 (esp. 250-450) deg.
 C and 50-1000 (esp. 100-600) psig, with a LHSV of 0.1-20
 (esp. 0.1-5).

The prod. is hydrofinished, pref. at 190-340 deg. C
 and 400-3000 psig in the presence of a metallic hydrogenation
 catalyst.

PREFERRED CATALYSTS

(I) is a silicoaluminophosphate, esp. SAPO-11, SAPO-31
 or SAPO-41. The metal is Pt and/or Pd.

PREFERRED PROPERTIES

The prods. have a V.I. of 120-180 and a pour point
 below -9 deg. C. (38pp367SLDwgNo0/4).

(E) ISR: US4440871 US4650917 US4686029 US4689138
 US4710485 US4740650 US4788378 US4824554