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(54) Title: HIGH NANOPORE VOLUME CATALYST AND PROCESS USING SSZ-91

(57) Abstract: An improved hydroisomerization catalyst and process for making a base oil product wherein the catalyst comprises a base extrudate that includes SSZ-91 molecular sieve and a high nanopore volume alumina. The catalyst and process generally involves the use of a SSZ-91/high nanopore volume alumina based catalyst to produce dewaxed base oil products by contacting the catalyst with a hydrocarbon feedstock. The catalyst base extrudate advantageously comprises an alumina having a pore volume in the 11-20 nm pore diameter range of 0.05 to 1.0 cc/g, with the base extrudate formed from SSZ-91 and the alumina having a total pore volume in the 2-50 nm pore diameter range of 0.12 to 1.80 cc/g. The catalyst and process provide improved base oil yield with reduced gas and fuels production.



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