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(74) Agent: **TAYLOR, Richard, B.**; Shell Oil Company, One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

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(71) Applicant (for SM only): **SHELL OIL COMPANY** [US/US]; One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

(71) Applicant (for all designated States except US): **SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.** [NL/NL]; Carel Van Bylandtlaan 30, NL-2596 HR The Hague (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BHAN, Opinder, Bhan** [US/US]; 714 Cranfield Court, Katy, TX 77450 (US). **WELLINGTON, Scott, Lee** [US/US]; 5109 Aspen Street, Bellaire, TX 77401 (US).

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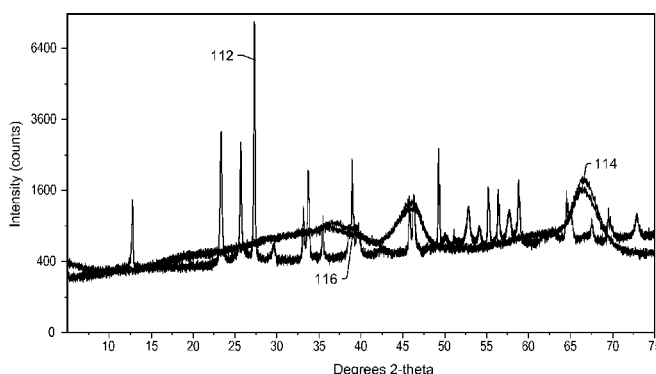


FIG. 2

(57) Abstract: A catalyst that includes one or more metals from Column 6 of the Periodic Table and/or one or more compounds of one or more metals from Column 6 of the Periodic Table and a support. The support comprises from 0.01 grams to 0.2 gram of silica and from 0.80 grams to 0.99 grams of alumina per gram of support. The catalyst has a surface area of at least 315 m²/g, a pore size distribution with a median pore diameter of at most 100 Å, and at least 80% of its pore volume in pores having a pore diameter of at most 300 Å. The catalyst exhibits one or more peaks between 35 degrees and 70 degrees, and at least one of the peaks has a base width of at least 10 degrees, as determined by x-ray diffraction at 2-theta. Methods of preparation of such catalyst are described herein. Methods of contacting a hydrocarbon feed with hydrogen in the presence of such catalyst to produce a crude product. Uses of crude products obtained. The crude product composition is also described herein.



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