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(71) Applicant (for all designated States except US): **EXXON-MOBIL CHEMICAL PATENTS INC.**; A Corporation of The State Of Delaware, 5200 Bayway Drive, Baytown, TX 77520-2101 (US).

(72) Inventors; and

(75) **Inventors/Applicants (for US only): JOSHI, Yogesh, V.** [IN/US]; 38 Plumstead Ct., Annandale, NJ 08801 (US). **VENKATARAMAN, Pallassana, S.** [US/US]; 8817 Stark Road, Annandale, VA 22003 (US). **HELTON, Terry, E.** [US/US]; 4060 Suncrest Lane, Bethlehem, PA 18020 (US). **SMITH, C., Morris** [US/US]; 3726 Tanglely, Houston, TX 77005 (US). **SANTIESTEBAN, Jose, G.** [US/US]; 1874 Viola Lane, Hellertown, PA 18055 (US). **VINCENT, Matthew, J.** [US/US]; 4724 Gulfway Drive, Baytown, TX 77521 (US).

(74) **Agents: TYUS, Darryl M.** et al.; Exxonmobil Chemical Company, Law Technology, P.O. Box 2149, Baytown, TX 77522-2149 (US).

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(54) **Title:** SELECTING AN IMPROVED CATALYST COMPOSITION AND HYDROCARBON CONVERSION PROCESS USING SAME

(57) **Abstract:** The present invention provides a method for selecting an improved catalyst composition comprising a crystalline molecular sieve material having a structure and properties whereby the catalyst composition has at least one active catalytic site with a Mono Alkylation Selectivity Factor (MASF) greater than or equal to 0 kcal/mol $\pm$ 0.5 kcal/mol, and optionally further at least one active catalytic site with an Olefin Oligomerization Suppression Factor (OOSF) greater than or equal to 5 kcal/mol $\pm$ 0.5 kcal/mol. Further, there is provided an improved process for conversion of hydrocarbon feedstock in the presence of said selected catalyst composition.

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