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(71) Applicant (for all designated States except US): **EXXON-MOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520-2101 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHEN, Tan-jen** [US/US]; 5615 Lofty Magnolia Court, Kingwood, TX 77345 (US). **BENITEZ, Francisco, M.** [US/US]; 1618 Stone Meadows Lane, Houston, TX 77094 (US). **CHENG, Jane, C.** [US/US]; 1303 Pinhorn Drive, Bridgewater, NJ 08807 (US). **STANAT, Jon, E.** [US/US]; 912 C Lovett Boulevard, Houston, TX 77006 (US). **BUCHANAN, J., Scott** [US/US]; 13 Terrell Rd., Lambertville, NJ 08530 (US).

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

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(54) Title: PROCESS FOR PRODUCING CYCLOHEXYLBENZENE

(57) Abstract: In a process for producing cyclohexylbenzene, benzene and hydrogen are fed to at least one reaction zone. The benzene and hydrogen are then contacted in the at least one reaction zone under hydroalkylation conditions with a catalyst system comprising a molecular sieve having an X-ray diffraction pattern including d-spacing maxima at 12.4 ± 0.25 , 6.9 ± 0.15 , 3.57 ± 0.07 and 3.42 ± 0.07 Angstrom, and at least one hydrogenation metal to produce an effluent containing cyclohexylbenzene. The ratio of the total number of moles of hydrogen fed to said at least one reaction zone to the number of moles of benzene fed to said at least one reaction zone is between 0.4 and 0.9: 1.



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