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(71) Applicant: SAUDI BASIC INDUSTRIES CORPORATION [SA/SA]; P.O. Box 5101, Riyadh, 11422 (SA).

(72) Inventor; and

(71) Applicant (for US only): WARD, Andrew Mark [GB/NL]; c/o SABIC Corporate Patent Group, P.O. Box 3008, NL-6160 GA Geleen (NL).

(74) Agent: VROEMEN, Maurice; Sabic Intellectual Property Group, P.O. Box 3008, NL-6160 GA Geleen (NL).

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(54) Title: PROCESS FOR PRODUCING BTX FROM A C5-C12 HYDROCARBON MIXTURE

(57) Abstract: The present invention relates to a process for producing chemical grade BTX from a mixed feedstream comprising C5-C12 hydrocarbons by contacting said feedstream in the presence of hydrogen with a catalyst having hydrocracking/hydrodesulphurisation activity. Particularly, a process for producing BTX from a feedstream comprising C5-C12 hydrocarbons is provided comprising the steps of: (a) contacting said feedstream in the presence of hydrogen with a combined hydrocracking/hydrodesulphurisation catalyst to produce a hydrocracking product stream comprising BTX; and (b) separating the BTX from the hydrocracking product stream. The hydrocracking/hydrodesulphurisation catalyst comprises 0.1-1 wt-% hydrogenation metal in relation to the total catalyst weight. The hydrocracking/hydrodesulphurisation catalyst further comprises a zeolite having a pore size of 5-8 Å and a silica (SiO₂) to alumina (Al₂O₃) molar ratio of 5-200. The hydrocracking/hydrodesulphurisation conditions include a temperature of 450-580 °C, a pressure of 300-5000 kPa gauge and a Weight Hourly Space Velocity of 0.1-10 h⁻¹.



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