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(21) International Application Number: PCT/US99/25889 (22) International Filing Date: 4 November 1999 (04.11.99) (30) Priority Data: 09/213,798 17 December 1998 (17.12.98) US (71) Applicant: MOBIL OIL CORPORATION [US/US]; 3225 Gallows Road, Fairfax, VA 22307 (US). (72) Inventors: DEGNAN, Thomas, Francis, Jr.; 736 Paddock Path, Moorestown, NJ 08057 (US). GREEN, John, R.; 1614 Makefield Road, Yardley, PA 19067 (US). HUANG, Yun, Yang; 98 William Feather Drive, Voorhees Township, NJ 08043 (US). VENKAT, Chaya, Rao; 35 Littlebrook Road North, Princeton, NJ 08540 (US). WEISS, Ronald, A.; 6 Red Robin Way, Flemington, NJ 08822 (US). (74) Agents: ROBERTS, Peter, W. et al.; ExxonMobil Chemical Company, P.O. Box 2149, Baytown, TX 77522-2149 (US).		(81) Designated States: AU, CA, CN, ID, IN, JP, KR, MX, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: IMPROVED AROMATIC ALKYLATION PROCESS (57) Abstract Alkylation product is contacted with a purification medium in a liquid phase pre-reaction step to remove impurities and form a purified stream. The purified stream is then further processed by liquid phase transalkylation to convert the polyalkylated aromatic compound to a monoalkylated aromatic compound. The process may use a molecular sieve catalyst such as MCM-22 as the purification medium in the pre-reaction step because of its high reactivity for alkylation, strong retention of catalyst poisons and low reactivity for oligomerization under the pre-reactor conditions. Olefins, diolefins, styrene, oxygenated organic compounds, sulfur containing compounds, nitrogen containing compounds and oligomeric compounds are removed.		