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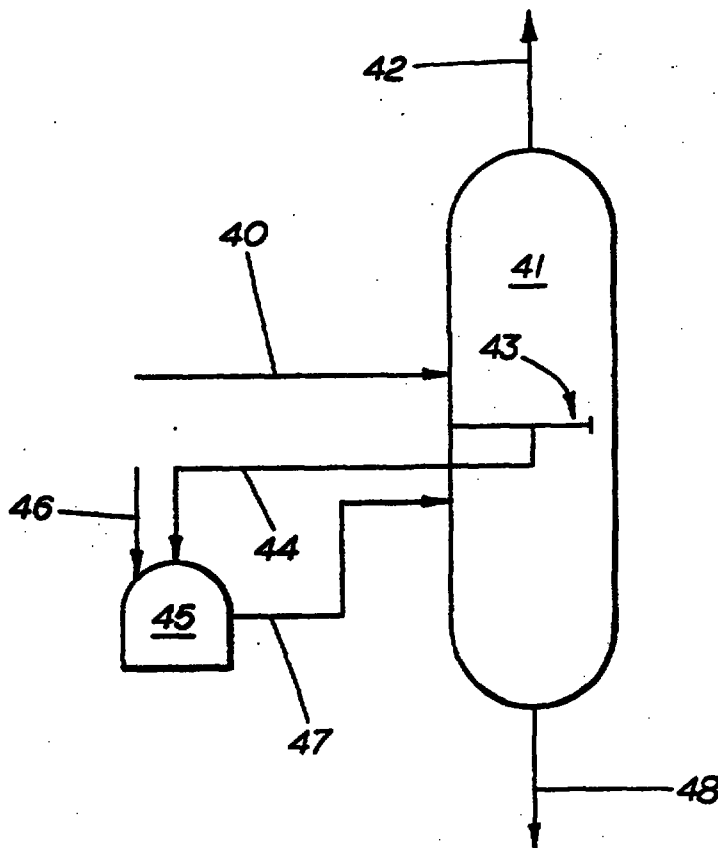
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(71) Applicant: EXXON CHEMICAL PATENTS INC. [US/US]; 5200 Bayway Drive, Baytown, TX 77520 (US). ✓			
(72) Inventors: VEBELIUNAS, Rimas, Virgilijus; 8318 Cedarbrake, Houston, TX 77055 (US). BAMFORD, David, Alan; 5615 Wigton Drive, Houston, TX 77096 (US). DRUMMOND, Neil, James; 16 Liggars Place, Dunfermline, Fife KY12 7XZ (GB). SNIDER, Sheri, Renee; 518 Columbia, Houston, TX 77007 (US). STRACK, Robert, David; 1906 Park Lodge Court, Houston, TX 77062 (US). HALLE, Roy, Thomas; 912 Davis Road, League City, TX 77573 (US).			
(74) Agents: ZBORAY, James, A.; Exxon Chemical Company, P.O. Box 2149, Baytown, TX 77522-2149 (US) et al.			

(54) Title: PROCESS FOR SELECTIVE HYDROGENATION OF CRACKED HYDROCARBONS

(57) Abstract

The invention relates to a process to selectively hydrogenate di-olefinically, poly-olefinically, and acetylenically unsaturated hydrocarbon components a C₂ to C₅⁺ or a C₃ to C₅⁺ fraction of a cracked hydrocarbon stream. The process comprises removing from a deethanizer or depropanizer a heavy stream enriched in a C₃ to C₅⁺ or a C₄ to C₅⁺ fraction; reacting the heavy stream with hydrogen for selective hydrogenation; and returning at least a portion of the hydrogenated stream to the deethanizer or depropanizer. Embodiments are disclosed where the heavy stream is removed by a side draw or by means of the reboiler circuit. The invention is applicable to front-end demethanizer, deethanizer, or depropanizer fractional distillation process sequences such as may be used with steam cracking or catalytic cracking.



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