

Title (en)

REMOVAL OF SULFUR-CONTAINING COMPOUNDS FROM LIQUID HYDROCARBON STREAMS

Title (de)

ENTFERNUNG VON SCHWEFELENTHALTENDEN PRODUKTEN AUS FLÜSSIGEN KOHLENWASSERSTOFFSTRÖMEN

Title (fr)

EXTRACTION DE COMPOSES CONTENANT DU SOUFRE DE FLUX D'HYDROCARBURES LIQUIDES

Publication

**EP 1478716 A1 20041124 (EN)**

Application

**EP 02713690 A 20020228**

Priority

US 0205777 W 20020228

Abstract (en)

[origin: WO03074633A1] A process effective for the removal of organic sulfur compounds from liquid hydrocarbons is disclosed. The process more specifically addresses the removal of thiophenes and thiophene derivatives from a number of petroleum fractions, including gasoline, diesel fuel, and kerosene. In the first step of the process, the liquid hydrocarbon is subjected to oxidation conditions in order to oxidize at least some of the thiophene compounds to sulfones. Then, these sulfones can be catalytically decomposed to hydrocarbons (e.g. hydroxybiphenyl) and volatile sulfur compounds (e.g. sulfur dioxide). The hydrocarbon decomposition products remain in the treated liquid as valuable blending components, while the volatile sulfur compounds are easily separable from the treated liquid using well-known techniques such as flash vaporization or distillation.

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