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(54) Title: GASOLINE DESULFURIZATION PROCESS ☒

(57) Abstract

A catalytic cracked naphtha is desulfurized with minimum loss of olefins and octane. The naphtha is fed to a first distillation column reactor (10) which acts as a depentanizer or dehexanizer with the lighter material containing most of the olefins and mercaptans being boiled up into a first distillation reaction zone (11) where the mercaptans are reacted with diolefins to form sulfides which are removed in the bottoms along with any higher boiling sulfur compounds. The bottoms are subjected to hydrosulfurization in a second distillation column reactor (20) where the sulfur compounds are converted to H₂S and removed. The lighter fraction containing most of the olefins is thus not subjected to the more harsh hydrogenation conditions of the second reactor (20).

