PRINCIPLES FOR SELECTION OF CATIONIC ADSORBENTS FOR THE SELECTIVE REMOVAL OF SULFUR-CONTAINING COMPOUNDS FROM DIESEL

Tech ID: 21621 / UC Case 2011-114-0

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,719,028	08/01/2017	2011-114

BRIEF DESCRIPTION

A major challenge facing petroleum refiners is the desulfurization of diesel where sulfur levels must be reduced to less than 10 ppm. This is difficult because alkyl groups inhibit access to the sulfur atom. Furthermore, it requires high hydrogenation under great pressures.

This invention provides an alternative to hydrodesulfurization by the adsorption of thiophene derivatives on a solid adsorbent. It is a method for predicting selective performance of an adsorbent from a list of metals or cations for use in removing contaminants as thiophene derivatives in a hydrocarbon feed.

SUGGESTED USES

Removal of thiophene derivatives from hydro-carbon products, e.g., vacuum gas oils, kerosene and diesel fuels.

ADVANTAGES

Cheaper and more efficient.

RELATED MATERIALS

» US Patent No. 9,719,028 B2

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OTHER INFORMATION

KEYWORDS

Petroleum, desulfurization, catalyst

CATEGORIZED AS

» **Energy**

» Hydrocarbon

RELATED CASES

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