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(US). O'BARA, Joseph, T.; 36 Richard Street, Parsippany,
NJ 07054 (US).

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(74) Agents: HUGHES, Gerard, J. et al.; ExxonMobil Re-
search and Engineering Company, P.O. Box 900, 1545
Route 22 East, Annandale, NJ 08801-0900 (US).

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(71) Applicant: EXXONMOBIL RESEARCH AND ENGI-
NEERING COMPANY [US/US]; P.O. Box 900, 1545
Route 22 East, Annandale, NJ 08801-0900 (US).

(72) Inventors: FEIMER, Joseph, L.; 2933 Old Lakeshore
Road, Bright's Grove, Ontario N0N 1C0 (CA). ZINKIE,
David, N.; 5723 Telfer Road, Sarnia, Ontario N7T 7H2
(CA). BAKER, Myles, W.; 4227 Summit Manor Court,
#301, Fairfax, VA 22033 (US). KAUL, Bal, K.; 2 Hutchins
Lane, Randolph, NJ 07869 (US). STUNTZ, Gordon, F.;
12217 Lake Lingham Circle, Baton Rouge, LA 70816

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(54) Title: REMOVAL OF SULFUR COMPOUNDS FROM HYDROCARBON FEEDSTREAMS USING COBALT CONTAIN-
ING ADSORBENTS IN THE SUBSTANTIAL ABSENCE OF HYDROGEN

(57) Abstract: A process for removing sulfur compounds from hydrocarbon feedstreams, particularly those boiling in the naphtha range, by contacting the feedstream with an adsorbent comprised of cobalt and one or more Group VI metals selected from molybdenum and tungsten on a refractory support. This invention also relates to a process wherein a naphtha feedstream is first subjected to selective hydrodesulfurization to remove sulfur but not appreciably saturate olefins. A product stream is produced containing mercaptans that are removed by use of the cobalt-containing adsorbents of the present invention.