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AT BE CH DE FR GB IT LI NL(88) Date of deferred publication of the search report:
30.03.88 Bulletin 88/13(71) Applicant: **MOBIL OIL CORPORATION**
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New York New York 10017(US)(72) Inventor: **Rudnick, Leslie Robert**
5 Winthrop Road
Lawrenceville New Jersey 08648(US)(74) Representative: **Cooper, John Anthony et al**
Mobil Court 3 Clements Inn
London WC2A 2EB(GB)(54) **Hydrogenation process.**

(57) Active sulfur compounds, especially thiols and thiophenols are effective catalysts for hydrogen transfer reactions, catalyzing the transfer of hydrogen from aliphatic and alkylaromatic compounds. A preferred hydrogen donor is shale oil which may be used as the donor solvent in a coal liquefaction process in which a thiol or thiophenol is used as a catalyst to promote transfer of hydrogen from the shale oil to the coal.

EP 0 195 539 A3



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EUROPEAN SEARCH REPORT

Application Number .

EP 86 30 1399

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	DE-A-2 823 812 (MOBIL) * Claim 1; page 14, lines 11-18 *	1,4-6,8	C 10 G 1/06
A	US-A- 443 321 (COMPTON) * Claims 1,5,8; column 5, lines 4-16 *	1,2-6,9 -11	
E	EP-A-0 175 511 (MOBIL) * Claims 1,5,6 *	1,6	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			C 10 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-12-1987	Examiner DE HERDT O.C.E.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			