



12

EUROPEAN PATENT APPLICATION

21 Application number : **92309490.8**

51 Int. Cl.⁵ : **C10G 69/12**

22 Date of filing : **16.10.92**

30 Priority : **21.10.91 IT 914953**

43 Date of publication of application :
28.04.93 Bulletin 93/17

84 Designated Contracting States :
**AT BE CH DE DK ES FR GB GR IE IT LI LU MC
NL PT SE**

88 Date of deferred publication of search report :
16.06.93 Bulletin 93/24

71 Applicant : **NESTE OY**
Keilaniemi
SF-02150 Espoo (FI)

72 Inventor : **Raulo, Pirkko**
Linnalahdentie 4 as. 5,
SF-00950 Helsinki (FI)
Inventor : **Keskinen, Kari M.**
Kipinäkuja 14
SF-04200 Kerava (FI)
Inventor : **Myllyoja, Jukka**
Kurkimäentie 1 E 36
SF-00940 Helsinki (FI)

74 Representative : **Goodanew, Martin Eric et al**
MATHISEN, MACARA & CO. The Coach House
6-8 Swakeleys Road
Ickenham Uxbridge UB10 8BZ (GB)

54 **Process for oil refining.**

57 The invention relates to a process for preparing a diesel oil fraction with a high cetane number. According to the invention a charge containing light olefins is oligomerized in the presence of a zeolite catalyst to prepare a product composition which at least partially comprises C₈₊ hydrocarbons. The product composition thus obtained is hydrogenated to form a diesel oil fraction. According to the invention the catalyst used comprises a ZSM-5 zeolite catalyst, whose hydrogen ions have, at least partially been exchanged for Ca²⁺ ions. By means of the invention it is possible to prepare diesel oil fraction with a cetane number higher than 49.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 30 9490

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.5)
Y A	US-A-4 482 772 (MOBIL) * claims 1,3,11,12 * * column 6, line 22 - line 28 * ---	1,4,5 1,11,12	C10G69/12
Y A D	GB-A-2 136 013 (THE BROKEN HILL PROPRIETARY CO LTD.) * claims 1,2,3,7,15,16,18 * & US-A-4 675 460 -----	1,4,5 1,9	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			C10G C07C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 16 APRIL 1993	Examiner OSWALD DE HERDT
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

EPO FORM 1503 03.82 (P0601)