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(54) Title: AVIATION GASOLINE CONTAINING REDUCED AMOUNTS OF TETRAETHYL LEAD

(57) Abstract: An aviation gasoline (Avgas) fuel composition possessing a high motor octane number and which contains reduced amounts of tetraethyl lead is disclosed. The Avgas composition preferably comprises about 20 to about 80 vol % iso-octane, about 5 to about 18 vol % toluene, about 1 to about 20 vol % C_4 to C_5 paraffins, about 0 to about 1 ml/gallon tetraethyl lead (TEL) and the balance light alkylate. The Avgas composition may be economically produced utilizing spare methyl tertiary butyl ether plant capacity to produce iso-octane as one component of the composition.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/27045

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :C10L 1/04
US CL :c 44/33; 585/14
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 44/33; 58 5/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9822556 A1 (BP OIL INTERNATIONAL LIMITED). 28 May 1998. See page 2, lines 13-29; page 4, lines 7-17, 27-35; page 5, lines 1-6, 10-13, 21-24; Example 1).	1-20

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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