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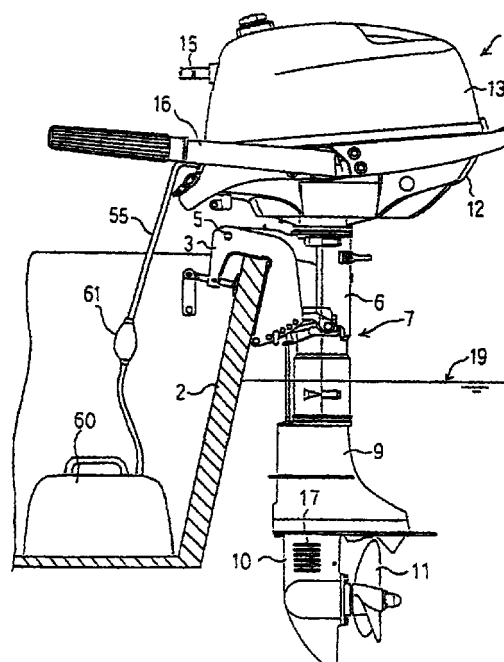
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(54) **Outboard motor for a boat**

(57) An outboard motor which can be mounted at the stem of a boat comprises a boat-side fuel tank (60) which is installed on the boat side, a fuel tank (29) on the outboard motor side which is installed near the front portion of an engine (21), a fuel pump (50) which supplies fuel to the engine, and a fuel changeover cock (37) which selectively switches the fuel tank on the boat side and the fuel tank on the outboard motor side to the fuel pump, and in which the fuel changeover cock (37) is installed below the fuel tank (29) on the outboard motor side. This results in short and compact piping of the fuel supply system. Moreover, the changeover valve can be switched so as to connect the fuel tanks thereby facilitating the filling of the tanks on the motor side.



[Fig. 1]

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EUROPEAN SEARCH REPORT

Application Number
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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.6)
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 006 (M-1066), 8 January 1991 & JP 02 256867 A (TONEN CORP), 17 October 1990 * abstract *	1,4,5	F02B61/04
A	US 4 969 848 A (ISOGAWA ATSUSHI) 13 November 1990 * figure 1 * * abstract *	1-3	
A	US 4 820 215 A (MIZUSAWA NORIHITO ET AL) 11 April 1989 * figure 1 * * abstract *	1	
A	US 4 832 641 A (OISHI HIROSHI ET AL) 23 May 1989 * figure 1 * * abstract *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F02B F02M B63H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 April 1999	Examiner Wassenaar, G
<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</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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19-04-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4969848 A	13-11-1990	JP 1301913 A	06-12-1989
US 4820215 A	11-04-1989	JP 62050295 A	04-03-1987
US 4832641 A	23-05-1989	JP 63093695 A	23-04-1988