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(54) **Improved rotor-type carburetor apparatus and associated methods.**

(57) An improved rotor-type carburetor for use with an internal combustion engine is provided which, in one embodiment, is adjustable to selectively vary its constant fuel-air ratio by axially moving an internal body portion thereof relative to the turbine rotor assembly of the carburetor. Alternatively, the constant fuel-air ratio of the carburetor may be altered simply by replacing such internal body portion with a differently configured one. Undesirable fuel delivery from the turbine rotor to the engine during turbine spin-down is significantly diminished through the use of an internal fuel reservoir structure, formed within the carburetor body, which functions to capture and retain unneeded fuel discharged from the rotor during turbine spin-down periods. During turbine spin-up periods (e.g., when the engine is being started) the reservoir-retained fuel is released into the engine's incoming air stream to hasten fuel delivery to the engine during initial portions of turbine spin-up periods. Additionally, various structural improvements are incorporated into the carburetor. Included in these improvements are a carburetor body construction in which three generally annular sections are telescopingly interengaged to form the outer body of the carburetor, and the provision of improved sealing structures to better inhibit fuel leakage from the turbine rotor assembly.

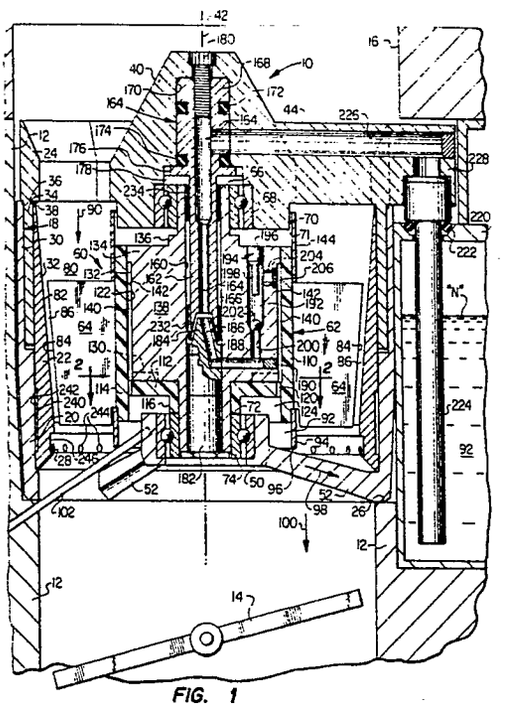

FIG. 1

EP 0 258 722 A3

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EUROPEAN SEARCH REPORT

Application number

DOCUMENTS CONSIDERED TO BE RELEVANT

EP 87111875.8

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	US - A - 4 474 712 (DIENER) * Totality *	1,2,8	F 02 M 69/06
A		14,29, 34	
Y	US - A - 3 307 838 (NILES) * Totality; especially numeral 21 *	1,2,8	
X	US - A - 3 991 144 (DIENER) * Totality; especially fig. 1, numerals 30,31 *	9,10	
A		14,29, 34	
A	US - A - 4 283 358 (DIENER) * Totality *	1,9, 14,29, 34	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

F 02 M 17/00
F 02 M 29/00
F 02 M 69/00

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
VIENNA	18-07-1989	PIPPAN

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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