

Title (en)  
IMPROVED ROTOR-TYPE CARBURETOR APPARATUS AND ASSOCIATED METHODS

Publication  
**EP 0258722 A3 19891018 (EN)**

Application  
**EP 87111875 A 19870817**

Priority  
US 89966786 A 19860822

Abstract (en)  
[origin: EP0258722A2] 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 telescopically 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.

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CPC (source: EP KR)  
**F02M 17/16** (2013.01 - EP); **F02M 69/04** (2013.01 - KR); **F02M 69/06** (2013.01 - EP)

Citation (search report)  
• [Y] US 4474712 A 19841002 - DIENER RUDOLF [CH]  
• [Y] US 3307838 A 19670307 - NILES HAROLD B  
• [X] US 3991144 A 19761109 - DIENER RUDOLF  
• [A] US 4283358 A 19810811 - DIENER RUDOLF

Cited by  
WO2007122026A1

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