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(54) Free-piston gas generator

(57) Improvement in diesel free-piston gas generators with, e.g., a cylinder in which there are provided two pistons, which are moved synchronously towards or from each other. At the ends of the cylinder the cylinder and the pistons define a combustion chamber which can be connected to a pipe for the supply of high-energy exhaust gas to a consumer thereof. According to the invention, the device comprises at least one exhaust gas valve, which is arranged in an exhaust gas port provided in the cylinder section, which port constantly communicates with the combustion chamber. The exhaust gas valve is operated by an activator which is controlled, e.g., by a computer which via sensors very rapidly establishes values for operating parameters for the gas generator. Furthermore, the cylinder portion of the buffer chamber comprises a component which is movable relative to the rest of the cylinder portion, by means of which component the volume of the buffer chamber is variable.

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EUROPEAN SEARCH REPORT

Application Number
EP 99 11 3550

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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			F02B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 September 1999	Examiner Wassenaar, G
CATEGORY OF CITED DOCUMENTS 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 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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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06-09-1999

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