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(54) **In-line annular piston fixed bolt regenerative variable charge liquid propellant gun with variable hydraulic control of piston.**

(57) The gun structure comprises a breech casing (21) defining a breech bore, a fixed member (5) in the breech bore, a differential area piston (6) dividing the breech bore between a combustion chamber (55) and a propellant reservoir (35), said piston having an enlarged portion and a cut out portion, said cut out portion overrunning the fixed member as piston moves from a gun charged position to a gun discharged position, and said cut out portion and said enlarged portion being so sized and shaped to cooperate as said piston moves with respect to said fixed member to define a variable area injection orifice for the flow of propellant from said reservoir to said combustion chamber.

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EUROPEAN SEARCH REPORT

Application Number

EP 89 10 6446

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.5)
D,A	US-A-4 341 147 (MAYER R.) * column 1, line 65 - column 2, line 7; figure 6 ** column 2, line 30 - column 3, line 20 @ column 9, line 4 - column 10, line 32 * - - -	1-6	F 41 A 1/04
A	US-A-4 043 248 (BULMAN M.) * column 4, line 63 - column 5, line 20; figure 5 * - - - - -	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F 41 A
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of search 19 March 91	Examiner VAN DER PLAS J.M.
<div>CATEGORY OF CITED DOCUMENTS</div> <div>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</div> <div>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</div>			