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(54) **Shrouded aerial bomb**

(57) A target penetrating aerial bomb including a penetrating body (24) shaped for improved target penetration, having a narrower impact profile at approximately the same weight as an existing bomb. An aerodynamic shroud (40) encases the penetrating body (24) and emulates the aerodynamic shape of the existing

bomb, and the weight, center of gravity, and moments of inertia of the bomb closely approximate those properties of the existing bomb. The bomb according to the invention may be qualified for flight by similarity to the existing bomb, and thus avoid lengthy and costly qualification procedures.

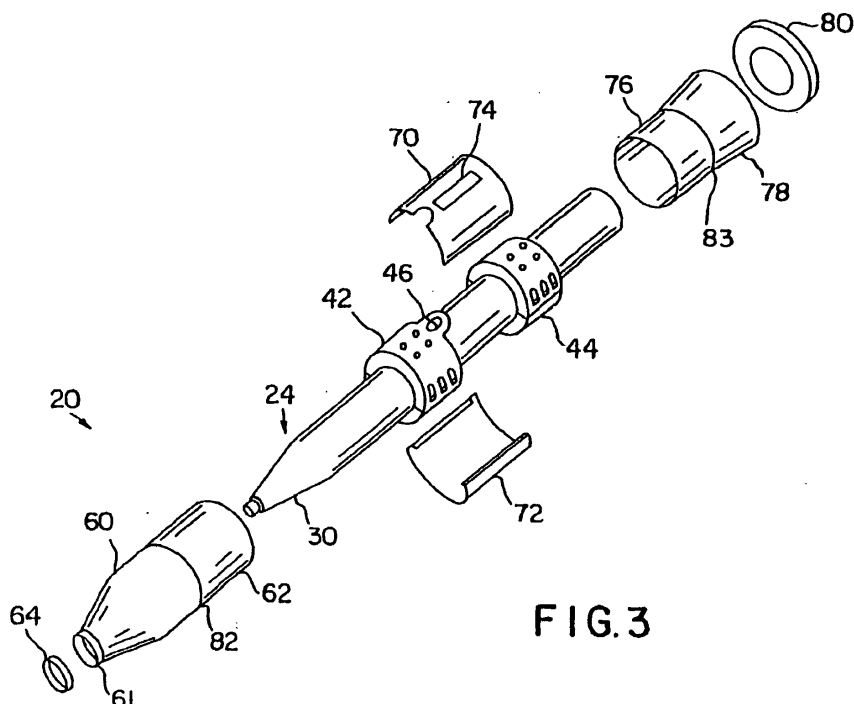


FIG.3



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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.7)
X	US 5 656 792 A (RENTZSCH MAX ET AL) 12 August 1997 (1997-08-12) * column 2, line 28-43 * * column 4, line 12-36 * * figure 1 *	1-3,9-11	F42B12/44 F42B25/00 F42B12/06 F42B12/62
Y	---	4-6	
Y	US 4 638 737 A (MCINGVALE PAT H) 27 January 1987 (1987-01-27) * column 2, line 37-46 * * figure 3 * -----	4-6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F42B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 January 2004	Examiner Lostetter, Y
<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 & : 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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06-01-2004

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5656792 A	12-08-1997	DE 19535218 C1	27-02-1997
		DE 59601410 D1	15-04-1999
		EP 0764826 A1	26-03-1997

US 4638737 A	27-01-1987	NONE	
