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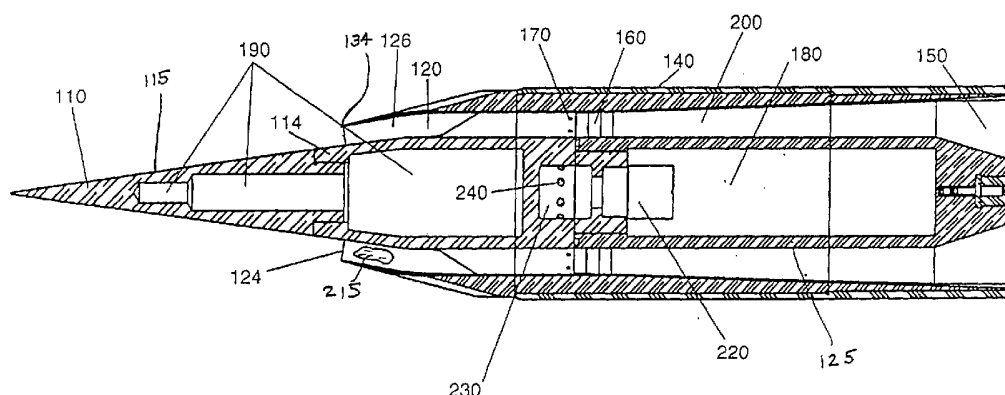
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(54) Title: METHOD AND APPARATUS FOR TESTING ENGINES



(57) Abstract: A scramjet has a cowl (140), a center structure, and a plurality of wide pylons (120) connecting the cowl (140) to the center structure, with scramjet engines (200) positioned between adjacent pylons (120). Leading surfaces (124) of adjacent pylons (120) converge to one another to provide side wall compression to air entering the engines (200). The center structure includes a fore body (110), a center body (114) and an aft body (125) that, with the pylons (120), define a basic structure either formed entirely from one piece or several securely connected pieces. A method of testing the scramjet projectile (100) comprises using a gun to accelerate the scramjet projectile (100) to the takeover velocity of the engines (200).



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : F42B 15/10

US CL : 102/374

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 102/374, 381, 503, 520; 60/720, 767

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
US-PGPUBS, EPO, JPO, DERWENT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,513,571 A (GRANTZ et al) 7 May 1996 (07.05.1996), whole document.	1-30
Y	US 5,485,787 A (BOWCUTT et al) 23 January 1996 (23.01.1996), whole document.	1-30
Y	US 5,853,143 A (BRADLEY et al) 29 December 1998 (29.12.1998), whole document.	1-30
Y,E	US 2002/0124758 A1 (CARLAND et al) 12 September 2002 (12.09.2002), whole document.	1-30
A	US 5,067,406 A (OLSON et al) 26 November 1991 (26.11.1991), whole document.	1-30

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"P" document published prior to the international filing date but later than the priority date claimed	

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