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(54) Title: SYSTEMS AND METHODS FOR ANTI-PHASE OPERATION OF PULSE COMBUSTORS

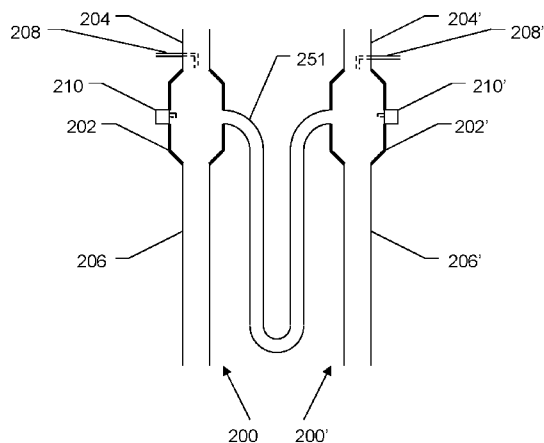


FIG. 2A

(57) Abstract: A pulse combustor system for operating pulse combustors in anti-phase. The pulse combustor system includes two pulse combustors connected at their combustion chambers by a connecting tube. Each of the pulse combustors has a fundamental oscillation mode and one or more additional oscillation modes when operated in isolation. The connecting tube has a length corresponding to $\frac{1}{2}$ of the fundamental oscillation mode wavelength.



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INTERNATIONAL SEARCH REPORT

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PCT/US 16/23241

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F02K 7/04 (2016.01)

CPC - F02K 7/04

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)

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

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase; GOOGLE (PATENTS, SCHOLAR) Search Terms Used: pulse, combustor, jet, pulsejet, pulse detonation engine, wavelength, wave, length, half

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- A	US 2,838,102 A (REIMERS) 10 June 1958 (10.06.1958) entire document	1, 3-5, 7-9, 10/(1, 3-5, 8-9), 11/(1, 3-5, 8-9), 12 ----- 2, 6, 10/(2, 6), 11/(2, 6)
A	US 4,314,444 A (PUTNAM et al) 09 February 1982 (09.02.1982) entire document	1-12
A	US 3,768,926 A (PEGG et al) 30 October 1973 (30.10.1973) entire document	1-12
A	US 3,606,867 A (BRIFFA) 21 September 1971 (21.09.1971) entire document	1-12
A	US 3,185,871 A (BODINE jr) 25 May 1965 (25.05.1965) entire document	1-12

☐ Further documents are listed in the continuation of Box C.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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