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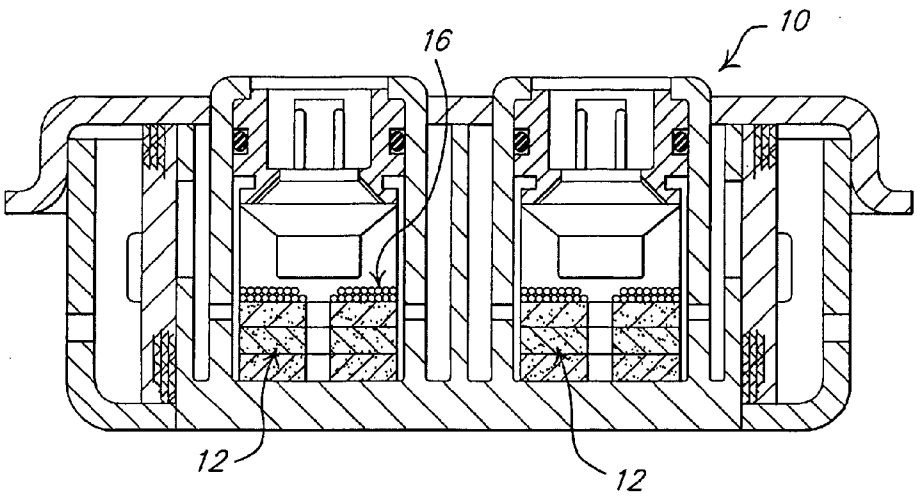
(54) Title: GAS GENERANT COMPOSITIONS



(57) Abstract: A novel compound, tris (5-amino tetrazolo) triazine is used for example, as a gas generating fuel. A method of making the compound is also provided. A gas generating composition, containing the novel compound as a fuel, and an oxidizer is also provided. The novel compound may be contained within a gas generant composition (12), within a gas generator (10). The gas generator 10 may be contained within a gas generating system (200) such as an airbag inflator (10) or seat belt assembly (150), or more broadly within a vehicle occupant protection system (180).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/11109

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - C07C 279/00 (2008.01)
USPC - 564/225, 230, 233
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)
USPC-564/225, 230, 233

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)
Google, WEST:terms-gas generant composition; tetrazole; gas generating system; vehicle occupant protection system; tetrazole triazine

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0168730 B1 (VALBUSA et al.) 22 January 1986 (22.01.1986), p 7, compound 5; p 19, Example 5	1-13
Y	US 2006/0016529 A1 (BARNES et al.) 26 January 2006 (26.01.2006), para [0002], [0031], [0048-0050]	1-13
Y	US 2006/0043716 A1 (QUIOC et al.) 02 March 2006 (02.03.2006), para [0004]	4, 6, 12

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

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
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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
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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