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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: COAXIAL INLET AND OUTLET EXHAUST TREATMENT DEVICE

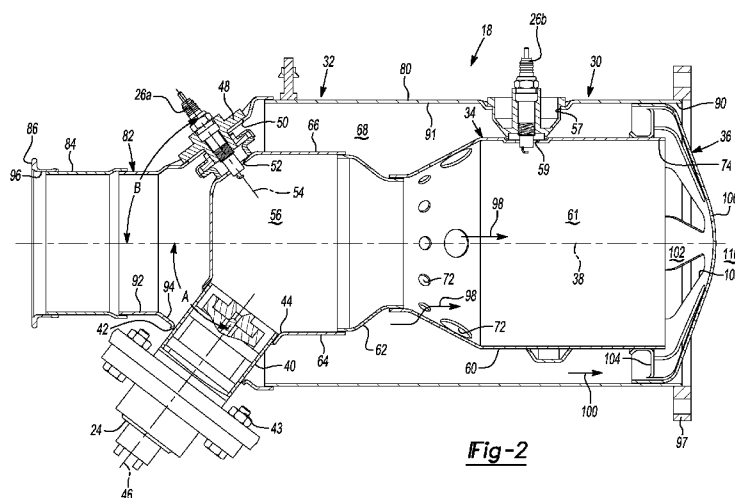


Fig-2

(57) Abstract: A burner for an exhaust gas treatment system treats an exhaust flow from an engine and includes an inner housing defining a primary combustion zone and a secondary combustion zone. The inner housing includes a plurality of apertures upstream of the secondary combustion zone for receipt of a first portion of the exhaust flow. An outer housing surrounds the inner housing to define a bypass flow path between the inner and outer housings to bypass a second portion of the exhaust flow around the inner housing outside of the primary and secondary combustion zones. The outer housing includes an exhaust inlet coaxially aligned with an exhaust outlet along a central longitudinal axis. A mixing zone is provided downstream of the second combustion chamber in receipt of the first and second portions of the exhaust flow.

A. CLASSIFICATION OF SUBJECT MATTER***F01N 3/10(2006.01)i, F01N 3/02(2006.01)i, F01N 3/36(2006.01)i***

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)

F01N 3/10; F01N 3/34; F01N 3/28; F01N 3/08; F01N 3/24; F01N 3/025

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: exhaust gas treatment system, inner housing, outer housing, mixing zone.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 09-228830 A (KUBOTA CORP) 02 September 1997 See abstract, claim 1 and figure 4.	1-15
A	JP 2010-025112 A (FRIEDRICH BOYSEN GMBH & CO KG) 04 February 2010 See abstract, claims 1-4 and figure 1.	1-15
A	US 7845166 B2 (KOTRBA ADAM J. et al.) 07 December 2010 See abstract, claim 1.	1-15
A	US 2009-0277164 A1 (ARELLANO LEONEL et al.) 12 November 2009 See abstract, claims 1-9 and figures 1-4.	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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