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#### (54) Title: EXHAUST SYSTEM IMPLEMENTING LOW-TEMPERATURE REGENERATION STRATEGY

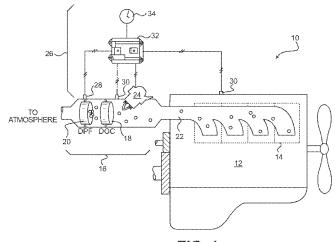


FIG. 1

(57) Abstract: An exhaust control system for use with a combustion engine is disclosed. The exhaust control system may have an exhaust passage configured to receive a flow of exhaust from the combustion engine, a particulate filter located within the exhaust passage, and an oxidation catalyst located upstream of the filter. The oxidation catalyst may be configured to promote regeneration of the particulate filter and may have an activation temperature range. The exhaust control system may also have a heating device located to selectively warm the oxidation catalyst to within the activation temperature range, and a controller in communication with the combustion engine and the heating device. The controller may be configured to detect a loading of the particulate filter exceeding a first loaded threshold amount, and to detect a low temperature condition of the combustion engine. The controller may further be configured to activate the heating device to warm the oxidation catalyst when the loading of the particulate filter exceeds the first loaded threshold amount during the low temperature condition and until the loading of the particulate filter is reduced below a second loaded threshold amount.



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#### A. CLASSIFICATION OF SUBJECT MATTER

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#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) F01N 3/02; F01N 3/00; F01N 3/023; F01N 3/025; F01N 3/027; F01N 3/10; F01N 3/18

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 since 1975.

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: exhaust, gas, filter, regeneration, passive

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
А	EP 1921288 A1 (HINO MOTORS, LTD. et al.) 14 May 2008 See abstract, paragraphs 23-39, fig. 1	1-20
A	US 2008-0028753 A1 (WAYNE M. WAGNER et al.) 07 February 2008 See abstract, paragraphs 20-25, claims 1, 8, 9	1-20
A	US 2007-0234712 A1 (YASUSHI OHMURA) 11 October 2007 See abstract, paragraphs 42-48, 51-83, fig. 1	1-20
A	WO 2007-079832 A1 (ARVINMERITOR EMISSIONS TECHNOLOGIES GMBH et al.) 19 July 2007 See abstract, paragraphs 17, 42-53, fig. 1	1-20

		Further	documents	are	listed	in	the	contin	uation	of I	Box	C.
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See patent family annex.

- \* Special categories of cited documents:
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

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