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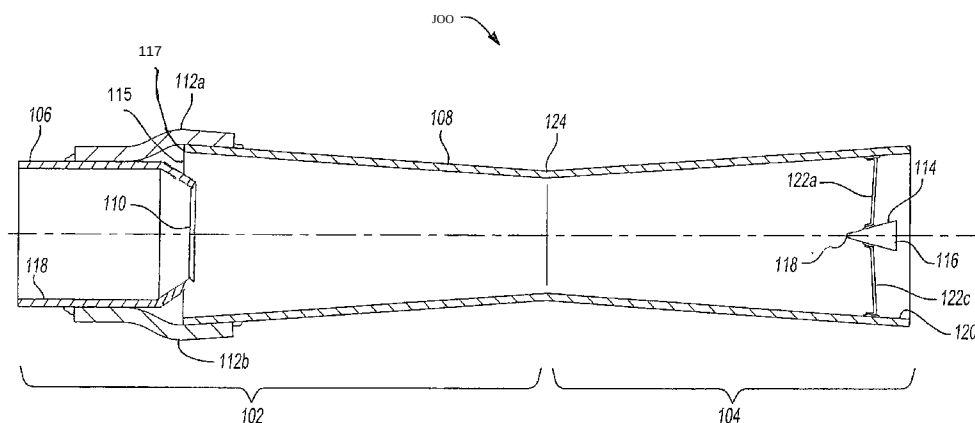
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(54) **Title:** DEVICE FOR LOWERING TAIL PIPE EXHAUST TEMPERATURE



IFig- 1

(57) **Abstract:** A component for a vehicular exhaust pipe includes an upstream venturi forming portion for creating at least a partial vacuum interior to the component. A downstream diverter housing portion of the component has an inlet coupled to an outlet of the venturi portion. The diverter housing portion includes the diverter element positioned adjacent an output of the diverter housing portion for forcing axially central exhaust flow radially outward toward a wall of the diverter housing. The partial vacuum in the component device causes colder environmental ambient air to enter an inlet of the component. The diverter also creates a mixture of hot exhaust flow with the colder environmental air, resulting in a lower temperature of the exhaust gas exiting the component and substantial elimination of centrally disposed exhaust hot spots.



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INTERNATIONAL SEARCH REPORT

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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)

IPC(8) - B01 F 5/04, B05B 7/30 (2008 04)

USPC - 239/425 5, 366/163 2, 181 5

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)

USPTO EAST System (US, USPG-PUB, EPO, DERWENT)

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X -- Y	US 3,285,709 A (ENNARINO et al) 15 November 1966 (15 11 1966) cols 1, 6-8 and fig 4	1, 2 ----- 3-9
Y	US 3,468,124 A (HRABOWECKYJ) 23 September 1969 (23 09 1969) cols 1, 6, 7 and figs 1-10	3, 5, 6
Y	US 3,031,147 A (GOODRIE) 24 April 1962 (24 04 1962) cols 1, 3 and figs 1-7	4, 9
Y	US 2004/0206573 A1 (HSU) 21 October 2004 (21 10 2004) abstract, paras 0015, 0026 and figs 1-6	7, 8

D Further documents are listed in the continuation of Box C



* Special categories of cited documents

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