SYSTEM, DEVICE AND METHOD FOR OPERATION OF INTERNAL COMBUSTION ENGINE

502 PROVIDE AIR FOR ENGINE

504 FLOW SUPPLIED AIR THROUGH A METAL ELEMENT

506 USE PROVIDED AIR FLOWED THROUGH METAL ELEMENT FOR COMBUSTION IN COMBUSTION ENGINE

Abstract: The present invention provides an air supply assembly for providing air to a combustion engine, the air supply assembly comprising an air inlet opening; an air outlet opening; and a metal element positioned in an air flow path between the air inlet opening and air outlet opening, wherein, when air which flowed through the metal element is used for combustion in the combustion engine, the fuel consumption of the combustion engine is reduced and/or the air pollution created by the combustion engine is reduced. The present invention also provides a method for reducing fuel consumption of a combustion engine and a method for reducing air pollution created by a combustion engine, the method comprising passing air through a metal element; and using the air for combustion in the combustion engine.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC: F02M 27/00 (2006.01),35/00 (2006.01); B01D 39/10 (2006.01)
   USPC: 123/539,198E,55/525
   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)
   U.S. : 123/539,198E,55/525
   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)
   ESAT - terms: combustion engine, air supply, intake, inlet, metal, copper, gold

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
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<tbody>
<tr>
<td>X</td>
<td>US 2,329,248 A (CARLSON) 23 January 1942 (23.01.1942), column 2 line 13 - column 3 line 10.</td>
<td>1-4,6,9-17,19,22-30,32,35-43,45,48-52</td>
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<td>X</td>
<td>US 2,688,322 A (STAUFFER) 21 November 1957 (27.11.1957), entire document.</td>
<td>1-3,6,9-16,19,22-29,32,35-42,45,48-52</td>
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<td>X</td>
<td>US 6,895,945 B2 (PARSA) 24 May 2005 (24.05.2005), column 2 line 37 - column 3 line 44 and column 8, lines 12 - 25.</td>
<td>1-3,7,8,10-16,20,21,23-29,33,34,36-42,46,47,49-52</td>
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<td>A</td>
<td>US 4,966,121 (KOJA) 30 October 1990 (30.10.1990), entire document.</td>
<td>1-52</td>
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<td>A</td>
<td>US 6,463,917 (SILVER) 15 October 2002 (15.10.2002), entire document.</td>
<td>1-52</td>
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</table>

Further documents are listed in the continuation of Box C. See patent family annex.

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