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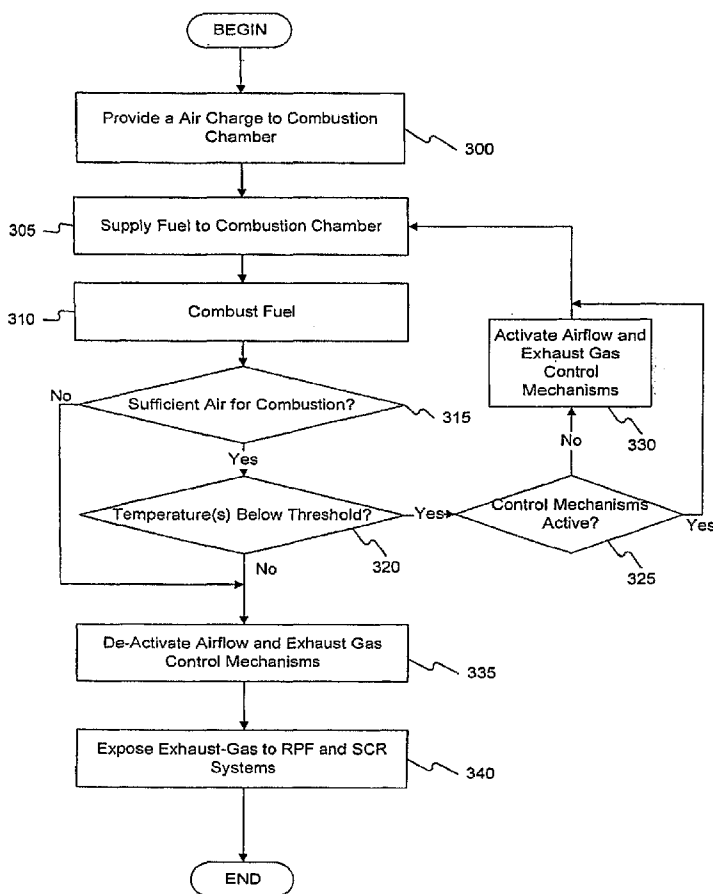
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[Continued on next page]

(54) Title: POWER SOURCE THERMAL MANAGEMENT AND EMISSIONS REDUCTION SYSTEM



(57) Abstract: A power source (18) may have at least one combustion chamber (30), a first valve configured to control an airflow between an air source and the at least one combustion chamber and a second valve configured to control an exhaust gas flow between the combustion chamber and an exhaust system (17). The power source may also have a fuel source (38) configured to supply a fuel to the at least one combustion chamber and a controller (52) operatively connected to the first valve and the second valve. The controller may be configured to determine one or more temperatures and, if the one or more temperatures are below a predetermined threshold, cause the first valve to substantially limit the airflow to the combustion chamber and cause the second valve to substantially limit the exhaust gas flow from the combustion chamber, such that a combustion stroke of one or more combustion cycles is executed with air substantially provided during an intake stroke of a previous combustion cycle.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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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)  
 F02D F02B

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 practical, search terms used)  
 EPO-Internal

<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Further documents are listed in the continuation of Box C.

See patent family annex.

- \* Special categories of cited documents :
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  - \*E\* earlier document but published on or after the international filing date
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  - \* & \* document member of the same patent family

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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <b>Libeaut, Laurent</b>
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