Abstract: A magnetic heater is provided having a conductor assembly and a magnet assembly. The magnet assembly is adapted to rotate relative to the conductor assembly about an axis so as to induce eddy currents in the conductor assembly when relative motion is produced between the conductor assembly and first magnet assembly. The conductor assembly is adapted to translate transversely into and out of magnetic engagement with the magnet assembly. In one embodiment, the conductor assembly defines a fluid path therein for the transfer of heat from the conductor assembly to a fluid. The magnetic heater is a component of a heat generation system comprising an internal combustion engine having a drive shaft for rotating the magnet assembly. The heat generated by the magnetic heater, as well as the heat generated by the engine from the engine exhaust and engine cooling system, is combined to heat a fluid.
(88) Date of publication of the international search report:
2 August 2007

For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
# INTERNATIONAL SEARCH REPORT

**International application No.**

PCT/US06/38370

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC(8) - H05B 6/10 (2007.01)**

**USPC - 2 19/631**

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)**

IPC(8) - H05B 6/02, 6/10; H02K 1/22, 1/27, 1/28, 1/32, 49/04; F24J 3/00 (2007.01)

**USPC - 219/631, 672, 674-677, 635, 628, 618**

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 WEB System (US, USPG-PUB), MicroPatent

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<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 6,144,020 A (USUI et al) 07 November 2000 (07.11.2000) entire document</td>
<td>1, 2, 4, 12</td>
</tr>
<tr>
<td>A</td>
<td>US 5,237,144 A (IGUCHI) 17 August 1993 (17.08.1993) entire document</td>
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Date of the actual completion of the international search

28 February 2007

Date of mailing of the international search report

24 May 2007

Name and mailing address of the ISA/US

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