Title: TORUS CRANK MECHANISM

Abstract: Disclosed is a torus crank mechanism including a housing assembly (100) providing sealed chambers (145 to 148), a core (200) centrally arranged in the housing assembly while having a vertical shaft (215 or 216) protruded from one or each of upper and lower surfaces of the core, and horizontal shafts (211 to 214), a rotor (300) adapted to rotate in a reciprocating fashion around the core while having rotating vanes (311 to 314) arranged in respective chambers, and guide slots (315 to 318), bevel gears (410 to 440) rotatably supported by respective horizontal shafts while having respective eccentric sliders (411, 421, 431, and 441) rotatably and slidably received in the guide slots, and an output gear (500 or 600) rotatably supported by the vertical shaft. A multiple torus crank mechanism is configured by coaxially connecting torus crank mechanisms each having the above described configuration.
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

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 F16C 3/04, F02B 53/00

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)

IPC7 F16C 3/04, F02B 53/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975, Korean Utility models and applications for utility models since 1975

Japanese Utility models and applications for utility models since 1975

Electronic database consulted during the international search (name of database and, where practicable, search terms used)

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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<tr>
<td>A</td>
<td>JP07-317559 A (ABE HIROSKUKE ) 05 December 1995 see the whole document</td>
<td>1 ~ 28</td>
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<tr>
<td>A</td>
<td>US 6186098 (Jin-Hee, Choi) 13 February 2001 see the whole document</td>
<td>1 ~ 28</td>
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Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search

18 NOVEMBER 2002 (18.11.2002)

Date of mailing of the international search report

18 NOVEMBER 2002 (18.11.2002)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

NAMGUNG, Yong

Telephone No. 82-42-481-5503

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