FOLDING BICYCLE APPARATUS AND METHOD

A foldable bicycle is provided. One feature of the foldable bicycle is that the central portion of the frame that defines the bicycle's geometry is substantially rigid. That is, the down tube (170), seat tube (25), top tube (15) and bearing tube (30) are substantially fixed relative to each other. Another feature of the foldable bicycle is that the front wheel (175) can be folded into a position between the downtube assembly (170), which is comprised of two tubes. Another feature is that a ratio of distances between and among tubes of the foldable bicycle is within a predetermined range.
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**

IPC 7 B62K15/00 B62K13/02

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 7 B62K

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

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

EPO-Internal, WPI Data, PAJ

**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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<td>DE 203 00 031 U (FAN JEENG NENG) 13 March 2003 (2003-03-13) figures 1,2</td>
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<td>DE 43 13 832 A (MUELLER HEIKO ;RIESE MARKUS (DE)) 3 November 1994 (1994-11-03) column 2, line 56 - column 3, line 46; figures</td>
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</table>

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents:
  - "A" document defining the general state of the art which is not deemed to be of particular relevance
  - "E" earlier document but published on or after the international filing date
  - "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another document or other special reason (as specified)
  - "O" document referring to an oral disclosure, use, exhibition or other means
  - "P" document published prior to the international filing date but later than the priority data claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search: 15 September 2004

Date of mailing of the international search report: 12 JAN 2005

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 rl, Fax: (+31-70) 340-2015

Authorized officer: Grunfeld, M

Form PCT/ISA/210 (second sheet) (January 2004)
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<td>GB 2373770 A</td>
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</table>
INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [ ] Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. [ ] Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. [ ] Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. [ ] As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. [x] No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

   1-10

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (January 2004)
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10

   Folding bicycle with a middle sprocket assembly defining a pivot location and wherein the ratio of distances between and among tubes of the foldable bicycle is within a predetermined range

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2. claims: 11-15

   Bicycle with folding front fork assembly and method for folding such a bicycle

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