Title: GASTROSTOMY DELIVERY SYSTEM AND METHOD

Abstract: A method of feeding a patient through the patient's gastrostomy feeding tube. The method includes the steps of connecting a connector of a filled feeding bag directly to a port of the feeding tube; manipulating the feeding bag such that the fluid within the filled feeding bag is driven through the connector and into the feeding tube; and disconnecting the feeding bag connector from the port of the feeding tube after the fluid has been expelled from the feeding bag.
Date of publication of the international search report:
7 April 2016
### INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

| IPC(8) | A61J 1/10, 15/00; A61M 39/10 (2015.01) |
| CPC  | A61J 1/10, 15/0015; A61M 39/10 |

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) Classification(s): | A61J 15/00, A61J1/10, A61M39/10 (2015.01); CPC Classification(s): A61J 1/10, 1/12, 1/14, 1/1406, 1/1412, 1/2003, 1/2006, 1/2011, 1/2048, 15/00; 15/0015, 15/0026; A61M 39/10; B65D 35/28; Y10S 604/905 |

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 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>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 4,560,387 A (WEILAND, MC) December 24, 1985; figures 1-5; column 3, lines 10-14; column 2, lines 59-66; column 3, lines 2-5; column 3, lines 55-58</td>
<td>1-17</td>
</tr>
<tr>
<td>Y</td>
<td>US 2011/0118676 A1 (KROPCEZNSKI, JR., JJ et al.) May 19, 2011; figures 9-11, 124, 138, 138; paragraphs [0006], [0012], [0016]-[0020], [0006], [0126]-[0129], [0195], [0204], [0207], [0208], [0212]; claim 14</td>
<td>1-17</td>
</tr>
<tr>
<td>Y</td>
<td>US 8,136,330 B2 (OSTLER, M1 et al.) March 20, 2012; figures 3A-6C; column 8, lines 10-13</td>
<td>11</td>
</tr>
<tr>
<td>Y</td>
<td>US 2005/0268058 A1 (CHOI, K) December 08, 2005; abstract</td>
<td>16</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,018,646 A (BILLMAN, FL) May 28, 1991; figure 2; column 4, lines 62-64</td>
<td>15</td>
</tr>
</tbody>
</table>

* Special categories of cited documents:
  - "A" document defining the general state of the art which is not considered to be of particular relevance
  - "E" earlier application or patent 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 citation 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 date 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

- "&" document member of the same patent family

Date of the actual completion of the international search: 22 September 2015 (22.09.2015)

Date of mailing of the international search report: 04 FEB 2016

Name and mailing address of the ISA/Authorized officer:
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-272-8300
PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (January 2015)
**INTERNATIONAL SEARCH REPORT**

**Box No. 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 No. 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:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I: Claims 1-17 are directed toward a method of feeding a patient through the patient's gastrostomy feeding tube.

Group II: Claims 18-20 are directed toward a connector having a barb and a tapered ring.

-***Continued Within the Next Supplemental Box***-

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 additional fees, this Authority did not invite payment of additional fees.

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. ☒ 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.:
   Claims 1-17

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☒ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (January 2015)
The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical features of Group I include a method of feeding a patient through the patient's gastrostomy feeding tube, the method comprising the steps of: connecting a connector of a filled feeding bag directly to a port of the feeding tube; manipulating the feeding bag such that a fluid within the filled feeding bag is driven through the connector and into the feeding tube; and disconnecting the feeding bag connector from the port of the feeding tube after the fluid has been driven from the feeding bag, which are not present in Group II; and the special technical features of Group II include a connection fitting for connection to a PEG feeding tube, the connection fitting comprising: a connector at a first end and barb at a second end thereof with a passageway extending between the first and second ends, wherein the barb is configured to be received within the PEG feeding tube and to bite into the tube when the tube is pulled away from the connection fitting; and a tapered ring positioned between the first and second ends with a narrower end of the ring facing toward the second end, wherein the narrower end is configured to engage the PEG feeding tube and push the PEG feeding tube up to the barb to disconnect the connection fitting from the PEG feeding tube, which are not present in Group I.

The common technical features of Groups I-II are: a connector for a feeding tube.

These common technical features are disclosed by US 20110118670A1 to Kropczynski et al., (hereinafter "Kropczynski"). Kropczynski discloses an apparatus capable of being used in a method of feeding a patient through the patient's gastrostomy feeding tube comprising the steps of: connecting a connector (interconnect 740; shown in Fig. 104, paragraph [0193]) of a feeding bag (modified for use with a polymeric soft pouch or collapsible bag; paragraph [0200]; also prior art shown in figure 1 and described in paragraph [0012] teaches that bag may be prefilled) directly to a port of the feeding tube (the interconnect 740 includes a fluid communication lumen 755 that can communicate fluid between an interior volume of a receptacle or container and an enteral administration set, paragraph [0197]); and manipulating the feeding bag such that a fluid within the filled feeding bag is driven through the connector and into the feeding tube (hanging a feeding bag from a gravity elevation pole to assist flow of liquid is well known, see description of prior art shown in figures 1-3, paragraphs [0065-0066]).

Since the common technical features are previously disclosed by Kropczynski, these common features are not special and so Groups I-II lack unity.