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(54) Title: PROCESS FOR THE TRANSPORT OF A STERILE PARTICULATE BULK MATERIAL AND ITS TRANSFER INTO AN ISOLATOR, AS WELL AS A CONTAINER, AN ISOLATOR AND A COMBINATION OF AN ISOLATOR AND A CONTAINER

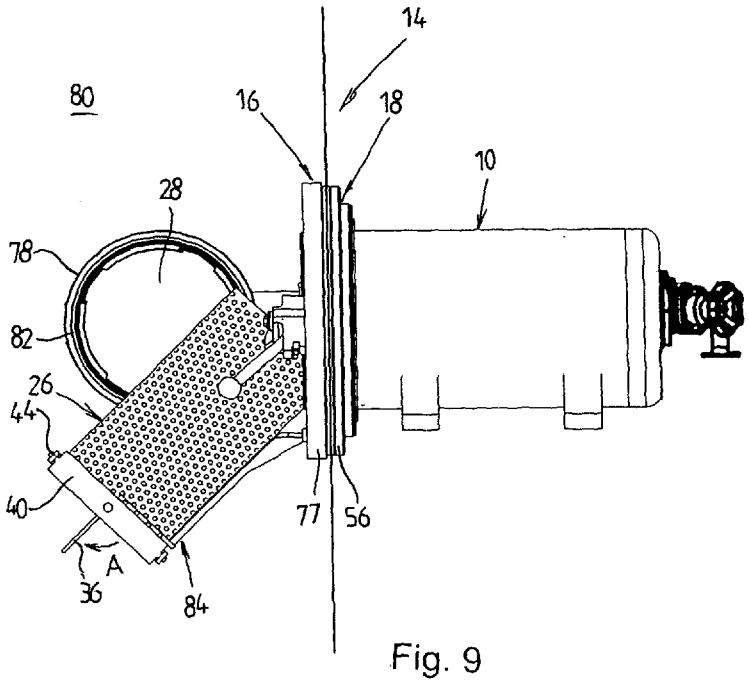

Fig. 9

(57) Abstract: The invention relates to a process and a container (10) for transporting a sterile, particulate bulk material and for transferring the material from the container (10) into an isolator (14). The container comprises a filling and emptying opening (24) and a beta part (18) of an RTP system for docking to a complementary alpha part (16) of the RTP system on the isolator. After the opening of the RTP, the material is transferred into the isolator. According to the invention the material is transported in a basket (26) inside the container and when it is transferred after the opening of the RTP, the basket is moved at least partially out of the container and through the open RTP into an inclined position in the interior (80) of the isolator in which position the material can slide or fall by its own downwardly out of the basket.

[Continued on next page]

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EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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15 February 2018 (15.02.2018)

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/000086

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61L2/07 A61L2/26
ADD.

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)
A61L

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)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 823 828 A1 (ATEC PHARMATECHNIK GMBH [DE]) 14 January 2015 (2015-01-14) cited in the application	8-10,12, 13
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A	page 5, line 30 - page 8, line 21; figure 1	1-7

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* 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

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"O" document referring to an oral disclosure, use, exhibition or other means

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"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	Date of mailing of the international search report
15 November 2017	15/01/2018

Name and mailing address of the ISA/	Authorized officer
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/000086

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P A,P	EP 3 117 840 A1 (ATEC PHARMATECHNIK GMBH [DE]) 18 January 2017 (2017-01-18) paragraphs [0015], [0029], [0030]; figure 6	8-10,12, 13 1-7

X A	DE 20 2004 006896 U1 (ATEC PHARMATECHNIK GMBH [DE]) 22 July 2004 (2004-07-22) abstract	8-10,12, 13 1-7

X A	EP 1 593 622 A1 (NETZHAMMER AG [CH]) 9 November 2005 (2005-11-09) abstract	8-10,12, 13 1-7

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2017/000086

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:

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 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.:

1-13

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13

1. A process for transporting sterile particulate bulk material, in particular cleaned and sterilized small objects, such as stoppers for infusion bottles and vials, in a container (10) and for transferring the material from the container (10) into an isolator (14), wherein a beta part (18) of a RTP system that is attached to a filling and emptying opening (24) of the container (10) is docked to a complementary alpha part (16) of the RTP system that is mounted to the isolator (14) and wherein after the opening of the RTP, the material is transferred into the isolator (14), characterized in that the material is transported in a basket (26) within the container (10),and in that after the opening of the RTP and before the transfer of the material into the isolator (14) the basket (26) is moved out of the container (10) through the filling and emptying opening (24) and the open RTP into an inclined position inside the isolator (14) in which position the material can slide or fall by its own downwardly out of the basket (24).
2. The process according to claim 1, characterized in that the basket (26) is moved along a linear guide (52) of the container (10) through the filling and emptying opening (24) and the open RTP.
3. The process according to claim 1 or 2, characterized in that the basket (26) is moved into an inclined position having a defined angle of inclination and is retained in this position.
4. The process according to one of the preceding claims, characterized in that the basket (26), in the inclined position, is retained by a support (84) that is disposed inside the isolator (14) below the alpha part (16) of the RTP system (16, 18).
5. The process according to one of the preceding claims, characterized in that the basket (26) is retained in the inclined position by retaining means (46, 48; 84, 92) inside the container (10) and/or inside the isolator (14).
6. The process according to one of the preceding claims, characterized in that a perforated cover (36) of the basket (26) is opened in the inclined position of the basket (26).
7. The process according to claim 6, characterized in that one half of the cover (36) is pivoted out of the basket (26) about a pivot axis (42).
8. A container (10) for transporting a sterile particulate bulk material, in particular cleaned and sterilized small objects, such as stoppers for infusion bottles and vials, and for transferring the material from the container...

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2. claims: 14-17

14. An isolator (14) having an alpha part (16) of a RTP

system (16, 18) and having means for docking a container (10) for the transport of a sterile particulate bulk material, in particular cleaned and sterilized small articles, such as stoppers for infusion bottles and vials, the container (10) comprising a filling and emptying opening (24) and a beta part (18) of the RTP system (16, 18) that is attached to the filling and emptying opening (24) and including a basket (26) for receiving the material to be transported, that can be moved at least partially out of the container (10) and into an inclined position inside the isolator (14), when the RTP is open, in which position the material can slide or fall by its own downwardly out of the basket (26), characterized by a support (84) that is mounted inside the isolator (14) and is arranged below the alpha part (16) of the RTP system (16, 18) for supporting the basket (26) in the inclined position.

15. The isolator (14) according to claim 14, characterized in that the alpha part (16) of the RTP system (16, 18) is mounted in a vertical wall (76) of the isolator (14). .

16. Combination of an isolator (14) having an alpha part (16) of a RTP system (16, 18) and a container (10) according to one of claims 8 to 13, that is docked to the isolator (14), characterized by a support (84) that is mounted inside the isolator (14) and is arranged below the alpha part (16) of the RTP system (16, 18) for supporting the basket (26) in the inclined position, in which position the material can slide or fall by its own downwardly out of the basket (26).

17. Combination according to claim 16, characterized in that the alpha part (16) of the RTP system (16, 18) is mounted in a vertical wall (76) of the isolator (14).

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2017/000086

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