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[Continued on next page]

(54) Title: APPARATUS FOR TESTING CONTAINERS, TRAY FOR HOLDING CYLINDERS AND SUCTION-BASED-CHUCK FOR ROBOTIC ARM

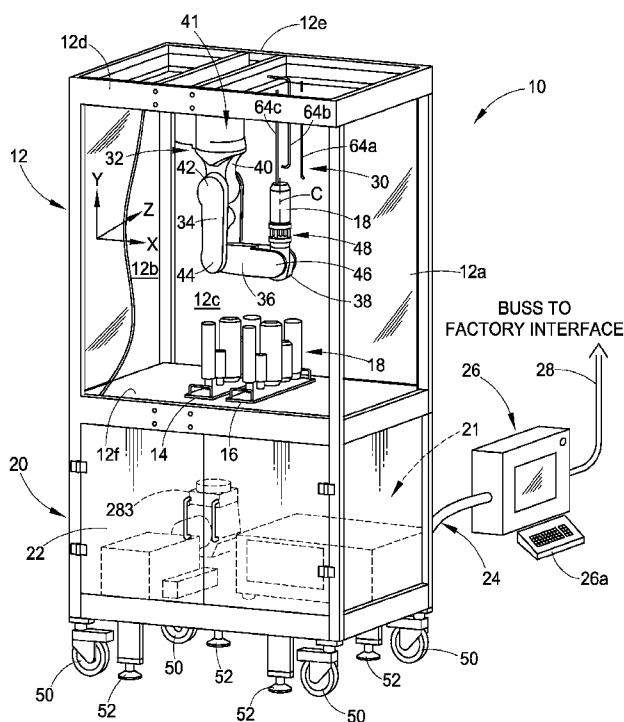


FIG. 1

(57) Abstract: Apparatus for testing characteristics of a container includes a plurality of test stations in an enclosure. The containers are maneuvered by a gantry mounted robot. An optional suction device is provided that may also provide electrical ground for the container. A dedicated output buss may also be used as an interface between the test cell control system and a secure network.



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

— *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))*

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

(88) Date of publication of the international search report:

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2009/034067

A. CLASSIFICATION OF SUBJECT MATTER

INV. B07C5/34 B25J15/06 B65D25/10 B65D71/70

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)

B07C B25J B65D

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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 437 985 A (HINDS JAMES J [US] ET AL) 20 March 1984 (1984-03-20) column 10, line 30 - line 44	1,2
A	DE 73 07 208 U (ORIGINAL HANAU QUARZLAMPEN [DE]) 24 May 1973 (1973-05-24)	

☐ Further documents are listed in the continuation of Box C.

☒ 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 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 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

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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.
- *G* document member of the same patent family

Date of the actual completion of the international search

22 April 2009

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30/07/2009

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/034067

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 allsearchable 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 reportcovers 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.:

see additional sheet(s)

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: 1,2

Enclosure

2. claims: 3-5, 8

Positioning

3. claims: 6,7

Hold and release device

4. claim: 9

Bar code

5. claims: 10,11

Control system

6. claims: 12,13

Three test stations

7. claim: 14

Gantry mounting

8. claims: 15, 16

Fill and empty

9. claims: 17-20

Optical probes

10. claim: 21

Specific container type

11. claims: 22-24

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

- 12. claim: 25

Loading area

- 13. claim: 26

Outlet chutes

Tray

- 14. claim: 27

Natural rubber

- 15. claims: 28,29

Annular lip

- 16. claim: 30

Flexible unitary body

- 17. claims: 31, 32

Support of each cylinder

- 18. claims: 33-36

Electronically sensed identification

- 19. claim: 37

Self-centering gasket

- 20. claim: 38

Single-ended can container

- 21. claim: 39

Chuck for a robotic arm

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/034067

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4437985	A	20-03-1984	NONE	
DE 7307208	U	24-05-1973	NONE	