

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 October 2009 (22.10.2009)

(10) International Publication Number
WO 2009/129069 A3

(51) International Patent Classification:
G01R 31/02 (2006.01) *G02B 5/04* (2006.01)
G11B 20/18 (2006.01)

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(21) International Application Number:
PCT/US2009/039587

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(22) International Filing Date:
6 April 2009 (06.04.2009)

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/104,869 17 April 2008 (17.04.2008) US

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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, 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),

[Continued on next page]

(54) Title: BULK FEEDING DISK DRIVES TO DISK DRIVE TESTING SYSTEMS

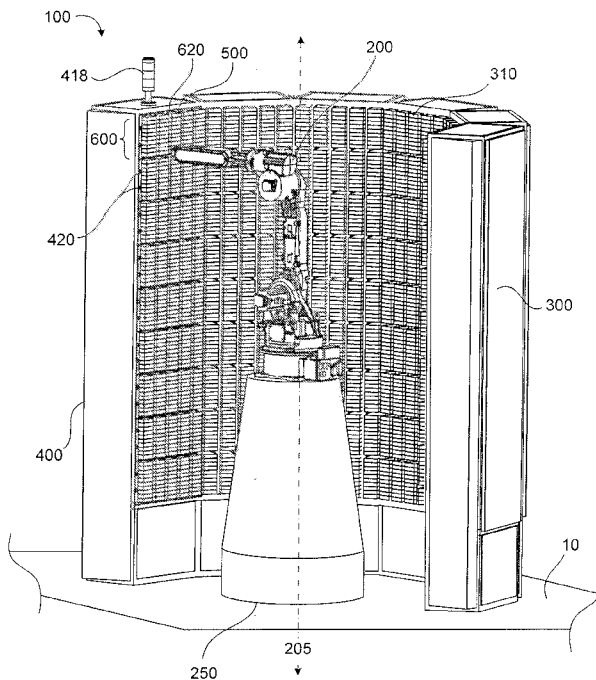


FIG. 3

(57) Abstract: A method of supplying disk drives (500) to a disk drive testing system (100) includes placing a disk drive tote (600), carrying multiple disk drives (500), in a presentation position accessible to an automated transporter (200) of the disk drive testing system. The method includes actuating the automated transporter to retrieve one of the disk drives from the disk drive tote, and actuating the automated transporter to deliver the retrieved disk drive to a test slot (310) of the disk drive testing system and insert the disk drive in the test slot.



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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))*

Published:

— *with international search report (Art. 21(3))*

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

14 January 2010

A. CLASSIFICATION OF SUBJECT MATTER*G01R 31/02(2006.01)i, G11B 20/18(2006.01)i, G02B 5/04(2006.01)i*

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 : G01R, G11B

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

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

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

eKOMPASS (KIPO internal)

"keyword : robot, harddisk, test, examine, tote"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	JP 2001-023270 A (MATSUSHITA ELECTRIC IND CO LTD) 2001.01.26 See abstract, page 2, [0001] and figures 1-6	1-4, 6 18,19
A	JP 2007-188615 A (FUJITSU LTD) 2007.07.26 See abstract and figure 1	6, 18-20, 27-29
A	US 2006-269384 A1 (JUBIN KIAIE AND ALEX DADIOMOV) 2006.11.30 See abstract	1-4, 6, 18-20, 27-29

 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 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 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

26 NOVEMBER 2009 (26.11.2009)

Date of mailing of the international search report

26 NOVEMBER 2009 (26.11.2009)

Name and mailing address of the ISA/KR

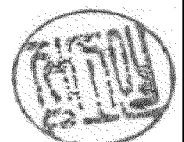
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gu, Daejeon 302-701, Republic of Korea

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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.: 7, 9, 12, 14
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:

The claims 7, 9, 12 and 14 are too unclear to make meaningful search possible because the claims 7, 9, 12 and 14 refer to claim 5, 8, 11 and 13, respectively, violating PCT Rule 6.4(a).

3. Claims Nos.: 5,8,10,11,13,15-17,21-26,30-31
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:

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. 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.:

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/039587

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2001-023270 A	2001.01.26	None	
JP 2007-188615 A	2007.07.26	US 2007-0165321 A1	2007.07.19
US 2006-269384 A1	2006.11.30	US 07435046 B2	2008.10.14