

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 February 2004 (26.02.2004)

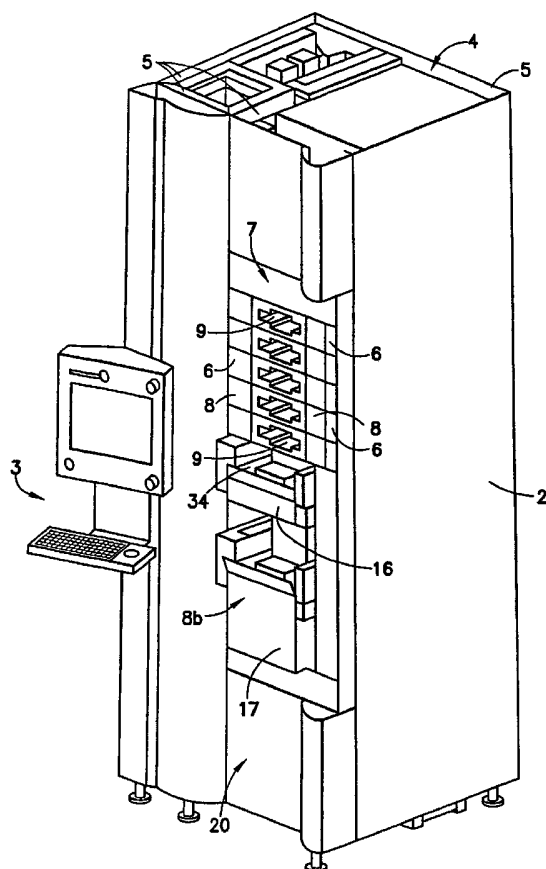
PCT

(10) International Publication Number
WO 2004/017366 A3

- (51) International Patent Classification⁷: **G06F 7/00**
- (21) International Application Number: PCT/US2003/023445
- (22) International Filing Date: 29 July 2003 (29.07.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
1328/02 29 July 2002 (29.07.2002) CH
- (71) Applicant: **BROOKS AUTOMATION, INC.** [US/US];
15 Elizabeth Drive, Chelmsford, MA 01824 (US).
- (72) Inventors: **BLATTNER, Jakob**; Schiffgasse 14, 8272 Er-
matingen (CH). **FEDERICI, Rudy**; Andhauserstrasse 71,
8572 Berg (CH). **FOSNIGHT, William, John**; 117 Davis
Road, Carlisle, MA 01741 (US). **HARIS, Clint**; 304 Lan-
caster Road, Lunenburg, MA 01462 (US).
- (74) Agents: **GREEN, Clarence, A.** et al.; PERMAN &
Green, LLP, 425 Post Road, Fairfield, CT 06824 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: RETICLE MANIPULATING DEVICE



(57) Abstract: A reticle manipulating device (1) with an at least substantially closed housing (2) for maintaining clean-room conditions inside the housing, an input/output station (7) for introducing and discharging reticles in and out of the housing, and at least one functional unit (71) arranged in the housing for impressing a predetermined function on the reticles. The device has a manipulating device (18) also arranged inside the housing, for manipulating the reticles in the housing.

WO 2004/017366 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.

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

15 July 2004

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/23445

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 7/00

US CL : 414/217,217.1,411 and 937

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)

U.S. : 414/217,217.1,411 and 937

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,999,671 A (Iizuka, Kazuo) 12 March 1991 (12.03.1991)	1-8
A	US 6,059,507 A (Adams, Douglas R.) 9 May 2000 (09.05.2000)	1-8
A	US 6,142,722 A (Genov et al.) 7 November 2000 (07.11.2000)	1-8
T	US 6,690,993 B2 (Foulke et al.) 10 February 2004 (10.02.2004)	1-8

☐ 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 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

12 April 2004 (12.04.2004)

Date of mailing of the international search report

24 MAY 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Bileen D. Lillis

Telephone No. 703-308-1113