

108 JUL 2002

2002041580



162162

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
9 August 2001 (09.08.2001)

PCT

(10) International Publication Number
WO 01/56708 A1(51) International Patent Classification⁷: **B05C 13/00**,
21/00, C23C 14/34Circle, Milpitas, CA 95035 (US). **XIE, Jun**; 2784 Vine-
yard Park Place, San Jose, CA 95148 (US). **LAWSON,**
Eric, C.; 1430 Hampton Drive, Sunnyvale, CA 94087
(US).

(21) International Application Number: PCT/US01/02441

(22) International Filing Date: 23 January 2001 (23.01.2001)

(74) Agent: **COLE, Stanley, Z.**; 26620 St. Francis Road, Los
Altos Hills, CA 94022 (US).

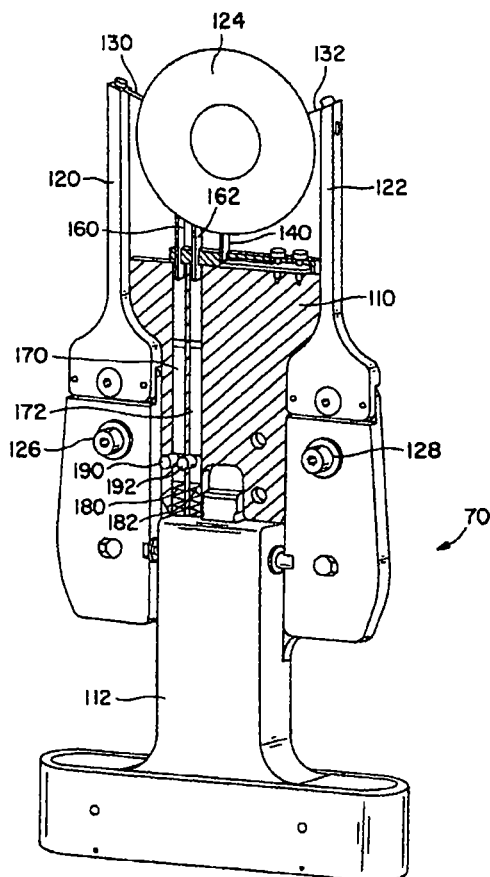
(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/495,545 1 February 2000 (01.02.2000) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, 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,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.(71) Applicant: **INTEVAC, INC.** [US/US]; 3560 Bassett
Street, Santa Clara, CA 95054-2704 (US).(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European(72) Inventors: **BLUCK, Terry**; 3128 Butte Street, Santa
Clara, CA 95051 (US). **ROGERS, James, H.**; 211 Images

[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR PROCESSING INSULATING SUBSTRATES



(57) Abstract: A disk gripper (70) for gripping an insulating disk (124) at its edge during processing includes a contact device for contacting the edge of the disk and a mechanism for moving the contact device between a contact position and a retracted position. The apparatus includes pivot pins (128 and 126), a gripper body (110), a pedestal (112), side wings (122 and 120), gripper fingers (132, 130, and 140), contact pins (160 and 162), contact rods (170 and 172), springs (180 and 182), and retraction pins (190 and 192).

WO 01/56708 A1



ACTION

WO 01/56708 A1

patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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.

Published:

— *with international search report*