



(51) International Patent Classification:
G01N 1/31 (2006.01)

(21) International Application Number:
PCT/US2013/077177

(22) International Filing Date:
20 December 2013 (20.12.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/746,089 26 December 2012 (26.12.2012) US
61/799,497 15 March 2013 (15.03.2013) US

(71) Applicant: VENTANA MEDICAL SYSTEMS, INC.
[US/US]; 1910 E. Innovation Park Drive, Tucson, AZ
85755 (US).

(72) Inventors: MARSHALL, Kevin, David; 7226 E. Sabino
Vista Drive, Tucson, AZ 85750 (US). HARRISON,
Joshua David, Kenneth; 4341 W. Mar St., Tucson, AZ
85741 (US). KETTERER, Matthew; 1091 W. Eagle
Landing Place, Oro Valley, AZ 85737 (US). KRAM, Bri-
an, Howard; 38255 South Loma Serena Drive, Tucson,
AZ 85739 (US).

(74) Agents: KLASSEN, Karl L. et al.; Perkins Coie LLP,
P.O. Box 1247, Seattle, WA 98111-1247 (US).

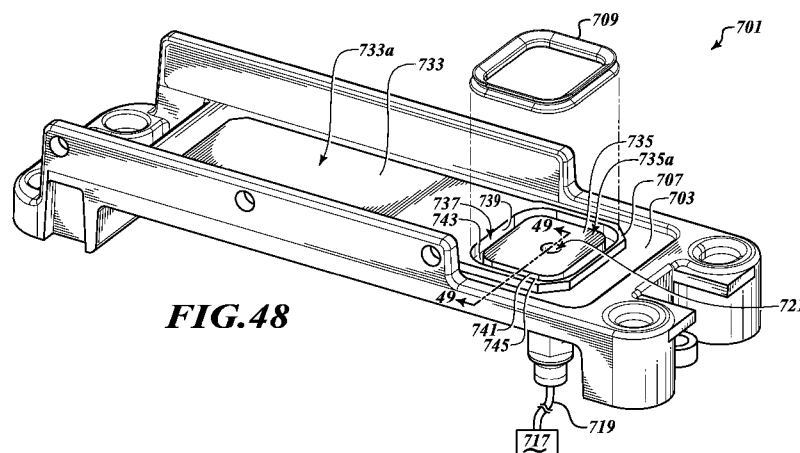
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, 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, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report (Rule 48.2(g))

(54) Title: SPECIMEN PROCESSING SYSTEMS AND METHODS FOR HOLDING SLIDES



(57) Abstract: At least some embodiments of the technology are directed to an automated slide processing apparatus configured to apply at least one reagent to a specimen carried by a microscope slide. The slide processing station can include a support element with a support surface, at least one vacuum port, and a sealing member having a non-round shape. In an uncompressed state, the sealing member can extend upwardly beyond the support surface. In a compressed state, the sealing member can be configured to maintain an airtight seal with a backside of the microscope slide as the microscope slide is pulled against the support surface by a vacuum drawn via the at least one vacuum port.