



(51) International Patent Classification:

B01L 3/00 (2006.01) *C12N 15/10* (2006.01)
C12Q 1/68 (2006.01) *G01N 33/543* (2006.01)

(21) International Application Number:

PCT/US2015/062109

(22) International Filing Date:

23 November 2015 (23.11.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/083,681 24 November 2014 (24.11.2014) US

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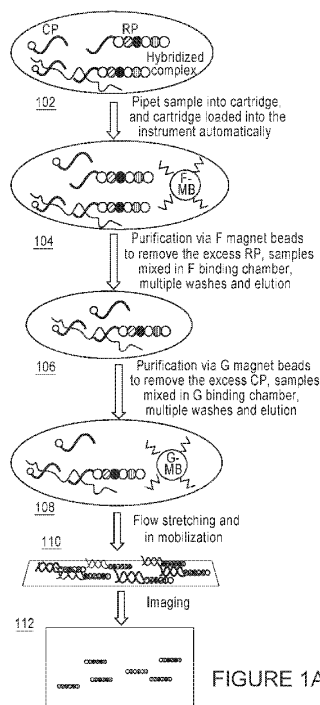
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, 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.

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(54) Title: METHODS AND APPARATUSES FOR GENE PURIFICATION AND IMAGING



(57) Abstract: The present disclosure is directed to systems, devices and methods for nucleic acid or protein purification and imaging. A system is provided including a cartridge comprising a sample input area configured to hold a sample, comprising a plurality of hybridized complexes comprising a plurality of target molecules each hybridized with probes and a plurality of non-hybridized probes. The cartridge may also include a first binding chamber configured with first magnetic beads to receive and bind the sample, a first elution channel configured to receive the first magnetic beads and elute the sample from the first magnetic beads, a second binding chamber configured with second magnetic beads to receive and bind the sample, a second elution channel configured to receive the second magnetic beads and elute the sample from the second magnetic beads, and a binding area configured to receive the eluted sample and hold molecules for imaging.

FIGURE 1A



(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, ST, 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).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

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

— *with sequence listing part of description (Rule 5.2(a))*