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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 September 2011 (09.09.2011)

PCT

(10) International Publication Number
WO 2011/108206 A1

(51) International Patent Classification:
G01N 35/08 (2006.01) *G01N 15/14* (2006.01)
C12M 1/00 (2006.01) *G01N 37/00* (2006.01)

(21) International Application Number:
PCT/JP2011/000902

(22) International Filing Date:
18 February 2011 (18.02.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2010-043968 1 March 2010 (01.03.2010) JP

(71) Applicant *(for all designated States except US)*: **SONY CORPORATION** [JP/JP]; 1-7-1, Konan, Minato-ku, Tokyo, 1080075 (JP).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **ITO, Tatsumi** [JP/JP]; c/o SONY CORPORATION, 1-7-1, Konan, Minato-ku, Tokyo, 1080075 (JP). **AKIYAMA, Shoji** [JP/JP]; c/o SONY CORPORATION, 1-7-1, Konan, Minato-ku, Tokyo, 1080075 (JP). **KAKUTA, Masaya** [JP/JP]; c/o SONY CORPORATION, 1-7-1, Konan, Minato-ku, Tokyo, 1080075 (JP). **YAMASAKI, Takeshi** [JP/JP]; c/o SONY CORPORATION, 1-7-1, Konan, Minato-ku, Tokyo, 1080075 (JP).

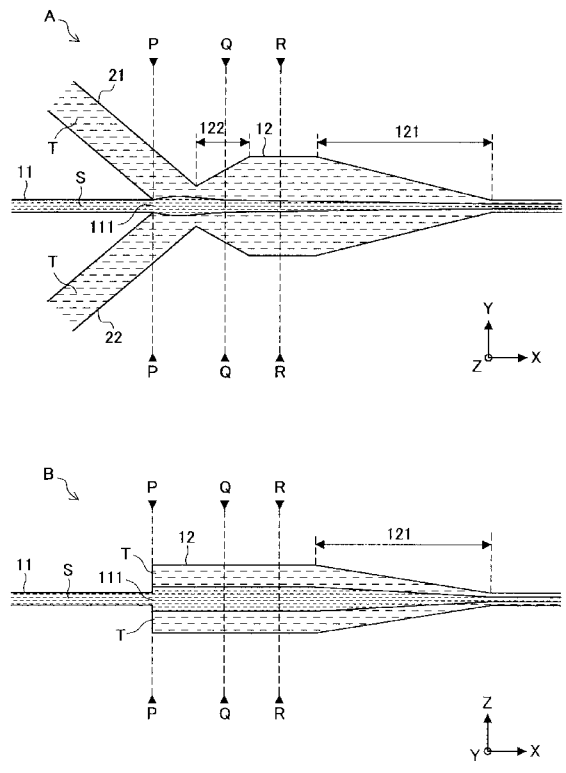
(74) Agents: **KAMEYA, Yoshiaki** et al.; HAZUKI INTERNATIONAL YOTSUYA, Daiichi Tomizawa Building, 3-1-3, Yotsuya, Shinjuku-ku, Tokyo, 1600004 (JP).

(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, 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, IS, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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.

[Continued on next page]

(54) Title: MICROCHIP AND PARTICULATE ANALYZING DEVICE

[Fig. 1]



(57) Abstract: A microchip is provided which includes a first introduction channel, second introduction channels arranged to sandwich the first introduction channel and merged with the first introduction channel from both sides, and a merge channel connected to the first introduction channel and the second introduction channels, where fluids fed from the first and the second introduction channels are merged and flow, wherein the merge channel has a tapered portion formed so that a channel width in a sandwiching direction along which the first introduction channel is sandwiched by the second introduction channels gradually increases along a fluid feeding direction.

WO 2011/108206 A1

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

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

— *with amended claims (Art. 19(1))*