



(43) International Publication Date
18 September 2014 (18.09.2014)

(51) International Patent Classification:
H01Q 7/06 (2006.01) *G06K 19/07* (2006.01)
G06K 17/00 (2006.01)

(21) International Application Number:
PCT/JP2014/057630

(22) International Filing Date:
13 March 2014 (13.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2013-053237 15 March 2013 (15.03.2013) JP
2013-070150 28 March 2013 (28.03.2013) JP
2013-070151 28 March 2013 (28.03.2013) JP

(71) Applicant (for all designated States except US): **RICOH COMPANY, LTD.** [JP/JP]; 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo, 1438555 (JP).

(72) Inventor; and

(71) Applicant (for US only): **OTSUKI, Takashi** [JP/JP]; c/o RICOH COMPANY, LTD., 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo, 1438555 (JP).

(74) Agents: **ITOH, Tadashige** et al.; 16th Floor, Marunouchi MY PLAZA (Meiji Yasuda Seimei Building), 1-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 1000005 (JP).

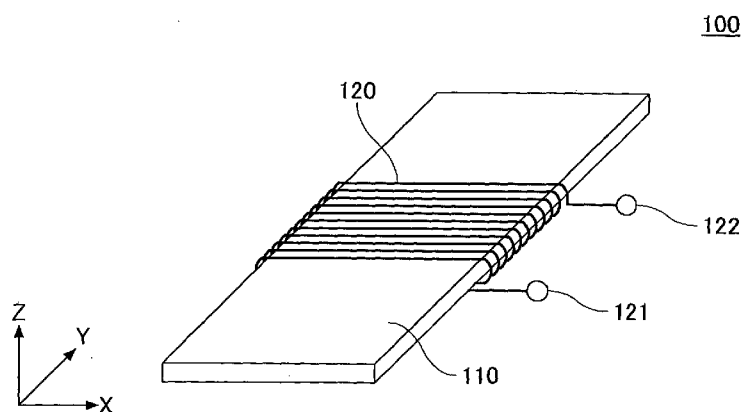
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, KE,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

[Continued on next page]

(54) Title: ANTENNA DEVICE

FIG.1



(57) Abstract: An antenna device of a magnetic coupling type includes a magnetic body having a plate-like shape; and a coil, which is wound around the magnetic body.

Published:

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