

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
18 May 2012 (18.05.2012)

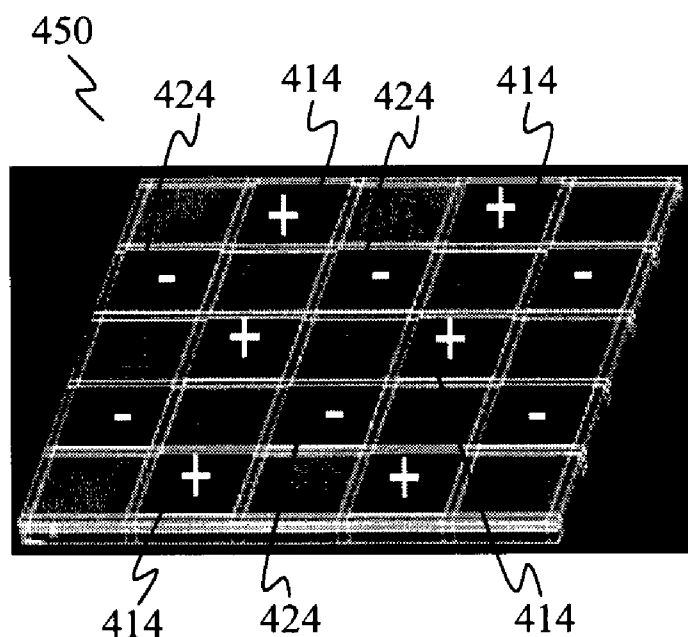


(10) International Publication Number
WO 2012/064283 A8

- (51) International Patent Classification:
H03H 9/64 (2006.01) *H04R 17/00* (2006.01)
- (21) International Application Number:
PCT/SG2011/000388
- (22) International Filing Date:
2 November 2011 (02.11.2011)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
201008262-6 8 November 2010 (08.11.2010) SG
- (71) Applicant (for all designated States except US):
AGENCY FOR SCIENCE, TECHNOLOGY AND RE-
SEARCH [SG/SG]; 1 Fusionopolis Way, #20-10 Connex-
is, 138632 Singapore (SG).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **KHINE, Lynn**
[CA/SG]; c/o Industry Development, Institute of Micro-
electronics, 11 Science Park Road, Singapore Science Park
2, 117685 Singapore (SG). **TSAL, Ming Lin Julius**
[—/SG]; c/o Industry Development, Institute of Microelec-
tronics, 11 Science Park Road, Singapore Science Park 2,
117685 Singapore (SG).
- (74) Agent: **VIERING, JENTSCHURA & PARTNER LLP**;
P.O. Box 1088, Rochor Post Office, Rochor Road, 911833
Singapore (SG).
- (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, JP, 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, QA, RO, RS, RU, RW, 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: A PIEZOELECTRIC RESONATOR



(57) Abstract: According to embodiments of the present invention, a piezoelectric resonator is provided. The piezoelectric resonator includes a piezoelectric substrate, a first electrode comprising a first plurality of electrode fingers, a second electrode comprising a second plurality of electrode fingers, wherein the first plurality of electrode fingers and the second plurality of electrode fingers are interdigitated, and wherein electrode patches are arranged along the first plurality of electrode fingers and the second plurality of electrode fingers according to a 2-dimensional lattice.



(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, 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))*

(48) Date of publication of this corrected version:

13 June 2013

(15) Information about Corrections:

see Notice of 13 June 2013

Previous Correction:

see Notice of 5 July 2012