



(51) International Patent Classification:

H04W 84/00 (2009.01) H04W 40/24 (2009.01)

(21) International Application Number:

PCT/IL2011/000096

(22) International Filing Date:

27 January 2011 (27.01.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

203568	28 January 2010 (28.01.2010)	IL
206455	17 June 2010 (17.06.2010)	IL

(71) Applicant (for all designated States except US): **ELTA SYSTEMS LTD.** [IL/IL]; 100 Yitzchak Hanassi Blvd., P.O.B. 330, 77102 Ashdod (IL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GILOH, Benjamin** [IL/IL]; 20155 Moshav Yaad (IL).

(74) Agent: **REINHOLD COHN AND PARTNERS;** P.O.B.13239, 61131 Tel Aviv (IL).

(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, 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.

(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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

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

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: CELLULAR COMMUNICATION SYSTEM WITH MOVING BASE STATIONS AND METHODS AND APPARATUS USEFUL IN CONJUNCTION THEREWITH

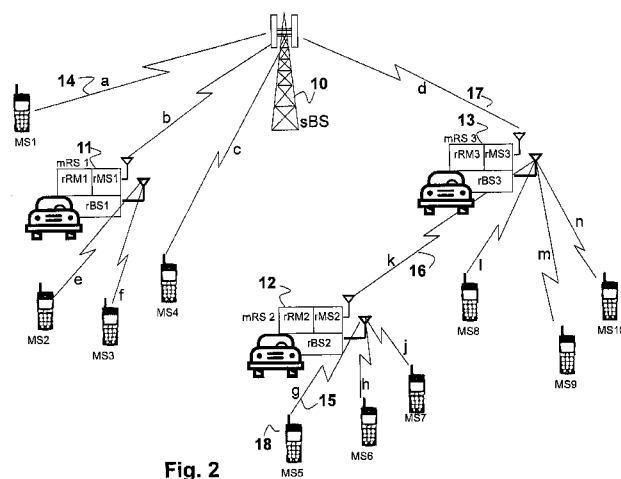


Fig. 2

(57) Abstract: A mobile communication network system comprising a core network including a core device and at least one static base station; base stations; and Mobile stations communicating via antennae with the base stations; The base stations including at least one moving base station which communicates via antennae with the mobile stations and has a physical e.g. Ethernet back-connection to a co-located radio manager having a physical connection with a co-located mobile station communicating via antennae with at least one selectable static base station, wherein each individual co-located radio manager comprises a radio resource manager; and functionality for receiving information from, and sending information to, other respectively co-located radio managers regarding qualities of their respective connections back to the core network, quality of its own connection back to the core network and channel quality which other base stations are able to provide and which its own base station is able to provide, to mobile stations in the vicinity of the individual co-located radio manager, and for using the information to determine whether to reject at least one mobile station seeking to be served by an individual base station associated with said individual co-located radio manager.