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2000 02033-9
1003 copy

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: H04Q 7/38	A1	(11) International Publication Number: WO 99/27736 (43) International Publication Date: 3 June 1999 (03.06.99)
(21) International Application Number: PCT/SE98/02076 (22) International Filing Date: 17 November 1998 (17.11.98) (30) Priority Data: 9704281-6 21 November 1997 (21.11.97) SE (71) Applicant: TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE). (72) Inventors: MAGNUSSON, Sverker; Jaktvarvsplan 3, S-112 36 Stockholm (SE). OLOFSSON, Håkan; Ringvägen 50, S-118 67 Stockholm (SE). ISAKSSON, Katarina; Kungsvägen 7, S-182 79 Stocksund (SE). TRZECIAK, Stephan; Blekholmstorget 22, co2207, S-111 64 Stockholm (SE). (74) Agent: ERICSSON RADIO SYSTEMS AB; Common Patent Dept., S-164 80 Stockholm (SE).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: CELL IDENTIFICATION BASED ON DISTANCE (57) Abstract The present invention relates generally to the problem of determining the identity of a cell for e.g. cell handoff or automatic frequency planning, and more particularly to the problem of determining the true identity of a cell when only the transmission frequency and a non-unique identity code is known. A candidate list is created for each cell. This candidate list is created based on a function of various elements e.g. distance, transmission power, cell type, and antenna placement. The cells are then ranked on the candidate list based on this function. When a particular frequency/code combination is detected, the candidate list is then consulted, and the highest ranking cell with the same frequency/code combination is chosen as being the signal source. In an alternative embodiment the neighbor cell list is used to create the candidate list. If there are no matches on this list for the detected frequency/code combination, then the neighbors of the cells on the candidate list are also added to the candidate list which is then checked for a match.		