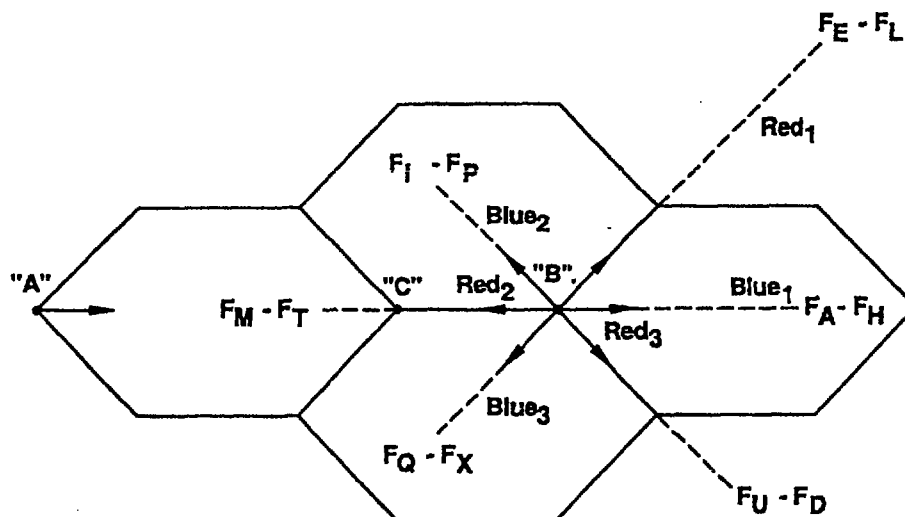




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| (51) International Patent Classification <sup>6</sup> :<br><b>H04Q 7/36, 7/22</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (11) International Publication Number:<br><b>WO 98/17078</b>  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | (43) International Publication Date: 23 April 1998 (23.04.98) |
| (21) International Application Number: PCT/US97/18073<br>(22) International Filing Date: 7 October 1997 (07.10.97)<br>(30) Priority Data:<br>08/728,754 11 October 1996 (11.10.96) US/<br>(71) Applicant: ERICSSON INC. [US/US]; 7001 Development Drive, P.O. Box 13969, Research Triangle Park, NC 27709 (US).<br>(72) Inventor: DENT, Paul, W.; 637 Eagle Point Road, Pittsboro, NC 27312 (US).<br>(74) Agents: MOORE, Stanley, R. et al.; Jenkins & Gilchrist, P.C., Suite 3200, 1445 Ross Avenue, Dallas, TX 75202 (US). |  | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, 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, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).<br><br>Published<br>Without international search report and to be republished upon receipt of that report. |                                                               |

(54) Title: INTERSTITIAL SECTOR SYSTEM



## (57) Abstract

A method and apparatus for improving the reception characteristics for lower-power portable telephone units at a base station site (8) is disclosed. A normal three-sector antenna site (8) is divided into a plurality of sectors each having a central line of focus. The frequency channels assigned to the base station site (8) are divided among the sectors, and an antenna (10) within each sector radiates the assigned frequencies along the central line of focus for each of the sectors.