980086-0
JP05

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04Q 7/38	A1	(11) International Publication Number: WO 97/09838
		(43) International Publication Date: 13 March 1997 (13.03.97)

(21) International Application Number: PCT/SE96/01113

(22) International Filing Date: 6 September 1996 (06.09.96)

(30) Priority Data:
08/524,346 6 September 1995 (06.09.95) US

(71) Applicant: TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE).

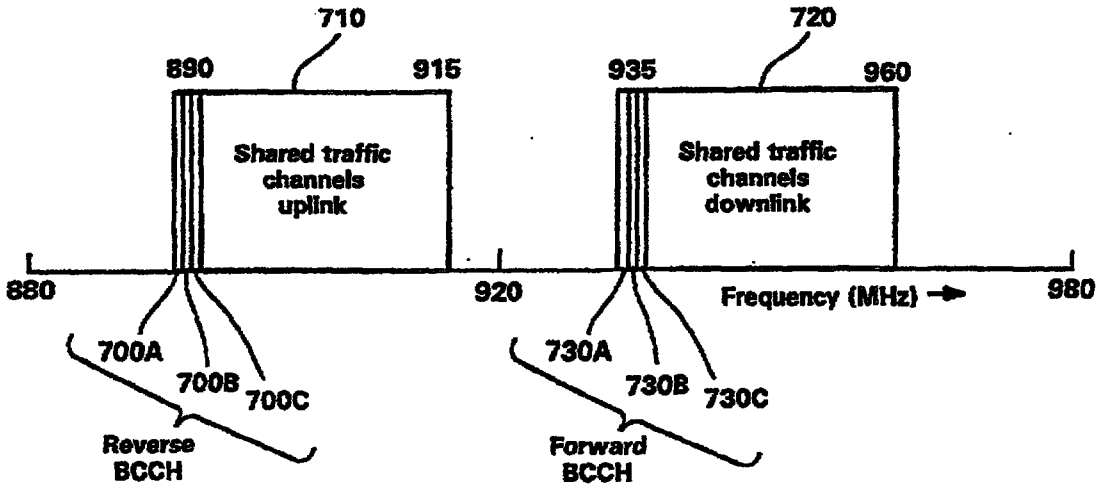
(72) Inventor: UDDENFELDT, Jan, Erik; Backtimjegränd 19, S-165 73 Hässelby (SE).

(74) Agents: BOHLIN, Björn et al.; Telefonaktiebolaget LM Ericsson, Patent and Trademark Dept., S-126 25 Stockholm (SE).

(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, 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, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), 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).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: METHOD AND APPARATUS FOR FREQUENCY PLANNING IN A MULTI-SYSTEM CELLULAR COMMUNICATIONS NETWORK



(57) Abstract

A method and apparatus for frequency planning in a multi-system (A, B, C) cellular communications network is disclosed in which a plurality of systems operate over a frequency range comprising a plurality of frequency bands. The systems (A, B, C) each provide communications services to a plurality of subscribers (660) located within substantially the same geographic region. Each of the systems (A, B, C) is assigned one or more of the network frequency bands for use as control channels (700, 730). The systems then share the unassigned frequency bands to provide communications service (710, 720). The systems may share the frequency bands without coordination or synchronization or, as an alternative, the sharing may be controlled by a processor.