



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

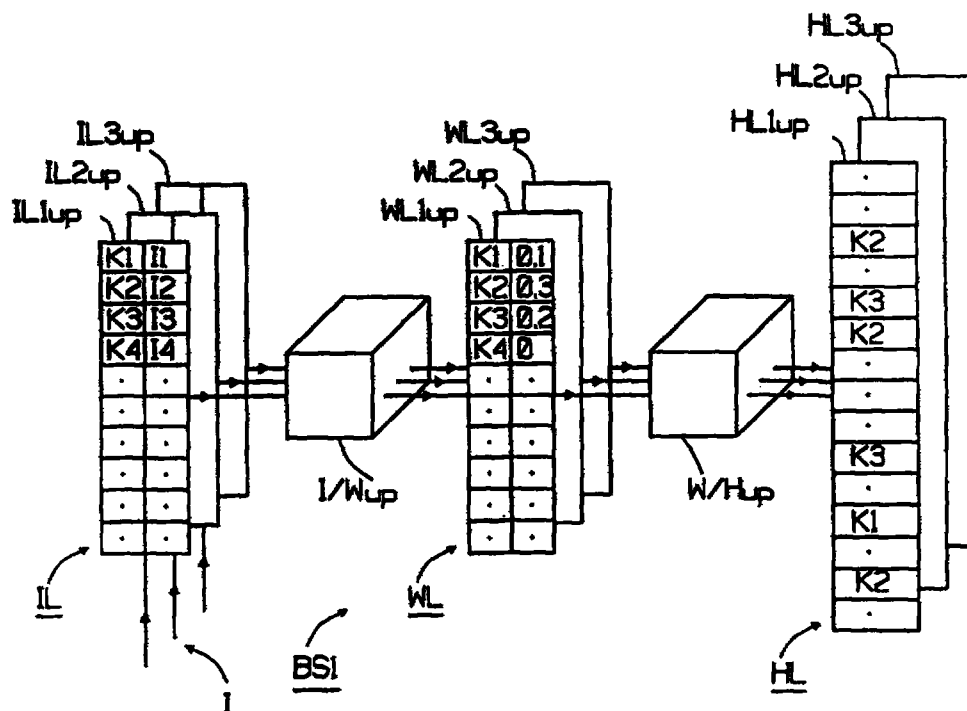
(51) International Patent Classification ⁶ : H04B 1/713		A1	(11) International Publication Number: WO 96/02980
			(43) International Publication Date: 1 February 1996 (01.02.96)
(21) International Application Number: PCT/SE95/00855		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, 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), ARIPO patent (KE, MW, SD, SZ, UG).	
(22) International Filing Date: 13 July 1995 (13.07.95)			
(30) Priority Data: 9402492-4 15 July 1994 (15.07.94) SE			
(71) Applicant (for all designated States except US): TELEFONAKTIEBOLAGET LM ERICSSON [SE/SE]; S-126 25 Stockholm (SE).		9612085-2. Published With international search report. In English translation (filed in Swedish). RTMP copy + 1 PER + Annexes	
(72) Inventors; and			
(75) Inventors/Applicants (for US only): ANDERSSON, Claes, Håkan [SE/SE]; Tranholmsvägen 8, S-178 32 Ekerö (SE). ALMGREN, Knut, Magnus [SE/SE]; Kungsvägen 19 A, S-191 45 Sollentuna (SE).			
(74) Agents: LÖVGREN, Tage et al.; Telefonaktiebolaget LM Ericsson, Patent and Trademark Dept., S-126 25 Stockholm (SE).			

(54) Title: A METHOD AND MEANS FOR FREQUENCY HOPPING IN A RADIO COMMUNICATION SYSTEM

(57) Abstract

Frequency hopping and hops between time-divided channels (K1, K2, ...) is carried out in a mobile telecommunications system. Hop sequences are established for individual connections for hops between the channels, thereby improving utilization of the channels in the system. Interference (I) is measured on the channels (K1, K2, ...) for individual connections between a base station (BS1) and a plurality of mobile stations. The connections are bidirectional, having an uplink and a downlink. The measured interference values of the uplink and the downlink respectively are stored in an interference list (IL) for each of the connections. The drawing shows three interference lists (IL_{1up}-IL_{3up}) in the uplink, including channel numbers (K1, K2, ...)

and the measured interference values (I₁, I₂, ...). The interference values are converted to weight values (0.1; 0.3; ...) in a conversion circuit (I/W_{up}), and the weight values are then stored in weight lists (WL_{1up}-WL_{3up}). The weight values are analyzed in an allocation circuit (W/H_{up}), which allocates channels to individual hop sequence lists (HL_{1up}-HL_{3up}). Each connection is allocated a respective hop sequence list. The hop sequence lists are sent to respective mobile stations, thereby providing the mobile stations with information as to which hop sequence list shall be used.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Larvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				