



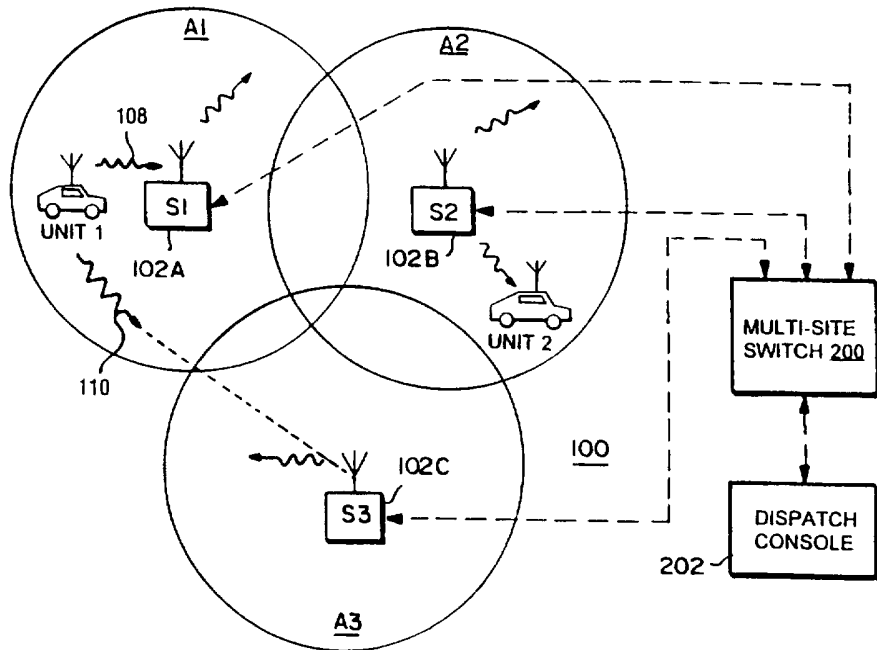
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US96/17181 (22) International Filing Date: 24 October 1996 (24.10.96) (30) Priority Data: 08/548,828 26 October 1995 (26.10.95) US (71) Applicant: ERICSSON INC. [US/US]; 7001 Development Drive, P.O. Box 13969, Research Triangle Park, NC 27709 (US). (72) Inventor: COOPER, Gerald, M.; Route 1, Box 403, Gretna, Pittsylvania, VA 24557 (US). (74) Agent: NELSON, Jeffrey, H.; Nixon &amp; Vanderhye P.C., 8th floor, 1100 North Glebe Road, Arlington, VA 22201-4714 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, 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).</p> <p><b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 5 June 1997 (05.06.97)</p>

(54) Title: MULTISITE RADIO SYSTEM WITH FALSE MOBILE RADIO SIGNALLING DETECTION

(57) Abstract

In a digitally trunked radio repeating system that may include several radio site repeating transceivers, a site area identification coding system to ensure that transmissions intended for one site or as one mode are not decoded by another site or as another transmission mode. In particular, a site or transmission mode identification byte is used in the transmission error coding (CRC) scheme applied by both a mobile transceiver and the radio site repeater. Since the identification byte is used in the transmitter to calculate the CRC error correction data, the same identification byte must be used in the receiver to decode the CRC value. The intended radio site or transmission mode will apply the proper identification byte to decode a transmission. The wrong radio site or mode will not correctly decode the CRC value in a transmission because the wrong identification byte will be applied to the transmission.



Accordingly, a transmission received by the wrong radio site or at a transceiver operating in a mode different from that of the transmission will not properly decode the transmission due to a CRC error caused by applying the wrong identification byte.

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# INTERNATIONAL SEARCH REPORT

International Application No

PC1, US 96/17181

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 H04Q7/28

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 H04Q H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PERSONAL COMMUNICATION - FREEDOM THROUGH WIRELESS TECHNOLOGY, SECAUCUS, NJ., MAY 18 - 20, 1993, no. CONF. 43, 18 May 1993, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 714-717, XP000393282	1-3
A	GOURGUE F: "AIR INTERFACE OF THE FUTURE EUROPEAN FULLY DIGITAL TRUNK RADIO SYSTEM" see page 716, column 2 - page 717, column 1	4-6
Y	--- WO 94 14287 A (HUGHES AIRCRAFT CO) 23 June 1994	1-3
A	see page 9, line 3 - line 26 see page 12, line 5 - line 14; figures 4,6 --- -/--	4-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

24 March 1997

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International Application No  
PCT/US 96/17181

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 142 539 A (DAHLIN JAN E AANGSTROEM ET AL) 25 August 1992 see column 3, line 45 - column 4, line 14 see column 4, line 44 - line 48; figure 3 ---	1,2
A	US 5 230 003 A (DENT PAUL W ET AL) 20 July 1993 see column 1, line 61 - column 2, line 10 -----	7

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT, JS 96/17181

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