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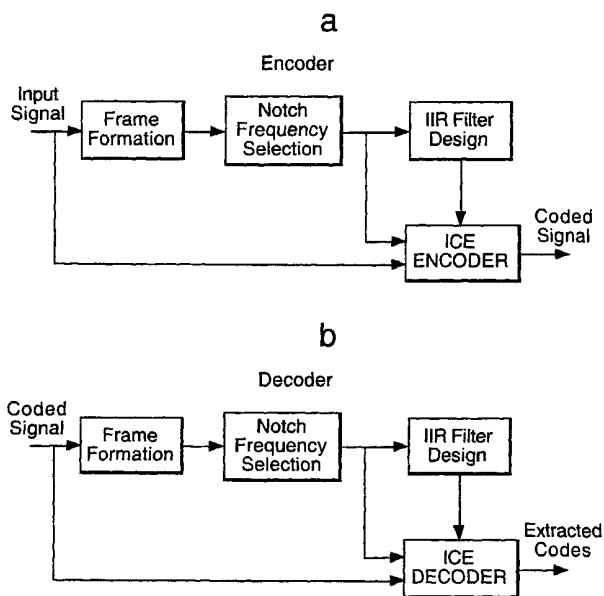
(43) International Publication Date
9 August 2001 (09.08.2001)

PCT

(10) International Publication Number
WO 01/58063 A3

- (51) International Patent Classification⁷: **H04H 1/00** OTU [GB/GB]; Ashlar Court, Ravenscourt Gardens, London W6 0TU (GB). **VOUKELATOS, Stathis** [GB/GB]; 7 Comer Crescent, Southall, Middlesex UB3 4XD (GB).
- (21) International Application Number: PCT/GB01/00413
- (22) International Filing Date: 2 February 2001 (02.02.2001) (74) Agent: **SHARP, Alan, Cooper**; QED I.P. Services Limited, Dawley Road, Hayes, Middlesex UB3 1HH (GB).
- (25) Filing Language: English (81) Designated States (*national*): JP, KR, US.
- (26) Publication Language: English (84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
- (30) Priority Data: 0002259.0 2 February 2000 (02.02.2000) GB
- (71) Applicant (*for all designated States except US*): **CENTRAL RESEARCH LABORATORIES LIMITED** [GB/GB]; Dawley Road, Hayes, Middlesex UB3 1HH (GB). **Published:**
— *with international search report*
- (72) Inventors; and (88) Date of publication of the international search report:
7 March 2002
- (75) Inventors/Applicants (*for US only*): **KUDUMAKIS, Panos** Ashlar Court Ravenscourt Gardens London W6
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: A METHOD OF LABELLING A MULTI-FREQUENCY SIGNAL SUCH AS AN AUDIO OR A VIDEO SIGNAL



(57) Abstract: A system for labelling and subsequently identifying a multi-frequency signal, includes means for inserting a code signal into a multi-frequency signal, signal distribution means, signal receiving means, code extractions means, and monitoring means to determine which parts of the frequency spectrum will at least partly mask the code signal at a given time using predetermined criteria. The means for inserting a code signal includes means for eliminating one or more frequency ranges being located in a part of the frequency spectrum that will at least partly mask the code signal, the location of the frequency ranges being eliminated from said multi-frequency signal varies with the frequency content of said multi-frequency signal.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 01/00413

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04H1/00

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 7 H04H

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)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y Y	<p>FR 2 734 977 A (TELEDIFFUSION FSE) 6 December 1996 (1996-12-06) page 4, line 25 -page 5, line 22 page 11, line 1-19 page 18, line 7-14 page 19, line 17-34; claim 1 ---</p> <p>NICHOLSEN D ET AL: "WATERMARKING IN THE MPEG-4 CONTEXT" PROCEEDINGS OF THE EUROPEAN CONFERENCE ON MULTIMEDIA APPLICATIONS, SERVICES AND TECHNIQUES, XX, XX, 1999, pages 472-492, XP000910536 page 482, paragraph 2 ---</p> <p style="text-align: center;">-/--</p>	<p>1, 3, 5, 6, 11-13 4, 8, 10</p> <p>4, 8, 10</p>

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- *&* document member of the same patent family

Date of the actual completion of the international search

19 November 2001

Date of mailing of the international search report

27/11/2001

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 01/00413

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 366 381 A (EMI PLC THORN) 2 May 1990 (1990-05-02) cited in the application	1,3,7, 11-13
Y	column 5, line 47 -column 6, line 23; claims 6,9; figure 6 ----	5,6
Y	GB 2 294 619 A (TEKTRONIX INC) 1 May 1996 (1996-05-01) the whole document ----	5,6
X	US 4 972 471 A (DALE JAMES ET AL) 20 November 1990 (1990-11-20) column 1, line 61 -column 2, line 33 column 2, line 56 -column 3, line 23 column 4, line 47-61; claims 1-4 ----	1,3, 11-13
A	US 5 774 452 A (WOLOSEWICZ JACK) 30 June 1998 (1998-06-30) column 1, line 65 -column 2, line 10 -----	1,11-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 01/00413

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2734977	A	06-12-1996	FR 2734977 A1 06-12-1996
			AU 702731 B2 04-03-1999
			AU 6228796 A 18-12-1996
			BR 9608865 A 15-06-1999
			CA 2222198 A1 05-12-1996
			DE 69601465 D1 11-03-1999
			DE 69601465 T2 10-06-1999
			EP 0829145 A1 18-03-1998
			ES 2129975 T3 16-06-1999
			WO 9638927 A1 05-12-1996
			JP 3033193 B2 17-04-2000
			JP 10507054 T 07-07-1998
			PL 323534 A1 30-03-1998
			TR 9701496 T1 21-03-1998
US 6151578 A 21-11-2000			
EP 0366381	A	02-05-1990	AT 120059 T 15-04-1995
			DE 68921692 D1 20-04-1995
			DE 68921692 T2 05-10-1995
			EP 0366381 A2 02-05-1990
			JP 2162569 A 22-06-1990
			JP 3212988 B2 25-09-2001
			US 5113437 A 12-05-1992
GB 2294619	A	01-05-1996	DE 19539538 A1 02-05-1996
US 4972471	A	20-11-1990	CA 2088780 A1 15-03-1992
			WO 9205550 A1 02-04-1992
			EP 0548071 A1 30-06-1993
			JP 6500658 T 20-01-1994
US 5774452	A	30-06-1998	US 6005501 A 21-12-1999