



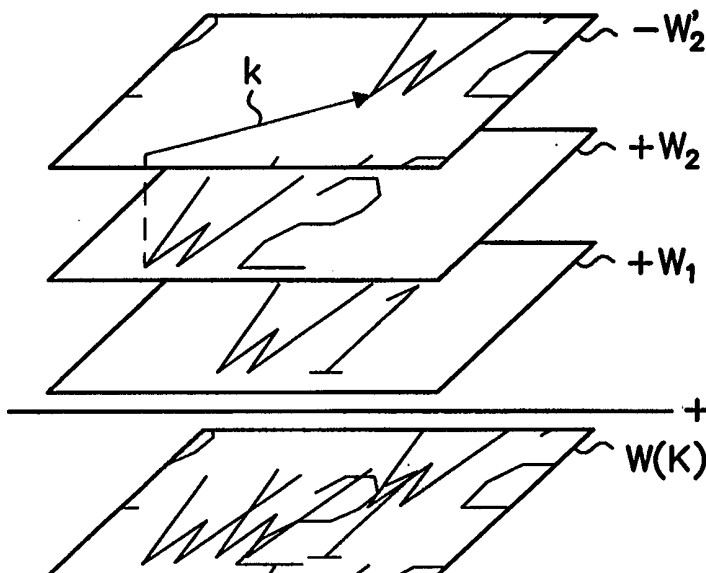
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/IB99/00348</p> <p>(22) International Filing Date: 2 March 1999 (02.03.99)</p> <p>(30) Priority Data: 98200656.1 4 March 1998 (04.03.98) EP</p> <p>(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).</p> <p>(71) Applicant (for SE only): PHILIPS AB [SE/SE]; Kottbygatan 7, Kista, S-164 85 Stockholm (SE).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): KALKER, Antonius, A., C., M. [NL/NL]; Prof. Holstlaan 61, NL-5656 AA Eindhoven (NL).</p> <p>(74) Agent: SCHMITZ, Herman, J., R.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, 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, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>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.</p> <p>(88) Date of publication of the international search report: 18 November 1999 (18.11.99)</p>	

(54) Title: EMBEDDING AUXILIARY DATA IN A SIGNAL

(57) Abstract

A method is disclosed for embedding auxiliary data in a signal. The data is encoded into the relative position or phase of one or more basic watermark patterns. This allows multi-bit data to be embedded by using only one or a few distinct watermark patterns.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 99/00348

A. CLASSIFICATION OF SUBJECT MATTER		
IPC6: H04N 5/913, H04N 1/32, H04N 7/08 // H04N 1/00 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	Kalker, Ton et al, "Video watermarking system for broadcast monitoring", 1999, Engineering Info.Inc., (San Jose, CA, USA), see the whole document --	1-14
E,X	Maes, M. et al, "Exploiting shift invariance to obtain a high payload in digital image watermarking", 199, IEEE Comput. Soc., (Florence, Italy), see the whole document --	1-14
A	US 5664018 A (FRANK THOMSON LEIGHTON), 2 Sept 1997 (02.09.97), abstract --	1-14
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Date of the actual completion of the international search		Date of mailing of the international search report
1 October 1999		04-10-1999
Name and mailing address of the ISA: Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86		Authorized officer Michel Gascoin/mj Telephone No. +46 8 782 25 00

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	US 5819289 A (MAXWELL T. SANFORD, II ET AL), 6 October 1998 (06.10.98), abstract --	1-14
P,A	WO 9854897 A2 (KONINKLIJKE PHILIPS ELECTRONICS N.V.), 3 December 1998 (03.12.98), abstract -- -----	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/08/99

International application No.

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US 5664018 A	02/09/97	AU 2076097 A EP 0888676 A WO 9734391 A	01/10/97 07/01/99 18/09/97
US 5819289 A	06/10/98	AU 2435297 A WO 9739410 A	07/11/97 23/10/97
WO 9854897 A2	03/12/98	EP 0920775 A	09/06/99