

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 September 2003 (04.09.2003)

PCT

(10) International Publication Number
WO 2003/073612 A3

(51) International Patent Classification⁷: H03H 21/00

(21) International Application Number:
PCT/GB2003/000655

(22) International Filing Date: 14 February 2003 (14.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0204548.2 27 February 2002 (27.02.2002) GB

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, 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, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

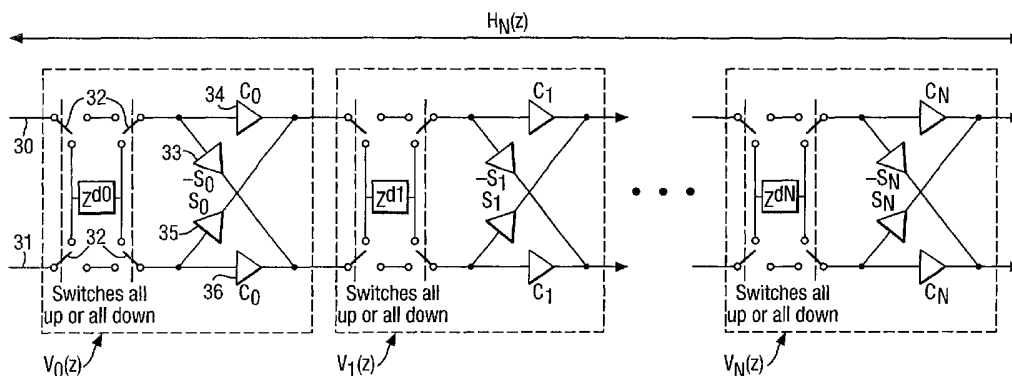
Declaration under Rule 4.17:
— of inventorship (Rule 4.17(iv)) for US only

Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
8 January 2004

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: METHOD OF BLIND SIGNAL SEPARATION



(57) Abstract: A method of blind signal separation of convolutively mixed signals comprises firstly processing signals to produce second order independence. In a second step, and together with ranges of signal delay and rotation parameters, the resulting processed signals are used to determine delay and rotation parameters. These parameters implement at least one elementary paraunitary matrix and transform the processed signals into output signals with improvement in independence to at least a predominant part of a maximum extent obtainable over the parameter ranges. The output signals then become the next processed signals and the second step is iterated until independence ceases to be improved significantly. The latest output signals are then unmixed signals.

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INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/GB 03/00655

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03H21/00

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 H03H

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE LATHAUWER L ET AL: "An algebraic approach to the blind identification of paraunitary filters" IEEE, vol. 3, 23 September 2000 (2000-09-23), pages 1162-1165, XP010532709 page 1162, right-hand column, line 14-26 page 1163, right-hand column, line 26-34 figure 1	1-30
A	VAIDYANATHAN: "Multirate Systems and Filter Banks" 1993, PRENTICE HALL, NEW JERSEY XP002249017 242830 cited in the application page 727 -page 729	1-30

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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Date of the actual completion of the international search

29 October 2003

Date of mailing of the international search report

17/11/2003

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INTERNATIONAL SEARCH REPORT

Intern:	Application No
PCT/GB 03/00655	

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>TE-WON LEE ET AL: "A contextual blind separation of delayed and convolved sources" ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 1997. ICASSP-97., 1997 IEEE INTERNATIONAL CONFERENCE ON MUNICH, GERMANY 21-24 APRIL 1997, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 21 April 1997 (1997-04-21), pages 1199-1202, XP010226015 ISBN: 0-8186-7919-0 the whole document</p> <p style="text-align: center;">----</p>	1-30
A	<p>SEUNGJIN CHOI ET AL: "Blind deconvolution of linear MIMO systems driven by arbitrarily distributed sources" TENCON 99. PROCEEDINGS OF THE IEEE REGION 10 CONFERENCE CHEJU ISLAND, SOUTH KOREA 15-17 SEPT. 1999, PISCATAWAY, NJ, USA, IEEE, US, 15 September 1999 (1999-09-15), pages 662-665, XP010368350 ISBN: 0-7803-5739-6 abstract paragraph '0001! figure 1</p> <p style="text-align: center;">-----</p>	1-30