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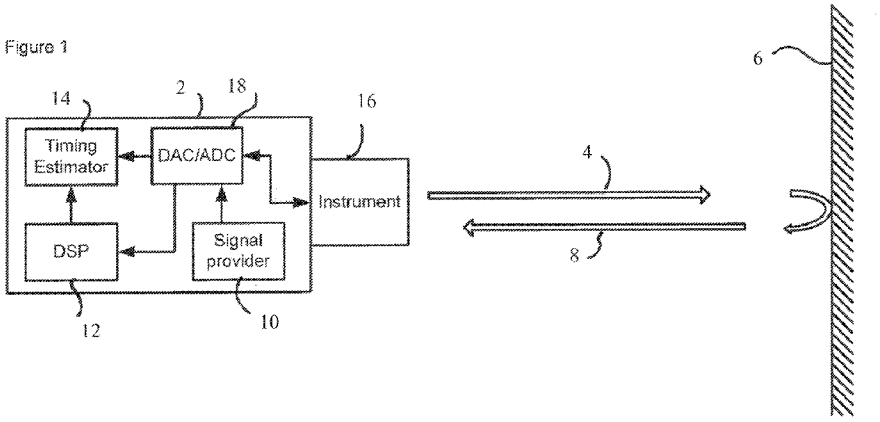
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(54) Title: METHOD AND APPARATUS

Figure 1



(57) Abstract: A signal processing method for estimating a frequency domain representation of signal from a series of samples distorted by an instrument function, the method comprising obtaining the series of samples; obtaining a set of coefficients that fit a set of basis functions to a complex exponential function wherein the set of basis functions comprises a plurality of basis functions each defined by a shifted version of the instrument function in a signal domain; estimating the frequency domain representation of the signal based on the series of samples and the coefficients. This is wherein the estimate of the instrument function is based on a characterisation of the instrument function in the frequency domain at frequencies associated with the complex exponential function.

WO 2014/191771 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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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.
X	ONATIVIA JON ET AL: "Sequential local FRI sampling of infinite streams of Diracs", 2013 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING (ICASSP); VANCOUCER, BC; 26-31 MAY 2013, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, PISCATAWAY, NJ, US, 26 May 2013 (2013-05-26), pages 5440-5444, XP032508672, ISSN: 1520-6149, DOI: 10.1109/ICASSP.2013.6638703 [retrieved on 2013-10-18] abstract page 5441 ----- -/--	19-23, 26-28

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

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2

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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.
A	Jose Antonio Urigüen ET AL: "ON THE EXPONENTIAL REPRODUCING KERNELS FOR SAMPLING SIGNALS WITH FINITE RATE OF INNOVATION", Proceedings of the 9th International Workshop on SampTA, May 2011 (2011-05), pages 1-4, XP055151589, Retrieved from the Internet: URL:http://www.commsp.ee.ic.ac.uk/~pld/publications/UriguenDB_SampTA2011.pdf [retrieved on 2014-11-07] page 2 - page 3	1-14, 19-28
A	BABOULAZ L ET AL: "Exact Feature Extraction Using Finite Rate of Innovation Principles With an Application to Image Super-Resolution", IEEE TRANSACTIONS ON IMAGE PROCESSING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 17, no. 2, 1 February 2009 (2009-02-01), pages 281-298, XP011249727, ISSN: 1057-7149 page 3 page 3; figures 9-14	15-18
A	PIER LUIGI DRAGOTTI ET AL: "Sampling Moments and Reconstructing Signals of Finite Rate of Innovation: Shannon Meets Strang-Fix", IEEE TRANSACTIONS ON SIGNAL PROCESSING, IEEE SERVICE CENTER, NEW YORK, NY, US, vol. 55, no. 5, 1 May 2007 (2007-05-01), pages 1741-1757, XP011177342, ISSN: 1053-587X, DOI: 10.1109/TSP.2006.890907 cited in the application page 1743 page 1751 - page 1752	1-14, 19-28

2