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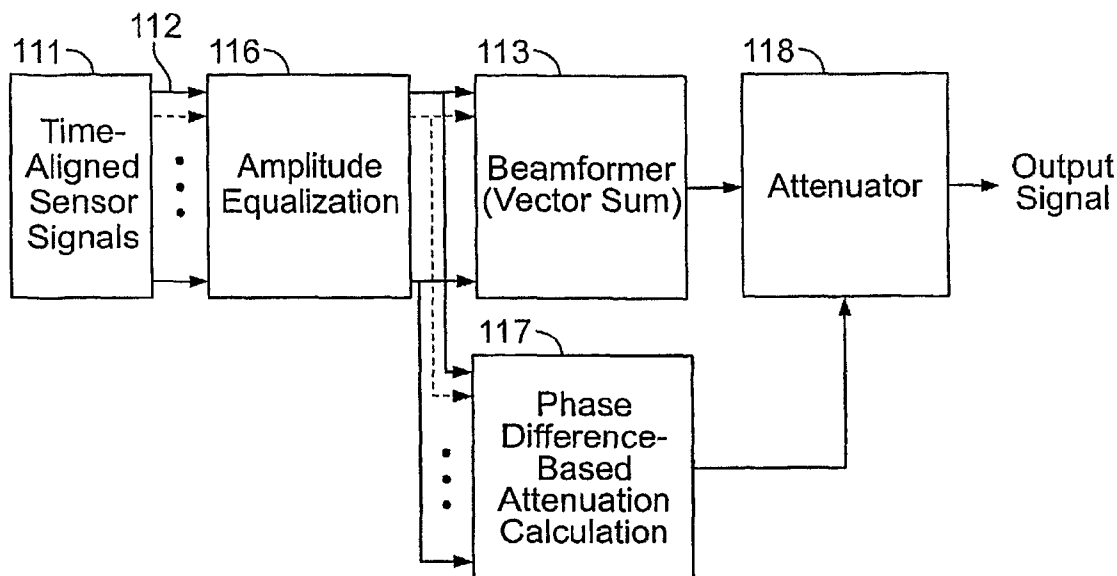
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(54) Title: SYSTEM AND METHOD FOR IMPROVING TIME DOMAIN PROCESSED SENSOR SIGNAL OUTPUT



(57) Abstract: Noise discrimination in signals from a plurality of sensors is conducted by enhancing the phase difference in the signals such that off-axis pick-up is suppressed while on-axis pick-up is enhanced. Alternatively, attenuation/expansion are applied to the signals in a phase difference dependent manner, consistent with suppression of off-axis pick-up and on-axis enhancement. Nulls between sensitivity lobes are widened, effectively narrowing the sensitivity lobes and improving directionality and noise discrimination.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/33410

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G01R 25/00**(2006.01)

USPC: 324/076.770

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)

U.S. : 324/076.770,76.52

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,961,172 A (HUTCHEON) 01 June 1976 (01.06.1976), see entire document.	1,2
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Y		3
Y	US 5,896,449 A (OSHIDAN et al.) 20 April 1999 (20.04.1999), see entire document.	3

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Further documents are listed in the continuation of Box C.

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See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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25 September 2007 (25.09.2007)

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

USPGPUB, USPAT, USOCR, EPO, JPO, DERWENT, IBM_TDB search notes: (time adj domain)and ((phase adj angle)with
(attenuat44 enhanc\$6)), beam\$forming, beam\$form\$4, (enhanc\$6 attenuat\$4)near7 function near7 phase