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(54) Title: A SONAR TRANSDUCER ARRAY ASSEMBLY AND METHODS OF MANUFACTURE THEREOF

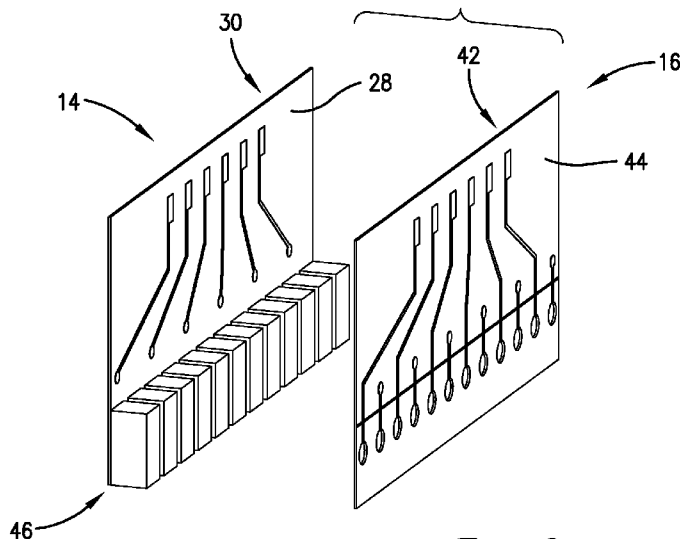


Fig. 6.

(57) Abstract: A sonar transducer array assembly comprises a first flexible circuit, a second flexible circuit, and a plurality of transducer elements. The first and second flexible circuits each include a first side, a second side, and a plurality of adhesive areas spaced apart and positioned in a line along one edge of the first side. The transducer elements each include a first surface attached to one of the adhesive areas of the first flexible circuit, an opposing second surface attached to one of the adhesive areas of the second flexible circuit, and a third surface positioned between the first and second surfaces. The transducer elements form a linear array with the third surface of each transducer element in alignment and configured to transmit and receive an acoustic pressure wave.





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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2015/030866**A. CLASSIFICATION OF SUBJECT MATTER****G01S 7/521(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
G01S 7/521; H01L 41/47; H05K 1/14; H04R 17/00; A61B 8/00Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & keywords: sonar, transducer, flexible, array**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2013-0107487 A1 (WODNICKI et al.) 02 May 2013 See abstract, paragraphs [0020]-[0027] and figures 1-3.	1-17
A	US 2007-0093715 A1 (HIPPE et al.) 26 April 2007 See abstract, paragraphs [0020]-[0022] and figures 2-3.	1-17
A	US 5920523 A (HANAFY et al.) 06 July 1999 See abstract and figures 1a-10.	1-17
A	US 5792058 A (LEE et al.) 11 August 1998 See figures 2-8.	1-17
A	US 6043590 A (GILMORE) 28 March 2000 See figures 1-13d.	1-17

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

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"&" document member of the same patent family

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