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- (71) **Applicant (for all designated States except US):**
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; High Tech Campus 5, NL-5656 AE Eindhoven (NL).
- (72) **Inventor; and**
- (75) **Inventor/Applicant (for US only):** **FRASER, John Douglas** [US/US]; c/o Philips IP&S - NL, High Tech Campus 44, NL-5656 AE Eindhoven (NL).
- (74) **Agents:** **VAN VELZEN, Maaïke** et al.; Philips IP&S - NL, High Tech Campus 44, NL-5656 AE Eindhoven (NL).
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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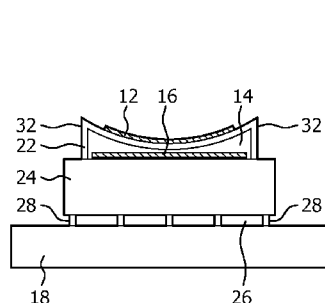
(54) **Title:** ULTRASONIC CMUT WITH SUPPRESSED ACOUSTIC COUPLING TO THE SUBSTRATE

FIG. 3a

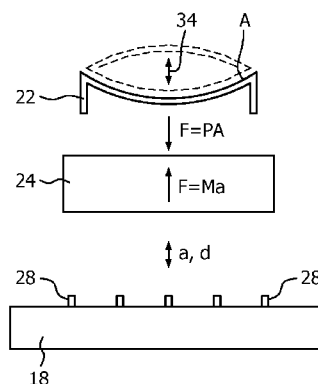


FIG. 3b

(57) **Abstract:** An array of cMUT cells are formed on individually isolated massive plates on a substrate. The mass of each plate provides an inertial force in opposition to the force and motion of transmission by the cell which reduces the resultant translation of motion in the plate. The reduction in motion results in less coupling of acoustic energy into the substrate and contamination of the signals of adjacent cMUT cells by lateral waves. The unwanted wave coupling into the substrate can be further damped by compliant or sparse periodic mounting of the massive plates on the substrate.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2012/051173

A. CLASSIFICATION OF SUBJECT MATTER

INV. B06B1/02 G10K11/00
ADD.

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)

B06B G10K G01H

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2011/018387 A1 (OGAWA TOSHIYUKI [JP] ET AL) 27 January 2011 (2011-01-27) abstract; figures paragraphs [0005], [0023], [0029] - [0039], [0043]	1-21
X	WO 2010/146838 A2 (CANON KK [JP]; KANDORI ATSUSHI [JP]; TAKAGI MAKOTO [JP]; MAJIMA MASA0) 23 December 2010 (2010-12-23) abstract; figures 1,3 paragraphs [0013], [0014], [0022] - [0024]	1-7, 16-21
X	US 2008/048211 A1 (KHURI-YAKUB BUTRUS T [US] ET AL) 28 February 2008 (2008-02-28) cited in the application paragraphs [0012], [0025], [0027], [0034]; figures 1,2	1-10, 16-21
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Scappazzoni, E

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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.
X	US 2009/122651 A1 (KUPNIK MARIO [US] ET AL) 14 May 2009 (2009-05-14) cited in the application abstract; figure 1 paragraphs [0003], [0008], [0009], [0014], [0015], [0026], [0085] - [0094] -----	1-3,5,6, 8-12, 15-21
X	US 2004/113524 A1 (BAUMGARTNER CHARLES E [US] ET AL) 17 June 2004 (2004-06-17) abstract; figure 1 paragraphs [0002], [0004], [0005], [0011], [0014], [0015], [0029] - [0033], [0036], [0040], [0041], [0045], [0048] -----	1-3,5,6, 13,14, 16-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

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