

**PATENT COOPERATION TREATY**

**PCT**

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference NC69655WO	<b>FOR FURTHER ACTION</b>		see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/FI2010/050241	International filing date ( <i>day/month/year</i> ) 26 March 2010 (26.03.2010)	(Earliest) Priority Date ( <i>day/month/year</i> ) 29 June 2009 (29.06.2009)	
Applicant NOKIA CORPORATION et al.			

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

the international application in the language in which it was filed.

a translation of the international application into \_\_\_\_\_ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b.  This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.  **Certain claims were found unsearchable** (see Box No. II).

3.  **Unity of invention is lacking** (see Box No. III).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

Controllable acoustic transducer

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 5

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b.  none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI2010/050241

## A. CLASSIFICATION OF SUBJECT MATTER

See extra sheet

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: G10K, H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
FI, SE, NO, DKElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI, INSPEC,

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2009045042 A1 (BROWNE A. et al.) 19 February 2009 (19.02.2009) Figures 8a and 8b. Paragraphs [0046] and [0047].	1-28
A	US 2008013773 A1 (YANG B.) 17 January 2008 (17.01.2008) Figure 1. Abstract.	1-28
A	US 2007165878 A1 (KONAGAI Y.) 19 July 2007 (19.07.2007) Abstract.	1-28
A	JP 62283273 A (HITACHI METALS LTD) 09 December 1987 (09.12.1987) Figures 2a and 2b.	1-28

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

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"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
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"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	

Date of the actual completion of the international search  
22 September 2010 (22.09.2010)Date of mailing of the international search report  
24 September 2010 (24.09.2010)Name and mailing address of the ISA/FI  
National Board of Patents and Registration of Finland  
P.O. Box 1160, FI-00101 HELSINKI, Finland  
Facsimile No. +358 9 6939 5328Authorized officer  
Janne Nummela  
Telephone No. +358 9 6939 500

**INTERNATIONAL SEARCH REPORT**  
**Information on patent family members**

International application No.  
PCT/FI2010/050241

Patent document cited in search report	Publication date	Patent family members(s)	Publication date
US 2009045042 A1	19/02/2009	CN 101368664 A DE 102008038813 A1	18/02/2009 26/02/2009
US 2008013773 A1	17/01/2008	KR 20080001575 A JP 2008011487 A DE 102006042208 B3	03/01/2008 17/01/2008 31/01/2008
US 2007165878 A1	19/07/2007	WO 2005067348 A1 EP 1705955 A1 CN 1906972 A JP 2005197896 A	21/07/2005 27/09/2006 31/01/2007 21/07/2005
JP 62283273 A	09/12/1987	None	

CLASSIFICATION OF SUBJECT MATTER

Int.Cl.

**G10K 11/00** (2006.01)

**H04R 1/00** (2006.01)