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### (54) Hearing instrument

(57) According to the invention, a hearing instrument with at least one microphone and signal processing comprises at least two receivers having a different frequency

response. At least a first one of the receivers is placed outside the ear canal, for example in a behind-the-ear component.

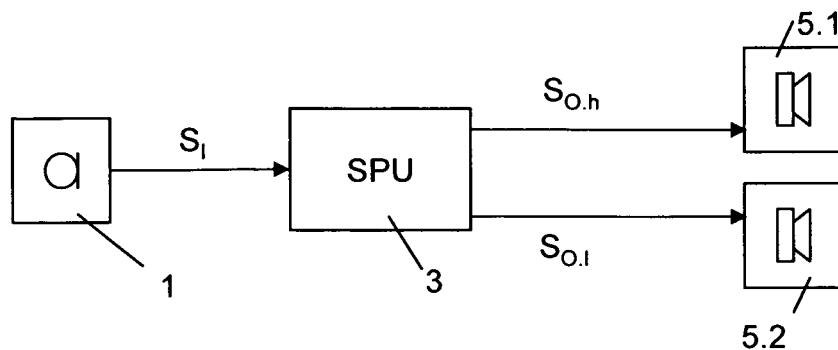


Fig. 1



## EUROPEAN SEARCH REPORT

Application Number

EP 11 00 7689

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)												
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim													
X	DE 23 03 194 A1 (MICRO-TECHNIC HUEBER & CO, 7000 STUTTGART; MICRO-TECHNIC HOERGERAETE G) 25 July 1974 (1974-07-25) * page 1, line 9 - page 6, line 10; claims 1-3; figures 1,2 *	1,8	INV. H04R25/02 H04R25/00												
Y	----- US 2002/164041 A1 (ZUREK PATRICK M) 7 November 2002 (2002-11-07) * paragraphs [0008] - [0012]; figures 1,2 *	1-5,8-13													
Y	----- EP 0 455 203 A (KNOWLES ELECTRONICS, INC) 6 November 1991 (1991-11-06) * column 3, line 21 - column 5, line 50; figures 1-5 *	1-13													
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)												
2			H04R												
<table border="1"> <tr> <td>Place of search</td> <td>Date of completion of the search</td> <td>Examiner</td> <td></td> </tr> <tr> <td>Munich</td> <td>28 February 2012</td> <td>Kiernan, Laurence</td> <td></td> </tr> </table>				Place of search	Date of completion of the search	Examiner		Munich	28 February 2012	Kiernan, Laurence					
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<table border="1"> <tr> <td>CATEGORY OF CITED DOCUMENTS</td> <td>T : theory or principle underlying the invention</td> </tr> <tr> <td>X : particularly relevant if taken alone</td> <td>E : earlier patent document, but published on, or after the filing date</td> </tr> <tr> <td>Y : particularly relevant if combined with another document of the same category</td> <td>D : document cited in the application</td> </tr> <tr> <td>A : technological background</td> <td>L : document cited for other reasons</td> </tr> <tr> <td>O : non-written disclosure</td> <td>.....</td> </tr> <tr> <td>P : intermediate document</td> <td>&amp; : member of the same patent family, corresponding document</td> </tr> </table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention	X : particularly relevant if taken alone	E : earlier patent document, but published on, or after the filing date	Y : particularly relevant if combined with another document of the same category	D : document cited in the application	A : technological background	L : document cited for other reasons	O : non-written disclosure	.....	P : intermediate document	& : member of the same patent family, corresponding document
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P : intermediate document	& : member of the same patent family, corresponding document														



Application Number

EP 11 00 7689

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-13

The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION**  
**SHEET B**

Application Number

EP 11 00 7689

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-13

The subject-matter of claims 1-13 concerns a hearing aid device having at least one microphone, a first receiver located outside the ear canal and a second receiver. The first and second receivers are connected to the microphone via a signal processing means and the first and second receivers have a different frequency response. The special technical feature associated with claim 6 is that the second receiver is positioned in the ear canal. This special technical feature solves the problem of high quality sound perception.

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2. claim: 14

The subject-matter of claim 14, in so far as depending on claim 1, defines a hearing aid device having a behind-the-ear (BTE) component fitting behind a user's ear and the connection means between the BTE component and an ear canal component. The special technical feature associated with claim 14 concerns the connection link being reversibly connected to the BTE component. This special technical feature solves the problem of variability.

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3. claim: 15

The subject-matter of claims 15, in so far as depending on claim 1, concerns a hearing aid device having an in-the-ear-canal component and a fixation means therefor. The fixation means is located outside the user's ear canal, has an outer shell and is shaped to fit between the entrance and isthmus of the user's ear. The special technical feature associated with claim 15 concerns the mounting between the in-the-ear-canal-component and the fixation means. This special technical feature solves the problem of a comfortable and secure fit.

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ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 11 00 7689

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-02-2012

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