



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
13.08.2014 Bulletin 2014/33

(51) Int Cl.:
H04R 25/00 (2006.01) H04R 1/44 (2006.01)

(43) Date of publication A2:
24.11.2010 Bulletin 2010/47

(21) Application number: **10173186.7**

(22) Date of filing: **03.03.2003**

(84) Designated Contracting States:
CH DE DK LI

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
03004661.9 / 1 339 256

(71) Applicant: **Phonak AG**
8712 Stäfa (CH)

(72) Inventors:
• **Roeck, Hans-Ueli**
8634 Hombrechtikon (CH)
• **Allegro-Baumann, Silvia**
6314 Unterägeri (CH)
• **Pfisterer, Franziska**
8903 Birmensdorf (CH)

(74) Representative: **Troesch Scheidegger Werner AG**
Schwäntenmos 14
8126 Zumikon (CH)

(54) **Method for manufacturing acoustical devices and for reducing wind disturbances**

(57) For reducing wind noise effects at a hearing device the output of an acoustical to electrical arrangement (3) of the hearing device is operationally connected to a high-pass filter arrangement (5) having a control input (C_5) for the high-pass corner frequency (f_c). The output of the high-pass filter unit (5) is operationally connected on one hand to a processor unit (PR) which fulfills transfer characteristic tailoring according to the needs of an indi-

vidual. The output of the processor unit (PR) is operationally connected to an output electrical to mechanical converter arrangement (7). On the other hand the output of the filter unit (5) is operationally connected to a statistic-forming unit (9) which thus acts as a low-pass type unit. The output of the statistic-forming unit (9) is operationally connected to the control input of the filter unit (5).

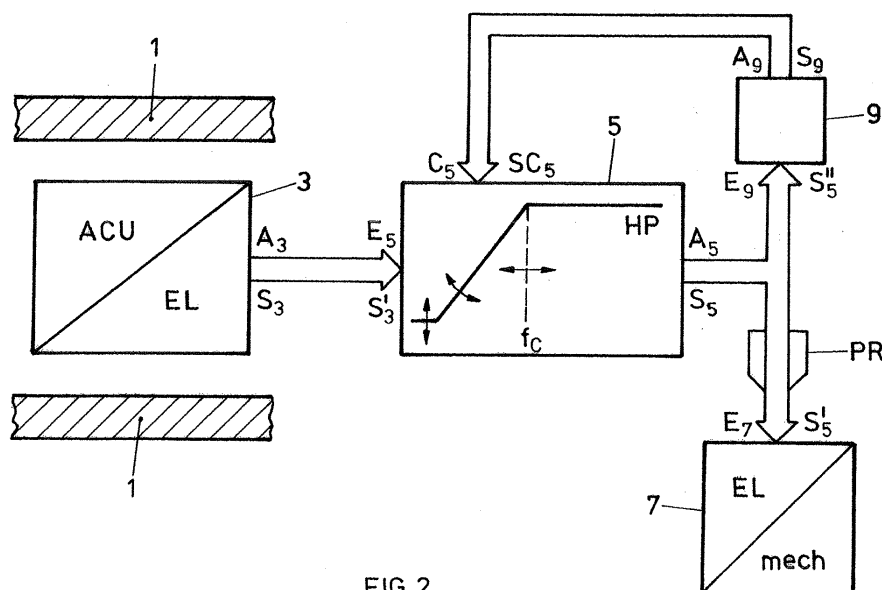


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 3186

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	GB 2 077 078 A (BODYSONIC KK) 9 December 1981 (1981-12-09)	5	INV. H04R25/00 H04R1/44
A	* page 1, line 6 - page 5, line 120 * -----	1-4	
A	US 4 289 935 A (ZOLLNER MANFRED ET AL) 15 September 1981 (1981-09-15) * column 1, line 8 - column 7, line 35 * -----	1-5	
A	US 6 118 879 A (HANNA CHRISTOPHER M [US]) 12 September 2000 (2000-09-12) * column 10, line 24 - column 27, line 15; figures 3, 10 * -----	1-5	
			TECHNICAL FIELDS SEARCHED (IPC)
			H04R
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 3 July 2014	Examiner Peirs, Karel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

 1
EPO FORM 1503 03.82 (P04C01)

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

EP 10 17 3186

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.

03-07-2014

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
GB 2077078	A	09-12-1981	CA	1184506 A1	26-03-1985
			DE	3115801 A1	14-01-1982
			FR	2480978 A1	23-10-1981
			GB	2077078 A	09-12-1981
			GB	2143105 A	30-01-1985
			IT	1142404 B	08-10-1986

US 4289935	A	15-09-1981	DE	2908999 A1	18-09-1980
			US	4289935 A	15-09-1981

US 6118879	A	12-09-2000	AR	013578 A1	10-01-2001
			AR	024439 A2	02-10-2002
			AR	024581 A2	16-10-2002
			AU	739719 B2	18-10-2001
			AU	3226297 A	05-01-1998
			BR	9714304 A	02-05-2000
			CA	2255925 A1	11-12-1997
			CN	1221528 A	30-06-1999
			CN	101232334 A	30-07-2008
			CN	102890932 A	23-01-2013
			EP	0974211 A1	26-01-2000
			EP	2339766 A2	29-06-2011
			HK	1020240 A1	11-07-2008
			HK	1122660 A1	31-05-2013
			JP	4746647 B2	10-08-2011
			JP	2000513888 A	17-10-2000
			JP	2008203891 A	04-09-2008
			JP	2008242475 A	09-10-2008
			JP	2008242476 A	09-10-2008
			JP	2008242477 A	09-10-2008
			JP	2012234224 A	29-11-2012
			JP	2013015855 A	24-01-2013
			KR	20000016821 A	25-03-2000
			TW	401713 B	11-08-2000
			US	5796842 A	18-08-1998
			US	6118879 A	12-09-2000
			US	2008095376 A1	24-04-2008
			US	2008095377 A1	24-04-2008
			US	2008095378 A1	24-04-2008
			US	2008095379 A1	24-04-2008
			US	2008095380 A1	24-04-2008
			US	2008095381 A1	24-04-2008
			US	2008137871 A1	12-06-2008
			US	2011103466 A1	05-05-2011
			US	2011134992 A1	09-06-2011
			US	2011205429 A1	25-08-2011

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

5

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.

03-07-2014

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2011235705 A1	29-09-2011
		US 2011243333 A1	06-10-2011
		US 2012082206 A1	05-04-2012
		US 2012087502 A1	12-04-2012
		WO 9747102 A1	11-12-1997

15

20

25

30

35

40

45

50

55

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82