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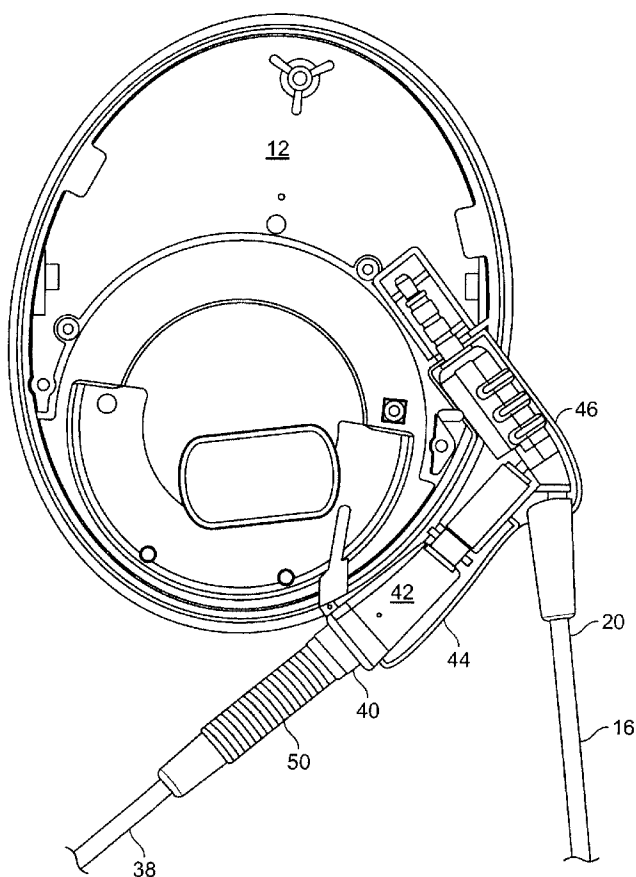
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[Continued on next page]

(54) Title: MICROPHONE TECHNIQUES



(57) Abstract: Among other features, a boom microphone has a microphone connector; an earcup module includes an earcup connector jack to connect to a headphone and a boom lead-in to receive the microphone connector; and a control module communicates voice signals wirelessly between (a) the boom microphone and headphone and (b) a telephone.

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FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,
NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

INV. H04M1/60 H04R5/033 H04R1/10 H04R1/08

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)

H04M H04R

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 practical, 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.
P,X	US 2007/225035 A1 (GAUGER DANIEL M JR [US] ET AL) 27 September 2007 (2007-09-27) paragraphs [0015] - [0017], [0019] - [0024]	1,3, 5-16, 32-34, 40-46
X	IOGEAR: BLUETOOTH WIRELESS STEREO SOLUTIONS, [Online] 12 December 2005 (2005-12-12), XP002481754 Retrieved from the Internet: URL:http://www.iogear.com/support/dm/manua l/GBMH201#display> [retrieved on 2008-05-26] the whole document ----- -/--	1-9, 40-46



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

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)

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

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

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

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.

& document member of the same patent family

Date of the actual completion of the international search

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04/09/2008

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International application No

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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	BLUEYE CYCLOPS BLUETOOTH STEREO HEADPHONE, [Online] 29 January 2006 (2006-01-29), XP002481755 Retrieved from the Internet: URL:http://ph.hardwarezone.com/news/view.p hp?cid=8&id=3526> [retrieved on 2008-05-26] the whole document	1-9, 32-34, 40-46
X	US 2005/064915 A1 (LAIR JOHN [US] LAIR JOHN [US] ET AL) 24 March 2005 (2005-03-24) paragraphs [0024] - [0035]; figures 1b,2c,2g	1-9
A	US 2006/013410 A1 (WURTZ MICHAEL J [US]) 19 January 2006 (2006-01-19) paragraphs [0017] - [0031]; figures 4,6	1-9
A	US 2002/102005 A1 (LIN JIU-LIN [TW]) 1 August 2002 (2002-08-01) paragraphs [0018] - [0024]; figure 2	1-9
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X	US 2005/130697 A1 (DYER MEDFORD A [US]) 16 June 2005 (2005-06-16) paragraphs [0020], [0024], [0025]; figure 7	40-46
X	EP 0 583 900 A (SONY CORP [JP]) 23 February 1994 (1994-02-23) column 4, line 23 - column 9, line 13	17-26
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/050216

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

1-34, 40-46
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9

Apparatus comprising a boom microphone, an earcup module including a jack to connect to a headphone and a boom lead-in to receive the microphone connector, a control module for wireless communication between the headphone and a telephone

2. claims: 10-16, 27-31

Apparatus having headphone, attachable and detachable microphone and power connection between headphone and control module/microphone.

3. claims: 17-26

Apparatus having noise canceling headphone, attachable and detachable microphone and noise canceling circuitry.

4. claims: 32-34, 40-46

Apparatus comprising headphone and attachable/detachable microphone and circuitry to control operations of the apparatus while receiving incoming calls.

5. claims: 35-39

Apparatus having a headphone, an attachable detachable microphone, connector to attach the microphone being non-axi-symmetrical

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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