Title: CHEST PIECE FOR STETHOSCOPES

Abstract: A stethoscope chest piece (2) includes a housing (20) having a rigid contact surface to be pressed against a patient’s chest for picking-up sounds therefrom; a mass (22) yieldingly mounted with respect to the housing and the contact surface; and an electrical transducer (24) in the housing and cooperable with the mass and the contact surface to generate an electrical signal corresponding to the displacement of the contact surface relative to the mass. Also described are a stethoscope apparatus including processing circuitry (104) for reducing noise, a loudspeaker (107) for converting the output of the chestpiece (104) for reducing noise, a loudspeaker (107) for converting the output of the chestpiece (102) to sound, various features making the apparatus attractive to children, and method of using the apparatus for monitoring a physiological condition of a patient.
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
**INTERNATIONAL SEARCH REPORT**

**International application No.**

PCT/IL01/00566

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### A. CLASSIFICATION OF SUBJECT MATTER

**IPC(7)**: A61B 7/04; A61B 5/02

**US CL**: 381/67; 600/528

According to International Patent Classification (IPC) or to both national classification and IPC

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### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**U.S.:** 381/67; 600/528

Documented searched other than minimum documentation to the extent that such documents are included in the fields searched

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### Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 6,002,777 A (GRASFIELD et al) 14 December 1999 (14.12.1999), col. 5, lines 3-6 and lines 9-16, and figure 1</td>
<td>34, 25</td>
</tr>
<tr>
<td>X</td>
<td>US 5,610,987 A (HARLEY) 11 March 1997 (11.03.1997), Col. 4, lines 25-67 and cl. 5, lines 1-57 and figure 1</td>
<td>1-2, 17, 22, 39-41, 44</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,014,432 A (MODNEY) 11 January 2000 (11.01.2000), col. 3, lines 25-38 and figure 2</td>
<td>23-24</td>
</tr>
<tr>
<td>Y</td>
<td>US 4,527,153 A (SUZUKI et al) 02 July 1985 (02.07.1985), figure 4 and col. 3, lines 48-57</td>
<td>12, 42-43</td>
</tr>
</tbody>
</table>

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

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

* "E" earlier application or patent published on or after the international filing date

* "L" document which throws doubts on priority claims 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

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**Date of the actual completion of the international search**

03 October 2001 (03.10.2001)

**Date of mailing of the international search report**

6 JAN 2002

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Form PCT/ISA/210 (second sheet) (July 1998)