Title: GUIDING ULTRASOUND END EFFECTOR FOR MEDICAL TREATMENT

1. Obtain a first signal from a location at a first time

2. Obtain a second signal from the location at a later second time

3. Create an image of the location using the two signals

Abstract: Obtaining a first signal from a location of an ultrasonic transducer at a first time (272), obtaining a signal from a location at a later second time (274) by which time the patient received medical treatment, and creating an image of the location of the ultrasonic transducer using the two signals (276).
**INTERNATIONAL SEARCH REPORT**

**INTERNATIONAL APPLICATION No.**

**PCT/US02/16699**

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### A. CLASSIFICATION OF SUBJECT MATTER

- **IPC(7)**: A61B 5/05
- **US CL**: 600/439

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.**: 600/371, 429, 439, 424, 454; 604/22; 601/2; 606/45, 169; 606/130

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 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 6,063,050 A (MANNA et al) 16 May 2000 (16.05.2000), see entire document.</td>
<td>1-14</td>
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</tbody>
</table>

- **T** late 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

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- **Date of the actual completion of the international search**: 08 July 2003 (08.07.2003)
- **Date of mailing of the international search report**: 17 JUL 2003

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