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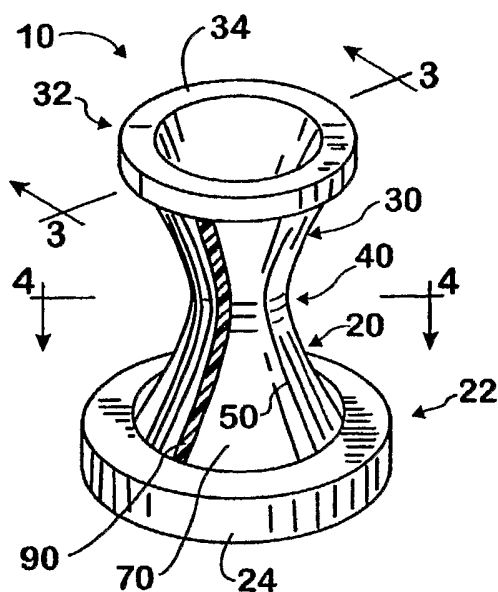
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(54) Title: SEAL FOR TROCAR

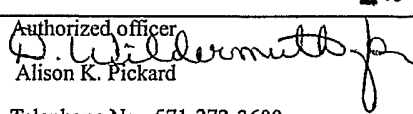


(57) Abstract: A seal for use with a trocar. The seal includes a first portion terminating in a proximal end, a second portion terminating in a distal end, and a connecting region disposed between the first and the second portion. At least one longitudinal slit extends from the connecting region toward one of the proximal end, toward the distal end, or toward both. When the seal is in an unstressed state, the seal provides a fluid barrier and when the seal is in a stressed state, the at least one longitudinal slit opens to provide access to the inner portion of the seal.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/34672

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| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC: F16J 15/02( 2006.01);F16L 37/28( 2006.01);F16K 15/14( 2006.01)<br><br>USPC: 277/607,626,644;604/167.02-167.04,167.06;137/849;251/149.1;215/247,260<br>According to International Patent Classification (IPC) or to both national classification and IPC                                                                                                                                                                                 |                                                                                                                                                                     |                                                                                                                                                                                                                                                  |
| <b>B. FIELDS SEARCHED</b><br><br>Minimum documentation searched (classification system followed by classification symbols)<br>U.S. : 277/607,626,644; 604/167.02-167.04, 167.06; 137/849; 251/149.1; 215/247, 260<br><br>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br><br>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) |                                                                                                                                                                     |                                                                                                                                                                                                                                                  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                     |                                                                                                                                                                                                                                                  |
| Category *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Citation of document, with indication, where appropriate, of the relevant passages                                                                                  | Relevant to claim No.                                                                                                                                                                                                                            |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | US 5,788,676 (YOON) 4 August 1998 (04.08.1998), entire doc.                                                                                                         | 1-23                                                                                                                                                                                                                                             |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | US 5,916,198 (DILLOW) 29 June 1999 (29.06.1999), entire doc.                                                                                                        | 1-23                                                                                                                                                                                                                                             |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> 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                                                                | "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                                              |
| "E"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | earlier application or patent published on or after the international filing date                                                                                   | "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                                                                     |
| "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) | "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 |
| "O"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | document referring to an oral disclosure, use, exhibition or other means                                                                                            | "&" document member of the same patent family                                                                                                                                                                                                    |
| "P"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | document published prior to the international filing date but later than the priority date claimed                                                                  |                                                                                                                                                                                                                                                  |
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| Name and mailing address of the ISA/US<br>Mail Stop PCT, Attn: ISA/US<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, Virginia 22313-1450<br>Facsimile No. (571) 273-3201                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                     | Authorized officer<br><br>Alison K. Pickard<br>Telephone No. 571-272-3600                                                                                    |