Title: SPRING ENERGIZED CONNECTOR

Abstract: A spring energized connector (10) includes an axial spring ring (12) disposed within a housing (26) having a bore (28) with an internal groove (30) for retaining the spring. A piston (40) is provided having an external groove (42) for receiving a portion of this spring and a chamfer (46) is provided for radially expanding the spring as the piston is inserted into the bore in a connect direction with a selected connect force. A contact retaining wall (54), defining an internal groove sidewall, is disposed at an angle from a normal to a bore centerline for causing axial compression of the spring as the piston is moved in a disconnect direction, opposite the connect direction, causing a disconnect force, in the disconnect direction, greater than a connected force.
(88) Date of publication of the international search report:
24 June 2004

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

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : F16D 1/00
US CL : 403/227,326,325,315,316,317
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)
U.S. : 403/327,326,325,315,316,317

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)

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>
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<td>Y</td>
<td>US 5,411,348 A (Balsells) 2 May 1995 (2.5.1995), entire document.</td>
<td>10</td>
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</table>

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

Date of the actual completion of the international search
21 March 2003 (21.03.2003)

Date of mailing of the international search report
04 MAY 2004

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