



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 603 161 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
08.01.1997 Bulletin 1997/02

(51) Int. Cl.<sup>6</sup>: H01R 23/68, H01R 13/193

(43) Date of publication A2:  
22.06.1994 Bulletin 1994/25

(21) Application number: 94103475.3

(22) Date of filing: 23.02.1990

(84) Designated Contracting States:  
BE CH DE ES FR GB IT LI NL SE

(30) Priority: 28.02.1989 GB 8904500  
28.02.1989 GB 8904502

(62) Application number of the earlier application in  
accordance with Art. 76 EPC: 90103582.4

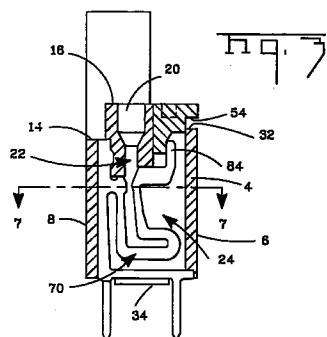
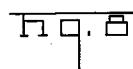
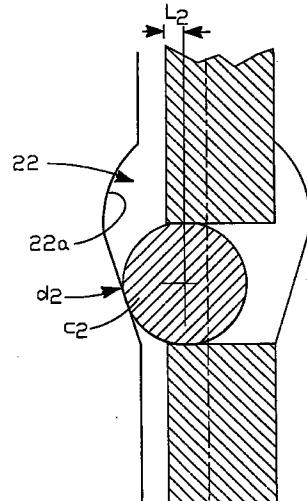
(71) Applicant: THE WHITAKER CORPORATION  
Wilmington, Delaware 19808 (US)

(72) Inventor: Soes, Lucas  
NL - Rosmalen (NL)

(74) Representative: Klunker . Schmitt-Nilson . Hirsch  
Winzererstrasse 106  
80797 München (DE)

### (54) Zero insertion force connector for cable to board applications

(57) In electrical connector (2) is shown having an insulative housing (4) with a plurality of terminal receiving passages (24), the passageways extending from a lower surface (34) to a position proximate to an upper face (16). A plurality of electrical terminals (70) are disposed within the passageways (24) where posts (86) extend from the lower face (34) for contacting printed circuit board traces. The upper face (16) of the housing (4) includes a plurality of conductor receiving passageways (20) which are in alignment with conductor receiving sections (78), (82) of the electrical terminals (70). An actuator member (50) is moveable relative to the housing and relative to the upper face (16), the movement of the actuator member (50) opening the cable receiving sections (78), (82) of the electrical terminals (70), while release of the actuator member (50) causes the conductor receiving section (78), (82) to engage the exposed conductor of the multiconductor cable for electrical connection thereto.



EP 0 603 161 A3



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 94 10 3475

| DOCUMENTS CONSIDERED TO BE RELEVANT   |   |   | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
|---|---|---|--|
| Category  | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim   |  |
| A   | US-A-4 496 205 (CHRISTENSEN GORDON D ET AL) 29 January 1985<br>---            |   | H01R23/68<br>H01R13/193                      |
| A   | US-A-4 377 318 (LONG EVERETT J) 22 March 1983<br>---                          |   |  |
| A   | US-A-3 763 459 (MILLIS E) 2 October 1973<br>-----                             |   |  |
|   |   |   | TECHNICAL FIELDS SEARCHED (Int.Cl.6)         |
|   |   |   | H01R   |
| <p>The present search report has been drawn up for all claims</p>   |   |   |  |
| Place of search   | Date of completion of the search  | Examiner  |  |
| THE HAGUE   | 12 November 1996  | Horak, A  |  |
| CATEGORY OF CITED DOCUMENTS   |   | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>.....<br>& : member of the same patent family, corresponding document |  |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |   |   |  |