

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 August 2004 (19.08.2004)

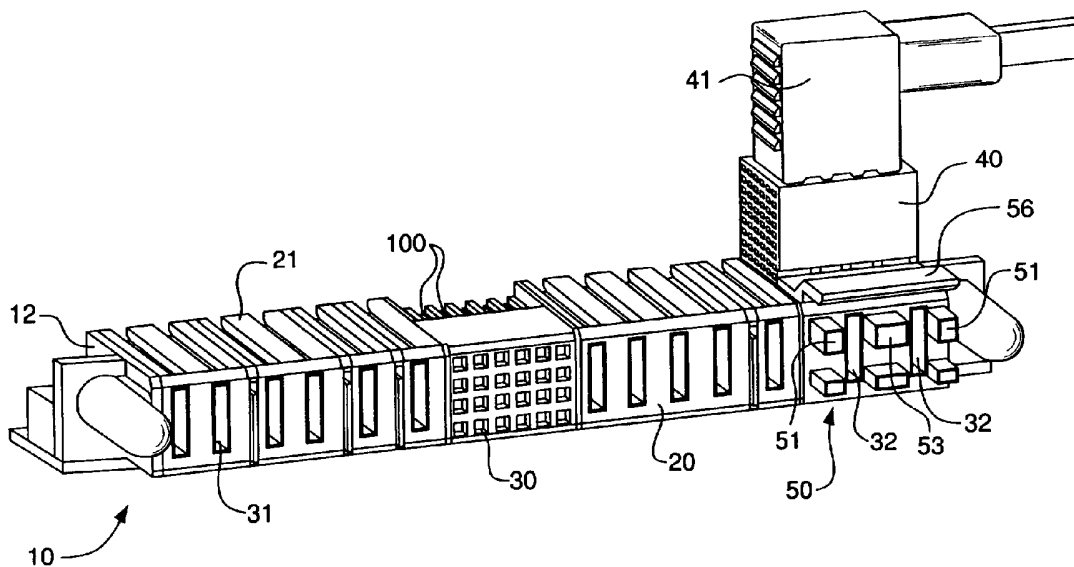
PCT

(10) International Publication Number
WO 2004/070881 A3

- (51) International Patent Classification⁷: **H01R 13/64**
 - (21) International Application Number: PCT/US2004/001933
 - (22) International Filing Date: 26 January 2004 (26.01.2004)
 - (25) Filing Language: English
 - (26) Publication Language: English
 - (30) Priority Data: 10/352,531 28 January 2003 (28.01.2003) US
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 - (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
 - (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report

[Continued on next page]

(54) Title: POWER CONNECTOR WITH SAFETY FEATURE



(57) Abstract: Electrical receptacle connectors are provided including an insulative housing (12) and AC power contacts (70) disposed therein that are configured for engaging an external power supply. The receptacle connectors are employed with a safety guard (50) for restricting operator access to hot AC power contacts when disconnected from complementary header connectors. Preferred safety guards include projections (51, 52) extending along at least a portion of perimeter areas surrounding housing apertures that provide access to engaging portions of the AC power contacts. The projections define a safety gap between human digits directed toward the housing apertures and the AC power contacts.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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.

(88) Date of publication of the international search report:
28 April 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/01933

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : HO1R 13/64 US CL : 437/677 According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) U.S. : 437/677,680,682,681,79</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <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>x</td> <td>US 4,224,486 A (Zimmerman et al) 23 September 1980 (23.09.1980), entire document</td> <td>19-23</td> </tr> <tr> <td>x</td> <td>US 5,173,063 A (Barkus et al) 22 December 1992 (22.12.1992), entire document</td> <td>12-15,17,18</td> </tr> <tr> <td>---</td> <td></td> <td>-----</td> </tr> <tr> <td>y</td> <td>US 4,915,641 A (Miskin et al.) 31 August 1988 (31.08.1988), entire document</td> <td>1-9 and 11</td> </tr> <tr> <td>y</td> <td>US 4,818,237 A (Weber) 04 April 1989 (04.04.1989), entire document</td> <td>10</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	x	US 4,224,486 A (Zimmerman et al) 23 September 1980 (23.09.1980), entire document	19-23	x	US 5,173,063 A (Barkus et al) 22 December 1992 (22.12.1992), entire document	12-15,17,18	---		-----	y	US 4,915,641 A (Miskin et al.) 31 August 1988 (31.08.1988), entire document	1-9 and 11	y	US 4,818,237 A (Weber) 04 April 1989 (04.04.1989), entire document	10
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<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"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)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"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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<p>Date of the actual completion of the international search 05 January 2005 (05.01.2005)</p>		<p>Date of mailing of the international search report 01 MAR 2005</p>																		
<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230</p>		<p>Authorized officer Brigitte R. Hammond <i>J. W. Hammond</i> Telephone No. 571-272-2001 <i>For</i></p>																		