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 61/482,060 3 May 2011 (03.05.2011) US</p> <p>(71) Applicant (for all designated States except US): CARDIOINSIGHT TECHNOLOGIES, INC. [US/US]; 1160 Cedar Avenue, Suite 290, Cleveland, Ohio 44106 (US).</p> <p>(72) Inventor; and</p> <p>(71) Applicant : WALTERS, William A. [US/US]; 4881 Orchard Road, Mentor, Ohio 44060 (US).</p> <p>(72) Inventor; and</p> <p>(75) Inventor/Applicant (for US only): CROFOOT, Larry M. [US/US]; 4536 Baldwin Road, Perry, Ohio 44077 (US).</p> | <p>(74) Agent: PLATT, Jonathan A.; Renner, Otto, Boisselle & Sklar, LLP, Nineteenth Floor, 1621 Euclid Avenue, Cleveland, Ohio 44115 (US).</p> <p>(81) Designated States (<i>unless otherwise indicated, for every kind of national protection available</i>): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.</p> <p>(84) Designated States (<i>unless otherwise indicated, for every kind of regional protection available</i>): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).</p> |
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[Continued on next page]

(54) Title: ELECTRICAL CONNECTOR PLUG WITH KEY TO AVOID CONTACT DAMAGE

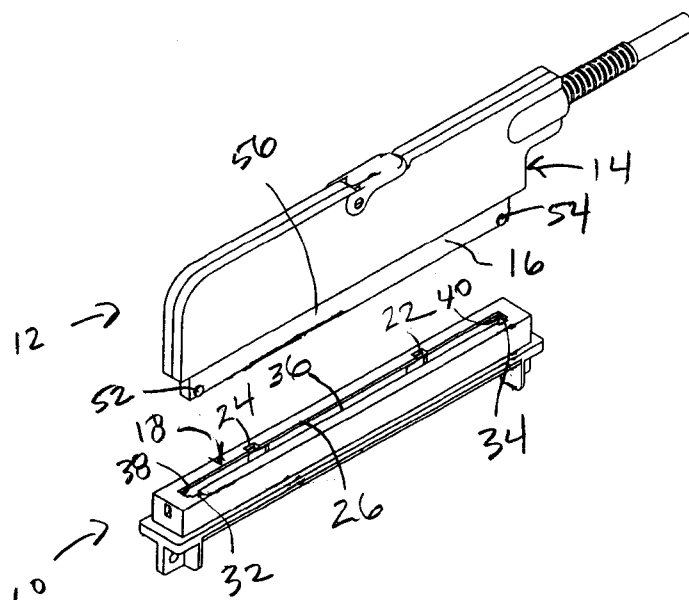


Fig. 1

(57) Abstract: Uniquely positioned slots are provided in the receptacle and uniquely positioned bosses are provided in the plug of a connector pair. These features are designed to prevent the plug from being inserted midspan and damaging the exposed contacts of the receptacle. The bosses may be located near outside corners of the plug, and may protrude sufficiently from the face of the plug to prevent the corners of the plug from being inserted into the receptacle, except when the bosses are aligned with the boss-receiving slots in the receptacle.

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A. CLASSIFICATION OF SUBJECT MATTER***H01R 13/629(2006.01)i, H01R 12/71(2011.01)i***

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)

H01R 13/629; H01R 13/645; H01R 9/07; H01R 13/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: receptacle, plug, insert, open, slot

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 05116239 A (SIWINSKI; PAUL P.) 26 May 1992 See abstract, column 9, lines 49-59, column 10, lines 1-8, claim 1 and figure 1.	1-19
A	EP 0443492 B1 (THE WHITAKER CORPORATION) 26 April 1995 See abstract, column 1, lines 54-58, column 4, lines 26-27, column 5, lines 21-43, column 6, lines 18-26, claims 1-3 and figures 1-3.	1-19



Further documents are listed in the continuation of Box C.



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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"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

Date of the actual completion of the international search

22 NOVEMBER 2012 (22.11.2012)

Date of mailing of the international search report

23 NOVEMBER 2012 (23.11.2012)

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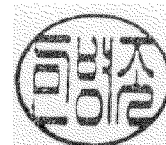
Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

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Authorized officer

Min Byung Jo

Telephone No. 82-42-481-8687



INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		EP 0461814 A3	29.04.1992
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		US 05173063 A	22.12.1992