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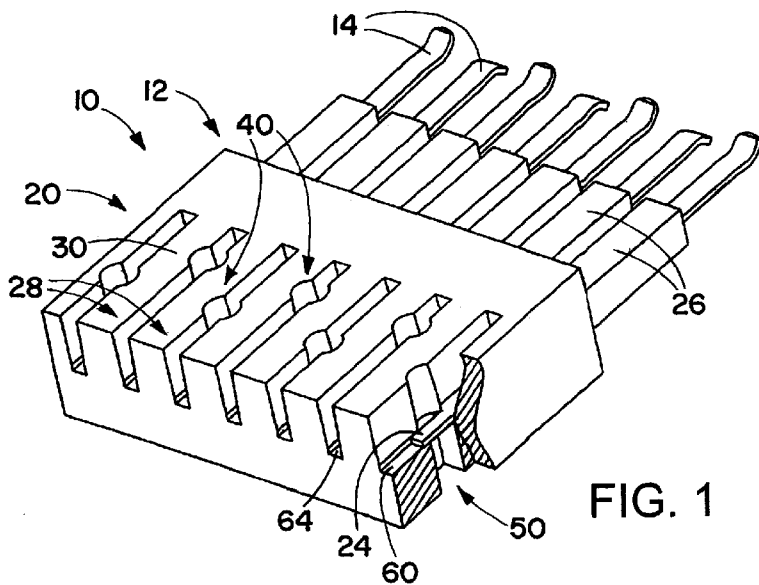


FIG. 1

(57) **Abstract:** A linear connector contact array is presented with focus on the tails of the contacts that are connected to individual wires. A wire management comb made from dielectric material positions each wire over its contact's tail. The wire is attached to the tail by electrically welding the wire to the tail without removing the insulating material. This is accomplished with a heated welding electrode that melts through the insulator material until electrical contact is made with the wire. A non-heated electrode is beneath the tail to complete this circuit. The wire management comb has deep channels which form insulating ribs between adjacent wires. The weld sites are staggered, and exposed ends of the contact tails are held short of the end of the management comb.



A. CLASSIFICATION OF SUBJECT MATTER**H01R 11/01(2006.01)i, H01R 13/02(2006.01)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 11/01; H01R 4/10; H01R 4/24; H01R 29/00; H01R 12/24; H01R 13/627

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: connector, wire, terminal, weld, comb

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 7462065 B1 (ZHAO JIM) 09 December 2008 See abstract; column 4, line 19 - column 8, line 6; and figures 1-7.	1-3,5-7,11-16 4,8-10,17-20
A	US 2005-0032413 A1 (TOLMIE BERNARD R.) 10 February 2005 See abstract; paragraphs [0036]-[0046]; and figures 10-12.	1-20
A	US 6375520 B1 (SHUEY; JOSEPH B) 23 April 2002 See column 3, lines 21-31; claim 1; and figures 1-4.	1-20
A	US 2003-0139082 A1 (KIYOSHI ARAMOTO et al.) 24 July 2003 See paragraphs [0016]-[0018]; claim 1; and figures 1-4.	1-20
A	US 6210204 B1 (KO; DAVID TSO-CHIN et al.) 03 April 2001 See column 2, lines 18-50; claim 1; and figures 1-3.	1-20
A	US 04963699 A (URUSHIBATA; KENICHI et al.) 16 October 1990 See column 2, lines 49 - column 4, lines 44; and figures 1-7.	1-20

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

* Special categories of cited documents:

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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