

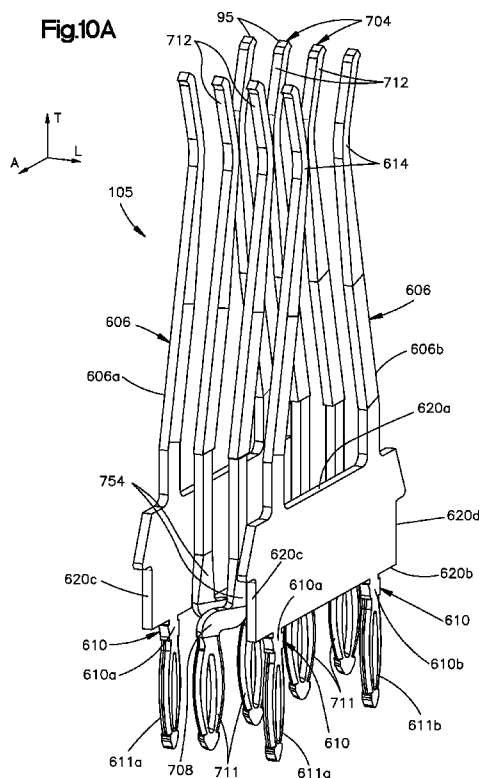


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[Continued on next page]

(54) Title: ELECTRICAL CONNECTOR



(57) Abstract: Electrical connectors that are mating compatible with the MicroTCA" standard and configured to be mounted to an underlying substrate are provided. Certain of the electrical connectors can be configured to be mounted to a substrate configured in accordance with the MicroTCA® press fit footprint. Additionally, electrical connectors that are mating compatible with the MicroTCA® standard and configured to be mounted to respective alternative footprints, and substrates configured in accordance with the respective alternative footprints are provided. The disclosed electrical connectors and corresponding substrate footprints can operate to transmit data at speed up to and in excess of 25 Gigabits per second.



GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

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A. CLASSIFICATION OF SUBJECT MATTER***H01R 12/71(2011.01)i, H01R 13/648(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 12/71; H01R 12/18; H01R 9/09

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: card edge connector, ground plate, signal contact, mating end, mounting end, micro TCA, differential signal pair, broadsides, PCB, substrate, signal vias, ground vias, footprint, ground flow return path

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 05919049A A (PETERSEN; CARL C. et al.) 06 July 1999 See column 2, lines 30-31, column 3, lines 62 - column 4, line 1, column 4, lines 26-28, column 5, lines 32-35, column 6, lines 8-9, claims 1, 11, and figures 1-9.	1-71
A	US 05921784A A (PETERSEN; CARL C. et al.) 13 July 1999 See column 2, lines 28-30, column 3, lines 16-30, column 6, lines 4-6, claims 1, 12, and figures 1-4.	1-71
A	EP 0975054 A2 (MOLEX INCORPORATED) 26 January 2000 See paragraphs [0019], [0022], [0026], [0028], [0029], claim 1, and figures 1-6, 9.	1-71



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"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

10 OCTOBER 2012 (10.10.2012)

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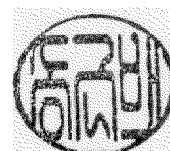
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 05919049A A	06.07.1999	EP 0877448 A2 EP 0877448 A3	11.11.1998 28.03.2001
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EP 0975054 A2	26.01.2000	CN 1149716 C0 CN 1242622 A0 EP 0975054 A3 EP 0975067 A1 JP 03-087734 U JP 03-111383 B2 JP 2000-048882 A JP 2000-067958 A JP 3111383 B2 KR 10-0367391 B1	12.05.2004 26.01.2000 19.09.2001 26.01.2000 29.05.2002 22.09.2000 18.02.2000 03.03.2000 20.11.2000 10.01.2003