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(71) Applicant: **MOLEX INCORPORATED**
Lisle Illinois 60532 (US)

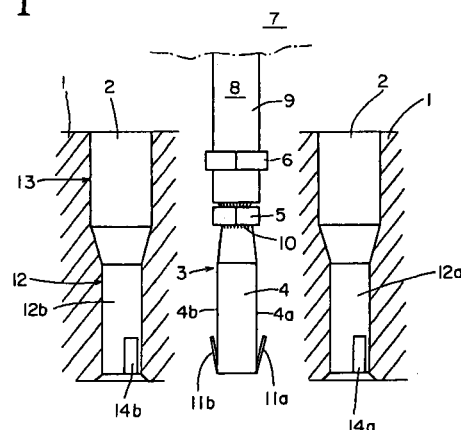
(72) Inventors:
• **Okano, Masato**
Hachida-shi, Tokyo 194-0013 (JP)
• **Noda, Atsuhito**
Hachioji-shi, Tokyo 192-0364 (JP)

(74) Representative:
Kampfenkel, Klaus, Dipl.-Ing.
Blumbach, Kramer & Partner GbR,
Alexandrastrasse 5
65187 Wiesbaden (DE)

(54) **Cable connector**

(57) Disclosed is a cable connector comprising an insulating housing having two or more parallel-piled, lateral arrangements of terminal cavities, each terminal cavity containing a terminal, which is connected to the core conductor of a selected insulated wire in a wire cable. The terminal has a crimping barrel formed on its root side for pinching the end of the selected insulated wire, and a hollow socket formed on its tip end for receiving a selected pin terminal in a counter cable connector. The hollow socket has lances projecting from the opposite side walls and diverging toward the root of the terminal. Each terminal cavity has catch recesses formed on the opposite side walls confronting the opposite lanced-side walls of the terminal when inserted in a selected terminal cavity. The terminals each having the core conductor crimped thereto by the crimping barrel are inserted in the terminal cavities until the lances have been caught by the catch recesses, thereby preventing the pulling-off of the wire cable from the cable connector.

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)		
X	EP 0 638 959 A (MOLEX INC) 15 February 1995 (1995-02-15)	1	H01R13/42 H01R13/432 H01R13/424		
A	* abstract; figures 1,2 * ---	2			
A	FR 2 461 376 A (ALSTHOM CGEE) 30 January 1981 (1981-01-30) * abstract; figure 1 * * page 3, line 6 - line 21 *	1,2			
A	EP 0 568 927 A (WHITAKER CORP) 10 November 1993 (1993-11-10) * abstract; figures 1,8 * * column 4, line 3 - line 9 *	1,2			
A	US 4 015 891 A (PEMBERTON DONALD STUART) 5 April 1977 (1977-04-05) * abstract; figures 1-3 *	1,2			
A	US 2 689 337 A (BURTT, H. AND DE TAR, D.) 14 September 1954 (1954-09-14) * column 2, line 2 - line 8; figures 1,4 * -----	1,2	<table border="1"> <thead> <tr> <th>TECHNICAL FIELDS SEARCHED (Int.CI.7)</th> </tr> </thead> <tbody> <tr> <td>H01R</td> </tr> </tbody> </table>	TECHNICAL FIELDS SEARCHED (Int.CI.7)	H01R
TECHNICAL FIELDS SEARCHED (Int.CI.7)					
H01R					
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 18 September 2000	Examiner Jiménez, J		
<table border="0"> <tr> <td> CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document </td> <td> T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document </td> </tr> </table>				CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document				

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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18-09-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0638959 A	15-02-1995	US 5437567 A	01-08-1995
		JP 2724680 B	09-03-1998
		JP 7065886 A	10-03-1995
		KR 147015 B	15-09-1998
FR 2461376 A	30-01-1981	DE 3049699 T	09-09-1982
		DE 8034978 U	14-10-1982
		ES 493243 D	16-04-1981
		ES 8104625 A	01-07-1981
		WO 8100177 A	22-01-1981
		IT 1128914 B	04-06-1986
EP 0568927 A	10-11-1993	DE 69313001 D	18-09-1997
		DE 69313001 T	15-01-1998
US 4015891 A	05-04-1977	GB 1509201 A	04-05-1978
		AU 499960 B	10-05-1979
		AU 8044375 A	28-10-1976
		DE 2519550 A	13-11-1975
		ES 212096 Y	01-11-1976
		FR 2269804 A	28-11-1975
		IT 1035500 B	20-10-1979
		JP 50149992 A	01-12-1975
		JP 56019956 B	11-05-1981
		ZA 7502540 A	30-06-1976
US 2689337 A	14-09-1954	NONE	