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(54) Electrical connecting unit

(57) There is described a connecting unit (1) having a first and a second connector (2, 3) mutually connectable in a first direction (A); first and second coupling means (18, 15) carried respectively by the first and second connector (2, 3) and which click together, in the first direction (A), into a coupled position; and coupling detecting means (36) mounted to slide, along the first connector (2) and in the first direction (A), between a preassembly position and a fully assembled position, and having a disabling arm (50) flexible elastically in a second direction (B) crosswise to the first direction (A), and normally set in an undeformed configuration in which it presses against the first coupling means (18) to prevent the fully assembled position from being reached; the second coupling means (15) having an opposing surface (22), which, in the coupled position, defines a temporary stop for an interacting portion (55) of the disabling arm (50) as the coupling detecting means (36) move into the fully assembled position, and which is cam-shaped to flex the disabling arm (50) and to be passed over by the interacting portion (55) only when additional thrust is exerted on the coupling detecting means (36) in the first direction (A).

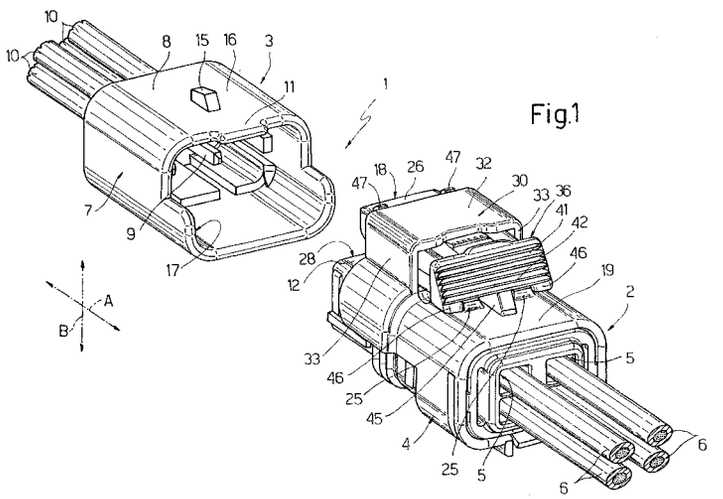


Fig.1

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EUROPEAN SEARCH REPORT

Application Number
EP 02 00 1503

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,A	US 5 605 472 A (SAKAI HITOSHI ET AL) 25 February 1997 (1997-02-25) * the whole document *	1-10	H01R13/629 H01R13/627
A	EP 0 788 193 A (YAZAKI CORP) 6 August 1997 (1997-08-06) * column 5, line 28 - column 9, line 27 *	1-10	
A	EP 0 862 244 A (SUMITOMO WIRING SYSTEMS) 2 September 1998 (1998-09-02) * column 4, line 4 - column 10, line 49 *	1-10	
A	EP 0 601 522 A (SUMITOMO WIRING SYSTEMS) 15 June 1994 (1994-06-15) * column 3, line 20 - column 7, line 15 *	1-10	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

H01R

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	5 November 2002	Demol, S

CATEGORY OF CITED DOCUMENTS

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05-11-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5605472 A	25-02-1997	JP 2921645 B2	19-07-1999
		JP 8031517 A	02-02-1996
		DE 19525413 A1	18-01-1996
EP 0788193 A	06-08-1997	JP 3228854 B2	12-11-2001
		JP 9092398 A	04-04-1997
		DE 69611222 D1	18-01-2001
		DE 69611222 T2	17-05-2001
		EP 0788193 A2	06-08-1997
		US 5879180 A	09-03-1999
EP 0862244 A	02-09-1998	JP 3301530 B2	15-07-2002
		JP 10241788 A	11-09-1998
		CN 1192067 A	02-09-1998
		DE 69806827 D1	05-09-2002
		EP 0862244 A1	02-09-1998
		US 6059598 A	09-05-2000
EP 0601522 A	15-06-1994	DE 69315043 D1	11-12-1997
		DE 69315043 T2	04-06-1998
		EP 0601522 A2	15-06-1994
		US 5409395 A	25-04-1995

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82