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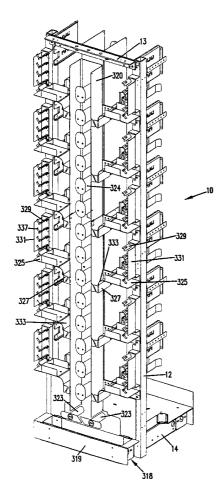
13 March 2000 (13.03.2000) US

(71) Applicants: ADC TELECOMMUNICATIONS, INC. [US/US]; 12501 Whitewater Drive, Minnetonka, MN 55343 (US). RAPP, David, E. [US/US]; 13781 Carmody Drive, Eden Prairie, MN 55347 (US). DUBERSTEIN, Todd, Robert [US/US]; 17100 Woodview Ct., Prior Lake, MN 55372 (US).

- (72) Inventors: PUETZ, Curtis, Lee; 13570 Gossamer Way, Apple Valley, MN 55124 (US). KNUDSEN, Clinton, Michael; 2901 Rhode Island Avenue South, St. Louis Park, MN 55426 (US).
- (74) Agent: BRUESS, Steven, C.; Merchant & Gould P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (US).
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(54) Title: FIBER DISTRIBUTION FRAME WITH FIBER TERMINATION BLOCKS



(57) Abstract: A fiber termination block including a frame structure adapted to be connected to a fiber distribution rack. The frame structure includes a front end and a rear end. A front fiber optic adapter array is positioned adjacent the front end of the frame structure. A plurality of rear modules are mounted at the rear end of the frame structure. Each of the rear modules defines a front opening. At least one coupler is mounted within each of the rear modules. A plurality of fiber optic cables are provided for transmitting fiber optic signals between the front fiber optic adapter array and the couplers. The fiber optic cables extend through the front openings of the rear modules to access the couplers.

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a. classi IPC 7	FICATION OF SUBJECT MATTER G02B6/44		
According to	o International Patent Classification (IPC) or to both national classific	ation and IPC	
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	ion searched other than minimum documentation to the extent that s		
Electronic d	ata base consulted during the international search (name of data ba	se and, where practical	l, search terms used)
EPO-In	ternal		
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the rel	evant passages	Relevant to claim No.
A	US 5 758 003 A (HAATAJA TIMOTHY of 26 May 1998 (1998-05-26) cited in the application column 2, line 62 - line 65 column 3, line 23 - line 28 column 3, line 46 -column 4, line column 4, line 47 - line 59 figures 1,7		1,6,12, 15
A	US 5 969 294 A (DODD JOSEPH K E 19 October 1999 (1999-10-19) column 2, line 63 -column 3, line figure 1		12
A	EP 0 849 602 A (SIECOR CORP) 24 June 1998 (1998-06-24) abstract figures 1,2	-/	12
χ Furth	ner documents are listed in the continuation of box C.	χ Patent family	members are listed in annex.
A' docume consid E' earlier of filing d L' docume which citation O' docume other n P' docume	nt which may throw doubts on priority claim(s) or is cited to establish the publication date of another n or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or	or priority date an cited to understar invention "X" document of partic cannot be considinvolve an inventi "Y" document of partic cannot be consididocument is comments, such comments,	blished after the international filing date d not in conflict with the application but the distribution of the principle or theory underlying the sular relevance; the claimed invention ered novel or cannot be considered to eve step when the document is taken alone ular relevance; the claimed invention ered to involve an inventive step when the bined with one or more other such docubination being obvious to a person skilled
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.							
A	US 5 497 444 A (WHEELER TODD A) 5 March 1996 (1996-03-05) cited in the application								

INTERNATIONAL SEARCH REPORT

information on patent family members

Intel onal Application No

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5758003	Α	26-05-1998	NONE		
US 5969294	Α	19-10-1999	NONE		
EP 0849602	A	24-06-1998	US	5764043 A	09-06-1998
			CA	2221525 A1	20-06-1998
			EP	08 49 602 A2	24-06-1998
			JP	10322730 A	04-12-1998
US 5497444	а	05-03-1996	US	5717810 A	10-02-1998
			ΑT	176336 T	15-02-1999
			ΑU	679308 B2	26-06-1997
			AU	1255595 A	08-08-1995
			CA	2181373 A1	27-07-1995
			CN	1142268 A ,B	05-02-1997
			DE	69416330 D1	11-03-1999
			DE	69416330 T2	09-09-1999
			EP	0740803 A1	06-11-1996
			EP	0871047 A1	14-10-1998
			ES	21 2919 2 T3	01-06-1999
			HU	74895 A2	28-02-1997
			SG	49194 A1	18-05-1998
			WO	9520175 A1	27-07-1995