(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 1 March 2007 (01.03.2007)

(51) International Patent Classification: G02B 6/44 (2006.01) G02B 6/38 (2006.01)

(21) International Application Number:

PCT/US2006/032857

(22) International Filing Date: 22 August 2006 (22.08.2006)

(25) Filing Language: English

(26) Publication Language: **English**

(30) Priority Data:

11/212,492 US 25 August 2005 (25.08.2005)

(71) Applicant (for all designated States except US): ADC TELECOMMUNICATIONS, INC. [US/US]; 13625 Technology Drive, Eden Prairie, MN 55344-2252 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BAYAZIT, Yilmaz [TR/US]; 500 Ridgewood Avenue #18, Minneapolis, MN 55403 (US). RASKOVICH, Chad, A. [US/US]; 532 Spencer Street South, Shakopee, MN 55379 (US). BRAN DE LEON, Oscar [US/US]; 736 S. Elm Street, Belle Plain, MN 56011 (US).
- (74) Agent: BRUESS, Steven, C.; MERCHANT & GOULD P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (US).

(10) International Publication Number WO 2007/024910 A3

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

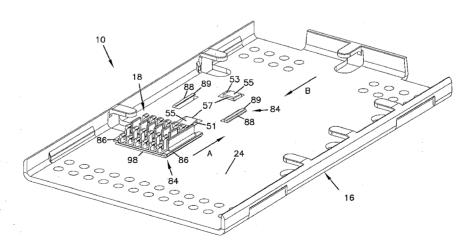
Published:

with international search report

(88) Date of publication of the international search report: 28 June 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SPLICE CHIP DEVICE



(57) Abstract: A splice tray arrangement (10) including a tray (16) and a splice chip (18). The splice chip (18) includes a plurality of arms that define channels for holding splice elements. The arms include retaining structure for retaining a splice element in both of either one of an upper region and a lower region of a channel. The splice tray (16) arrangement (10) also includes a mounting arrangement for securing the splice chip to the tray at a mounting location. The mounting arrangement includes sliding interlock guides (86,88) disposed on each of the splice chip (18) and the tray (16). The mounting arrangement further includes flexible tabs (51) arranged to prevent lateral movement of the splice chip (18) when positioned at the mounting location.



INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/032857 A. CLASSIFICATION OF SUBJECT MATTER INV. G02B6/44 ADD. G02B6/38 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) G02B B65D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category* χ US 6 259 851 B1 (DAOUD BASSEL H [US]) 1 - 8, 10-15. 10 July 2001 (2001-07-10) 17 - 21column 1, line 62 - line 63; figure 2 column 2, line 34 - line 39 column 3, line 17 - line 35 US 2002/159744 A1 (DAOUD BASSEL H [US]) 5 Α 31 October 2002 (2002-10-31) figure 1 -/--Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "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 docu-ments, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 28 March 2007 05/04/2007

Authorized officer

BOURHIS, J

Fax: (+31-70) 340-3016

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/032857

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 743 899 A1 (NOANE GEORGES LE [FR]) 25 July 1997 (1997-07-25) page 1, line 33 - line 35 page 4, line 6 - line 18 page 11, line 24 - page 12, line 34 page 17, line 31 - page 18, line 23; figure 7 page 19, line 15 - line 21	1-3,6-21
X	US 2002/191939 A1 (DAOUD BASSEL HAGE [US] ET AL) 19 December 2002 (2002-12-19)	1-3,6,7, 11-14, 17-21
	paragraph [0006] paragraph [0019] — paragraph [0025]	
X	DE 44 19 903 A1 (SIEMENS AG [DE]) 14 December 1995 (1995-12-14)	1-3,6,7, 11-14, 17-21
	figure 5	
Α	US 6 285 815 B1 (DAOUD BASSEL HAGE [US]) 4 September 2001 (2001-09-04) figures 1-3	1-21
Χ	US 6 311 007 B1 (DAOUD BASSEL HAGE [US]) 30 October 2001 (2001-10-30) column 3, line 16 - column 4, line 61	22-24, 33-35
Α	figures 1,4	36
X A	US 5 472 160 A (BUREK DENIS E [US] ET AL) 5 December 1995 (1995-12-05) figures 13-17 column 13, line 67 - column 14, line 5	22,25-30
	column 15, line 14 - line 16	

International application No. PCT/US2006/032857

INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)							
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:							
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:							
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:							
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).							
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)							
This International Searching Authority found multiple inventions in this international application, as follows:							
see additional sheet							
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.							
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.							
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:							
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:							
Remark on Protest The additional search fees were accompanied by the applicant's protest							
The additional dealer look were accompanied by the applicance process.							
X No protest accompanied the payment of additional search fees.							

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-21

a splice chip, comprising

a) a base:

- b) a plurality of arms projecting outward from the base, the arms defining channels having a height sized to receive multiple splice elements in a stacked relationship, the height of each of the channels being defined by a first channel region and a second channel region of the channel;
- c) retaining structure arranged to retain a splice element in both of either one of the first channel region and the second channel region.

2. claims: 22-36

a splice chip, comprising:

a) a base having a first end and an opposite second end, the base including a bottom side and a top side:

b) a plurality of arms projecting outward from the top side of the base, the arms defining channels for receiving splice elements; and

c) first and second guides extending outward in a lateral direction beyond the first and second ends of the base, the quides being offset from the bottom side of the base.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2006/032857

Patent document cited in search report		Publication . date		Patent family member(s)	Publication date
US 6259851	В1	10-07-2001	NONE		
US 2002159744	A1	31-10-2002	NONE		
FR 2743899	A1	25-07-1997	NONE		فقعة والقباء الحصر وجهي ولها الحصر وجهي الحصر وجهي والأن الحصر وحمره الحصر
US 2002191939	A1	19-12-2002	NONE		
DE 4419903	A1	14-12-1995	NONE		<u> </u>
US 6285815	B1	04-09-2001	NONE		حصر نظیا هذا هم بریان اقاد همه برای افت اسم برای افت هم برای کنا
US 6311007	B1	30-10-2001	NONE	بهی یشد <u>سد بسر کند کننا نشد نشا کند به سی محم کم بسی بران</u>	
US 5472160	Α	05-12-1995	US	5440666 A	08-08-1995