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- (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):** REDMANN, Tim [US/US]; 5080 County Road 50, Carver, MN 55315 (US). SIEVERS, Scott, C. [US/US]; 925 Waterford Way, Jordan, MN 55352 (US).
- (74) **Agent:** BRUESS, Steven, C ; Merchant & Gould P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (US).
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AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, 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, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Published:

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3 December 2009

(54) **Title:** FIBER MANAGEMENT PANEL

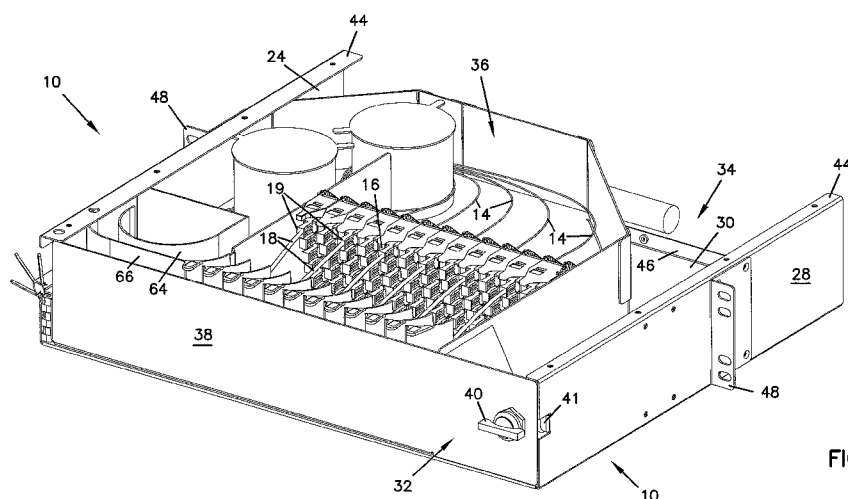


FIG. 2

(57) **Abstract:** A telecommunications termination panel (10) includes a housing having a top(31), a bottom(30), a first side and a second opposing side defining a front opening (32) and a rear opening (34). The housing defines a cable entry adjacent the rear opening and a cable exit adjacent the rear opening, wherein the rear opening is adjacent the first side. A tray (36) is pivotably mounted within the front opening of the housing, pivoting about a vertical axis located adjacent the first side and including a cable entry and a cable exit adjacent the vertical pivot axis and a plurality of connection locations. A cable path (62) is defined between the rear opening of the housing and the tray, the cable path defined by a cable guide (420, 422, 831) defining a channel for receiving cables, the cable guide including a slidably structure (440, 840) configured for pushing cables into the channel defined by the cable guide.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2009/040161

A. CLASSIFICATION OF SUBJECT MATTER
INV. G02B6/44 H04Q1/02 H04Q1/06

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 H04Q

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 , WI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 7 090 084 B2 (KNUDSEN CLINTON M [US] ET AL) 15 August 2006 (2006-08-15) cited in the application	18
A	For establishing nonunity abstract column 2 , line 58 - column 6 , line 53 claim 1 figures 1-22	1-6, 11, 20
A	----- US 5 946 440 A (PUETZ CURTIS LEE [US]) 31 August 1999 (1999-08-31) column 5 , line 33 - line 40 figures 7,27 ----- -/-	1-6, 11, 19, 20

Further documents are listed in the continuation of Box C.

See patent family annex

* Special categories of cited documents

¹A* document defining the general state of the art which is not considered to be of particular relevance

¹E¹ earlier document but published on or after the international filing date

¹L' 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)

¹O* document referring to an oral disclosure, use, exhibition or other means

¹P* document published prior to the international filing date but later than the priority date claimed

¹T* 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 invention

¹X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

¹Y¹ 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.

¹&* document member of the same patent family

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Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Moroz, Alexander

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2009/040161

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/19005 A (ADC TELECOMMUNICATIONS INC [US]) 7 March 2002 (2002-03-07) page 6, line 15 - line 26 page 9, line 33 - page 10, line 5 page 10, line 26 - line 29 claim 1 figures 1-5,20-29 -----	1-6,20
X	US 2007/127201 A1 (MERTESDORF DANIEL R [US] ET AL MERTESDORF DANIEL RAY [US] ET AL) 7 June 2007 (2007-06-07)	7-10, 12-18,20
A	abstract paragraphs [0005],, [0006],, [0062], [0063], [0066], [0068], [0069], [0073], [0074], [0082] - [0085], [0092], [0093] figures 1-7,13-22,24-33,35,38,41,44,47,50 -----	19
X	US 6 870 734 B2 (MERTESDORF DANIEL RAY [US] ET AL) 22 March 2005 (2005-03-22) cited in the application	7-10, 12-18,20
A	abstract column 8, last paragraph - column 9, paragraph 2 figures 24-33,35,38,41,44,47,50 -----	19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/040161

Box No. 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:

2. 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 No. 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 allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not Invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers
1. The international search report covers the claims Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

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 and, where applicable, the payment of a protest fee
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM POT/ISA/ 210

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

1. claims: 1-6,11,18(part),20

Telecommunications termination panel with a slidable structure configured for pushing cables into the channel defined by the cable guide.

2. claims: 7-10, 12-17, 18(part)

Telecommunications termination panel with a hingedly mounted cover.

3. claim: 19

Telecommunications termination panel with a plurality of splice trays mounted to the tray.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/040161

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
US 7090084	B2	15-08-2006	AU 2003270893	AI 13-05-2004
			CA 2503486	AI 06-05-2004
			CN 1706202	A 07-12-2005
			EP 1557048	A2 27-07-2005
			MX PA05004161	A 22-06-2005
			WO 2004039092	A2 06-05-2004
			US 2004074852	AI 22-04-2004
			US 2006118497	AI 08-06-2006
			<hr style="border-top: 1px dashed black;"/>	
US 5946440	A	31-08-1999	NONE	
<hr style="border-top: 1px dashed black;"/>				
wo 0219005	A	07-03-2002	AR 030500	AI 20-08-2003
			AU 8517901	A 13-03-2002
			CA 2420819	AI 07-03-2002
			CN 1470004	A 21-01-2004
			CN 1651956	A 10-08-2005
			CN 1651957	A 10-08-2005
			EP 1368685	A2 10-12-2003
			TW 512245	B 01-12-2002
			<hr style="border-top: 1px dashed black;"/>	
US 2007127201	AI	07-06-2007	NONE	
<hr style="border-top: 1px dashed black;"/>				
US 6870734	B2	22-03-2005	AU 2004246161	AI 16-12-2004
			CA 2527156	AI 16-12-2004
			CN 1799296	A 05-07-2006
			EP 1632116	A2 08-03-2006
			MX PA05012767	A 13-02-2006
			US 2005220436	AI 06-10-2005
			US 2009129045	AI 21-05-2009
			US 2004251220	AI 16-12-2004
			WO 2004110122	A2 16-12-2004