

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 June 2008 (12.06.2008)

PCT

(10) International Publication Number
WO 2008/069968 A3

(51) **International Patent Classification:**
HOIB 11/02 (2006.01)

(21) **International Application Number:**
PCT/US2007/024632

(22) **International Filing Date:**
30 November 2007 (30.11.2007)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
60/872,075 1 December 2006 (01.12.2006) US
60/920,768 29 March 2007 (29.03.2007) US

(71) **Applicant (for all designated States except US):** **THE SIEMON COMPANY** [US/US]; 27 Siemon Company Drive, Watertown, CT 06795 (US).

(72) **Inventors; and**

(75) **Inventors/Applicants (for US only):** **SIEMON, John, A.** [US/US]; 200 Quassuk Road, Woodbury, CT 06798 (US). **BELOW, Randy** [US/US]; 340 Chestnut St., Cheshire, CT 06410 (US). **CELELLA, Brian** [US/US]; 38 Celella Drive, Southington, CT 06489 (US). **FREY, James, Anthony** [US/US]; 11 Walker Road, Woodbury, CT 06798 (US). **YIP, Maxwell, K.** [US/US]; 90 Wilson Ave., Trumbull, CT 06611 (US). **CRUDELE, Vinicio** [IT/US];

521 Artillery Rd., Watertown, CT 06795 (US). **FAVALE, Joseph, Mario** [US/US]; 220 Mount Fair Drive, Watertown, CT 06795 (US). **PARDEE, Marc, Jason** [US/US]; 419 Farmington Ave., Waterbury, CT 06710 (US).

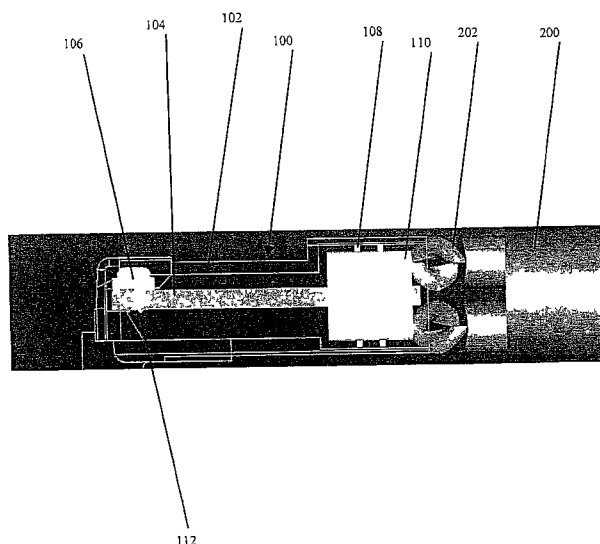
(74) **Agent:** **FOX, David, A.**; Cantor Colburn LLP, 20 Church Street, 22nd Floor, Hartford, CT 06103-3207 (US).

(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, 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, FT, 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, 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, MT, 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).

[Continued on next page]

(54) **Title:** MODULAR CONNECTOR WITH REDUCED TERMINATION VARIABILITY



(57) **Abstract:** A telecommunications connector assembly including a cable having a first pair of twisted wires and a second pair of twisted wires; a first connector having a first substrate having a first termination area, the first pair of twisted wires being electrically terminated on a first side of the first substrate, the second pair of twisted wires being electrically terminated on a second side of the first substrate, the second side opposite the first side; a second connector having a second substrate having a second termination area, the second pair of twisted wires being electrically terminated on the first side of the second substrate, the first pair of twisted wires being electrically terminated on the second side of the second substrate, the second side opposite the first side.

WO 2008/069968 A3



Published:

— *with international search report*

(88) Date of publication of the international search report:

25 September 2008

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2007/024632

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H01B 11/02 (2008.04)

USPC - 174/113R

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)

IPC(8) - H01B 11/02 (2008.04)

USPC - 174/113R

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 practicable, search terms used)

Google Patent, PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2006/0131056 A 1 (HACKMAN) 22 June 2006 (22.06.2006) entire document	1-22
Y	US 6,194,652 B 1 (IVAN) 27 February 2001 (27.02.2001) entire document	1-19
Y	US 6,083,047 A (PAAGMAN) 04 July 2000 (04.07.2000) entire document	4
Y	US 2004/0116081 A 1 (CRUDELE et al) 17 June 2004 (17.06.2004) entire document	10,19
Y	US 6,527,594 B 1 (KORSUNSKY et al) 04 March 2003 (04.03.2003) entire document	14
Y	US 2004/0216914 A 1 (VEXLER et al) 04 November 2004 (04.11.2004) entire document	15
Y	US 5,967,801 A (MARTIN et al) 19 October 1999 (19.10.1999) entire document	20-22
Y	US 6,293,818 B 1 (KIM et al) 25 September 2001 (25.09.2001) entire document	21

☐ Further documents are listed in the continuation of Box C.



* Special categories of cited documents

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

"E" earlier application or patent but published on or after the international filing date

"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)

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

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

"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 invention

"X" 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

"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 documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

23 April 2008

Date of mailing of the international search report

14 MAY 2008

Name and mailing address of the ISA/US

Mail Stop PCT, Attn. ISA/US, Commissioner for Patents
P O Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-3201

Authorized officer:

Blaine R. Copenheaver

PCT Helpdesk. 571-272-4300

PCT OSP 571-272-7774