

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	BELDEN CANADA INC.	03/20/2020
RECEIVING PARTY DATA		
Name:	BELDEN CANADA ULC	
Street Address:	2310 ALFRED NOBEL	
City:	SAINT-LAURENT	
State/Country:	CANADA	
Postal Code:	H2S 2B4	
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	17453681	
CORRESPONDENCE DATA		
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ATTORNEY DOCKET NUMBER:	G13569-00506-HM	
NAME OF SUBMITTER:	HUGH MANSFIELD	
SIGNATURE:	/HUGH MANSFIELD/	
DATE SIGNED:	02/21/2022	
Total Attachments: 23		
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ASSIGNMENT OF INVENTION

UNIVERSAL

WHEREAS, BELDEN CANADA INC., whose full address is 2310 Alfred-Nobel, Saint-Laurent, Quebec, Canada, H2S 2B4 (hereinafter referred to as "Assignor"); is the owner of all rights, title and interest in and to the inventions and designs described in the patents, applications for patent and designs as provided in Schedule A, Schedule B and Schedule C;

and:

WHEREAS BELDEN CANADA ULC, whose full post office address is 2310 Alfred-Nobel, Saint-Laurent, Quebec, Canada, H2S 2B4 (hereinafter referred to as "Assignee"), is desirous of acquiring Assignor's right, title and interest in and to said inventions, designs, patents, applications for patent and in and to any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good, valuable and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has and does hereby sell, assign and transfer unto Assignee, its successors and assigns, Assignor's entire right, title and interest in and to the invention or inventions, as described in the patents, applications for patent and designs as provided in Schedule A, Schedule B and Schedule C, in any form or embodiment thereof, and in and to any related application; and in and to any applications based thereon filed in any foreign country, including the right to file foreign applications, including, but not limited to under the provisions of the Patent Cooperation Treaty and under the Paris Convention; also the Assignor's right, title and interest in and to any and all patents, reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions, and any divisional, continuation, continuation-in-part, substitute application(s) or supplementary disclosure(s) which may be filed upon said invention or inventions, in any country; and

Assignor hereby authorizes and requests the issuing authority to issue any and all patents on such application or applications to Assignee.

Les soussignés désirent que la présente cession soit en anglais. The undersigned request that the present assignment be in English.

IN WITNESS WHEREOF, We have hereunto set my/our hand(s) and seal.

WITNESS(ES)

DATE

ASSIGNOR(S)


Signature of Witness

03/20/2020
MM/DD/YYYY


Signature of authorized representative of BELDEN CANADA INC.

Amanda Gerhardt
Name of Witness

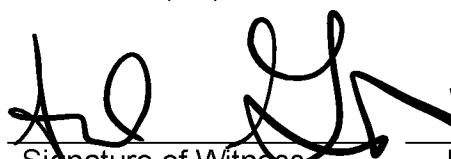
Brian E. Anderson
Name of authorized representative of BELDEN CANADA INC.

Secretary
Title of authorized representative of BELDEN CANADA INC.

WITNESS(ES)

DATE

ASSIGNEE(S)


Signature of Witness

03/20/2020
MM/DD/YYYY


Signature of authorized representative of BELDEN CANADA ULC

Amanda Gerhardt
Name of Witness

Brian E. Anderson
Name of authorized representative of BELDEN CANADA ULC

Secretary
Title of authorized representative of BELDEN CANADA ULC

Schedule A

Publication Number	Application Number	Title	Application Date
CA2468007C	CA2468007	Wire lead guide and method for terminating a communications cable	2004-05-21
CA2712846C	CA2712846	Wire lead guide and method for terminating a communications cable	2004-05-21
US7150657	US10/853566	Wire lead guide and method for terminating a communications cable	2004-05-24
CA2540114C	CA2540114	Keyed fibre optic connector	2004-09-22
US7258493	US10/945935	Keyed fibre optic connector	2004-09-22
CA2487568C	CA2487568	Connector assembly	2004-11-12
US7249962	US10/986206	Connector assembly	2004-11-12
CA2563655C	CA2563655	Telecommunications connector	2005-04-19
MXPA06012021A	MX2006012021	Telecommunications connector.	2005-04-19
MX2007005750A	MX2007005750	High performance telecommunications cable.	2005-11-15
US7838773	US11/718148	High performance telecommunications cable	2005-11-15
CA2588062C	CA2588062	Crosstalk reducing conductor and contact configuration in a communication system	2005-11-17
MX2007005907A	MX2007005907	Crosstalk reducing conductor and contact configuration in a communication system.	2005-11-17
US8477928	US11/719464	Crosstalk reducing conductor and contact configuration in a communication system	2005-11-17
US7448920	US11/552168	Wire lead guide and method for terminating a communications cable	2006-10-24
CA2648772C	CA2648772	Balanced interconnector	2007-04-25
US7422467	US11/740154	Balanced interconnector	2007-04-25
US7699533	US11/779335	Back-to-back receptacle	2007-07-18
US7674046	US11/779338	Fibre optic connector keying system	2007-07-18
CA2694884C	CA2694884	Connector with insulation piercing contact	2008-08-01
MX2010001211A	MX2010001211	Connector with insulation piercing contact.	2008-08-01
US7670193	US12/184474	Connector with insulation piercing contact and conductor guiding passageway	2008-08-01
US7568938	US12/187671	Balanced interconnector	2008-08-07
CA2695395C	CA2695395	Telescoping connector assembly	2008-08-08
US7905015	US12/188380	Method for terminating a telecommunications cable	2008-08-08

Publication Number	Application Number	Title	Application Date
US7645160	US12/188460	Telescoping connector assembly	2008-08-08
CA2711452C	CA2711452	Patch panel labelling system	2009-01-12
US8141224	US12/352294	Patch panel labelling system	2009-01-12
US7887244	US12/484614	Reversible fiber connector with mechanical splice and sliding lock	2009-06-15
US8075198	US12/489793	Reversible fiber connector with mechanical sliding splice	2009-06-23
US7614901	US12/500083	Balanced interconnector	2009-07-09
CA2734213C	CA2734213	Slide actuated field installable fiber optic connector	2009-08-19
US8376631	US12/543956	Slide actuated field installable fiber optic connector	2009-08-19
US7811006	US12/552830	Field installable fiber optic connector and installation tool	2009-09-02
CA2748141C	CA2748141	Coupler connector	2009-12-22
US7905753	US12/644905	Coupler connector	2009-12-22
US7837513	US10/543,947	Telecommunications Connector	2005-08-01
US8021197	US12/950,354	Telecommunications Connector	2010-11-19
US7883376	US12/691777	Connector with insulation piercing contact for terminating pairs of bonded conductors	2010-01-22
MX291229B	MX2010001515	ENSAMBLE CONECTOR TELESCOPICO.	2010-02-08
US8455762	US12/887879	High performance telecommunications cable	2010-09-22
US8167662	US13/017500	Cable comprising connector with insulation piercing contacts	2011-01-31
US8801298	US13/768553	Slide actuated field installable fiber optic connector	2013-02-15
US8958545	US13/779517	Crosstalk reducing conductor and contact configuration in a communication system	2013-02-27
CA2889236A1	CA2889236	Matched high-speed interconnector assembly	2013-06-28
US9318840	US13/930847	Matched high-speed interconnector assembly	2013-06-28
CA2959945A1	CA2959945	Coupler connector and cable terminator with side contacts	2015-09-04
CA2960155A1	CA2960155	Coupler connector and cable terminator with end contacts	2015-09-04

Publication Number	Application Number	Title	Application Date
US9397455	US14/845601	Coupler connector and cable terminator with side contacts	2015-09-04
US9413125	US14/845607	Coupler connector and cable terminator with end contacts	2015-09-04
US9865960	US15/508522	Coupler connector and cable terminator with side contacts	2015-09-04
CA2964011A1	CA2964011	Splice holder	2015-10-20
US9575278	US14/887658	Splice holder	2015-10-20
US9692181	US15/095314	Matched high-speed interconnector assembly	2016-04-11
CA2983354A1	CA2983354	Keystone jack adaptor	2016-04-25
US9577396	US15/137332	Keystone jack adaptor	2016-04-25
CA2983356A1	CA2983356	Network plug	2016-04-28
US9570852	US15/141173	Network plug	2016-04-28
CA3006885A1	CA3006885	Hinged connector door assembly	2016-12-01
US9865975	US15/366168	Hinged connector door assembly	2016-12-01
CA3006883A1	CA3006883	Cable assembly tool	2016-12-05
US10250000	US15/369021	Cable assembly tool	2016-12-05
CA3011492A1	CA3011492	Compensating connector system	2017-01-26
US10103493	US15/416625	Method of maintaining cross talk in different zones of an assembly for interconnecting a cable	2017-01-26
CA2963902A1	CA2963902	Fiber optic connector	2017-04-10
US10473859	US15/482981	Fiber optic connector	2017-04-10
CA2966349A1	CA2966349	Overmoulded assembly with strain relief	2017-05-04
US10175430	US15/586982	Overmoulded furcation assembly with strain relief	2017-05-04
CA2970076A1	CA2970076	Rackmount case for the accommodation of optical equipment	2017-06-07
US20170353014A1	US15/615922	Rackmount case for the accommodation of optical equipment	2017-06-07
CA2970182A1	CA2970182	Deformable latch mechanism for tray	2017-06-08
US9841574	US15/617318	Deformable latch mechanism for tray	2017-06-08
CA2972609A1	CA2972609	Labelling system for rackmount case for the accommodation of optical equipment	2017-07-05
US10332429	US15/641810	Labelling system for rackmount case for the accommodation of optical equipment	2017-07-05

Publication Number	Application Number	Title	Application Date
CA2972850A1	CA2972850	Dual direction fiber optic cassette system and fiber optic cassette with removable standalone adaptor plate	2017-07-07
US10185108	US15/643586	Dual direction fiber optic cassette system and fiber optic cassette with removable standalone adaptor plate	2017-07-07
CA2977560A1	CA2977560	Optic cable puller assembly	2017-08-25
US20180067275A1	US15/686353	Optic cable puller assembly	2017-08-25
CA2989073A1	CA2989073	Plug with rotatable release mechanism	2017-12-13
US10185101	US15/840551	Plug with rotatable release mechanism	2017-12-13
US10186797	US15/861112	Coupler connector and cable terminator with side contacts	2018-01-03
CA3015149A1	CA3015149	Intelligent system for interconnecting data networking equipment	2018-08-22
US10462540	US16/109165	Intelligent system for interconnecting data networking equipment	2018-08-22
US20190013623A1	US16/127877	Compensating connector system	2018-09-11
CA3019068A1	CA3019068	Slide and tilt tray, slide and tray using same	2018-09-27
CA3019081A1	CA3019081	Modular fiber optic cassette, system and method	2018-09-27
US10359595	US16/143621	Slide and tilt tray, slide and tray using same	2018-09-27
US20190101717A1	US16/143831	Modular fiber optic cassette, system and method	2018-09-27
CA3025542A1	CA3025542	Fiber optic cassette system with slantable connector	2018-11-27
US20190162924A1	US16/201235	Fiber optic cassette system with slantable connector	2018-11-27
US10476197	US16/219255	Coupler connector and cable terminator with side contacts	2018-12-13
US10488611	US16/220311	Dual direction fiber optic cassette system and fiber optic cassette	2018-12-14
CA3027932A1	CA3027932	Fiber optic cassette system with releasable engagement	2018-12-17
US20190187394A1	US16/223675	Fiber optic cassette system with releasable engagement	2018-12-18

Publication Number	Application Number	Title	Application Date
CA3030399A1	CA3030399	Fiber optic cassette system with reversible cassettes	2019-01-16
US20190219786A1	US16/249442	Fiber optic cassette system with reversible cassettes	2019-01-16
CA3039711A1	CA3039711	Cross connect system and tray	2019-04-05
US20190310426A1	US16/376072	Cross connect system and tray	2019-04-05
CA3051950A1	CA3051950	Telescoping cable spool	2019-08-13
US20200048029A1	US16/539395	Telescoping cable spool	2019-08-13
CA3052811A1	CA3052811	Flexible cable guide	2019-08-21
US20200064576A1	US16/546492	Flexible cable guide	2019-08-21
CA3054527A1	CA3054527	Patch panel system with tiltable tray and multiposition lock and release mechanism	2019-09-05
US20200081214A1	US16/561731	Patch panel system with tiltable tray and multiposition lock and release mechanism	2019-09-05
US20200036130A1	US16/593229	Coupler connector and cable terminator with side contacts	2019-10-04
N/A	US16/791061	Cross Connect System and tray	2019-04-05
USD812572	US29/547095	Adapter for Patch Panel Assembly	2015-12-01
CA162925	CA162925	Adapter for Patch Panel Assembly	2015-06-12

Schedule B

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
CA	DUAL INSULATED DATA COMMUNICATION CABLE	2,157,322	31/08/1995	2,157,322	03/02/1998
CA	DOUBLE-TWISTING CABLE MACHINE AND CABLE FORMED THEREWITH	2,291,649	03/12/1999	2,291,649	09/07/2002
US	DOUBLE-E-TWISTING CABLE MACHINE AND CABLE FORMED THEREWITH	09/454,947	03/12/1999	6,272,828	14/08/2001
CA	PUNCH DOWN INSULATION DISPLACEMENT CONNECTOR HOUSING	2,291,538	03/12/1999	2,291,538	12/03/2002
CA	MODULAR CONNECTORS WITH COMPENSATION STRUCTURES	2,291,373	02/12/1999	2,291,373	06/08/2002
CA	HIGH FREQUENCY CONNECTOR WITH NOISE CANCELLING CHARACTERISTICS	2,225,108	17/12/1997	2,225,108	10/04/2001
GB	HIGH FREQUENCY CONNECTOR WITH NOISE CANCELLING CHARACTERISTICS	9726780.1	18/12/1997	2 323 484	16/01/2002
US	HIGH FREQUENCY CONNECTOR WITH NOISE CANCELLING CHARACTERISTICS	769,711	18/12/1996	5,779,503	14/07/1998
CA	OPTICAL FIBER MECHANICAL SPLICE	2,110,940	08/12/1993	2,110,940	18/08/1998
US	OPTICAL FIBER MECHANICAL SPLICE	163,642	09/12/1993	5,394,496	28/02/1995
US	SHIFTED-PLANE CORE GEOMETRY CABLE	09/274,890	23/03/1999	6,162,992	19/12/2000
US	APPARATUS FOR CONNECTING CONDUCTORS TO TERMINALS OF A CROSS-CONNECT CONNECTOR FOR COMMUNICATION LINES	795,457	08/11/1985	4,709,463	01/12/1987
CA	CONNECTING CONDUCTORS TO TERMINALS OF A CROSS-CONNECT CONNECTOR FOR	494,970	08/11/1985	1,252,613	18/04/1989

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	COMMUNICATION LINES				
US	TELECOMMUNICATIONS CONNECTOR	220,191	18/07/1988	4,904,210	27/02/1990
US	TELECOMMUNICATIONS CONNECTOR	324,156	16/03/1989	4,904,201	27/02/1990
CA	MOUNTING PLATE FOR TELECOMMUNICATIONS WALL OUTLET	2,007,247	05/01/1990	2,007,247	17/08/1993
US	MOUNTING PLATE FOR TELECOMMUNICATIONS WALL OUTLET	463,052	10/01/1990	5,044,987	03/09/1991
US	PATCH PANEL	08/006,410	21/01/1993	5,385,488	31/01/1995
US	TELECOMMUNICATIONS CIRCUIT ASSEMBLIES OF WIRES AND CONNECTORS	08/037,834	25/03/1993	5,350,324	27/09/1994
CA	TELECOMMUNICATIONS CIRCUIT ASSEMBLIES OF WIRES AND CONNECTORS	2,119,680	23/03/1994	2,119,680	05/12/2000
US	DISTRIBUTION FRAMES AND ELECTRICAL CONNECTORS	07/018,234	24/02/1987	4,861,283	29/08/1989
US	ELECTRICAL CONNECTOR FOR MATING WITH INSULATION DISPLACEMENT TERMINALS	07/045,337	04/05/1987	4,735,574	05/04/1988
US	ELECTRICAL TELECOMMUNICATIONS CABLE	07/658,727	21/02/1991	5,132,488	21/07/1992
CA	MULTI-TERMINAL ELECTRICAL CONNECTORS	2,078,387	16/09/1992	2,078,387	09/04/1996
US	MULTI-TERMINAL ELECTRICAL CONNECTORS	07/940,279	03/09/1992	5,282,754	01/02/1994
US	MULTI-TERMINAL ELECTRICAL CONNECTORS	08/141,360	28/10/1993	5,358,414	25/10/1994
CA	FORMING CABLE CORE UNITS	444,295	23/12/1983	1,217,395	03/02/1987
CA	COILERS	458,100	04/07/1984	1,221,672	12/05/1987
CA	CROSS-CONNECT CONNECTORS	507,635	25/04/1986	1,262,177	03/10/1989
US	CONNECTOR BODIES AND ASSEMBLIES	07/018,230	24/02/1987	4,797,124	10/01/1989

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
CA	DISTRIBUTION FRAMES AND ELECTRICAL CONNECTORS	507,636	25/04/1986	1,258,900	29/08/1989
CA	TELECOMMUNICATIONS WALL OUTLETS	583,861	23/11/1988	1,309,158	20/10/1992
US	TELECOMMUNICATIONS WALL OUTLETS	275,885	25/11/1988	4,894,024	16/01/1990
CA	CIRCUIT ASSEMBLIES OF PRINTED CIRCUIT BOARDS AND TELECOMMUNICATIONS CONNECTORS	2,072,380	25/06/1992	2,072,380	01/08/2000
FR	CIRCUIT ASSEMBLIES OF PRINTED CIRCUIT BOARDS AND TELECOMMUNICATIONS CONNECTORS	939000007549	22/06/1993	2 693 075	31/05/1996
GB	CIRCUIT ASSEMBLIES OF PRINTED CIRCUIT BOARDS AND TELECOMMUNICATIONS CONNECTORS	9312908.8	22/06/1993	2 268 336	13/03/1996
JP	CIRCUIT ASSEMBLIES OF PRINTED CIRCUIT BOARDS AND TELECOMMUNICATIONS CONNECTORS	05-167409	14/06/1993	3177348	06/04/2001
US	CIRCUIT ASSEMBLIES OF PRINTED CIRCUIT BOARDS AND TELECOMMUNICATIONS CONNECTORS	904,637	26/06/1992	5,326,284	05/07/1994
US	SNAP-TOGETHER ENCLOSURE FOR A TELEPHONE JACK RECEPTACLE	296,648	12/01/1989	4,887,972	19/12/1989
US	METHOD OF MANUFACTURING ELECTRICAL RECEPTACLES	250,678	29/09/1988	5,031,310	16/07/1991
CA	CLOSED LOOP, PROGRAMMABLE POWER AND COMMUNICATION SYSTEM	542,091	13/07/1987	1,297,157	10/03/1992
US	CLOSED LOOP, PROGRAMMABLE POWER AND COMMUNICATION SYSTEM	131,840	11/12/1987	5,033,112	16/07/1991

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
CA	ELECTRICAL SOCKET DEVICE FOR USE IN A CLOSED-LOOP, PROGRAMMABLE POWER AND COMMUNICATION SYSTEM	615,840	13/07/1987	1,309,886	10/11/1992
CA	CONNECTORS FOR TELECOMMUNICATIONS LINES	583,811	17/11/1988	1,290,035	01/10/1991
US	CONNECTORS FOR TELECOMMUNICATIONS LINES	275,817	25/11/1988	4,909,754	20/03/1990
US	INSIDE TELECOMMUNICATION CABLE	451,944	21/12/1982	4,562,302	31/12/1985
CA	FLAME RETARDANT DUAL INSULATION DESIGN AND CABLE CONSTRUCTION FOR PLENUM APPLICATIONS	2,421,440	10/03/2003		
CA	FLAME RETARDANT FOAM UNDER LAYER HAVING REFINED MICRO-CELLULAR STRUCTURE	2,435,719	21/07/2003		
US	FLAME RETARDANT FOAM UNDER LAYER HAVING REFINED MICRO-CELLULAR STRUCTURE	60/487,958	18/07/2003		
US	FLAME RETARDANT DUAL INSULATION DESIGN AND CABLE CONSTRUCTION FOR PLENUM APPLICATIONS	60/452,947	10/03/2003		
US	METHODS AND APPARATUS FOR MAKING ELECTRICAL CABLE	30,006	25/03/1987	4,778,543	18/10/1988
US	METHOD AND APPARATUS FOR PROVIDING JACKETS ON CABLE	800,313	29/11/1991	5,162,120	10/11/1992
US	METHODS AND APPARATUS FOR PRINTING ONTO CABLE JACKET	781,477	29/08/1991	5,223,852	29/06/1993
US	EXTRUSION APPARATUS	879,632	07/05/1992	5,211,963	18/05/1993

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
US	EXTRUSION APPARATUS AND METHODS OF EXTRUSION	940,280	03/09/1992	5,250,249	05/10/1993
CA	CRADLE FOR A TWISTING MACHINE	444,270	23/12/1983	1,213,798	12/11/1986
US	MANUFACTURE OF TELECOMMUNICATIONS CABLE CORES	565,633	27/12/1983	4,604,862	12/08/1986
US	METHOD AND APPARATUS FOR MAKING CABLE CORE	115,323	02/11/1987	4,765,130	23/08/1988
US	METHOD AND APPARATUS FOR GUIDING FILAMENTARY MATERIAL ONTO A REEL	111,543	23/10/1987	4,756,489	12/07/1988
US	ELECTRICAL CABLE WITH CORRUGATED METAL SHIELD	585,552	20/09/1990	5,077,449	31/12/1991
GB	DISTRIBUTING FRAME, FOR TELECOMMUNICATIONS SYSTEMS	8304148	15/02/1983	2 119579A	
US	ELECTRICALLY INSULATED WIRE	263,610	14/05/1981	4,869,959	26/09/1989
US	METHOD FOR SPLICING FILAMENTARY MATERIAL AND HOLDING DEVICES THEREFOR	78,438	27/07/1987	4,765,129	23/08/1988
US	IN-LINE FILTERING DEVICE FOR A TELECOMMUNICATIONS LINE	930,170	13/11/1986	4,827,228	02/05/1989
CA	APPLYING MAGNETIC FIELD TO FLUID MIXTURE INCLUDING MAGNETIC PARTICLES THROUGH A COIL	450,793	28/03/1984	1,225,358	11/08/1987
CA	PRODUCTION OF INSULATED ELECTRICAL CONDUCTORS	450,800	28/03/1984	1,225,361	11/08/1987
CA	CRADLE FOR A TWISTING MACHINE	444,293	23/12/1983	1,230,021	08/12/1987
CA	CORE UNIT FOR AQ TELECOMMUNICATIONS CABLE	510,751	23/12/1983	1,217,251	27/01/1987
CA	LIFTING AND TILTING DEVICE	502,575	24/02/1986	1,235,167	12/04/1988

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
US	APPARATUS FOR CLOSING A METALLIC SHIELD AROUND A CABLE CORE	936,065	01/12/1986	4,753,002	28/06/1988
CA	APPARATUS FOR CLOSING A METALLIC SHIELD AROUND A CABLE CORE	523,685	27/11/1986	1,260,243	26/09/1989
CA	PROVISION OF PLASTIC INSULATION UPON AN ELECTRICAL CONDUCTOR	459,584	24/07/1984	1,214,913	09/12/1986
CA	CABLE TERMINATION BAR	2,429,765	23/05/2003		
US	CABLE TERMINATION MODULE AND METHOD OF USE	60/472,779	23/05/2003		
AE	KEYED FIBRE OPTIC CONNECTOR	210/2006	22/09/2004		
AU	KEYED FIBRE OPTIC CONNECTOR	2004274992	22/09/2004		
CA	KEYED FIBRE OPTIC CONNECTOR	2,441,872	22/09/2003		
CN	KEYED FIBRE OPTIC CONNECTOR	200480027280.X	22/09/2004	ZL200480027280.X	11/03/2009
EP	KEYED FIBRE OPTIC CONNECTOR	4786650.4	22/09/2004	1 671 169	07/06/2017
IN	KEYED FIBRE OPTIC CONNECTOR	924/KOLNP/2006	22/09/2004		
JP	KEYED FIBRE OPTIC CONNECTOR	2006-526499	22/09/2004		
MX	KEYED FIBRE OPTIC CONNECTOR	2006-003216	22/09/2004	265212	19/03/2009
US	KEYED FIBRE OPTIC CONNECTOR	60/504,189	22/09/2003		
WO	KEYED FIBRE OPTIC CONNECTOR	CA2004/001730	22/09/2004		
CA	SHIELDING MATERIAL AND COMMUNICATIONS CABLE USING SAME	2,461,110	15/03/2004		
US	SHIELDING MATERIAL AND COMMUNICATIONS CABLE USING SAME	60/552,729	15/03/2004		
US	SHIELDING MATERIAL WITH LOSSY COMPONENT AND COMMUNICATIONS CABLE USING SAME	60/556,366	26/03/2004		
CA	UNIVERSAL MONITORING METHOD FOR	2,465,551	30/04/2004		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	TELECOMMUNICATION PORTS				
US	UNIVERSAL MONITORING METHOD FOR TELECOMMUNICATION PORTS	60/566,414	30/04/2004		
WO	UNIVERSAL MONITORING METHOD FOR TELECOMMUNICATION PORTS	CA2005/000668	02/05/2005		
AE	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	425/2007	17/11/2005		
AE	BALANCED INTERCONNECTOR	1083/2008	25/04/2007		
AU	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	2005306539	17/11/2005		
AU	BALANCED INTERCONNECTOR	2007242021	25/04/2007		
CA	CONNECTOR AND CONTACT CONFIGURATION THEREFORE	2,487,760	17/11/2004		
CA	BALANCED INTERCONNECTOR	2,544,929	25/04/2006		
CN	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	200580046328.6	17/11/2005		
CN	BALANCED INTERCONNECTOR	200780019236.8	25/04/2007		
EP	CROSSTALK REDUCING CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	5810854.9	17/11/2005	1 815 607	07/09/2011
EP	BALANCED INTERCONNECTOR	7719620.2	25/04/2007		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
EP	CROSSTALK REDUCING CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	11180114	17/11/2005	2 395 676	13/03/2013
ID	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	W-00200701547	17/11/2005		
ID	BALANCED INTERCONNECTOR	W-00200803744	25/04/2007		
IN	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	1784/KOLNP/2007	17/11/2005		
IN	BALANCED INTERCONNECTOR	4294/KOLNP/2008	25/04/2007		
JP	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	2007-541603	17/11/2005		
JP	BALANCED INTERCONNECTOR	2009-506877	25/04/2007	5074483	31/08/2012
MX	BALANCED INTERCONNECTOR	08/13604	25/04/2007		
NZ	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	555267	17/11/2005		
RU	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	2007122495	17/11/2005		
UA	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	a200705397	17/11/2005		
US	CONNECTOR AND CONTACT CONFIGURATION	60/628,136	17/11/2004		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	THEREFORE				
US	BALANCED INTERCONNECTOR	60/745,563	25/04/2006		
WO	CROSSTALK REDUCING CONDUCTOR AND CONTACT CONFIGURATION IN A COMMUNICATION SYSTEM	CA2005/001753	17/11/2005		
WO	BALANCED INTERCONNECTOR	CA2007/000694	25/04/2007		
CA	CONNECTOR ASSEMBLY	2,449,528	14/11/2003		
US	CONNECTOR ASSEMBLY	60/519,625	14/11/2003		
US	WIRE GUIDE AND CONNECTOR ASSEMBLY USING SAME	11/776,259	11/07/2007		
CA	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	2,493,681	21/01/2005		
CA	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	2,487,777	17/11/2004		
US	HIGH PERFORMANCE CABLING SYSTEM	60/627,146	15/11/2004		
US	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	60/645,615	24/01/2005		
AE	TELECOMMUNICATIONS CONNECTOR	749/2006	19/04/2005		
AU	TELECOMMUNICATIONS CONNECTOR	2005234099	19/04/2005		
CA	CONNECTOR	2,464,834	19/04/2004		
CN	TELECOMMUNICATIONS CONNECTOR	200580011883.5	19/04/2005	ZL 200580011883.5	29/09/2010
EP	TELECOMMUNICATIONS CONNECTOR	5735815.2	19/04/2005	1 738 438	10/10/2012
IN	TELECOMMUNICATIONS CONNECTOR	2992/KOLNP/2006	19/04/2005		
JP	TELECOMMUNICATIONS CONNECTOR	2007-508693	19/04/2005		
US	CONNECTOR	60/562,992	19/04/2004		
WO	TELECOMMUNICATIONS CONNECTOR	CA2005/000588	19/04/2005		
CA	CABLE MANAGEMENT RACK	2,533,486	20/01/2006		
CA	CABLE MANAGEMENT	2,574,751	22/01/2007		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	BAR				
US	CABLE MANAGEMENT RACK	60/760,387	20/01/2006		
US	CABLE MANAGEMENT BAR	11/625,479	22/01/2007		
US	PROTECTIVE COVER FOR RACK MOUNTED NETWORKING EQUIPMENT	60/787,640	31/03/2006		
US	PROTECTIVE COVER FOR RACK MOUNTED NETWORKING EQUIPMENT	11/694,509	30/03/2007		
CA	LOCKING DEVICE FOR PATCHCORD	2,583,627	02/04/2007		
GB	LOCKING DEVICE FOR PATCHCORD	706471	02/04/2007		
US	LOCK RING FOR PATCHCORD	60/787,658	31/03/2006		
US	LOCKING DEVICE FOR PATCHCORD	11/695,178	02/04/2007		
US	INSTALLATION TOOL	60/885,685	19/01/2007		
US	PLUG INSTALLATION TOOL	11/972,922	11/01/2008		
US	HINGED PATCH PANEL	60/892,627	02/03/2007		
CA	ADJUSTABLE CABLE MANAGER	2,586,898	30/04/2007		
US	ADJUSTABLE CABLE MANAGER	60/914,912	30/04/2007		
US	ANGLED PATCH PANEL WITH TRAY	60/951,284	23/07/2007		
EP	CONNECTOR WITH INSULATION PIERCING CONTACT	8783329.9	01/08/2008		
US	JACK WITH INSULATION PIERCING CONTACT	60/953,318	01/08/2007		
WO	CONNECTOR WITH INSULATION PIERCING CONTACT	CA2008/001418	01/08/2008		
US	TELESCOPING CONNECTOR ASSEMBLY	60/954,934	09/08/2007		
WO	TELESCOPING CONNECTOR ASSEMBLY	CA2008/001448	08/08/2008		
US	RETRACTABLE PATCH PANEL	60/954,936	09/08/2007		
US	REVERSIBLE PATCH PANEL	60/977,412	04/10/2007		
US	PATCH PANEL WITH	60/979,116	11/10/2007		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	ONE SIDED ATTACHMENT				
US	CABLE MANAGEMENT SIDE BRACKET	61/020,512	11/01/2008		
US	CABLE MANAGEMENT SIDE BRACKET	12/352,360	12/01/2009		
CA	PATCH PANEL WITH ANGLED MODULE	2,710,297	22/12/2008		
US	PATCH PANEL WITH ANGLED MODULE	61/015,692	21/12/2007		
US	PATCH PANEL WITH ANGLED MODULE	12/341,168	22/12/2008		
WO	PATCH PANEL WITH ANGLED MODULE	CA2008/002244	22/12/2008		
CA	PATCH PANEL LABELLING SYSTEM	2,617,853	11/01/2008		
US	PATCH PANEL LABELLING SYSTEM	61/020,550	11/01/2008		
WO	PATCH PANEL LABELLING SYSTEM	CA2009/000038	12/01/2009		
US	REINFORCED PATCH PANEL FRAME WITH REAR MOUNTED MODULES	61/038,238	20/03/2008		
US	REINFORCED PATCH PANEL FRAME WITH REAR MOUNTED MODULES	12/407,864	20/03/2009		
US	PATCH PANEL FRAME WITH BEZEL AND REAR MOUNTED MODULE	61/039,569	26/03/2008		
US	PATCH PANEL FRAME WITH BEZEL AND REAR MOUNTED MODULE	12/411,657	26/03/2009		
US	REVERSIBLE FIBER CONNECTOR WITH MECHANICAL SPLICE AND SLIDING LOCK	61/061,295	13/06/2008		
US	REVERSIBLE FIBER CONNECTOR WITH MECHANICAL SLIDING SPLICE	61/074,823	23/06/2008		
US	FIELD INSTALLABLE FIBER OPTIC CONNECTOR AND INSTALLATION TOOL	61/093,559	02/09/2008		
EP	SLIDE ACTUATED FIELD INSTALLABLE FIBER OPTIC CONNECTOR	9807791	19/08/2009		
US	SLIDE ACTUATED FIELD INSTALLABLE FIBER	61/090,089	19/08/2008		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	OPTIC CONNECTOR				
WO	SLIDE ACTUATED FIELD INSTALLABLE FIBER OPTIC CONNECTOR	CA2009/001160	19/08/2009		
US	SIDE MOUNTED PATCH PANEL	61/093,557	02/09/2008		
US	SIDE MOUNTED PATCH PANEL	12/552,608	02/09/2009		
CA	COUPLER CONNECTOR	2,647,704	22/12/2008		
US	COUPLER CONNECTOR	61/139,786	22/12/2008		
WO	COUPLER CONNECTOR	CA2009/001842	22/12/2009		
WO	MATCHED HIGH-SPEED INTERCONNECTOR ASSEMBLY	CA2013/050508	28/06/2013		
CA	MATCHED HIGH-SPEED INTERCONNECTOR ASSEMBLY	2,782,486	28/06/2012		
US	COUPLER CONNECTOR AND CABLE TERMINATOR WITH END CONTACTS	62/045,656	04/09/2014		
WO	COUPLER CONNECTOR AND CABLE TERMINATOR WITH END CONTACTS	CA2015/050848	04/09/2015		
US	COUPLER CONNECTOR AND CABLE TERMINATOR WITH SIDE CONTACTS	62/045,664	04/09/2014		
WO	COUPLER CONNECTOR AND CABLE TERMINATOR WITH SIDE CONTACTS	CA2015/050850	04/09/2015		
US	SPLICE HOLDER	62/065,934	20/10/2014		
WO	SPLICE HOLDER	CA2015/051050	20/10/2015		
US	NETWORK PLUG	62/154,294	29/04/2015		
WO	NETWORK PLUG	CA2016/050491	28/04/2016		
US	KEYSTONE JACK ADAPTOR	62/152,398	24/04/2015		
WO	KEYSTONE JACK ADAPTOR	CA2016/050476	25/04/2016		
US	COMPENSATING CONNECTOR SYSTEM	62/287,205	26/01/2016		
WO	COMPENSATING CONNECTOR SYSTEM	CA2017/050079	26/01/2017		
US	CABLE ASSEMBLY TOOL	62/263,142	04/12/2015		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
WO	CABLE ASSEMBLY TOOL	CA2016/051424	05/12/2016		
US	HINGED CONNECTOR DOOR ASSEMBLY	62/261,493	01/12/2015		
WO	HINGED CONNECTOR DOOR ASSEMBLY	CA2016/051409	01/12/2016		
US	OVERMOULDED ASSEMBLY WITH STRAIN RELIEF	62/332,141	05/05/2016		
US	OPTIC CABLE PULLER ASSEMBLY	62/382,903	02/09/2016		
US	FIBER OPTIC CONNECTOR	62/320,425	08/04/2016		
US	REVERSIBLE BREAKOUT BOX WITH CROSS CONNECT KIT	62/364,535	20/07/2016		
US	DUAL DIRECTION FIBER OPTIC CASSETTE SYSTEM AND FIBER OPTIC CASSETTE WITH REMOVABLE STANDALONE ADAPTOR PLATE	62/359,784	08/07/2016		
US	RACKMOUNT CASE FOR THE ACCOMODATION OF OPTICAL EQUIPMENT	62/346,762	07/06/2016		
US	DEFORMABLE LATCH MECHANISM FOR TRAY	62/347,162	08/06/2016		
US	LABELLING SYSTEM FOR RACKMOUNT CASE FOR THE ACCOMODATION OF OPTICAL EQUIPMENT	62/358,753	06/07/2016		
US	LABELLING SYSTEM FOR PATCH PANEL	62/373,437	11/08/2016		
US	CABLE PLUG REMOVAL AND INSTALLATION TOOL	62/422,660	16/11/2016		
US	PLUG WITH TWIST AND PULL RELEASE MECHANISM	62/434,544	15/12/2016		
US	INTELLIGENT SYSTEM FOR INTERCONNECTING DATA NETWORKING EQUIPMENT	62/548,484	22/08/2017		
US	MODULAR FIBER OPTIC CASSETTE AND SYSTEM	62/567,339	03/10/2017		
US	SLIDE AND TILT TRAY,	62/568,456	05/10/2017		

Country	Title	Appl No.	Appl Date	Grant No.	Grant Date
	SLIDE AND TRAY USING SAME				
US	FIBER OPTIC CASSETTE SYSTEM WITH REVERSIBLE CASSETTES	62/617,844	16/01/2018		
US	FIBER OPTIC CASSETTE SYSTEM WITH SLANTABLE CONNECTOR	62/592,473	30/11/2017		
US	FIBER OPTIC CASSETTE SYSTEM WITH RELEASABLE ENGAGEMENT	62/607,444	19/12/2017		
US	CROSS CONNECT SYSTEM AND TRAY	62/653,771	06/04/2018		
US	PATCH PANEL SYSTEM AND TRAY	62/727,736	06/09/2018		
US	TELESCOPING CABLE SPOOL	62/718,117	13/08/2018		
US	FLEXIBLE CABLE GUIDE	62/722,556	24/08/2018		

Schedule C

Ctry	Title	Appl No.	Appl Date	Grant No.	Grant Date
CA	METHODS OF MAKING TELECOMMUNICATIONS CABLE	2135952	1994-11-16	2,135,952	2001-08-14
US	METHODS OF MAKING TELECOMMUNICATIONS CABLE	343855	1994-11-17	5,658,406	1997-08-19
CA	IMPEDANCE COMPENSATION FOR A CABLE AND CONNECTOR	2277658	1999-07-14	2,277,658	2001-07-03
	IMPEDANCE COMPENSATION FOR A CABLE AND CONNECTOR	09/286,113	1999-04-02	6,356,162	2002-03-12
US	CABLE TESTING APPARATUS	09/259,945	1999-03-01	6,259,256	2001-07-10
CA	CABLE TESTING APPARATUS	2298338	2000-02-09	2,298,338	2001-12-18
CA	A SEMI-SHIELDED CABLE	2298313	2000-02-10	2,298,313	2001-08-14
CA	FIXTURE FOR CONTROLLING THE TRAJECTORY OF WIRES TO REDUCE CROSSTALK	2282956	1999-09-21	2,282,956	2002-06-18
US	FIXTURE FOR CONTROLLING THE TRAJECTORY OF WIRES TO REDUCE CROSSTALK	09/275,988	1999-03-25	6,379,175	2002-04-30
US	CROSS WEB FOR DATA GRADE CABLES	09/343,998	1999-06-30	6,365,836	2002-04-02
CA	CROSS WEB FOR DATA GRADE CABLES	2277655	1999-07-14	2,277,655	2001-09-25
CA	HIGH SPEED DATA COMMUNICATION CABLES	2313249	2000-07-27	2,313,249	2002-07-16
US	HIGH SPEED DATA COMMUNICATION CABLES	09/412,469	1999-10-05	6,566,607	2003-05-20
US	PUNCH DOWN INSULATION DISPLACEMENT CONNECTOR HOUSING	09/286,114	1999-04-02	6,575,778	2003-06-10
WO	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	CA2005/001732	2005-11-15		

Ctry	Title	Appl No.	Appl Date	Grant No.	Grant Date
EP	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	5803047.9	2005-11-15		
US	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	11/718,148	2005-11-15	7,838,773	2010-11-23
CN	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	200580038981.8	2005-11-15		
IN	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	1232/KOLNP/2007	2005-11-15		
JP	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	2007-540468	2005-11-15		
MX	HIGH PERFORMANCE TELECOMMUNICATIONS CABLE	07/05750	2005-11-15		
US	BOX FOR PAYOUT OF A FILAMENTARY PRODUCT	10/635,136	2003-08-05	7,007,799	2006-03-07
CA	BOX FOR PAYOUT OF A FILAMENTARY PRODUCT	2489011	2003-08-05	2,489,011	2007-04-24
CA	TWISTED PAIR CABLE WITH CABLE SEPARATOR	2669981	2003-03-13	2,669,981	2010-07-27
CA	ELECTROSTATIC DISCHARGE PROTECTED JACK	2440817	2002-03-12	2,440,817	2009-09-22
US	ELECTROSTATIC DISCHARGE PROTECTED JACK	10/097,535	2002-03-12	6,780,035	2004-08-24
CA	TWISTED PAIR CABLE WITH CABLE SEPARATOR	2479255	2003-03-13	2,479,255	2009-09-15
US	TWISTED PAIR CABLE WITH CABLE SEPARATOR	10/378,398	2003-03-03	7,196,271	2007-03-27