

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4207874

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
TELLABS ENTERPRISE, INC. (F/K/A TELLABS BEDFORD, INC.)	12/30/2016

RECEIVING PARTY DATA

Name:	BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT
Street Address:	901 MAIN STREET
Internal Address:	14TH FLOOR, TX1-492-14-11
City:	DALLAS
State/Country:	TEXAS
Postal Code:	75202-3714

PROPERTY NUMBERS Total: 50

Property Type	Number
Patent Number:	7472043
Patent Number:	7412305
Patent Number:	7408782
Patent Number:	6668138
Patent Number:	6898206
Patent Number:	7356042
Patent Number:	6466572
Patent Number:	6362908
Patent Number:	6781981
Patent Number:	6353609
Patent Number:	7085261
Patent Number:	6288883
Patent Number:	6366464
Patent Number:	6169389
Patent Number:	6535308
Patent Number:	6496639
Patent Number:	7103907
Patent Number:	6460182
Patent Number:	7058966

PATENT

Property Type	Number
Patent Number:	6151226
Patent Number:	6246510
Patent Number:	6278829
Patent Number:	6310784
Patent Number:	6385030
Patent Number:	6256205
Patent Number:	6396673
Patent Number:	6418195
Patent Number:	6366712
Patent Number:	6466728
Patent Number:	6707833
Patent Number:	6775299
Patent Number:	6795538
Patent Number:	6442035
Patent Number:	6977966
Patent Number:	7212541
Patent Number:	6775433
Patent Number:	7035504
Patent Number:	7197205
Patent Number:	7941559
Patent Number:	7454140
Patent Number:	7096147
Application Number:	13177081
Application Number:	13608156
Patent Number:	9209925
Patent Number:	9008501
Patent Number:	8953941
Patent Number:	9098729
Application Number:	14341132
Patent Number:	7254330
Patent Number:	6366717

CORRESPONDENCE DATA

Fax Number: (312)558-5700

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (312) 558-6352

Email: mfoy@winston.com

Correspondent Name: MICHELLE FOY, WINSTON & STRAWN LLP

Address Line 1: 35 WEST WACKER DRIVE

PATENT

Address Line 2: SUITE 4200
Address Line 4: CHICAGO, ILLINOIS 60601-9703

ATTORNEY DOCKET NUMBER: 3165.7128

NAME OF SUBMITTER: MICHELLE FOY

SIGNATURE: /Michelle Foy/

DATE SIGNED: 01/03/2017

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

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NOTICE OF GRANT OF SECURITY
INTEREST IN PATENTS

United States Patent and Trademark Office

Ladies and Gentlemen:

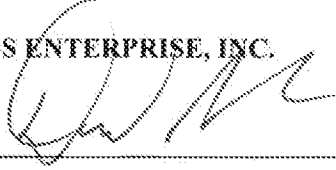
Please be advised that pursuant to the Security and Pledge Agreement dated as of December 30, 2016 (as amended, modified, extended, restated, renewed, replaced, or supplemented from time to time, the "Agreement") by and among the Grantors party thereto (each an "Grantor" and collectively, the "Grantors") and Bank of America, N.A., as administrative agent (the "Administrative Agent") for the Secured Parties referenced therein, the undersigned Grantor has granted a continuing security interest in and continuing lien upon the patents and patent applications shown on Schedule 1 attached hereto to the Administrative Agent for the ratable benefit of the Secured Parties.

The undersigned Grantor and the Administrative Agent, on behalf of the Secured Parties, hereby acknowledge and agree that the security interest in the foregoing patents and patent applications (a) may only be terminated in accordance with the terms of the Agreement and (b) is not to be construed as an assignment of any patent or patent application.

Grantor hereby authorizes and requests the United States Patent and Trademark Office to record this Notice of Grant of Security Interest in Patents.

Very truly yours,

TELLABS ENTERPRISE, INC.

By:  _____

Name: David B. Brown

Title: Chief Financial Officer and Treasurer

[SIGNATURE PAGE TO NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS]

PATENT
REEL: 041233 FRAME: 0622

Acknowledged and Accepted:

BANK OF AMERICA, N.A., as Administrative Agent

By: Amy Caranza
Name: Amy Caranza
Title: SVP

Schedule 1

<u>COUNTRY</u>	<u>NAME/TITLE</u>	<u>OWNER</u>	<u>REGISTRATION # OR APPLICATION #</u>	<u>REGISTRATION DATE OR APPLICATION DATE</u>
US	MASS CUSTOMIZATION CONFIGURATOR	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,472,043	30-Dec-2008
US	POWER SUPPLY DETECTION DEVICE AND METHOD	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,412,305	12-Aug-2008
US	MULTIPLE PRINTED CIRCUIT BOARD HEAT TRANSFER GUIDE PLATES	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,408,782	05-Aug-2008
US	APPARATUS AND METHODS FOR MAINTAINING BALANCED COMMUNICATION CHANNELS WITH INCREASING SERVICE DEMANDS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,668,138	23-Dec-2003
US	WAVELENGTH DIVISION MULTIPLEXED (WDN) RING- PASSIVE OPTICAL NETWORK (PON) WITH ROUTE PROTECTION FOR REPLACEMENT OF SPLITTER BASED PASSIVE OPTICAL NETWORKS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,898,206	24-May-2005
US	DISTRIBUTED ETHERNET HUB	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,356,042	08-Apr-2008
US	DISTRIBUTED ETHERNET HUB	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,466,572	15-Oct-2002
US	MULTI-SERVICE ADAPTABLE OPTICAL NETWORK UNIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,362,908	26-Mar-2002
US	ADDING DSL SERVICES TO A DIGITAL LOOP CARRIER SYSTEM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,781,981	24-Aug-2004
US	DIGITAL PACKET NETWORK FOR THE LOCAL ACCESS LOOP	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,353,609	05-Mar-2002
US	DIGITAL PACKET NETWORK FOR THE LOCAL ACCESS LOOP	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,085,261	01-Aug-2006
US	POWER INPUT PROTECTION CIRCUIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,288,883	11-Sep-2001
US	CARD CAGE FOR CIRCUIT CARDS IN AN OPTICAL NETWORK UNIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,366,464	02-Apr-2002
US	PUMPED CAPACITIVE STORAGE SYSTEM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,169,389	02-Jan-2001
US	METHOD AND APPARATUS FOR CONVERTING ELECTRICAL SIGNALS AND OPTICAL SIGNALS FOR BIDIRECTIONAL COMMUNICATION OVER A SINGLE OPTICAL FIBER	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,535,308	18-Mar-2003

US	METHOD AND APPARATUS FOR UPGRADING AN OPTICAL FIBER COMMUNICATION SYSTEM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,496,639	17-Dec-2002
US	RF RETURN OPTICAL TRANSMISSION	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,103,907	05-Sep-2006
US	AN OPTICAL COMMUNICATION SYSTEM FOR TRANSMITTING RF SIGNALS DOWNSTREAM AND BIDIRECTIONAL TELEPHONY SIGNALS WHICH ALSO INCLUDE RF CONTROL SIGNALS UPSTREAM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,460,182	01-Oct-2002
US	OPTICAL COMMUNICATION SYSTEM FOR TRANSMITTING RF SIGNALS DOWNSTREAM AND BIDIRECTIONAL TELEPHONY SIGNALS WHICH ALSO INCLUDE RF CONTROL SIGNALS UPSTREAM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,058,966	06-Jun-2006
US	FOUR QUADRANT POWER CONVERSION TOPOLOGY	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,151,226	21-Nov-2000
US	LIGHT AMPLIFICATION APPARATUS WITH AUTOMATIC MONITORING AND CONTROLS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,246,510	12-Jun-2001
US	OPTICAL FIBER ROUTING AND SUPPORT APPARATUS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,278,829	21-Aug-2001
US	DENSELY ARRANGED ELECTRICALLY SHIELDED COMMUNICATION PANELS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,310,784	30-Oct-2001
US	REDUCED SIGNAL LOSS SURGE PROTECTION CIRCUIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,385,030	07-May-2002
US	FASTENERLESS CARD CAGE FOR CIRCUIT CARDS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,256,205	03-Jul-2001
US	REDUCED-LOSS, HIGH-FREQUENCY SIGNAL TRANSMISSION SYSTEM UTILIZING AN OVER-VOLTAGE AND OVER-CURRENT PROTECTION DEVICE	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,396,673	28-May-2002
US	APPARATUS FOR COMMUNICATING A DIAGNOSTIC DEVICE WITH A TELECOMMUNICATIONS SYSTEM THROUGH A REMOTE NETWORK UNIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,418,195	09-Jul-2002
US	APPARATUS FOR DISTRIBUTING OPTICAL FIBER TRANSMISSION PATHS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,366,717	02-Apr-2002
US	APPARATUS AND METHOD FOR COMBINING TWO SEPARATE RF SIGNALS ON A SINGLE OPTICAL FIBER WITH MONITORING AND ALARM CAPABILITIES	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,366,712	02-Apr-2002
US	ATTENUATOR FOR FIBER OPTIC CABLES	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,466,728	15-Oct-2002
US	DIGITAL LASER DRIVER CIRCUIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,707,833	16-Mar-2004

US	COPPER BASED INTERFACE SYSTEM AND DATA FRAME FORMAT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,775,299	10-Aug-2004
US	COPPER BASED INTERFACE SYSTEM INITIALIZATION AND MONITORING METHODS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,795,538	21-Sep-2004
US	CARD CAGE WITH INTEGRAL CARD GUIDES	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,442,035	27-Aug-2002
US	BIDIRECTIONAL OPTICAL COMMUNICATIONS HAVING QUICK DATA RECOVERY WITHOUT FIRST ESTABLISHING TIMING AND PHASE LOCK	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,977,966	20-Dec-2005
US	WAVELENGTH DIVISION MULTIPLEXED (WDM) RING PASSIVE OPTICAL NETWORK (PON) WITH ROUTE PROTECTION FOR REPLACEMENT OF SPLITTER BASED PASSIVE OPTICAL NETWORKS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,212,541	01-May-2007
US	DEEP FIBER NETWORK WITH HIGH SPEED DATA AND VIDEO ON DEMAND	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	6,775,433	10-Aug-2004
US	DEEP FIBER NETWORK WITH HIGH SPEED DATA AND VIDEO ON DEMAND	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,035,504	25-Apr-2006
US	DEEP FIBER NETWORK WITH HIGH SPEED DATA AND VIDEO ON DEMAND	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,197,205	27-Mar-2007
US	MEDIA ACCESS CONTROL ADDRESS TRANSLATION FOR A FIBER TO THE HOME SYSTEM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,941,559	10-May-2011
US	FIBER TO THE HOME BROADBAND HOME UNIT	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,454,140	18-Nov-2008
US	APPARATUS AND METHOD FOR CORRELATING THE AIR FLOW VELOCITY IN AN ENVIRONMENTAL CHAMBER TO A RACK ASSEMBLY	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,096,147	22-Aug-2006
US	PASSIVE ARCHITECTURAL OPTICAL DISTRIBUTION NETWORK	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	13/177,081	06-Jul-2011
US	DELIVERY OF GPON TECHNOLOGY	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	13/608,156	10-Sep-2012
US	PASSIVE OPTICAL NETWORKING REDUNDANCY VIA TWO OR MORE AUTO SENSING OPTICAL LINE TERMINALS	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	9,209,925	08-Dec-2015
US	NETWORK AND METHOD FOR PROVIDING REDUNDANCY IN AN OPTICAL DISTRIBUTION NETWORK	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	9,008,501	14-Apr-2015
US	METHOD AND APPARATUS FOR IDENTIFYING A PORT IN A PASSIVE OPTICAL NETWORK	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	8,953,941	10-Feb-2015
US	METHOD AND APPARATUS FOR DETECTING DEVICE INTRUSION TO A NETWORK INTERFACE TERMINAL	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	9,098,729	04-Aug-2015
US	MODULAR PASSIVE OPTICAL NETWORK RECESSED WALL MOUNTED OPTICAL NETWORK TERMINAL SYSTEM	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	14/341,132	25-Jul-2014

US	SINGLE FIBER PASSIVE OPTICAL NETWORK WAVELENGTH DIVISION MULTIPLEX OVERLAY	Tellabs Enterprise, Inc. (f/k/a Tellabs Bedford, Inc.)	7,254,330	07-Aug-2007
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PATENT

REEL: 041233 FRAME: 0627

RECORDED: 01/03/2017