

**PATENT ASSIGNMENT**

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
TERABEAM CORPORATION	05/23/2008
RECEIVING PARTY DATA	
Name:	PERTEX TELECOMMUNICATION LLC
Street Address:	2711 Centerville Road
Internal Address:	Suite 400
City:	Wilmington
State/Country:	DELAWARE
Postal Code:	19808
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	09805763
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NAME OF SUBMITTER:	Paul S. Hunter

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Total Attachments: 11  
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**PATENT**

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**ASSIGNMENT OF PATENT RIGHTS**

For good and valuable consideration, the receipt of which is hereby acknowledged, Terabeam Corporation, a Washington corporation, with an office at 2115 O'Neil Drive, San Jose, CA 95131 ("**Assignor**"), does hereby sell, assign, transfer, and convey unto Pertex Telecommunication LLC, a Delaware limited liability company, having an address at 2711 Centerville Road, Suite 400, Wilmington, DE 19808 ("**Assignee**"), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the "**Patent Rights**"):

(a) the provisional patent applications, patent applications and patents listed in the table below (the "**Patents**");

(b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority, and/or (ii) for which any of the Patents directly or indirectly forms a basis for priority;

(c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations of any item in any of the foregoing categories (a) and (b);

(d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;

(e) all items in any of the foregoing in categories (b) through (d), whether or not expressly listed as Patents below and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;

(f) inventions, invention disclosures, and discoveries described in any of the Patents and/or any item in the foregoing categories (b) through (e) that (i) are included in any claim in the Patents and/or any item in the foregoing categories (b) through (e), and/or (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceedings brought on any of the Patents and/or any item in the foregoing categories (b) through (e);

(g) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(h) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (b) through (g), including, without limitation, all causes of action and other enforcement rights for

- (1) damages,
- (2) injunctive relief, and
- (3) any other remedies of any kind

for past, current, and future infringement; and

(i) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (h).

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6,381,044 (09/627,816)	US	(7/28/2000)	Method and apparatus for correcting aberrations in photon collection devices  Schuster, John J.; Bajorins, David P.
6,417,976 (09/801,030)	US	(3/6/2001)	Apparatus and method to mount electro-optic systems  Schuster, John J.; Riday, Richard B.; Davis, Eric J.; Webb, James S.; Hulett, Randy; Schulte, Derek
6,470,023 (09/799,851)	US	(3/5/2001)	Optical fiber position controller for multiple degrees of freedom  Upton, Eric Lawrence
6,483,621 (09/627,819)	US	(7/28/2000)	Method and apparatus for tone tracking in wireless optical communication systems  Adams, Jeffrey C.; Pratt, Mark; Barclay, Micah J.
JP20020515731T	JP	6/26/2001	Method and apparatus for tone tracking wireless optical communication system

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			Adams, Jeffrey C.; Pratt, Mark; Barclay, Micah J
6,487,022 (09/938,896)	US	(8/24/2001)	Transmitter using uniform intensity transmission for a wireless optical communication system  Okorogu, Albert O.
6,490,070 (09/627,279)	US	(7/28/2000)	Method and apparatus for polarization tracking in wireless optical communication systems  Adams, Jeffrey C.; Pratt, Mark; Barclay, Micah J.
6,493,490 (09/740,282)	US	(12/18/2000)	Method and apparatus for receiving and aligning an optical communications beam with an integrated structure  Steiger, Ronald D.
6,498,500 (09/805,655)	US	(3/13/2001)	Conductive fluid-based position sensor and method  Upton, Eric Lawrence
6,515,490 (10/143,166)	US	(5/10/2002)	Conductive fluid-based position sensor and method  Upton, Eric Lawrence
6,498,662 (09/627,276)	US	(7/28/2000)	Apparatus and method for receiving optical telecommunication transmissions by using a holographic optical element  Schuster, John J.
6,539,159 (09/805,675)	US	(3/13/2001)	Adaptive support for positioning optical components  Upton, Eric Lawrence
6,542,675	US		Apparatus and method to use a

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
(09/847,891)		(5/2/2001)	tapered fiber bundle in a free space optical communication system  Tourgee, Gerald Edward; Barbier, Pierre Robert; Rollins, David Lawrence; Sochor, Timothy Alan; Robinson, III, John Walker
6,553,161 (09/805,763)	US	(3/13/2001)	Magnetic fluid-based positioning apparatus and method  Upton, Eric Lawrence
6,575,418 (10/147,186)	US	(5/15/2002)	Wall mount assembly and apparatus for mounting FSO equipment to a wall  Riday, Richard Brian
6,597,476 (09/852,825)	US	(5/9/2001)	Common aperture holographic optical element devices for a free space optical transceiver  Okorogu, Albert O.
6,603,554 (09/746,122)	US	(12/22/2000)	Apparatus and method to measure light attenuation through a window  Eisenberg, Eric C.; Hampton, Shaun C.; Adams, Jeffrey C.; Bajorins, David P.
6,608,708 (09/627,815)	US	(7/28/2000)	System and method for using a holographic optical element in a wireless telecommunication system receiver  Amadon, Charles Gregory; Rallison, Richard D.; Schuster, John J.; Brown, Harold A.; Pratt, Mark
6,678,079 (09/802,672)	US	(3/9/2001)	Transceiver for a wireless optical telecommunication

<b>Patent or Application No.</b>	<b>Country</b>	<b>Filing Date</b>	<b><u>Title of Patent and First Named Inventor</u></b>
			system  Amadon, Charles Gregory; Rallison, Richard D.; Pratt, Mark; Bajorins, David P.; Stapleton, Lawrence Cooper; Riday, Richard B.; Brown, Harold Alexander; Lauby, William Joseph; Thomas, Michael; Sparrold, Scott William
JP20020515481T	JP	6/1/2001	System and method for using a holographic optical element in a wireless telecommunication system receiver  Amadon Charles Gregory; Rallison Richard D; Schuster John; Brown Harold A; Pratt Mark
TWI165501 (TW20010118449)	TW	(7/27/2001)	System and method for using a holographic optical element in a wireless telecommunication system receiver  Amadon Charles Gregory; Rallison Richard D; Schuster John; Brown Harold A; Pratt Mark
6,867,889 (10/686,881)	US	(10/16/2003)	Transceiver for a wireless optical telecommunication system  Amadon, Charles Gregory; Rallison, Richard D.; Pratt, Mark; Bajorins, David P.; Stapleton, Lawrence Cooper; Riday, Richard B.; Brown, Harold Alexander; Lauby, William Joseph; Thomas, Michael; Sparrold, Scott William

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6,609,690 (10/010,350)	US	(12/5/2001)	Apparatus for mounting free space optical system equipment to a window  Davis, Eric Joseph
6,661,546 (10/112,534)	US	(3/28/2002)	Multi-aperture holographic optical element for illumination sensing in a free space optical communication system  Plett, Mark L.
6,674,974 (09/627,277)	US	(7/28/2000)	Method and apparatus for tracking in an optical communications system  Stieger, Ronald D.; Mecherle, George Steven; Mollo, Mark A.
6,678,251 (09/782,956)	US	(2/13/2001)	Link quality agent  Sowizral, Henry Adam; Payne, Christopher Robin; Angus, Ian Gareth; Wagner, Alan Shelton; Harris, Patrick Neal; Hollinger, Kermit Andreas
7,012,897 (10/625,341)	US	(7/22/2003)	Link quality agent  Sowizral, Henry Adam; Payne, Christopher Robin; Angus, Ian Gareth; Wagner, Alan Shelton; Harris, Patrick Neal; Hollinger, Kermit Andreas
6,724,508 (09/886,246)	US	(6/20/2001)	Internal reflection apparatus and method using a holographic optical element for a free space optical communication system  Pierce, Robert Michael; Fadlovich, Chace Howard; Bratt, Nicholas Eichhorn

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6,731,415 (10/109,716)	US	(3/28/2002)	Multi-aperture holographic optical element for use in a free space optical communication system  Plett, Mark L.
6,768,876 (09/627,817)	US	(7/28/2000)	Method and apparatus for tracking an optical communications system  Steiger, Ronald D.; Pratt, Mark R.
6,791,073 (09/746,700)	US	(12/21/2000)	Optical receiver having baffle including a plurality of apertures  Bell, John A.; Schuster, John J.
6,801,687 (10/226,490)	US	(8/22/2002)	Apparatus and method for generating a mode-scrambled optical signal using a VCSEL array  Pierce, Robert M.
6,801,722 (09/847,608)	US	(5/1/2001)	Optical tracking system with reflective fiber  Webb, James S.; Bell, John A.; Presby, Herman M.
6,832,859 (10/072,292)	US	(2/7/2002)	Free space optical system with multiple function detectors  Bell, John A.; Bratt, Nicholas E.; Presby, Herman M.; Ferrier, Stuart; Plett, Mark Lewis
6,804,422 (10/008,453)	US	(12/5/2001)	Integrated optic component for binocular FSO transceiver  Bajorins, David Paul; Webb, James S.
6,810,175	US		Off-axis mode scrambler

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
(10/128,953)		(4/22/2002)	Wey, Jun Shan; Pierce, Robert M.; Eisenberg, Eric C.; Wyer, Jorah R.
7,072,543 (10/681,552)	US	(10/7/2003)	Extended source transmitter for free space optical communication systems  Pierce, Robert M.; Bell, John A.; Cornish, Carrie Sjaarda; Rush, David
6,847,496 (09/904,880)	US	(7/12/2001)	Transmission of free-space optical communication signals through windows  Presby, Herman
6,856,437 (10/061,557)	US	(2/1/2002)	Fast steering mirror  Witt, John D.; Anderson, Tyler M.
6,868,236 (10/198,980)	US	(7/18/2002)	Apparatus and method for combining multiple optical beams in a free-space optical communications system  Wiltsey, Thomas J.; Rollins, David L.; Pierce, Robert M.
6,895,146 (09/876,535)	US	(6/6/2001)	Mode scrambler  Wey, Jun Shan; Plett, Mark Lewis; Cashion, Steven Andrew; Nykolak, Gerald; Pierce, Robert Michael
6,912,360 (09/938,906)	US	(8/24/2001)	Free space point-to-multipoint optical communication system and apparatus  Sparrold, Scott W.; Upton, Eric L.; Okorogu, Albert O.
6,925,260 (09/805,656)	US	(3/13/2001)	Window-mounted positionable collector

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6,941,076 (09/859,339)	US	(5/16/2001)	Upton, Eric Lawrence Tone modulation for out-of-band communication in a free-space optical communication link  Adams, Jeffrey C.; Lee, Rand W.
6,967,754 (10/020,518)	US	(12/14/2001)	Hybrid optical transceivers for free space optical communication  Bratt, Nicholas E.; Fadlovich, Chace H.; Pierce, Robert M.
6,972,904 (10/732,902)	US	(12/9/2003)	Pointable optical transceivers for free space optical communication  Bratt, Nicholas E.; Fadlovich, Chace H.; Pierce, Robert M.
6,970,651 (09/919,687)	US	(7/31/2001)	High-sensitivity tracking in free-space optical communication systems  Schuster, John J.; Bell, John A.
7,006,954 (10/077,343)	US	(2/15/2002)	Random sampling for multivariate Bernoulli variables  Curtis, Wendell; Zikan, Karel; Sowizral, Henry
7,103,279 (10/196,568)	US	(7/15/2002)	Architecture for wireless transmission of high rate optical signals  Koh, Christopher T.; Robinson, Wyley; Lee, Myung K.; Holzman, Eric L.; Pergola, Kenneth Michael
7,116,910 (10/120,950)	US	(4/10/2002)	Free space optical tap and multi/demultiplexer

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6,450,773 (09/805,654)	US	(3/13/2001)	Presby, Herman M.; Rush, David W. Piezoelectric vacuum pump and method Eric Lawrence Upton

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed at Northampton, MA  
on May 23, 2008

**ASSIGNOR:**

**Terabeam Corporation**

By: David L. Renauld  
Name: David L. Renauld  
Title: Vice President  
(Signature MUST be notarized)

STATE OF Massachusetts  
COUNTY OF Hampshire ) ss.

On 5/23/08, before me, Anna Zadworny  
Notary Public in and for said State, personally appeared David L. Renauld (AZ)  
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the  
MAIC 570683114

instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Anna Zadworny (Seal)

ANNA ZADWORNY  
MY COMMISSION EXPIRES  
SEPTEMBER 17, 2010