7.18.04 102702	Attorney's Docket No.
To the Honorable Commissioner of Patents and Trademsthereof.	arks. Ficase ie attached original document(s) or co
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
David Spencer PEARSON	N. DDVIII GOVANIIVONGAA G
Brig Barnum ELLIOTT	Name: BBNT SOLUTIONS LLC
Additional name(s) of conveying party(ies) attached?	Address: 10 Moulton Street
☐ Yes ☒ No	Cambridge, MA 02138
3. Nature of conveyance:	_
☐ Assignment ☐ Merger	
☐ Security Agreement ☐ Change of Name	
Other:	Additional name(s) & address(es) attached?  Yes
o their.	No No
Execution Date: March 10 and 12, 2004	_
4. Application number(s) or patent number(s):	1803509
	oplication, the execution date of the application is: March
12, 2004	-
A. Patent Application No.(s)	B. Patent No.(s)
Additional numbers	
5. Name and address of party to whom correspondence should be mailed:	6. Total number of applications and patents involved:
	7. Total fee (37 CFR 3.41): \$40.00
Name: Christian R. Andersen	☐ Enclosed
Address: Verizon Corporate Services Group Inc.	57
600 Hidden Ridge Drive	Authorization to be charged to deposit accoun
Mail Code: HQE03H14	necessary.
I ' TO 75030	
Irving, Texas 75038 CUSTOMER NUMBER: 32127	
Irving, Texas 75038 CUSTOMER NUMBER: 32127	8. Deposit account number:
<b>O</b> ,	8. Deposit account number: 07-2347
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CUSTOMER NUMBER: 32127  DO NOT  9. Statement and signature.  To the best of my knowledge and belief, the foregoing in	07-2347
CUSTOMER NUMBER: 32127  DO NOT  9. Statement and signature.	07-2347  USE THIS SPACE  formation is true and correct and any attached copy is a tr
CUSTOMER NUMBER: 32127  DO NOT  9. Statement and signature.  To the best of my knowledge and belief, the foregoing in copy of the original document	07-2347  TUSE THIS SPACE  Iformation is true and correct and any attached copy is a tr
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DO NOT  9. Statement and signature.  To the best of my knowledge and belief, the foregoing in copy of the original document  Joel Wall  Reg. No. 25,648	O7-2347  CUSE THIS SPACE  Iformation is true and correct and any attached copy is a true mature.  March 18, 200  Date
CUSTOMER NUMBER: 32127  DO NOT  9. Statement and signature.  To the best of my knowledge and belief, the foregoing in copy of the original document  Joel Wall Name of Person Signing  Reg. No. 25,648  Sign  Total number of pages including cover sheet, attachmen	O7-2347  CUSE THIS SPACE  Iformation is true and correct and any attached copy is a true mature.  March 18, 200  Date

PATENT REEL: 015118 FRAME: 0576 3/12/2004 12:59 PM FROM: Fax TO: 1-571-432-0808 PAGE: 005 OF 006

Attorney's Docket No. 03-4018

## ASSIGNMENT (Joint) Worldwide Rights

THIS ASSIGNMENT, by <u>David Spencer Pearson</u> and <u>Brig Barnum Elliott</u>, residing at <u>Shadowbrook</u> Farm. 1601 Monument Avenue, <u>Bennington</u>, <u>Vermont 05201</u> and <u>25 Wollaston Avenue</u>, <u>Arlington</u>, <u>Massachusetts 02476</u> (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>SYSTEMS AND METHODS FOR IMPLEMENTING ROUTING PROTOCOLS FOR QUANTUM CRYPTOGRAPHIC KEY TRANSPORT</u> set forth in an application for Letters Patent of the United States,

(1)	which is a provisional application (a) filed herewith; or (b) bearing Application No, and filed on; or
(2)	which is a non-provisional application  (a) having an eath or declaration executed on even date herewith prior to filing of application:
	(b) bearing Application No. and filed on ; or (c) filed herewith; and

WHEREAS, <u>BBNT SOLUTIONS LLC</u>, a corporation duly organized under and pursuant to the laws of <u>Delaware</u> and having its principal place of business at <u>10 Moulton Street</u>, <u>Cambridge</u>, <u>MA 02138</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including any previously or subsequently filed provisional applications, for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, be it known that for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, provisional applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or

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3/12/2004 12:59 PM FROM: Fax TO: 1-571-432-0808 PAGE: 006 OF 006

Assignment Attorney's Docket No.: 03-4018

Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

David S. Pearson David Spencer Pearson	Witness Signature
Date: 12 March 2004	Susan Beal Witness Name
Brig Barnum Elliott	Witness Signature
Date:	Witness Name

Attorney's Docket No. 03-4018

## ASSIGNMENT (Joint) Worldwide Rights

THIS ASSIGNMENT, by <u>David Spencer Pearson</u> and <u>Brig Barnum Elliott</u>, residing at <u>Shadowbrook</u>
Farm, 1601 Monument Avenue, <u>Bennington</u>, <u>Vermont 05201</u> and <u>25 Wollaston Avenue</u>, <u>Arlington</u>, <u>Massachusetts</u>
02476 (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>SYSTEMS AND METHODS FOR IMPLEMENTING ROUTING PROTOCOLS FOR OUANTUM CRYPTOGRAPHIC KEY TRANSPORT</u> set forth in an application for Letters Patent of the United States,

(1)	which is a provisional application
	(a) filed herewith; or (b) bearing Application No, and filed on; or
(2)	which is a non-provisional application
	<ul> <li>(a) A having an oath or declaration executed on even date herewith prior to filing of application;</li> </ul>
	(b) bearing Application No, and filed on; or
	(c) 🔀 filed herewith; and

WHEREAS, <u>HENT SOLUTIONS I.I.C.</u>, a corporation duly organized under and pursuant to the laws of <u>Delaware</u> and having its principal place of business at <u>10 Moulton Street</u>. <u>Cambridge</u>, <u>MA 02138</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including any previously or subsequently filed provisional applications, for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, be it known that for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, provisional applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assigners will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or

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Assignment Attorney's Docket No.: 03-4018

Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

David Spencer Pearson	Witness Signature
Date:	Witness Name
Brig Barnum Ellibtt	Witness Signature
Date: 16 Mes 04	Oleksir Pikalo Witness Name

- 2 -

RECORDED: 03/18/2004