

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
Saeed S. Ghassemzadeh	11/16/2009
Jason Vincent Bellorado	11/19/2009
Ashley B. Tarokh	11/19/2009

**RECEIVING PARTY DATA**

Name:	AT&T Intellectual Property I, L.P.
Street Address:	645 E. Plumb Lane
City:	Reno
State/Country:	NEVADA
Postal Code:	89502

**PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	12622493

**CORRESPONDENCE DATA**

Fax Number: (512)338-6301  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
 Phone: 5123386300  
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 Correspondent Name: Nicole Teitler Cave  
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 Address Line 2: 7600B N. Capital of TX Hwy, Ste 350  
 Address Line 4: Austin, TEXAS 78731

ATTORNEY DOCKET NUMBER:	037-0111
NAME OF SUBMITTER:	Katrina Prati

Total Attachments: 12  
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**PATENT  
 REEL: 023564 FRAME: 0404**

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**ASSIGNMENT OF INVENTION**

For good and valuable consideration, the receipt of which is hereby acknowledged,  
I, an ASSIGNOR named below,

Saeed S. Ghassemzadeh of Andover, NJ  
Jason Vincent Bellorado of Santa Clara, CA  
Ashley B. Tarokh of Brookline, MA

hereby sell, assign and transfer to

ASSIGNEE: AT&T Intellectual Property I, L.P., a Nevada limited partnership,  
having a place of business at 645 E. Plumb Lane, Reno, NV 89502,

its successors, assigns and legal representatives, my entire right, title and interest throughout  
the world, including all rights to claim priority, in and to the invention(s) disclosed in:

- U.S. Patent Application executed on or about the date of this Assignment,
- U.S. Patent Application executed on \_\_\_\_\_, or
- U.S. Provisional Application
- U.S. Application No.: \_\_\_\_\_, filed on \_\_\_\_\_
- International Application No.: PCT/\_\_\_\_\_, filed on \_\_\_\_\_

ENTITLED: **NARROWBAND INTERFERENCE REJECTION FOR  
ULTRA-WIDEBAND SYSTEMS**, and naming as

INVENTOR(S): Saeed S. Ghassemzadeh, Jason Vincent Bellorado, and  
Ashley B. Tarokh

including without limitation, my entire right, title and interest in and to U.S. Provisional  
Application 61/182,803, filed June 1, 2009 and, more generally in and to, any and all United  
States and foreign applications (including any and all provisional, international, regional and  
foreign national applications) for said invention(s), including divisions, continuations,  
continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all  
patents of every country or region that may be granted or have been granted for said  
invention(s), including any reissues and reexaminations thereof.

To comply with 37 C.F.R. § 3.21 for recording this Assignment, I authorize and request that  
the application number and filing date be inserted here, if not already shown above,  
( 12 / 622,493 , filed November 20, 2009 ) when they become known.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to  
claim all rights of priority without further authorization from me.

I agree to execute any and all papers useful in connection with any and all United States and  
foreign applications (including international, regional, and foreign national applications), and  
generally to do everything possible to aid ASSIGNEE, its successors, assigns and nominees,  
at their request and reasonable expense, in obtaining and enforcing patents for said  
invention(s) in all countries.

I hereby covenant that no assignment, sale, license, agreement, or encumbrance has been or  
will be made or entered into that would conflict with this Assignment.

ASSIGNMENT OF INVENTION

I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on Nov 16, 2009 by Saeed S. Ghassenzadeh  
 Saeed S. Ghassenzadeh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of New Jersey  
 County of Monmouth

On 11/16/09, before me, Saeed S. Ghassenzadeh, personally appeared  
 (Date) (Printed Name of Notary)

Saeed S. Ghassenzadeh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of New Jersey that the foregoing paragraph is true and correct.

**ROBIN L. BADDERS**  
**ID # 2220046**  
**NOTARY PUBLIC OF NEW JERSEY**  
 Commission Expires 11/30/2013

WITNESS my hand and official seal.

Robin L. Badders  
 Signature of Notary

ASSIGNMENT OF INVENTION

Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Jason Vincent Bellorado

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Jason Vincent Bellorado, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary

ASSIGNMENT OF INVENTION

Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Ashley B. Tarokh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Ashley B. Tarokh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary

## ASSIGNMENT OF INVENTION

For good and valuable consideration, the receipt of which is hereby acknowledged,  
I, an ASSIGNOR named below,

Saeed S. Ghassemzadeh of Andover, NJ  
Jason Vincent Bellorado of Santa Clara, CA  
Ashley B. Tarokh of Brookline, MA

hereby sell, assign and transfer to

ASSIGNEE: AT&T Intellectual Property I, L.P., a Nevada limited partnership,  
having a place of business at 645 E. Plumb Lane, Reno, NV 89502,

its successors, assigns and legal representatives, my entire right, title and interest throughout  
the world, including all rights to claim priority, in and to the invention(s) disclosed in:

- U.S. Patent Application executed on or about the date of this Assignment,
- U.S. Patent Application executed on \_\_\_\_\_, or
- U.S. Provisional Application
- U.S. Application No.: \_\_\_\_\_, filed on \_\_\_\_\_
- International Application No.: PCT/\_\_\_\_\_, filed on \_\_\_\_\_

ENTITLED: **NARROWBAND INTERFERENCE REJECTION FOR  
ULTRA-WIDEBAND SYSTEMS**, and naming as

INVENTOR(S): Saeed S. Ghassemzadeh, Jason Vincent Bellorado, and  
Ashley B. Tarokh

including without limitation, my entire right, title and interest in and to U.S. Provisional  
Application 61/182,803, filed June 1, 2009 and, more generally in and to, any and all United  
States and foreign applications (including any and all provisional, international, regional and  
foreign national applications) for said invention(s), including divisions, continuations,  
continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all  
patents of every country or region that may be granted or have been granted for said  
invention(s), including any reissues and reexaminations thereof.

To comply with 37 C.F.R. § 3.21 for recording this Assignment, I authorize and request that  
the application number and filing date be inserted here, if not already shown above,  
( 12/622,493 , filed November 20, 2009 ) when they become known.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to  
claim all rights of priority without further authorization from me.

I agree to execute any and all papers useful in connection with any and all United States and  
foreign applications (including international, regional, and foreign national applications), and  
generally to do everything possible to aid ASSIGNEE, its successors, assigns and nominees,  
at their request and reasonable expense, in obtaining and enforcing patents for said  
invention(s) in all countries.

I hereby covenant that no assignment, sale, license, agreement, or encumbrance has been or  
will be made or entered into that would conflict with this Assignment.

ASSIGNMENT OF INVENTION

I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Saeed S. Ghassemzadeh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Saeed S. Ghassemzadeh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary



ASSIGNMENT OF INVENTION

Executed on Nov. 19, 2009 by Jason Vincent Bellorado  
Jason Vincent Bellorado

----- Notary Use Below -----

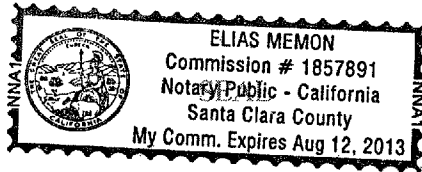
**ACKNOWLEDGMENT**

State of CALIFORNIA )  
County of SANTA CLARA )

On 11/19/2009, before me, ELIAS MEMON, NOTARY PUBLIC, personally appeared  
(Date) (Printed Name of Notary)

Jason Vincent Bellorado, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of CALIFORNIA that the foregoing paragraph is true and correct.



WITNESS my hand and official seal.

ELIAS MEMON  
Signature of Notary

ASSIGNMENT OF INVENTION

Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Ashley B. Tarokh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Ashley B. Tarokh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary

## ASSIGNMENT OF INVENTION

For good and valuable consideration, the receipt of which is hereby acknowledged,  
I, an ASSIGNOR named below,

Saeed S. Ghassemzadeh of Andover, NJ  
Jason Vincent Bellorado of Santa Clara, CA  
Ashley B. Tarokh of Brookline, MA

hereby sell, assign and transfer to

ASSIGNEE: AT&T Intellectual Property I, L.P., a Nevada limited partnership,  
having a place of business at 645 E. Plumb Lane, Reno, NV 89502,

its successors, assigns and legal representatives, my entire right, title and interest throughout  
the world, including all rights to claim priority, in and to the invention(s) disclosed in:

- U.S. Patent Application executed on or about the date of this Assignment,
- U.S. Patent Application executed on \_\_\_\_\_, or
- U.S. Provisional Application
- U.S. Application No.: \_\_\_\_\_, filed on \_\_\_\_\_
- International Application No.: PCT/\_\_\_\_\_, filed on \_\_\_\_\_

ENTITLED: **NARROWBAND INTERFERENCE REJECTION FOR  
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INVENTOR(S): Saeed S. Ghassemzadeh, Jason Vincent Bellorado, and  
Ashley B. Tarokh

including without limitation, my entire right, title and interest in and to U.S. Provisional  
Application 61/182,803, filed June 1, 2009 and, more generally in and to, any and all United  
States and foreign applications (including any and all provisional, international, regional and  
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continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all  
patents of every country or region that may be granted or have been granted for said  
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foreign applications (including international, regional, and foreign national applications), and  
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Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Saeed S. Ghassemzadeh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Saeed S. Ghassemzadeh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary

ASSIGNMENT OF INVENTION

Executed on \_\_\_\_\_, 200\_\_ by \_\_\_\_\_  
Jason Vincent Bellorado

----- *Notary Use Below* -----

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared  
(Date) (Printed Name of Notary)

Jason Vincent Bellorado, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of \_\_\_\_\_ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

\_\_\_\_\_  
Signature of Notary

ASSIGNMENT OF INVENTION

Executed on November 19, 2009 by *Ashley B. Tarokh*  
Ashley B. Tarokh

----- Notary Use Below -----

**ACKNOWLEDGMENT**

State of MASSACHUSETTS  
County of Middlesex

On 11/19/09, before me, Donna A. Bartolone, personally appeared  
(Date) (Printed Name of Notary)

Ashley B. Tarokh, who 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 instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of MASSACHUSETTS that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

SEAL

Donna A. Bartolone  
Signature of Notary

Donna A. Bartolone  
Notary Public  
My Commission Expires  
April 16, 2010