

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3502073

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
THOMAS MARCOUILLER	07/27/2015
OSCAR FERNANDO BRAN DE LEÓN	07/27/2015
THOMAS G. LEBLANC	07/27/2015
TODD LOEFFELHOLZ	08/13/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ADC TELECOMMUNICATIONS, INC.
<b>Street Address:</b>	1050 WESTLAKES DRIVE
<b>City:</b>	BERWYN,
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	19312
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14752142
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)332-9081
<i>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.</i>	
<b>Phone:</b>	(612) 332-5300
<b>Email:</b>	kwacek@merchantgould.com
<b>Correspondent Name:</b>	DAVID G. SCHMALTZ
<b>Address Line 1:</b>	MERCHANT & GOULD P.C.
<b>Address Line 2:</b>	P.O. BOX 2903
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402-0903
<b>ATTORNEY DOCKET NUMBER:</b>	02316.4219USU1
<b>NAME OF SUBMITTER:</b>	DAVID G. SCHMALTZ
<b>SIGNATURE:</b>	/David G. Schmaltz/
<b>DATE SIGNED:</b>	08/27/2015
<b>Total Attachments: 12</b>	
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source=ASSIGN-EXECUTED-MARCOUILLER-BRAN-DE-LEON-02316-4219USU1#page2.tif	

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source=ASSIGN-EXECUTED-MARCOUILLER-BRAN-DE-LEON-02316-4219USU1#page4.tif  
source=ASSIGN-EXECUTED-LEBLANC-02316-4219USU1#page1.tif  
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source=ASSIGNMENT-LOEFFELHOLZ-02316-4219USU1#page4.tif

**ASSIGNMENT**

WHEREAS, we, Thomas Marcouiller, Oscar Fernando Bran de León, Thomas G. LeBlanc and Todd Loeffelholz, made certain new and useful inventions and improvements for which we filed an application with the United States Patent and Trademark Office on June 26, 2015, application Serial No. 14/752,142 which is entitled INDEXING TERMINALS FOR SUPPORTING A BIDIRECTIONAL INDEXING ARCHITECTURE.

AND WHEREAS, ADC Telecommunications, Inc., a corporation organized and existing under and by virtue of the laws of the State of Minnesota, and having an office and place of business at 1050 Westlakes Drive, Berwyn, Pennsylvania 19312 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and the right(s) to claim priority thereto, and in and to the application, all patent applications based upon said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments

in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.


IN TESTIMONY WHEREOF, I have hereunto set my hand this 27 day of JULY, 2015.

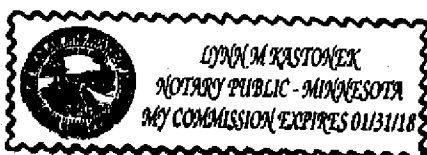
  
Thomas Marcouiller

STATE OF Minnesota )  
COUNTY OF Scott ) ss.

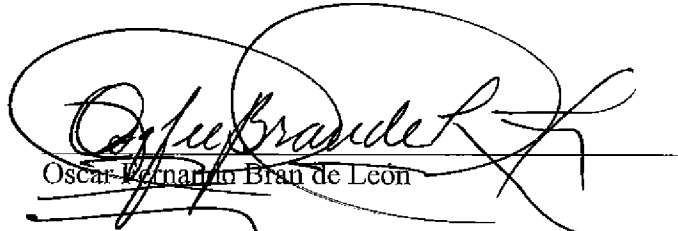
On this 27 day of July, 2015, before me personally appeared Thomas Marcouiller to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas Marcouiller duly acknowledged to me that Thomas Marcouiller executed the same for the uses and purposes therein set forth.

[SEAL]

  
Notary Public




IN TESTIMONY WHEREOF, I have hereunto set my hand this 27 day of July, 2015.

  
Oscar Fernando Bran de León

STATE OF Minnesota )  
COUNTY OF Scott ) ss.

On this 27 day of July, 2015, before me personally appeared Oscar Fernando Bran de León to me known and known to me to be the person described in and who executed the foregoing instrument, and Oscar Fernando Bran de León duly acknowledged to me that Oscar Fernando Bran de León executed the same for the uses and purposes therein set forth.

[SEAL]  Lynn M. Kastonek  
NOTARY PUBLIC - MINNESOTA  
MY COMMISSION EXPIRES 01/31/18  
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Thomas G. LeBlanc

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Thomas G. LeBlanc to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas G. LeBlanc duly acknowledged to me that Thomas G. LeBlanc executed the same for the uses and purposes therein set forth.

[SEAL] \_\_\_\_\_  
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

---

Todd Loeffelholz

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Todd Loeffelholz to me known and known to me to be the person described in and who executed the foregoing instrument, and Todd Loeffelholz duly acknowledged to me that Todd Loeffelholz executed the same for the uses and purposes therein set forth.

[SEAL]

Notary Public

**ASSIGNMENT**

WHEREAS, we, Thomas Marcouiller, Oscar Fernando Bran de León, Thomas G. LeBlanc and Todd Loeffelholz, made certain new and useful inventions and improvements for which we filed an application with the United States Patent and Trademark Office on June 26, 2015, application Serial No. 14/752,142 which is entitled INDEXING TERMINALS FOR SUPPORTING A BIDIRECTIONAL INDEXING ARCHITECTURE.

AND WHEREAS, ADC Telecommunications, Inc., a corporation organized and existing under and by virtue of the laws of the State of Minnesota, and having an office and place of business at 1050 Westlakes Drive, Berwyn, Pennsylvania 19312 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and the right(s) to claim priority thereto, and in and to the application, all patent applications based upon said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments

in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

---

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Thomas Marcouiller

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Thomas Marcouiller to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas Marcouiller duly acknowledged to me that Thomas Marcouiller executed the same for the uses and purposes therein set forth.

[SEAL]

---

Notary Public



IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Oscar Fernando Bran de León

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally appeared Oscar Fernando Bran de León to me known and known to me to be the person described in and who executed the foregoing instrument, and Oscar Fernando Bran de León duly acknowledged to me that Oscar Fernando Bran de León executed the same for the uses and purposes therein set forth.

[SEAL]

\_\_\_\_\_  
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this 27 day of July, 2015.

\_\_\_\_\_  
Thomas G. LeBlanc

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me personally appeared Thomas G. LeBlanc to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas G. LeBlanc duly acknowledged to me that Thomas G. LeBlanc executed the same for the uses and purposes therein set forth.

[SEAL]

\_\_\_\_\_  
Notary Public



### ASSIGNMENT

WHEREAS, we, Thomas Marcouiller, Oscar Fernando Bran de León, Thomas G. LeBlanc and Todd Loeffelholz, made certain new and useful inventions and improvements for which we filed an application with the United States Patent and Trademark Office on June 26, 2015, application Serial No. 14/752,142 which is entitled INDEXING TERMINALS FOR SUPPORTING A BIDIRECTIONAL INDEXING ARCHITECTURE

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NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and the right(s) to claim priority thereto, and in and to the application, all patent applications based upon said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments

in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Thomas Marcouiller

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Thomas Marcouiller to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas Marcouiller duly acknowledged to me that Thomas Marcouiller executed the same for the uses and purposes therein set forth.

[SEAL]

Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Oscar Fernando Bran de León

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Oscar Fernando Bran de León to me known and known to me to be the person described in and who executed the foregoing instrument, and Oscar Fernando Bran de León duly acknowledged to me that Oscar Fernando Bran de León executed the same for the uses and purposes therein set forth.

[SEAL]

\_\_\_\_\_  
Notary Public



IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Thomas G. LeBlanc

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared Thomas G. LeBlanc to me known and known to me to be the person described in and who executed the foregoing instrument, and Thomas G. LeBlanc duly acknowledged to me that Thomas G. LeBlanc executed the same for the uses and purposes therein set forth.

[SEAL]

\_\_\_\_\_  
Notary Public

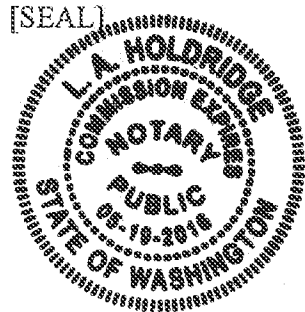
IN TESTIMONY WHEREOF, I have hereunto set my hand this 13 day of  
August, 2015.

Todd Loeffelholz  
Todd Loeffelholz

STATE OF WA )  
 ) ss.  
COUNTY OF Whatcom )

On this 13<sup>th</sup> day of August, 2015, before me personally appeared  
Todd Loeffelholz to me known and known to me to be the person described in and who executed  
the foregoing instrument, and Todd Loeffelholz duly acknowledged to me that Todd Loeffelholz  
executed the same for the uses and purposes therein set forth.

[SEAL]



[Signature]  
Notary Public