

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT2578995

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>KENNETH C. SHUEY</td> <td>10/09/2013</td> </tr> <tr> <td>RODNEY C. HEMMINGER</td> <td>10/11/2013</td> </tr> <tr> <td>JOHN R. HOLT</td> <td>10/07/2013</td> </tr> <tr> <td>BRENT BRIAN</td> <td>10/07/2013</td> </tr> </tbody> </table>		Name	Execution Date	KENNETH C. SHUEY	10/09/2013	RODNEY C. HEMMINGER	10/11/2013	JOHN R. HOLT	10/07/2013	BRENT BRIAN	10/07/2013
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Elster Solutions, LLC</td> </tr> <tr> <td>Street Address:</td> <td>208 South Rogers Lane</td> </tr> <tr> <td>City:</td> <td>Raleigh</td> </tr> <tr> <td>State/Country:</td> <td>NORTH CAROLINA</td> </tr> <tr> <td>Postal Code:</td> <td>27610</td> </tr> </table>		Name:	Elster Solutions, LLC	Street Address:	208 South Rogers Lane	City:	Raleigh	State/Country:	NORTH CAROLINA	Postal Code:	27610
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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14051116</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14051116						
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CORRESPONDENCE DATA											
<p>Fax Number: (215)568-3439</p> <p>Phone: 215-568-3100</p> <p>Email: assignments@woodcock.com</p> <p><i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i></p> <p>Correspondent Name: WOODCOCK WASHBURN LLP</p> <p>Address Line 1: 2929 ARCH STREET</p> <p>Address Line 2: CIRA CENTRE, 12TH FLOOR</p> <p>Address Line 4: PHILADELPHIA, PENNSYLVANIA 19104</p>											
ATTORNEY DOCKET NUMBER:	ELSE-1398 / E20120310										
NAME OF SUBMITTER:	JANIS CALVO										

Signature:	/Janis Calvo/
Date:	10/16/2013
Total Attachments: 8 source=ELSE-1398 ASSIGNMENTS#page1.tif source=ELSE-1398 ASSIGNMENTS#page2.tif source=ELSE-1398 ASSIGNMENTS#page3.tif source=ELSE-1398 ASSIGNMENTS#page4.tif source=ELSE-1398 ASSIGNMENTS#page5.tif source=ELSE-1398 ASSIGNMENTS#page6.tif source=ELSE-1398 ASSIGNMENTS#page7.tif source=ELSE-1398 ASSIGNMENTS#page8.tif	

ASSIGNMENT

WHEREAS, I, **Kenneth C. Shuey**, citizen of the **United States of America**, residing at **4561 Laid Back Lane, Zebulon, North Carolina 27597**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **E20120310/ELSE-1398** ("the invention"), which is entitled **IMPROVING DIGITAL RECEIVER PERFORMANCE IN THE PRESENCE OF IMAGE FREQUENCIES** ("the subject application"), and which claims priority to patent application number **61/711,930** filed **October 10, 2012** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Elster Solutions, LLC**, ASSIGNEE, having a place of business at **208 South Rogers Lane, Raleigh, North Carolina 27610**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

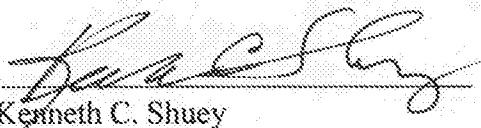
AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 9th day of October, year of 2013.


Kenneth C. Shuey

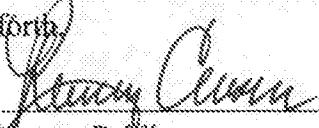
STATEMENT OF NOTARY PUBLIC

STATE OF North Carolina:

: SS

COUNTY OF Wake:

On this 9th day of October, year of 2013, before me personally came the above named Kenneth C. Shuey to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's free will for the use and purposes therein set forth.


Notary Public



The foregoing assignment covers patent application number 14/051116, filed on October 10, 2013

/Mark E. Braun/

Name of Attorney: Mark E. Braun

Registration No.: 68749

Date of Insertion: October 15, 2013

ASSIGNMENT

WHEREAS, I, **Rodney C. Hemminger**, citizen of the **United States of America**, residing at **6300 Lakeland Drive, Raleigh, North Carolina 27612**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **E20120310/ELSE-1398** ("the invention"), which is entitled **IMPROVING DIGITAL RECEIVER PERFORMANCE IN THE PRESENCE OF IMAGE FREQUENCIES** ("the subject application"), and which claims priority to patent application number **61/711,930** filed **October 10, 2012** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Elster Solutions, LLC**, ASSIGNEE, having a place of business at **208 South Rogers Lane, Raleigh, North Carolina 27610**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 11th day of October, year of 2013.

Rodney C. Hemminger
Rodney C. Hemminger

STATEMENT OF NOTARY PUBLIC

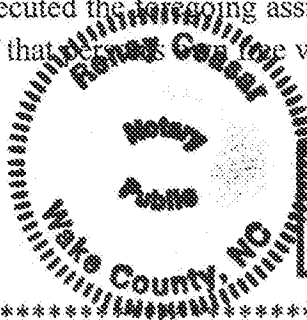
STATE OF North Carolina:

: SS

COUNTY OF Wake:

On this 11th day of October, year of 2012, before me personally came the above named Rodney C. Hemminger to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's free will for the use and purposes therein set forth.

Renee C. Cunn
Notary Public



My Commission Expires 8/25/2018

The foregoing assignment covers patent application number 14/051116, filed on October 10, 2013

/Mark E. Braun/

Name of Attorney: Mark E. Braun
Registration No.: 68749
Date of Insertion: October 15, 2013

ASSIGNMENT

WHEREAS, I, **John R. Holt**, citizen of the **United States of America**, residing at **205 W. Holding Avenue, Wake Forest, North Carolina 27587**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **E20120310/ELSE-1398** ("the invention"), which is entitled **IMPROVING DIGITAL RECEIVER PERFORMANCE IN THE PRESENCE OF IMAGE FREQUENCIES** ("the subject application"), and which claims priority to patent application number **61/711,930** filed **October 10, 2012** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Elster Solutions, LLC**, ASSIGNEE, having a place of business at **208 South Rogers Lane, Raleigh, North Carolina 27610**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 17th day of October, year of 2013.

John R. Holt

John R. Holt

STATEMENT OF NOTARY PUBLIC

STATE OF North Carolina:

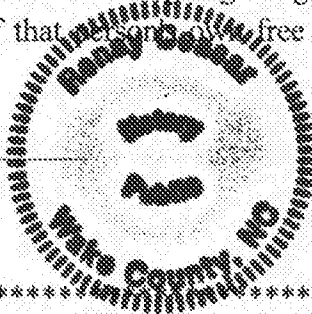
: SS

COUNTY OF Wake:

On this 17th day of October, year of 2013, before me personally came the above named John R. Holt to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's free will for the use and purposes therein set forth.

Rebecca Carson

Notary Public



The foregoing assignment covers patent application number 14/051116, filed on October 10, 2013

/Mark E. Braun/

Name of Attorney: Mark E. Braun

Registration No.: 68749

Date of Insertion: October 15, 2013

ASSIGNMENT

WHEREAS, I, **Brent Brian**, citizen of the **United States of America**, residing at **95 Smiths Creek Drive, Clayton, North Carolina 27520**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **E20120310/ELSE-1398** ("the invention"), which is entitled **IMPROVING DIGITAL RECEIVER PERFORMANCE IN THE PRESENCE OF IMAGE FREQUENCIES** ("the subject application"), and which claims priority to patent application number **61/711,930** filed **October 10, 2012** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Elster Solutions, LLC**, ASSIGNEE, having a place of business at **208 South Rogers Lane, Raleigh, North Carolina 27610**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

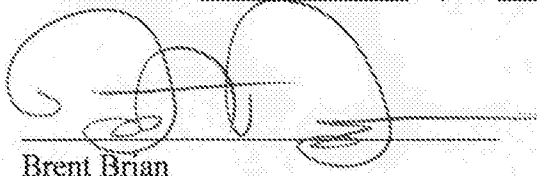
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AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 7 day of OCT, year of 2013.


Brent Brian

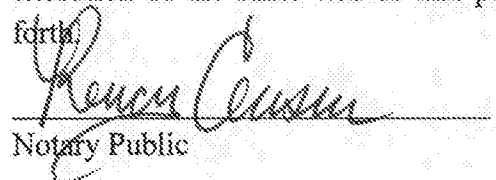
STATEMENT OF NOTARY PUBLIC

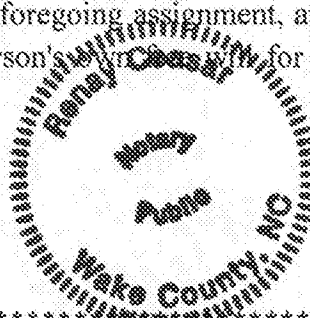
STATE OF North Carolina:

: SS

COUNTY OF Wake:

On this 7th day of October, year of 2013, before me personally came the above named Brent Brian to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will, for the use and purposes therein set forth.


Notary Public



My Commission Expires 8/25/2018

The foregoing assignment covers patent application number 14/051116, filed on October 10, 2013

/Mark E. Braun/

Name of Attorney: Mark E. Braun

Registration No.: 68749

Date of Insertion: October 15, 2013