502361907 05/28/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Thomas Kunz	05/05/2011
Erik Rettger	05/05/2011
David Farkas	05/12/2011
Christina Payne Earle	05/24/2011
Dennis Y. Wang	05/20/2011
Rodney H. Monson	05/09/2011
Luke P. Woods	05/06/2011
Simon King	05/16/2011

RECEIVING PARTY DATA

Name:	The PNC Financial Services Group, Inc.
Street Address:	249 Fifth Avenue
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15222

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13684926

CORRESPONDENCE DATA

Fax Number: 4125621041

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 412 562 1893

Email: susan.hilburg@bipc.com

Correspondent Name: Bryan H. Opalko

Address Line 1: 301 Grant Street, 20th Floor
Address Line 4: Pittsburgh, PENNSYLVANIA 15219

ATTORNEY DOCKET NUMBER: 0011046-600102

502361907 REEL: 030494 FRAME: 0405

PATENT

\$40.00 136849

NAME OF SUBMITTER:	Bryan H. Opalko
Signature:	/Bryan H. Opalko/
Date:	05/28/2013
Total Attachments: 11 source=PNC600102Assignment#page1.tif source=PNC600102Assignment#page2.tif source=PNC600102Assignment#page3.tif source=PNC600102Assignment#page4.tif source=PNC600102Assignment#page5.tif source=PNC600102Assignment#page6.tif source=PNC600102Assignment#page7.tif source=PNC600102Assignment#page8.tif source=PNC600102Assignment#page9.tif source=PNC600102Assignment#page10.tif source=PNC600102Assignment#page10.tif	

Attorney's Docket No. 100805

PATENT

	For: ⊠ U.S. and/or ⊠ Foreign Rights For: ⊠ U.S. Application or
	U.S. Provisional Application For: U.S. Patent
	For: PCT Application
	By: Multiple Inventors
Serial No. <u>13/037,063</u>	

Filing Date: February 28, 2011

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

Thomas Kunz (type or print name of inventors)		1550 Tiffany Drive Pittsburgh, PA 15241 Address	USA Nationality
Erik Rettger		34 Heritage Court Delmont, PA 15626	USA
David Farkas		1830 Lombard Street, Apt. 402 Philadelphia, PA 19146	USA
Christina Payne	•	139 S. Dallas Avenue Pittsburgh, PA 15208	USA
Dennis Y. Wang		2574 Corteland Drive Pittsburgh, PA 15241	USA
Rodney H. Monson		3253 Country Lane Waukegan, IL 60087	USA
Luke P. Woods		824 W. Wrightwood Avenue, Ap Chicago, IL 60614	ot. 2 USA
Simon King		1003 N. Winchester Avenue, Ap Chicago, IL 60622	ot. 1 USA
hereby sells, assigns and transfers to			
ASSIGNEE:	*		
The PNC Financial Services Group, Inc. (type or print name of ASSIGNEE)		249 Fifth Avenue Address	
(a Pennsylvania corporation)		Pittsburgh, PA 15222	-

(Assignment of Invention-Multiple Inventors [16-3.2]-page 1)

and the successors, assigns and legal representatives of	of the ASSIGNEE	
★ the entire right, title and interest		
ine entire right, the and interest	•	
and its territorial possessions percent (_	,	he United States
(check the following box, if foreign and in all foreign countries, including all right all foreign countries, in and to any and all improvements	its to claim priority both in the Un	
INCOME ANALYSIS TOOLS FOR	R WEALTH MANAGEMENT	
and which is found in:		
(a) U.S. patent application executed on ever	n date herewith;	
(b) ⊠ U.S. application no.: <u>13/037,063</u> filed on <u>f</u>	<u> February 28, 2011</u>	
and any legal equivalent thereof in a foreign of the United States and in all foreign countries and, in invention by the above application or any continuation thereof, and as to letters patent any reissue or re-ex-	n and to, all Letters Patent to be on, division, renewal, non-provision	obtained for said
ASSIGNOR hereby covenants that no assignment, s be made or entered into which would conflict with this as		has been or will
ASSIGNOR further covenants that ASSIGNEE will, to pertinent facts and documents relating to said invention a may be known and accessible to ASSIGNOR and will teror proceeding related thereto and will promptly execute a representatives any and all papers, instruments or affida and enforce said application, said invention and said Let may be necessary or desirable to carry out the purposes	and said Letters Patent and legal stify as to the same in any interfe and deliver to ASSIGNEE or its le vits required to apply for, obtain, ters Patent and said equivalents	equivalents as rence, litigation gal maintain, issue
IN WITNESS WHEREOF, We have hereunto set ha	nd and seal this	Date of signing
	~ n// \/	x 6/5/11
Thomas Kunz (type name of Inventor)	Signature of INVENTOR	Date
	v	X 5/5/11
Erik Rettger (type name of Inventor)	Signature of INVENTOR	Date
(type hame of inventor)		
David Farkas	X Signature of INIVENTOR	X
(type name of Inventor)	Signature of INVENTOR	Date
Christina Payne	X	X
(type name of Inventor)	Signature of INVENTOR	Date
Dennis Y. Wang	X	X 3/20/11
(type name of Inventor)	Signature of INVENTOR	Date
Rodney H. Monson	\mathbf{x}	\mathbf{X}
(type name of Inventor)	Signature of INVENTOR	Date
Luke P. Woods	X	\mathbf{X}
(type name of Inventor)	Signature of INVENTOR	Date
	X	X
Simon King (type name of Inventor)	Signature of INVENTOR	Date

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2)

Attorney's Docket No. 100805	PATENT
Serial No. 13/037.063	For: U.S. and/or I Foreign Rights For: U.S. Application or U.S. Provisional Application For: U.S. Patent For: PCT Application By: Multiple laventors
Filing Date: February 28, 2011	
ASSIGNMENT O	F INVENTION (MULTIPLE INVENTORS)
In consideration of the payment by A receipt of which is hereby acknowledged	SSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the and for other good and valuable consideration,
ASSIGNORS (Inventors):	
Thomas Kunz (type of print name of Inventors)	1550 Tiffany Drive <u>Pittsburgh, PA 15241 USA</u> Address Nationality
Erik Rettger	34 Heritage Court Delmont, PA 15626 USA
David Farkas	1830 Lombard Street, Apt. 402 Philadelphia, PA 19146 USA
Christina Payne	139 S. Dallas Avenue Pittsburgh, PA 15208 USA
Dennis Y. Wang	2574 Corteland Drive Pittsburgh, PA 15241 USA
Rodney H. Monson	3253 Country Lane Waukegan, IL 60087 USA
Luke P. Woods	824 W. Wrightwood Avenue, Apt. 2 Chicago, IL 60614 USA
Simon King	1003 N. Winchester Avenue, Apt. 1 Chicago, IL 60622 USA

(Assignment of Invention-Multiple Inventors [16-3.2]-page ()

249 Fifth Avenue Address

PI-2518362 v1 0237710 00325

(a Pennsylvania corporation)

ASSIGNEE:

hereby sells, assigns and transfers to

The PNC Financial Services Group, Inc. (type or print name of ASSIGNES)

REEL: 030494 FRAME: 0409

	원 그는 이 100명 소설을 경찰으로 되었다. 소설로 100명 - 200명 소설로 경찰을 했다.	
and the successors, assigns and legal representati	ves of the ASSIGNEE	
☑ the entire right, title and interest		
an undivided perce	nt (%) interest	for the United State
		e United States and I
INCOME ANALYSIS TOOLS	FOR WEALTH MANAGEMENT	
and which is found in:		
	and the state of t	
(a) U.S. patent application executed on		
(b) ⊠ U.S. application no∴ <u>13/037,063</u> filed	I on <u>February 28, 2011</u>	
and any legal equivalent thereof in a fore the United States and in all foreign countries a invention by the above application or any contin thereof, and as to letters patent any relissue or i	nd, in and to, all Letters Patent to ruation, division, renewal, non-pro-	o be obtained for said
ASSIGNOR hereby covenants that no assignment be made or entered into which would conflict with the		ince has been or will
ASSIGNOR further covenants that ASSIGNEE partition facts and documents relating to said invention may be known and accessible to ASSIGNOR and wor proceeding related thereto and will promptly execute representatives any and all papers, instruments or and enforce said application, said invention and said may be necessary or desirable to carry out the purp	Ilon and said Letters Patent and I vill testify as to the same in any in sute and deliver to ASSIGNEE or affidavits required to apply for, obt Il Letters Patent and said equivale	egal equivalents as terference, litigation its legal ain, maintain, issue
IN WITNESS WHEREOF, We have hereunto s	et hand and seal this	animina and managament and animal and animal an
	(福祉) 왕조 (교육) 마시크 (마시크) (교육	Date of signing
Thomas Kunz	X	X
(type name of Inventor)	Signature of INVENTOR	Date
Erik Rettger		X
(type name of Inventor)	Signature of INVENTOR	Date
David Farkas	X / Jan / Jan	X 5/12/11
(type name of Inventor)	Signature of INVENTOR	Date '
en angala estadad	X	X
Christing Payrie (type name of Inventor)	Signature of INVENTOR	Dale
		X
Dennis Y, Wang (type name of Inventor)	Signature of INVENTOR	Date
	X	. X
Rodney H. Monson	Signature of INVENTOR	
(type name of Inventor)		
Luke P. Woods	사람들이 많은 黃鹂 하다는 하는 사람들은 그 그는 그는 것은 것이었다.	Date
(type name of Inventor)	X	Date X
- 1111	Signature of INVENTOR	Date X Date
Simon King		Date X

(Assignment of Invention Multiple Inventors [16-3.2] page 2)

Attorney's Docket No. 100805

PATENT

		For: ⊠ U.S. and/or ⊠ Foreign Right For: ⊠ U.S. Application or □ U.S. Provisional Application For: □ U.S. Patent For: □ PCT Application By: Multiple Inventors
erial No. <u>1</u>	3/037,063	= ,

Se

Filing Date: February 28, 2011

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

	1550 Tiffany Drive	1104
Thomas Kunz (type or print name of inventors)	Pittsburgh, PA 15241 Address	USA Nationality
Erik Rettger	34 Heritage Court Delmont, PA 15626	USA
David Farkas	1830 Lombard Street, Apt. Philadelphia, PA 19146	402 USA
Christina Payne Earl	139 S. Dallas Avenue Pittsburgh, PA 15208	USA
Dennis Y. Wang	2574 Corteland Drive Pittsburgh, PA 15241	USA
Rodney H. Monson	3253 Country Lane Waukegan, IL 60087	USA
Luke P. Woods	824 W. Wrightwood Avenu Chicago, IL 60614	e, Apt. 2 USA
Simon King	1003 N. Winchester Avenu Chicago, IL 60622	e, Apt. 1 USA
hereby sells, assigns and transfers to		
ASSIGNEE:		
The PNC Financial Services Group, Inc. (type or print name of ASSIGNEE)	249 Fifth Avenue Address	
(a Pennsylvania corporation)	Pittsburgh, PA 15222	

(Assignment of Invention-Multiple Inventors [16-3.2]-page 1)

and the successors, assigns and legal representations	entatives of the ASSIGNEE	
the entire right, title and interest		
and its territorial possessions	percent (%) interest fo	r the United States
(check the following box,	if foreign rights are also to be assigned) ing all rights to claim priority both in the lovements which are disclosed in the inve	United States and ir
INCOME ANALYSIS TO	OOLS FOR WEALTH MANAGEMENT	
and which is found in:		
(a) U.S. patent application execute	ed on even date herewith;	
(b) ⊠ U.S. application no.: <u>13/037,06</u> 3	3 filed on February 28, 2011	
and any legal equivalent thereof in a the United States and in all foreign count invention by the above application or any thereof, and as to letters patent any reissu	continuation, division, renewal, non-provi	be obtained for said
ASSIGNOR hereby covenants that no ass be made or entered into which would conflict v	ignment, sale, agreement or encumbran vith this assignment;	ce has been or will
ASSIGNOR further covenants that ASSIG pertinent facts and documents relating to said may be known and accessible to ASSIGNOR or proceeding related thereto and will promptly representatives any and all papers, instrument and enforce said application, said invention and may be necessary or desirable to carry out the	invention and said Letters Patent and leg and will testify as to the same in any inter rexecute and deliver to ASSIGNEE or its ts or affidavits required to apply for, obtain and said Letters Patent and said equivalen	gal equivalents as rference, litigation s legal n, maintain, issue
IN WITNESS WHEREOF, We have hereu	into set hand and seal this	
		Date of signing
Thomas Kunz	X Signature of INVENTOR	<u>X</u>
(type name of Inventor)	Signature of INVENTOR	Date
Erik Rettger	X	X
(type name of Inventor)	Signature of INVENTOR	Date
David Farkas	X	X
(type name of Inventor)	Signature of INVENTOR	Date
Christina Payne Edvle	x Christina Pearle	$\times 5/24/11$
(type name of Inventor)	Signature of INVENTOR	Date
	\mathbf{x}	X
Dennis Y, Wang (type name of Inventor)	Signature of INVENTOR	Date
type name of inventory	X	X
Rodney H. Monson	Signature of INVENTOR	Date
(type name of Inventor)	· · · · · · · · · · · · · · · · · · ·	
Luke P. Woods	X	X
(type name of Inventor)	Signature of INVENTOR	Date
Simon King	X	X
(type name of Inventor)	Signature of INVENTOR	Date

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2)

and the successors, assigns and legal representa	tives of the ASSIGNEE	
★ the entire right, title and interest		
and its territorial possessions		d) e United States and in
INCOME ANALYSIS TOOL	S FOR WEALTH MANAGEMENT	
and which is found in:		
(a) U.S. patent application executed o	on even date herewith;	
(b) ⊠ U.S. application no.: <u>13/037,063</u> file	ed on <u>February 28, 2011</u>	
and any legal equivalent thereof in a for the United States and in all foreign countries invention by the above application or any con- thereof, and as to letters patent any reissue of	and, in and to, all Letters Patent to tinuation, division, renewal, non-pro	o be obtained for said
ASSIGNOR hereby covenants that no assignr be made or entered into which would conflict with		ance has been or will
ASSIGNOR further covenants that ASSIGNED certinent facts and documents relating to said investing to said investing to said investing the known and accessible to ASSIGNOR and or proceeding related thereto and will promptly except expresentatives any and all papers, instruments or and enforce said application, said invention and same to exercise the purious that	ention and said Letters Patent and I will testify as to the same in any intecute and deliver to ASSIGNEE or affidavits required to apply for, obtaid Letters Patent and said equivalences thereof.	egal equivalents as terference, litigation its legal ain, maintain, issue
IN WITHESS WITEILEOF, We have hereunto	set hand and sear this	Date of signing
Thomas Kunz	X	X
type name of Inventor)	Signature of INVENTOR	Date
Erik Rettger	\mathbf{x}	X
type name of Inventor)	Signature of INVENTOR	Date
Sould Poulos	X	X
David Farkas Type name of Inventor)	Signature of INVENTOR	Date
	X	X
Christina Payne type name of Inventor)	Signature of INVENTOR	Date
typo namo o mvonory	X	X
Dennis Y. Wang lype name of Inventor)	Signature of INVENTOR	Date
type name of inventor)		
Rodney H. Monson	X	X MA" 9, 201
type name of Inventor)	Signature of INVENTOR	Date
uke P. Woods	X	X
type name of Inventor)	Signature of INVENTOR	Date
Simon King	X	X
type name of Inventor)	Signature of INVENTOR	Date

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2)

Attorney's Docket No. <u>100805</u>	PATENT
	For: ☑ U.S. and/or ☑ Foreign Rights For: ☑ U.S. Application or ☐ U.S. Provisional Application For: ☐ U.S. Patent For: ☐ PCT Application By: Multiple Inventors
Serial No. 13/037,063	by. Multiple inventors
Filing Date: February 28, 2011	
ASSIGNMENT OF INV	VENTION (MULTIPLE INVENTORS)
	NEE to ASSIGNOR of the sum of One Dollar (\$1.00), the
ASSIGNORS (Inventors):	
Thomas Kunz (type or print name of inventors)	1550 Tiffany Drive Pittsburgh, PA 15241 USA Address Nationality
Erik Rettger	34 Heritage Court Delmont, PA 15626 USA
David Farkas	1830 Lombard Street, Apt. 402 Philadelphia, PA 19146 USA
Christina Payne	139 S. Dallas Avenue Pittsburgh, PA 15208 USA
Dennis Y. Wang	2574 Corteland Drive Pittsburgh, PA 15241 USA
Rodney H. Monson	3253 Country Lane Waukegan, IL 60087 USA
Luke P. Woods	824 W. Wrightwood Avenue, Apt. 2 Chicago, IL 60614 USA
Simon King	1003 N. Winchester Avenue, Apt. 1 Chicago, IL 60622 USA

(Assignment of Invention-Multiple Inventors [16-3.2]-page 1)

249 Fifth Avenue Address

Pittsburgh, PA 15222

PI-2515362 v1 0237710-00325

(a Pennsylvania corporation)

ASSIGNEE:

hereby sells, assigns and transfers to

The PNC Financial Services Group, Inc. (type or print name of ASSIGNEE)

	presentatives of the ASSIGNEE	
and the successors, assigns and legal rep	NOSOMATIVES OF THE MODIOTYLL	
★ the entire right, title and interest	est	
an undividedand its territorial possessions	percent (%) interest	for the United States
(check the following t	box, if foreign rights are also to be assigne cluding all rights to claim priority both in th improvements which are disclosed in the ir	e United States and In
INCOME ANALYSIS	S TOOLS FOR WEALTH MANAGEMENT	
and which is found in:		
(a) U.S. patent application exe	ecuted on even date herewith;	•
(b) ⊠ U.S. application no.: <u>13/037</u>	7,063 filed on <u>February 28, 2011</u>	
the United States and in all foreign co	in a foreign country, including the right to cuntries and, in and to, all Letters Patent t any continuation, division, renewal, non-pro- sissue or re-examination thereof.	o be obtained for said
ASSIGNOR hereby covenants that no be made or entered into which would confl	assignment, sale, agreement or encumbra lict with this assignment;	ance has been or will
pertinent facts and documents relating to s may be known and accessible to ASSIGNO	OR and will testify as to the same in any in	legal equivalents as terference, litigation
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrun- and enforce said application, said invention may be necessary or desirable to carry out	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, objury and said Letters Patent and said equivalent the purposes thereof.	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrun- and enforce said application, said invention may be necessary or desirable to carry out	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, ob n and said Letters Patent and said equival	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrun- and enforce said application, said invention may be necessary or desirable to carry out	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. ereunto set hand and seal this	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. ereunto set hand and seal this	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. ereunto set hand and seal this	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. The purpose thand and seal this	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date
pertinent facts and documents relating to somay be known and accessible to ASSIGNO or proceeding related thereto and will prongrepresentatives any and all papers, instrument and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalet the purposes thereof. Example 1 Signature of INVENTOR Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X Date
pertinent facts and documents relating to somay be known and accessible to ASSIGNO or proceeding related thereto and will prongrepresentatives any and all papers, instrument and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear thomas Kunz (type name of inventor) Erik Rettger	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obton and said Letters Patent and said equivalent the purposes thereof. The second of the same in the said equivalent term of the second of the said equivalent term	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X
pertinent facts and documents relating to somay be known and accessible to ASSIGNO or proceeding related thereto and will promote representatives any and all papers, instrument and enforce said application, said inventions may be necessary or desirable to carry out IN WITNESS WHEREOF, We have here the transfer of inventor) Thomas Kunz (type name of inventor) Erik Rettger (type name of inventor) David Farkas (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalent the purposes thereof. Example 1 Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X Date X Date X Date
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrument and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he with the thickness of the total said inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtained and said Letters Patent and said equivalent the purposes thereof. The ereunto set hand and seal this Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalet the purposes thereof. EVANO Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR X Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date
pertinent facts and documents relating to s may be known and accessible to ASSIGNO or proceeding related thereto and will pron representatives any and all papers, instrunt and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear the same of inventor) Erik Rettger (type name of inventor) David Farkas (type name of inventor) Christina Payne (type name of inventor) Dennis Y. Wang	said invention and said Letters Patent and OR and will testify as to the same in any in nptly execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalet the purposes thereof. The series of INVENTOR The	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X Date X Date X Date X Date X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNe or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor) Dennis Y, Wang (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalent the purposes thereof. EVALUATE: X Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrunt and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear the same of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor) Dennis Y, Wang (type name of Inventor) Rodney H. Monson	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. The purpose th	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrunt and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear the man and the man and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have hear the man and the	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalent the purposes thereof. EVALUATE: X Signature of INVENTOR	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor) Dennis Y, Wang (type name of Inventor) Rodney H. Monson (type name of Inventor) Luke P. Woods	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalent the purposes thereof. The purpose thereof. The purpose thereof. The purpose the purpos	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor) Dennis Y, Wang (type name of Inventor) Rodney H. Monson (type name of Inventor) Luke P. Woods (type name of Inventor)	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obtain and said Letters Patent and said equivalent the purposes thereof. The purpose	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X
pertinent facts and documents relating to s may be known and accessible to ASSIGNo or proceeding related thereto and will pron representatives any and all papers, instrun and enforce said application, said invention may be necessary or desirable to carry out IN WITNESS WHEREOF, We have he Thomas Kunz (type name of Inventor) Erik Rettger (type name of Inventor) David Farkas (type name of Inventor) Christina Payne (type name of Inventor) Dennis Y, Wang (type name of Inventor) Rodney H. Monson (type name of Inventor) Luke P. Woods	said invention and said Letters Patent and OR and will testify as to the same in any in any execute and deliver to ASSIGNEE or ments or affidavits required to apply for, obin and said Letters Patent and said equivalent the purposes thereof. The purpose thereof. The purpose thereof. The purpose the purpos	legal equivalents as terference, litigation its legal tain, maintain, issue ents thereof which Date of signing X Date X

Attorney's Docket No. 10	10080	15
--------------------------	-------	----

PATENT

	•	For: U.S. and/or For: U.S. Application U.S. Provision For: U.S. Patent For: PCT Applicat	on or nal Application ion
		By: Multiple Inventor	S
Serial No.	13/037,063		

Filing Date: February 28, 2011

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

	1550 Tiffany Drive	
Thomas Kunz	Pittsburgh, PA 15241	USA
(type or print name of inventors)	Address	Nationality
	34 Heritage Court	
Erik Rettger	Delmont, PA 15626	USA
	1830 Lombard Street, Apt. 402	•
David Farkas	Philadelphia, PA 19146	USA
	400.0.0.0.0	
Christina Payne	139 S. Dallas Avenue Pittsburgh, PA 15208	USA
Chinstina Fayne	Fittsburgh, FA 13200	004
	2574 Corteland Drive	
Dennis Y. Wang	Pittsburgh, PA 15241	<u>USA</u>
	3253 Country Lane	
Rodney H. Monson	Waukegan, IL 60087	USA
Luka D. Manda	824 W. Wrightwood Avenue, A	
Luke P. Woods	Chicago, IL 60614	USA
	1003 N. Winchester Avenue, A	pt. 1
Simon King	Chicago, IL 60622	USA
hereby sells, assigns and transfers to		
ACCIONET		
ASSIGNEE:		
The PNC Financial Services Group, Inc.	249 Fifth Avenue	
(type or print name of ASSIGNEE)	Address	
(a Pennsylvania corporation)	Pittsburgh, PA 15222	

(Assignment of Invention-Multiple Inventors [16-3.2]-page 1)

PI-2515362 v1 0237710-00325

and the successors, assigns and legal representatives of the ASSIGNEE			
the entire right, title and interest			
an undivided percent (and its territorial possessions	%) interest for the	ne United States	
(check the following box, if foreign rights are also to be assigned) and in all foreign countries, including all rights to claim priority both in the United States and ir all foreign countries, in and to any and all improvements which are disclosed in the invention entitled:			
INCOME ANALYSIS TOOLS FOR	R WEALTH MANAGEMENT		
and which is found in:			
(a) U.S. patent application executed on ever	n date herewith;		
(b) \boxtimes U.S. application no.: 13/037,063 filed on I	February 28, 2011		
and any legal equivalent thereof in a foreign of the United States and in all foreign countries and, in invention by the above application or any continuation thereof, and as to letters patent any reissue or re-ex	n and to, all Letters Patent to be on, division, renewal, non-provisio	obtained for said	
ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;			
ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.			
IN WITNESS WHEREOF, We have hereunto set ha		Date of signing	
Thomas Kunz	X	X	
(type name of Inventor)	Signature of INVENTOR	Date	
Erik Rettger	X	X	
(type name of Inventor)	Signature of INVENTOR	Date	
Dould Forker	X	X	
<u>David Farkas</u> (type name of Inventor)	Signature of INVENTOR	Date	
	X	X	
Christina Payne (type name of Inventor)	Signature of INVENTOR	Date	
,	X	X	
Dennis Y. Wang (type name of Inventor)	Signature of INVENTOR	Date	
(type hame of inventor)	•		
Rodney H. Monson	X Signature of INVENTOR	X	
(type name of Inventor)	Ť	Date	
Luke P. Woods	X	X	
(type name of Inventor)	Signature of INVENTOR	Date	
Simon King	Dajalah japada bi Semon Keng Obi Kandismo Ling a abbilda berkihicaya emukeshingsisha cam Laus Otto 2011.05.16 110931-0500	X 5/16/2011	
(type name of Inventor)	Signature of INVENTOR	Date	

(Assignment of Invention–Multiple Inventors [16-3.2]-page 2)

RECORDED: 05/28/2013