506046403 05/06/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6093117

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KAMIL UGURBIL	05/04/2020
PIERRE-FRANCOIS VAN DE MOORTELE	04/17/2020
EDWARD AUERBACH	04/17/2020
XIAOPING WU	04/21/2020

RECEIVING PARTY DATA

Name:	THE REGENTS OF THE UNIVERSITY OF MINNESOTA
Street Address:	200 OAK STREET SE
Internal Address:	600 MCNAMARA ALUMNI CENTER
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55455-2020

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	14762093
Application Number:	61756775
Application Number:	61914775

CORRESPONDENCE DATA

Fax Number: (414)271-3552

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.

using a lax number, if provided, if that is unsuccessful, it will be sent via 05 ma

Phone: 4142775220

Email: justin.fons@quarles.com, pat-dept@quarles.com,

ASchulz@Quarles.com

Correspondent Name: JUSTIN FONS

Address Line 1: 411 EAST WISCONSIN AVENUE

Address Line 2: SUITE 2400

Address Line 4: MILWAUKEE, WISCONSIN 53202

ATTORNEY DOCKET NUMBER:	920171.00072
NAME OF SUBMITTER:	JUSTIN FONS
SIGNATURE:	/Justin Fons/

PATENT 506046403 REEL: 052578 FRAME: 0506

DATE SIGNED:	05/06/2020
Total Attachments: 12	
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PATENT REEL: 052578 FRAME: 0507



WHEREAS, I, Edward Auerbach, have invented certain new and useful inventions in MULTIBAND RF/MRI PULSE DESIGN FOR MULTICHANNEL TRANSMITTER, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Utility application no. 14/762,093 on July 20, 2015; PCT/US2014/013004 on January 24, 2014; and Provisional application no. 61/756,775 on January 25, 2013; and Provisional application no. 61/914,775 on December 11, 2013 (the "Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

PATENT

(including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on __April 17, 2020 | 1:39 PM PDT

Edward Auerbach

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

IN WITNESS WHEREOF, I have hereunto set my hand on May 5, 2020 | 10:14 AM CDT _____, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

REGENTS OF THE UNIVERSITY OF MINNESOTA

KgaHiochi

Carol Grutkoski

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Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

PATENT



WHEREAS, I, Kamil Ugurbil, have invented certain new and useful inventions in MULTIBAND RF/MRI PULSE DESIGN FOR MULTICHANNEL TRANSMITTER, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Utility application no. 14/762,093 on July 20, 2015; PCT/US2014/013004 on January 24, 2014; and Provisional application no. 61/756,775 on January 25, 2013; and Provisional application no. 61/914,775 on December 11, 2013 (the "Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

PATENT

(including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on May 4, 2020 | 5:17 AM CDT

Kamil Ugurbil

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

IN WITNESS WHEREOF, I have hereunto set my hand on May 5, 2020 | 10:14 AM CDT _____, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

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REGENTS OF THE UNIVERSITY OF MINNESOTA

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Carol Grutkoski

Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

PATENT



WHEREAS, I, Pierre-Francois Van De Moortele, have invented certain new and useful inventions in MULTIBAND RF/MRI PULSE DESIGN FOR MULTICHANNEL TRANSMITTER, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Utility application no. 14/762,093 on July 20, 2015; PCT/US2014/013004 on January 24, 2014; and Provisional application no. 61/756,775 on January 25, 2013; and Provisional application no. 61/914,775 on December 11, 2013 (the "Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

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(including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on _

April 17, 2020 | 6:04 PM CDT

DocuSigned by

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Pierre-François Van De Moortele

IN WITNESS WHEREOF, I have hereunto set my hand on May 5, 2020 | 10:14 AM CDT, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

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REGENTS OF THE UNIVERSITY OF MINNESOTA

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Carol Grutkoski

Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

PATENT



WHEREAS, I, Xiaoping Wu, have invented certain new and useful inventions in MULTIBAND RF/MRI PULSE DESIGN FOR MULTICHANNEL TRANSMITTER, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Utility application no. 14/762,093 on July 20, 2015; PCT/US2014/013004 on January 24, 2014; and Provisional application no. 61/756,775 on January 25, 2013; and Provisional application no. 61/914,775 on December 11, 2013 (the "Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

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Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

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I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on _

April 21, 2020 | 2:18 PM CDT

/ (____

Xiaoping Wu

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

IN WITNESS WHEREOF, I have hereunto set my hand on May 5, 2020 | 10:14 AM CDT _____, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

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REGENTS OF THE UNIVERSITY OF MINNESOTA

Carol Grutkoski

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Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket Number 920171.00072 UM Case No. UMN 20130170

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