504467579 07/21/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4514281

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| JENS FUHRMANN | 03/10/2017 |
| REGINA RESZKA | 03/06/2017 |
| JUERGEN KASTLER | 06/07/2016 |
| KRISTINA BUSCH | 06/07/2016 |
| EDGAR LEIBOLD | 06/07/2016 |
| HUGO KATUS | 03/06/2017 |
| NORBERT FREY | 03/06/2017 |
| JOHANNA SIGL | 03/10/2017 |
| TANJA WEIS | 03/09/2017 |

RECEIVING PARTY DATA

| Name: | METANOMICS GMBH |
|--------------------------|--|
| Street Address: | TEGELER WEG 33 |
| City: | BERLIN |
| State/Country: | GERMANY |
| Postal Code: | 10589 |
| | |
| Name: | RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG |
| Name: Street Address: | RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG NEUENHEIMERSTR. 360 |
| | |
| Street Address: | NEUENHEIMERSTR. 360 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15012449 |

CORRESPONDENCE DATA

Fax Number: (312)474-0448

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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PATENT REEL: 043061 FRAME: 0445

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Address Line 4: CHICAGO, ILLINOIS 60606-6357

| ATTORNEY DOCKET NUMBER: | 32471/H70159A |
|-------------------------|---------------------|
| NAME OF SUBMITTER: | JOSHUA T. ELLIOTT |
| SIGNATURE: | /Joshua T. Elliott/ |
| DATE SIGNED: | 07/21/2017 |

Total Attachments: 9

source=H70159A_Assignment#page1.tif source=H70159A_Assignment#page2.tif source=H70159A_Assignment#page3.tif source=H70159A_Assignment#page4.tif source=H70159A_Assignment#page5.tif source=H70159A_Assignment#page6.tif source=H70159A_Assignment#page7.tif source=H70159A_Assignment#page8.tif source=H70159A_Assignment#page9.tif

> PATENT REEL: 043061 FRAME: 0446

| DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT | | |
|--|---|--|
| Title of Invention | MEANS AND METHODS FOR DIAGNOSING HEART FAILURE IN A SUBJECT | |
| As the below | named inventor, I hereby declare that: | |
| This declaration is directed to: | The attached application, or United States application or PCT international application number 15/012,449 filed on 02/01/2016 | |
| | As Amended on (if applicable) | |
| The above-ide | ntified application was made or authorized to be made by me. | |
| I believe that I | am the original inventor or an original joint inventor of a claimed invention in the application. | |
| WHERE | AS, Metanomics GmbH having places of business at Tegeler Weg 33, 10589 Berlin, Germany | |
| and | | |
| (hereinafter re | Karls-Universität Heidelberg having places of business at Neuenheimerstr. 360, 69117 Heidelberg, Germany ferred to as "ASSIGNEE(S)") is desirous of acquiring the entire right, title and interest in and to said invention any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any countries; | |
| acknowledged ASSIGNEE(S) foreign countr International T and all Letters | HEREFORE, in consideration of the sum of ONE DOLLAR (\$1.00), the receipt whereof is hereby it, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said it, the full and exclusive right to the said invention in the United States and its territorial possessions and in all ites (including the right to claim priority under the terms of the International Convention and other relevant treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any Patent which may be granted therefor in the United States and its territorial possessions and in any and all es and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | |
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| respecting sai substitute, ren Patent to be ASSIGNEE(S | agree that I will communicate to said ASSIGNEE(S) or its (his) representatives any facts known to me d invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, ewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters issued to said ASSIGNEE(S), make all rightful oaths, and, generally do everything possible to aid said its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United territorial possessions and in any and all foreign countries. | |
| | owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or of not more than five (5) years, or both. | |
| LEGAL NAN | //E OF INVENTOR | |
| Inventor: | Jens Fuhrmann Date: Date: | |
| Signature: | Jers Al- | |
| | | |

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| LEGAL NAI | ME OF INVENTOR | |
| Inventor: | Regina Reszka Date: 6 3. 9647 | |
| Signature: | lgin Locka | |

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| LEGAL NAM | ME OF INVENTOR |
| Inventor | Juergen Kastler Date: |
| Signature | |
| | |

| Attorney Docket | No.: | 32471 | /H7019 | 69,4 |
|-----------------|------|-------|--------|------|
| (modified) | | | | |

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| LEGAL NAN | ME OF INVENTOR |
| Inventor: | Kristina Busch Date 26.46 |
| Signature: | Misting Jones |

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| LEGAL NAM | E OF INVENTOR |
| Inventor | Edgar Leibold Date: The Coll |
| Signature: _ | Edge Scilato |

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| LEGAL NAM | TE OF INVENTOR |
| Inventor: | Hugo Katus Date: 06.03.2017 |
| Signature: | |

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| LEGAL NAM | ME OF INVENTOR |
| Inventor: _ | Norbert Frey Date: 6/3/20/2 |
| Signature: | |
| | (Free) |

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01 (modified) DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT Title of MEANS AND METHODS FOR DIAGNOSING HEART FAILURE IN A SUBJECT Invention As the below named inventor, I hereby declare that: This declaration | The attached application, or is directed to: United States application or PCT international application number 15/012,449 filed on 02/01/2016 . As Amended on (if applicable) The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. WHEREAS, Metanomics GmbH having places of business at Tegeler Weg 33, 10589 Berlin, Germany Rupreht-Karls-Universität Heidelberg having places of business at Neuenheimerstr. 360, 69117 Heidelberg, Germany (hereinafter referred to as "ASSIGNEE(S)") is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries; NOW, THEREFORE, in consideration of the sum of ONE DOLLAR (\$1.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE(S), the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE(S) as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE(S), its (his) 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 by me had this Assignment and sale not been made. Further, I agree that I will communicate to said ASSIGNEE(S) or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE(S), make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE(S), its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. LEGAL NAME OF INVENTOR

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Date: 09/03/20/7