PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7472194

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL JULIAN BLACK	12/12/2018
ERIC RACHLIN	08/04/2022
MATTHEW LOPER	06/15/2022
JONATHAN ROBERT CILLEY	07/15/2022
WILLIAM JOHN O'FARRELL	08/03/2022
ALEXANDER WEISS	07/20/2022
JASON LAWRENCE GELMAN	05/26/2022
STEVEN DOUGLAS HATCH	05/25/2022
NICOLAS HERON	05/31/2022
JAVIER ROMERO GONZALEZ-NICOLAS	07/26/2022

RECEIVING PARTY DATA

Name:	MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V.
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City:	MUNICH
State/Country:	GERMANY
Postal Code:	80539

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15913589

CORRESPONDENCE DATA

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PATENT 507425265 REEL: 060736 FRAME: 0785

ATTORNEY DOCKET NUMBER:	BDLB.1441A	
NAME OF SUBMITTER:	BRYAN MCWHORTER	
SIGNATURE:	/Bryan McWhorter/	
DATE SIGNED:	08/05/2022	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 14

source=BDLB.1441A Fully Executed Assignment and Declaration#page1.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page2.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page3.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page4.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page5.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page6.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page7.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page8.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page10.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page10.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page11.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page12.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page13.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page13.tif source=BDLB.1441A Fully Executed Assignment and Declaration#page14.tif

PATENT REEL: 060736 FRAME: 0786

U.S. Patent Appln. No. <u>15/913,589</u> Attorney Docket No. BDLB.1441A

Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1

PARTIES TO THE ASSIGNMENT

Assignor(s):

Michael Julian Black **Alexander Weiss** Hofgartenstraße 8 Hofgartenstraße 8 80539 Munich 80539 Munich Germany Germany

Eric Rachlin Hofgartenstraße 8 80539 Munich Germany

Matthew Loper Hofgartenstraße 8 80539 Munich Germany

Jonathan Robert Cilley Hofgartenstraße 8 80539 Munich Germany

William John O'Farrell Hofgartenstraße 8 80539 Munich

Germany

Assignee:

Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. Hofgartenstraße 8 80539 Munich Germany

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM

BEHAVIORAL DATA" (Invention) for which a non-provisional application for United States Letters

Patent (Application):

Jason Lawrence Gelman Hofgartenstraße 8 80539 Munich Germany

Steven Douglas Hatch Hofgartenstraße 8 80539 Munich Germany

Nicolas Heron Hofgartenstraße 8 80539 Munich Germany

Javier Romero Gonzalez-Nicolas

Hofgartenstraße 8 80539 Munich Germany

Page 1 of 14

PATENT REEL: 060736 FRAME: 0787

U.S. Patent Appln. No. <u>15/913,589</u>

Attorney Docket No. BDLB.1441A

Filing Date March 6, 2018

Client Docket No. PM16248-US-ORG1

Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA

Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas

was filed on March 6, 2018 and accorded U.S. Application No. 15/913,589; or

will be filed concurrently with the submission of this executed PATENT ASSIGNMENT

for recordation.

ASSIGNOR(S) hereby authorizes and requests ASSIGNEE'S legal representatives, of Knobbe, Martens, Olson & Bear, LLP, associated with Customer No. 79,502, to insert in the header above and here in parentheses (U.S. Patent Application No. 15/913,589, filed March 6, 2018) this application's U.S. application number and filing date, when known.

WHEREAS, ASSIGNEE, a corporation of the country of Germany, is desirous of acquiring the entire right, title and interest in and to the Invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said Invention and any improvements thereto, said Application and any and all letters patent which may be granted for said Invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all provisional, divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said Application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said Invention, Application and all letters patent on said Invention to be held and enjoyed by ASSIGNEE and its

Page 2 of 14

U.S. Patent Appln. No. 15/913,589

Attorney Docket No. BDLB.1441A

Filing Date March 6, 2018

Client Docket No. PM16248-US-ORG1

Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY

SHAPE FROM BEHAVIORAL DATA

Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William

John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas

Heron, Javier Romero Gonzalez-Nicolas

successors and assigns for their use and benefit and of their successors and assigns as fully and

entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment,

transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner

of Patents and Trademarks, as well as all other applicable patent offices throughout the world, to

issue all letters patent on said Invention to ASSIGNEE. ASSIGNOR(S) agree to execute all

instruments and documents required for the making and prosecution of applications for United

States and foreign letters patent on said Invention, for litigation regarding said letters patent, or

for the purpose of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its

successors, legal representatives, and assigns all claims for damages and all remedies arising out

of any violation of the rights assigned hereby that may have accrued prior to the date of

assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue

for, collect, and retain damages for past infringements of said letters patent before or after

issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate

to ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR

respecting the Invention or said Application, and testify in any legal proceeding, assist in the

preparation of any other patent property relating to the Application and the Invention or any

improvements made thereto, sign/execute all lawful papers, provide all requested documents,

execute and make all rightful oaths and/or declarations in connection with the Application and

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PATENT REEL: 060736 FRAME: 0789

U.S. Patent Appln. No. 15/913,589

Attorney Docket No. BDLB.1441A

Filing Date March 6, 2018

Client Docket No. PM16248-US-ORG1

Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA

Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas

the Invention including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Invention in all countries. These provisions are binding upon ASSIGNOR's heirs, legal representatives, administrators, and assigns.

U.S. Patent Appln. No. <u>15/913,589</u>	Attorney Docket No. <u>BDLB.1441A</u>	
Filing Date <u>March 6, 2018</u>	Client Docket No. PM16248-US-ORG1	
Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA		
Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas		
DECLARATION		
As a below named inventor, I hereby dec	lare that:	
This declaration is directed to:		
the attached application; or		
United States Patent Applicat	ion number <u>15/913,589</u> filed on <u>March 6, 2018</u> ; or	
PCT International Application	numberfiled on	
The above-identified application was made or authorized to be made by me.		
I believe that I am the original inventor o application.	r an original joint inventor of a claimed Invention in the	
I have reviewed and understand the cont	ents of the above-identified application, and	
acknowledge the duty to disclose to the	JS Patent & Trademark Office all information known to	
me to be material to the patentability as	defined in 37 CFR 1.56.	
I hereby acknowledge that any willful fals	se statement made in this declaration is punishable	
under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.		
Michael Julian Black		
<u> Dec. 12, 1618</u> Date		

Page 5 of 14

U.S. Patent Appln. No. 15/913,589 Attorney Docket No. BDLB.1441A Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number _______ filed on ______. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. Eric Rachlin August 4th, 2022 Date

U.S. Patent Appln. No. <u>15/913,589</u>	Attorney Docket No. <u>BDLB.1441A</u>
Filing Date March 6, 2018	Client Docket No. PM16248-US-ORG1
Title of Invention: MACHINE LEARNING SYST SHAPE FROM BEHAVIORAL DATA	EMS AND METHODS FOR EXTRACTING USER BODY
	n, Matthew Loper, Jonathan Robert Cilley, William rence Gelman, Steven Douglas Hatch, Nicolas
DECLARATION	
As a below named inventor, I hereby declar	e that:
This declaration is directed to:	
the attached application; or	
United States Patent Application	n number <u>15/913,589</u> filed on <u>March 6, 2018</u> ; or
PCT International Application nu	ımber filed on
The above-identified application was made	or authorized to be made by me.
I believe that I am the original inventor or a	n original joint inventor of a claimed Invention in the
application.	
I have reviewed and understand the conten	••
acknowledge the duty to disclose to the US Patent & Trademark Office all information known to	
me to be material to the patentability as de	fined in 37 CFR 1.56.
I hereby acknowledge that any willful false s	statement made in this declaration is punishable
under 18 USC 1001 by fine or imprisonment	of not more than five (5) years, or both.
11	
That Z	
Matthew Loper	
June 15, 2022	
Date	

U.S. Patent Appln. No. <u>15/913,589</u>	Attorney Docket No. <u>BDLB.1441A</u>	
Filing Date <u>March 6, 2018</u>	Client Docket No. PM16248-US-ORG1	
Title of Invention: MACHINE LEARNING SYS	STEMS AND METHODS FOR EXTRACTING USER BODY	
Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas		
DECLARATION		
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I believe that I am the original inventor or	an original joint inventor of a claimed Invention in the	
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I have reviewed and understand the conto	ents of the above-identified application, and	
acknowledge the duty to disclose to the U	JS Patent & Trademark Office all information known to	
me to be material to the patentability as defined in 37 CFR 1.56.		
I hereby acknowledge that any willful fals	e statement made in this declaration is punishable	
under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.		
/ Jonathan Robert (illey/		
Jonathan Robert Cilley		
July 15, 2022		
Date		

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U.S. Patent Appln. No. 15/913,589 Attorney Docket No. BDLB.1441A Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number ______ filed on _____. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. William John O'Farrell

August 3, 2022

Date

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63) U.S. Patent Appln. No. 15/913,589 Attorney Docket No. 8DL8 1441A Client Docket No. PM16248-US-ORG1 Filing Date March 6, 2018 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas DECLARATION As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Alexander Weiss

20 July 2022 Date

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U.S. Patent Appln. No. 15/913,589

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

Attorney Docket No. BDLB.1441A

Client Docket No. PM16248-US-ORG1 Filing Date March 6, 2018 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number ______ filed on _____. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. DocuSigned by: /Jason Lawrence Gelman/ ∽52BBF7A7AE64436... Jason Lawrence Gelman May 26, 2022 Date

U.S. Patent Appln. No. 15/913,589

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

Attorney Docket No. BDLB.1441A

Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number ______ filed on _____. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. /Steven Douglas Hatch/ Steven Douglas Hatch May 25, 2022 Date

Date

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

U.S. Patent Appln. No. 15/913,589 Attorney Docket No. BDLB.1441A Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number 15/913,589 filed on March 6, 2018; or PCT International Application number ______ filed on _____. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. DocuSigned by: Mcolas Heron/ -545EC65770574C5... **Nicolas Heron** May 31, 2022

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U.S. Patent Appln. No. 15/913,589 Attorney Docket No. BDLB.1441A Filing Date March 6, 2018 Client Docket No. PM16248-US-ORG1 Title of Invention: MACHINE LEARNING SYSTEMS AND METHODS FOR EXTRACTING USER BODY SHAPE FROM BEHAVIORAL DATA Inventors: Michael Julian Black, Eric Rachlin, Matthew Loper, Jonathan Robert Cilley, William John O'Farrell, Alexander Weiss, Jason Lawrence Gelman, Steven Douglas Hatch, Nicolas Heron, Javier Romero Gonzalez-Nicolas **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or \square United States Patent Application number <u>15/913,589</u> filed on <u>March 6, 2018</u>; or PCT International Application number ______ filed on ______. 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. I have reviewed and understand the contents of the above-identified application, and acknowledge the duty to disclose to the US Patent & Trademark Office all information known to me to be material to the patentability as defined in 37 CFR 1.56. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. Javier Romero Gonzalez-Nicolas 07/26/2022

Page 14 of 14

RECORDED: 08/05/2022