506011646 04/13/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6058358

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the INCORRECTLY SUBMITTED ASSIGNOR NAME OF SEBASTIEN HENRI RACANIERE TO SEBASTIEN HENRI ANDRE RACANIERE previously recorded on Reel 051662 Frame 0376. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
Daniel Pieter Wierstra	06/18/2018
Yujia Li	06/12/2018
Razvan Pascanu	06/16/2018
Peter William Battaglia	06/12/2018
Theophane Guillaume Weber	06/18/2018
Lars Buesing	06/13/2018
David Paul Reichert	06/14/2018
Arthur Clement Guez	06/12/2018
Danilo Jimenez Rezende	06/11/2018
ADRIA PUIGDOMENECH BADIA	06/11/2018
Oriol Vinyals	06/11/2018
Nicolas Manfred Otto Heess	07/04/2018
SEBASTIEN HENRI ANDRE RACANIERE	08/30/2018

RECEIVING PARTY DATA

Name:	DEEPMIND TECHNOLOGIES LIMITED
Street Address:	5 NEW STREET SQUARE
City:	LONDON
State/Country:	UNITED KINGDOM
Postal Code:	EC4A 3TW

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16689058

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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.

Phone: +1 (650) 839-5164

> **PATENT** REEL: 052383 FRAME: 0302

506011646

Email: apsi@fr.com, lswanson@fr.com

Correspondent Name: MICHAEL PORTNOV

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER: 45288-8345001

NAME OF SUBMITTER: LISA SWANSON

SIGNATURE: /Lisa Swanson/
DATE SIGNED: 04/13/2020

Total Attachments: 9

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01/29/2020 505889565

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5936266

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	l

CONVEYING PARTY DATA

Name	Execution Date
Daniel Pieter Wierstra	06/18/2018
Yujia Li	06/12/2018
Razvan Pascanu	06/16/2018
Peter William Battaglia	06/12/2018
Theophane Guillaume Weber	06/18/2018
Lars Buesing	06/13/2018
David Paul Reichert	06/14/2018
Arthur Clement Guez	06/12/2018
Danilo Jimenez Rezende	06/11/2018
ADRIA PUIGDOMENECH BADIA	06/11/2018
Oriol Vinyals	06/11/2018
Nicolas Manfred Otto Heess	07/04/2018
Sebastien Henri Racaniere	08/30/2018

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Application Number:	16689058

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Phone: +1 (650) 839-5164

Email: apsi@fr.com, lswanson@fr.com

Correspondent Name: MICHAEL PORTNOV

Address Line 1: FISH & RICHARDSON P.C.

PATENT

REEL: 052383 FRAME: 0304

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ASSIGNMENT and CONFIRMATION

We, <u>Daniel Pieter Wierstra</u>, <u>Yujia Li</u>, <u>Razvan Pascanu</u>, <u>Peter William Battaglia</u>, <u>Theophane Guillaume Weber</u>, <u>Lars Buesing</u>, <u>David Paul Reichert</u>, <u>Arthur Clement Guez</u>, <u>Danilo Jimenez Rezende</u>, <u>Adria Puigdomenech Badia</u>, <u>Oriol Vinyals</u>, <u>Nicolas Manfred Otto Heess</u> and <u>Sebastien Henri Andre Racaniere</u>, each hereby confirm the assignment and transfer to DeepMind Technologies Limited, a company organized under the laws of the United Kingdom, having a place of business at 5 New Street Square, London, EC4A 3TW United Kingdom, and its successors and assigns (collectively, "ASSIGNEE") of all of our individual and joint right, title and interest throughout the world in and to any and all inventions and improvements that are the subject or subjects of a patent application entitled

Imagination-Based Agent Neural Networks

Patent Office (EPO) on May 22, 2018 as Application No. PCT/EP2018/063283. We authorize and request the attorneys filing the application to complete this assignment by inserting the filing date and serial number of the application when known. The foregoing assignment and transfer occurred by operation of one or more agreements relating to our employment by DeepMind Technologies Limited or an affiliate of DeepMind Technologies Limited. Should any of us have any remaining interest, we each hereby assign and transfer any right, title or interest we may have in the above-mentioned inventions and improvements anywhere in the world to ASSIGNEE.

This assignment and confirmation includes the foregoing patent application or patent; all legal equivalents thereof in any country and all patents issuing therefrom; all patents, utility models, and design registrations granted for any of said inventions and improvements throughout the world; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. We authorize ASSIGNEE to

Page 2 of 4

apply in all countries in our names or in the name of ASSIGNEE for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for the assigned inventions and improvements.

The foregoing assignments have been made for good and valuable consideration, the receipt of which is hereby acknowledged, and in accordance with the employment-related agreements existing at the time the above-mentioned inventions and improvements were made.

We hereby represent and covenant that no assignment, agreement or encumbrance has been or will be made or entered into by us that would conflict with the abovementioned assignment of the inventions and improvements to ASSIGNEE.

We further covenant for ourselves and our respective heirs, legal representatives and assigns to provide to ASSIGNEE promptly upon the request of ASSIGNEE all pertinent facts and documents relating to any of the above-mentioned inventions and improvements, patent applications, patents and legal equivalents, as may be known and accessible to us; to testify as to the same in any interference, litigation, or proceeding relating thereto; and promptly to execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce any of the above-mentioned applications, inventions and improvements, patents and equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

6/18/2018 Dated:	6A5590DA267349C	
	Daniel Pieter Wierstra	
6/12/2018 Data da	DocuSigned by:	
Dated:	Yuiia Li	

--- DocuSigned by:

Attorney's Docket No.: 16113-8345WO1
Page 3 of 4

Dated:	Resolution 3FFBEC2610AB4F7
	Razvan Pascanu DocuSigned by:
Dated:	Peter William Battaglia
6/18/2018 Dated:	Theophane Guillaume Weber
Dated:	Lars Buesing
Dated:	Docusigned by: Jw + 2044651DAA104BC David Paul Reichert
Dated:	Docusigned by: 80BB947662FD4BF Arthur Clement Guez
Dated:	DocuSigned by: DANIE DA
6/11/2018 Dated:	Docusigned by: CCE3F183A579448 Adria Puigdomenech Badia

Dated:

Dated:

Docusigned by:

SoleABF2721914DA...

Oriol Vinyals

Dated:

Docusigned by:

SoleABF2721914DA...

Oriol Vinyals

Docusigned by:

Nicolas Manfred Otto Heess

Dated:

Sebastien Henri Andre Racaniere

Attorney's Docket No.: 16113-8345WO1

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Page 1 of 4

ASSIGNMENT and CONFIRMATION

We, <u>Daniel Pieter Wierstra</u>, <u>Yujia Li</u>, <u>Razvan Pascanu</u>, <u>Peter William Battaglia</u>, <u>Theophane Guillaume Weber</u>, <u>Lars Buesing</u>, <u>David Paul Reichert</u>, <u>Arthur Clement Guez</u>, <u>Danilo Jimenez Rezende</u>, <u>Adria Puigdomenech Badia</u>, <u>Oriol Vinyals</u>, <u>Nicolas Manfred Otto Heess</u> and <u>Sebastien Henri Andre Racaniere</u>, each hereby confirm the assignment and transfer to DeepMind Technologies Limited, a company organized under the laws of the United Kingdom, having a place of business at 5 New Street Square, London, EC4A 3TW United Kingdom, and its successors and assigns (collectively, "ASSIGNEE") of all of our individual and joint right, title and interest throughout the world in and to any and all inventions and improvements that are the subject or subjects of a patent application entitled

Imagination-Based Agent Neural Networks

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Page 2 of 4

apply in all countries in our names or in the name of ASSIGNEE for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for the assigned inventions and improvements.

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Dated:		
	Daniel Pieter Wierstra	
Dated:		
	Yuiia Li	

Page 3 of 4

Dated:	
	Razvan Pascanu
Dated:	Peter William Battaglia
Dated:	Theophane Guillaume Weber
Dated:	Lars Buesing
Dated:	David Paul Reichert
Dated:	Arthur Clement Guez
Dated:	Danilo Jimenez Rezende
Dated:	Adria Puigdomenech Badia

Attorney's Docket No.: 16113-8345WO1 Page 4 of 4

Dated:	Oriol Vinyals
Dated:	Nicolas Manfred Otto Heess
Dated: 8/30/2018	DocuSigned by:
	Sebastien Henri Andre Racaniere

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RECORDED: 04/13/2020