505971521 03/17/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CAEDMON SOMERS	10/22/2019
JASON RUPERT	10/22/2019
IGOR BOROVIKOV	10/17/2019
AHMAD BEIRAMI	10/17/2019
YUNQI ZHAO	10/17/2019
MOHSEN SARDARI	10/17/2019
JOHN KOLEN	02/04/2020
NAVID AGHDAIE	10/17/2019
KAZI ATIF-UZ ZAMAN	10/18/2019

RECEIVING PARTY DATA

Name:	ELECTRONIC ARTS INC.	
Street Address:	209 REDWOOD SHORES PKWY	
City:	REDWOOD CITY	
State/Country:	CALIFORNIA	
Postal Code:	94065	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16507864

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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: 9497600404

Email: efiling@knobbe.com

Correspondent Name: KNOBBE, MARTENS, OLSON & BEAR, LLP

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Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	EAI.247A
NAME OF SUBMITTER:	DAVID J. GRANT

SIGNATURE:	/DAVID J. GRANT/	
DATE SIGNED:	03/17/2020	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 10		
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COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: EAI.247A Page 1 of 10

Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES

ON VIDEO GAME CLIENTS

Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen

Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman

Declaration

This Declaration is directed to U.S. or International Application No. **16/507864**, filed July 10, 2019 and incorporating any amendments made thereto prior to the signature date of this Declaration.

As a named inventor, I declare that:

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 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.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

Assignment from Inventors

WHEREAS, above-identified inventors (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries related to DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been filed or prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application"), and ASSIGNOR desires to assign or confirm assignment of the Work and the Application to the below identified Assignee.

AND WHEREAS, **Electronic Arts Inc.**, with its principal place of business at 209 Redwood Shores Pkwy. Redwood City, CA 94065 (hereinafter the "ASSIGNEE"), desires to acquire or confirm ownership of the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred, and set over, and by these presents does hereby sell, assign, transfer, and set over, unto said ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest throughout the world in and to the Application and the Work, including: all provisional applications relating to the Work and the Application (including but not limited to U.S. Provisional Application No(s)., filed (respectively if plural applications)); all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals, and reissues thereof.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: EAI.247A Page 2 of 10

Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES

ON VIDEO GAME CLIENTS

Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen

Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman

applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives, and assigns.

AND ASSIGNOR 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 DOES HEREBY covenant and agree that ASSIGNOR will: communicate to said ASSIGNEE, its successors, legal representatives, and assigns any facts known to ASSIGNOR respecting the Work; testify in any legal proceeding; assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto; sign/execute all lawful papers; authorize the filing of, execute, and make all rightful oaths and/or declarations in connection with the Application and the Work 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 the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper patent protection for the Work in all countries.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently

Docket No.: EAI.247A Page 3 of 10
Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS
Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman
Legal Name of Inventor: Caedmon Somers
Signature: Landmer Somes 1 Date: 10/22/2019
Witnessed by: Morth
Witness Name (printed): AMIRALI SHARTAL
Legal Name of Inventor: Jason Rupert
Signature: Manhama Date: 10122/2016 Witnessed by: Mushing
Witness Name (printed): AMERALI SHARIFI

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently	
Docket No.: EAI.247A Page 4 of 10	
Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS	
Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman	
Legal Name of Inventor: Igor Borovikov IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 11th day of 2016,	
Signature:	
Signature before a Notary is desirable but not required.	
A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.	
STATE OF CALIFORNIA COUNTY OF ss.	
On, before me,, notary public, personally appeared Igor Borovikov who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.	
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.	
WITNESS my hand and official seal	

Notary Signature

[SEAL]

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently

Docket No.: EAI.247A	Page 5 of 10
Title: DISTRIBUTED TRAINING FOR MACHINE LEA ON VIDEO GAME CLIENTS	RNING OF AI CONTROLLED VIRTUAL ENTITIES
Inventors: Caedmon Somers, Jason Rupert, Igor Bor Sardari, John Kolen, Navid Aghdaie, and Kazi	
Legal Name of Inventor: Ahmad Beirami	
IN TESTIMONY WHEREOF, I hereunto set my hand	and seal this 17 day of October,
20 <u>19</u> . Signature:	
Signature befo	re a Notary is desirable but not required.
A NOTARY PUBLIC OR OTHER OFFICE VERIFIES ONLY THE IDENTITY OF TH DOCUMENT TO WHICH THIS CERTIFIC TRUTHFULNESS, ACCURACY, OR V	HE INDIVIDUAL WHO SIGNED THE CATE IS ATTACHED, AND NOT THE
STATE OF CALIFORNIA	
COUNTY OFss.	
On, before me, appeared Ahmad Beirami who proved to me on the bas whose name(s) is/are subscribed to the within instrume executed the same in his/her/their authorized capacity(instrument the person(s), or the entity upon behalf of w	sis of satisfactory evidence to be the person(s) ent, and acknowledged to me that he/she/they ies), and that by his/her/their signature(s) on the
I certify under PENALTY OF PERJURY under the laws paragraph is true and correct.	of the State of California that the foregoing
WITNESS my hand and official seal.	
1	Notary Signature

[SEAL]

	ASSIGNMENT (37 CFR 1.63(e)) If previously or concurrently
Docket No.: EAI.247A	Page 6 of 10
Title: DISTRIBUTED TRAINING FOR MACHINE LE ON VIDEO GAME CLIENTS	ARNING OF AI CONTROLLED VIRTUAL ENTITIES
Inventors: Caedmon Somers, Jason Rupert, Igor Bo Sardari, John Kolen, Navid Aghdaie, and Kaz	
Legal Name of Inventor: Yunqi Zhao IN TESTIMONY WHEREOF, I hereunto set my han 20 / Signature:	
	fore a Notary is desirable but not required.
A NOTARY PUBLIC OR OTHER OFFICE VERIFIES ONLY THE IDENTITY OF TOUR THIS CERTIFICATION OF TRUTHFULNESS, ACCURACY, OF	THE INDIVIDUAL WHO SIGNED THE ICATE IS ATTACHED, AND NOT THE
STATE OF CALIFORNIA COUNTY OF	
On, before me, appeared Yunqi Zhao who proved to me on the basis name(s) is/are subscribed to the within instrument, are the same in his/her/their authorized capacity(ies), and the person(s), or the entity upon behalf of which the person to the person the law paragraph is true and correct.	nd acknowledged to me that he/she/they executed that by his/her/their signature(s) on the instrument person(s) acted, executed the instrument.
WITNESS my hand and official seal.	•
	Notary Signature

[SEAL]

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently	
Docket No.: EAI.247A	Page 7 of 10
Title: DISTRIBUTED TRAINING FOR MACHINE L ON VIDEO GAME CLIENTS	EARNING OF AI CONTROLLED VIRTUAL ENTITIES
Inventors: Caedmon Somers, Jason Rupert, Igor I Sardari, John Kolen, Navid Aghdaie, and K	
A NOTARY PUBLIC OR OTHER OFF VERIFIES ONLY THE IDENTITY OF DOCUMENT TO WHICH THIS CERT	efore a Notary is desirable but not required. ICER COMPLETING THIS CERTIFICATE THE INDIVIDUAL WHO SIGNED THE IFICATE IS ATTACHED, AND NOT THE
TRUTHFULNESS, ACCURACY, C	OR VALIDITY OF THAT DOCUMENT,
STATE OF CALIFORNIA SS. COUNTY OF	
	ument, and acknowledged to me that he/she/they eity(ies), and that by his/her/their signature(s) on the of which the person(s) acted, executed the instrument.
WITNESS my hand and official seal.	Notary Signature

[SEAL]

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently Docket No.: EAI,247A Page 8 of 10 Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yungi Zhao, Mohsen Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman Legal Name of Inventor: John Kolen IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 4 day of February 202*0* . Signature: Signature before a Notary is desirable but not required. A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT. STATE OF CALIFORNIA SS. COUNTY OF On ______, before me, ______, notary public, personally appeared John Kolen who proved to me on the basis of satisfactory evidence to be the person(s) whose _, before me, _ name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing

Notary Signature

paragraph is true and correct.

[SEAL]

WITNESS my hand and official seal.

Application Data Sheet filed previously or concurrently	
Docket No.: EAI.247A Page 9 of 10	
Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS	
Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman	
Legal Name of Inventor: Navid Aghdaie	
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 17 day of october, 2011. Signature:	
Signature before a Notary is desirable but not required.	
A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.	
STATE OF CALIFORNIA	
On, before me,	

Notary Signature

paragraph is true and correct.

[SEAL]

WITNESS my hand and official seal.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently
Docket No.: EAI.247A Page 10 of 10
Title: DISTRIBUTED TRAINING FOR MACHINE LEARNING OF AI CONTROLLED VIRTUAL ENTITIES ON VIDEO GAME CLIENTS
Inventors: Caedmon Somers, Jason Rupert, Igor Borovikov, Ahmad Beirami, Yunqi Zhao, Mohsen Sardari, John Kolen, Navid Aghdaie, and Kazi Atif-Uz Zaman
Legal Name of Inventor: Kazi Atif-Uz Zaman IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 13th day of October 2019. Signature: Kazi Atif-Uz Zaman
Signature before a Notary is desirable but not required.
A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.
STATE OF CALIFORNIA COUNTY OF ss.
On, before me,, notary public, personally appeared Kazi Atif-Uz Zaman who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.

Notary Signature

PATENT REEL: 052140 FRAME: 0512

RECORDED: 03/17/2020

[SEAL]