504496826 08/09/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4543529

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GEOFFREY NORTON	07/21/2017
JACOB P STINE	08/08/2017
TAKAYUKI KAZAMA	07/21/2017
DIMITRI TOLSTOV	07/24/2017

RECEIVING PARTY DATA

Name:	SONY INTERACTIVE ENTERTAINMENT INC.
Street Address:	1-7-1 KONAN, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	108-0075

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15620751

CORRESPONDENCE DATA

Fax Number: (510)668-0239

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: 510-668-0965 Email: josh@jdipatent.com JOSHUA D. ISENBERG **Correspondent Name:** 809 CORPORATE WAY Address Line 1:

Address Line 4: FREMONT, CALIFORNIA 94539

ATTORNEY DOCKET NUMBER:	SCEA16276US00
NAME OF SUBMITTER:	JOSHUA D. ISENBERG
SIGNATURE:	/Joshua D. Isenberg, Reg. No. 41088/
DATE SIGNED:	08/09/2017

Total Attachments: 4

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PATENT REEL: 043249 FRAME: 0340

Attorney Docket No: SCEA16276US00

ASSIGNMENT

THIS ASSIGNMENT, by GEOFFREY PIERS ROBERT NORTON, residing at FOSTER CITY, CALIFORNIA, Jacob P. Stine, residing at LA HONDA, CALIFORNIA, TAKAYUKI KAZAMA, residing at CASTRO VALLEY, CALIFORNIA, and Dmitri Tolstov, residing at SAN CARLOS, CALIFORNIA (hereinafter referred to as the Assignors), respectively witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

"EMULATION OF TARGET SYSTEM USING JIT COMPILER AND SELECTIVE INSERTION OF HOST INTSTRUCTIONS"

which are described United States provision United States non-provisional and Internat hereby authorize and request attorney, Josh parentheses (U.S. Patent Application No, file applications when known.	ional applications for tua D. Isenberg, of 80 15/620.751	letters patent having the above tit 9 Corporate Way, Fremont, Califo, filed June 12, 2017, Inter	le. Said assignors ornia, to insert here in rnational Patent
WHEREAS,	Sony Interactive Ent	ertainment Inc.	
(hereinafter referred to as the Assignee a be 1-7-1 Konan, Minato-ku, Tokyo 108-007: said inventions and said application for Let obtained therefor and thereon, and to any a NOW, THEREFORE, for good and valuable of 1. The Assignors have sold, assigned, transferrentire right, title and interest in, to and under sa granted for said inventions in the United States	ody having corporate 5 JAPAN, is desirous tters Patent, and in ar and all improvements consideration, the received and set over, and do had inventions; said approved.	powers under the laws of JAPAN s of obtaining the entire right, title ad to any Letters Patent, United St which are disclosed in said applic pt of which is hereby acknowledged hereby sell, assign, transfer and set ov lication for Letters Patent; any Letters	and interest in and to ates or foreign, to be ation for Letters Patent. Ever unto said Assignee, the Patent which may be
of said application; any reissue or extension of so of Industrial Property; said right, title and interest of the term for which Letters Patent may be grands Assignors, had this sale and assignment not bee	said Letters Patent; and est to be held and enjoyented, as fully and entire	all rights under the International Coned by said Assignee for its own use ar	vention for the Protection and behoove to the full end
2. Said Assignors hereby jointly and severally was Assignors are the lawful owners of the entire rigand that the same have not entered into any assignore.	ght, title and interest in	and to said inventions and said applic	
3. Said Assignors hereby covenant and agree to extent said right, title and interest herein converted Assignors in lending such assistance and cooper papers (prepared at the expense of Assignee) winterest herein conveyed, (b) prompt execution expense of Assignee) which are deemed necessare country said application, any application which application for any Letters Patent granted on said Patent granted thereon; and (c) prompt assistant said application, or Letters Patent granted there proceedings and court actions.	yed, provided, however, ration be paid by Assign hich are deemed necess of all petitions, oaths, sary or desirable by Assi is a division, continuating application, or for an are and cooperation in the	that the entire expense which may be nee. Such cooperation shall include: (ary or desirable by Assignee to perfect pecifications, declarations and other pagnee for filing or prosecuting in the U on, or continuation-in-part of said apply interference proceeding involving sale prosecution of all legal proceedings	e incurred by said a) prompt execution of all at said right, title and appers (prepared at the inited States or any foreign plication, any reissue aid application or Letters involving said inventions,
4. The terms, covenants and conditions of this A other legal representatives, and shall be binding 5. Said Assignors hereby request the Director of	g upon said Assignors, t	heir heirs, legal representatives and a	ssigns.
United States to said Assignee as the assignee of			
IN WITNESS WHEREOF said Assignors have	ve executed and deliver	red this instrument on the date noted	below.
/Geoffrey Norton/	7/21/2017		
Geoffrey Piers Robert Norton	Date	Jacob P. Stine	Date
Takayuki Kazama	Date	Dmitri Tolstov	Date
Assignment	Page 1	of 1 Attorney Doc	cket No.: SCEA16276US00

PATENT REEL: 043249 FRAME: 0341

Assignment

Attorney Docket No: SCEA16276US00

ASSIGNMENT

THIS ASSIGNMENT, by GEOFFREY PIERS ROBERT NORTON, residing at FOSTER CITY, CALIFORNIA, Jacob P. Stine, residing at LA HONDA, CALIFORNIA, TAKAYUKI KAZAMA, residing at CASTRO VALLEY, CALIFORNIA, and Dmitri Tolstov, residing at SAN CARLOS, CALIFORNIA (hereinafter referred to as the Assignors), respectively witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

"EMULATION OF TARGET SYSTEM USING JIT COMPILER AND SELECTIVE INSERTION OF HOST INTSTRUCTIONS"

Takayuki Kazama	Date	Dmitri Tolstov		Date
Geomey Piers Robert Norton	Date	Jacob P. Stine		vate
Geoffrey Piers Robert Norton	— Date	/Jacob P. Jacob P. Stine	Stine/	8/8/2017 Date
IN WITNESS WHEREOF said Assignors have	ve executed and delive	red this instrument o	n the date noted b	elow.
5. Said Assignors hereby request the Director of United States to said Assignee as the assignee of	f said inventions.			
other legal representatives, and shall be binding	g upon said Assignors, t	their heirs, legal repre	sentatives and ass	igns.
3. Said Assignors hereby covenant and agree to extent said right, title and interest herein convey Assignors in lending such assistance and cooper papers (prepared at the expense of Assignee) winterest herein conveyed, (b) prompt execution expense of Assignee) which are deemed necessare country said application, any application which application for any Letters Patent granted on said Patent granted thereon; and (c) prompt assistant said application, or Letters Patent granted there proceedings and court actions. 4. The terms, covenants and conditions of this Assignment of the proceedings are covenants and conditions of this Assignment.	assist and cooperate wayed, provided, however ration be paid by Assignich are deemed necess of all petitions, oaths, sary or desirable by Assign a division, continuated application, or for an are and cooperation in the on, including opposition	ith said Assignee, who, that the entire experience. Such cooperation sary or desirable by Aspecifications, declaration, or continuation-in the prosecution of all lens, cancellation process.	ereby said Assigned asse which may be in shall include: (a) assigned to perfect a strength of the United Strength	incurred by said prompt execution of all said right, title and pers (prepared at the ited States or any foreign ication, any reissue d application or Letters avolving said inventions, mtests, public use
Said Assignors hereby jointly and severally w Assignors are the lawful owners of the entire rig and that the same have not entered into any assignore.	ght, title and interest in	and to said invention	s and said applica	
1. The Assignors have sold, assigned, transferre entire right, title and interest in, to and under sa granted for said inventions in the United States of said application; any reissue or extension of sof Industrial Property; said right, title and interes of the term for which Letters Patent may be grant Assignors, had this sale and assignment not bee	nid inventions; said app of America and any for said Letters Patent; and est to be held and enjoy nted, as fully and entire n made.	plication for Letters Pareign country, any dividual rights under the Indeed by said Assignee fely as the same would	tent; any Letters F ision, continuation nternational Conve or its own use and have been held ar	Patent which may be a, or continuation-in-part ention for the Protection behoove to the full end and enjoyed by the
NOW, THEREFORE, for good and valuable of		=		
(hereinafter referred to as the Assignee a be 1-7-1 Konan, Minato-ku, Tokyo 108-007: said inventions and said application for Let obtained therefor and thereon, and to any a	5 JAPAN, is desirou tters Patent, and in an	powers under the last of obtaining the end to any Letters Pa	ntire right, title a tent, United Stat	and interest in and to es or foreign, to be
WHEREAS,				
United States non-provisional and International Application No, file applications when known.	ional applications for ua D. Isenberg, of 80	r letters patent havir 19 Corporate Way, I	ng the above title Fremont, Califor	e. Said assignors nia, to insert here in
which are described United States provision	nal application for le			iled and in

Page 1 of 1

PATENT REEL: 043249 FRAME: 0342

Attorney Docket No.: SCEA16276US00

Assignment

Attorney Docket No: SCEA16276US00

ASSIGNMENT

THIS ASSIGNMENT, by GEOFFREY PIERS ROBERT NORTON, residing at FOSTER CITY, CALIFORNIA, Jacob P. Stine, residing at LA HONDA, CALIFORNIA, TAKAYUKI KAZAMA, residing at CASTRO VALLEY, CALIFORNIA, and Dmitri Tolstov, residing at SAN CARLOS, CALIFORNIA (hereinafter referred to as the Assignors), respectively witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

"EMULATION OF TARGET SYSTEM USING JIT COMPILER AND SELECTIVE INSERTION OF HOST INTSTRUCTIONS"

Takayuki Kazama	Date	Dmitri Tolstov	Date	
/Takayuki Kazama/	7/21/2017			
Geoffrey Piers Robert Norton	Date	Jacob P. Stine	Date	_
IN WITNESS WHEREOF said Assignors ha	ve executed and deliv		te noted below.	
United States to said Assignee as the assignee	of said inventions.			oi the
other legal representatives, and shall be binding. 5. Said Assignors hereby request the Director of	g upon said Assignors	, their heirs, legal representative	es and assigns.	
3. Said Assignors hereby covenant and agree to extent said right, title and interest herein convex Assignors in lending such assistance and coope papers (prepared at the expense of Assignee) winterest herein conveyed, (b) prompt execution expense of Assignee) which are deemed necess country said application, any application which application for any Letters Patent granted on sa Patent granted thereon; and (c) prompt assistant said application, or Letters Patent granted there proceedings and court actions. 4. The terms, covenants and conditions of this and conditions of this and conditions of the extent granted thereon.	eyed, provided, however tration be paid by Assistance deemed nece of all petitions, oaths, arry or desirable by Assis a division, continuated application, or for a acce and cooperation in eon, including opposition	er, that the entire expense whice gnee. Such cooperation shall in ssary or desirable by Assignee to specifications, declarations and signee for filing or prosecuting ation, or continuation-in-part of any interference proceeding involves the prosecution of all legal process, cancellation proceedings,	h may be incurred by sainclude: (a) prompt execute perfect said right, titled other papers (prepared in the United States or a said application, any reiplicition of said application of ceedings involving said ipriority contests, publication	d tion of all and at the my foreign ssue r Letters nventions, use
2. Said Assignors hereby jointly and severally values Assignors are the lawful owners of the entire ri and that the same have not entered into any ass	ght, title and interest signment, contract or u	in and to said inventions and sa inderstanding in conflict herewi	id application for Letters th.	s Patent,
1. The Assignors have sold, assigned, transfermentire right, title and interest in, to and under s granted for said inventions in the United States of said application; any reissue or extension of of Industrial Property; said right, title and interest of the term for which Letters Patent may be grantly Assignors, had this sale and assignment not because.	aid inventions; said ap s of America and any f said Letters Patent; ar est to be held and enjounted, as fully and enti	oplication for Letters Patent; any oreign country; any division, co and all rights under the Internation object by said Assignee for its ow	y Letters Patent which m ntinuation, or continuational Convention for the F on a use and behoove to the	ay be on-in-part Protection e full end
NOW, THEREFORE, for good and valuable		•	-	
(hereinafter referred to as the Assignee a b 1-7-1 Konan, Minato-ku, Tokyo 108-007 said inventions and said application for Le obtained therefor and thereon, and to any a	ody having corporate 5 JAPAN , is desironters Patent, and in	te powers under the laws of J us of obtaining the entire rig and to any Letters Patent, U	tht, title and interest in the states or foreign,	and to to be
WHEREAS,	Sony Interactive E	ntertainment Inc		
which are described United States provision United States non-provisional and International hereby authorize and request attorney, Joseparentheses (U.S. Patent Application No, fil applications when known.	tional applications for the desired to the desired	or letters patent having the a 809 Corporate Way, Fremon , filed June 12, 201	bove title. Said assign t, California, to insert 7, International Paten	here in t
		INISIRUCTIONS	~1 ·1	

Page 1 of 1

PATENT REEL: 043249 FRAME: 0343

Attorney Docket No.: SCEA16276US00

Assignment

Attorney Docket No: SCEA16276US00

ASSIGNMENT

THIS ASSIGNMENT, by **GEOFFREY PIERS ROBERT NORTON**, residing at **FOSTER CITY, CALIFORNIA**, **Jacob P. Stine**, residing at **LA HONDA, CALIFORNIA**, **TAKAYUKI KAZAMA**, residing at **CASTRO VALLEY, CALIFORNIA**, and **Dmitri Tolstov**, residing at **SAN CARLOS, CALIFORNIA** (hereinafter referred to as the Assignors), respectively witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

"EMULATION OF TARGET SYSTEM USING JIT COMPILER AND SELECTIVE INSERTION OF HOST INTSTRUCTIONS"

INSER	TION OF HOS	ST INTSTRUCTIONS"	
which are described United States provisio United States non-provisional and Internat hereby authorize and request attorney, Josl parentheses (U.S. Patent Application No, fil applications when known.	tional applications to D. Isenberg, of 15/620,751	for letters patent having the above f 809 Corporate Way, Fremont, Cal, filedJune12_, 2017, In	title. Said assignors lifornia, to insert here in ternational Patent
WHEREAS,			
	-	Entertainment Inc.	
(hereinafter referred to as the Assignee a b 1-7-1 Konan, Minato-ku, Tokyo 108-007 said inventions and said application for Le obtained therefor and thereon, and to any a	5 JAPAN, is desiretters Patent, and in	rous of obtaining the entire right, tin and to any Letters Patent, United	tle and interest in and to States or foreign, to be
NOW,THEREFORE,forgoodandvaluable	consideration, the r	eceipt of which is hereby acknowledg	ged:
1. The Assignors have sold, assigned, transferre entire right, title and interest in, to and under segranted for said inventions in the United States of said application; any reissue or extension of of Industrial Property, said right, title and interest of the term for which Letters Patent may be granged Assignors, had this sale and assignment not because.	aid inventions; said of America and any said Letters Patent; est to be held and en inted, as fully and er	application for Letters Patent; any Lett foreign country; any division, continua and all rights under the International C njoyed by said Assignee for its own use	ers Patent which may be ation, or continuation-in-part convention for the Protection and behoove to the full end
2. Said Assignors hereby jointly and severally values Assignors are the lawful owners of the entire ri and that the same have not entered into any ass	ght, title and interes	t in and to said inventions and said app	
3. Said Assignors hereby covenant and agree to extent said right, title and interest herein convex Assignors in lending such assistance and coope papers (prepared at the expense of Assignee) winterest herein conveyed, (b) prompt execution expense of Assignee) which are deemed necess country said application, any application which application for any Letters Patent granted on sa Patent granted thereon; and (c) prompt assistant said application, or Letters Patent granted thereoproceedings and court actions.	ryed, provided, hower ration be paid by As thich are deemed ne- of all petitions, oath ary or desirable by A is a division, contin- id application, or fo ce and cooperation is	ever, that the entire expense which may signee. Such cooperation shall include cessary or desirable by Assignee to per as, specifications, declarations and other Assignee for filing or prosecuting in the mation, or continuation-in-part of said arrany interference proceeding involving an the prosecution of all legal proceeding.	who be incurred by said e: (a) prompt execution of all fect said right, title and er papers (prepared at the e United States or any foreign application, any reissue g said application or Letters ags involving said inventions,
4. The terms, covenants and conditions of this a other legal representatives, and shall be binding			
5. Said Assignors hereby request the Director of United States to said Assignee as the assignee		Patent and Trademark Office to issue	said Letters Patent of the
IN WITNESS WHEREOF said Assignors ha	ve executed and de	livered this instrument on the date not	ed below.
Geoffrey Piers Robert Norton	Date	Jacob P. Stine	Date
		/Dmitri Tolstov/	7/24/2017
Takayuki Kazama	Date	Dmitri Tolstov	

PATENT
RECORDED: 08/09/2017 REEL: 043249 FRAME: 0344

Attorney Docket No.: SCEA16276US00

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