### PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
HIROKI WATANABE	02/26/2018
AKIHITO AKUTSU	02/26/2018
YASUHIKO MIYAZAKI	02/26/2018
ATSUSHI NAKADAIRA	02/26/2018
SHIGERU FUJIMURA	02/26/2018
JUNICHI KISHIGAMI	02/08/2018

#### **RECEIVING PARTY DATA**

Name:	NIPPON TELEGRAPH AND TELEPHONE CORPORATION
Street Address:	5-1, OTEMACHI 1-CHOME
Internal Address:	CHIYODA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	100-8116

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15770803

#### **CORRESPONDENCE DATA**

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using a lax humber, if provided, if that is unsuccessful, it will be sent via

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**Email:** landrew@kilpatricktownsend.com

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ATTORNEY DOCKET NUMBER:	044471/1085508
NAME OF SUBMITTER:	LESLEY L. ANDREW
SIGNATURE:	/Lesley L. Andrew/
DATE SIGNED:	04/25/2018

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# Total Attachments: 6 source=1085508\_Assignment#page1.tif source=1085508\_Assignment#page2.tif source=1085508\_Assignment#page3.tif source=1085508\_Assignment#page4.tif source=1085508\_Assignment#page5.tif

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PATENT REEL: 045629 FRAME: 0976

Attorney Docket No. 44471/	Attorney	Docket No.	44471/
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# ASSIGNMENT (Patent Application)

We [I], the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

BLOCKCHAIN GENERATION APPARATUS, BLOCKCHAIN GENERATION METHOD, BLOCKCHAIN
VERIFICATION APPARATUS, BLOCKCHAIN VERIFICATION METHOD, AND PROGRAM

filed with the U.S. Patent & Trademark Office on April 25, 2018

and assigned serial no. 15/770,803.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we [I] acknowledge, we [I]:

Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to NIPPON TELEGRAPH AND TELEPHONE CORPORATION, a corporation organized and existing under the laws of Japan having a principal place of business at 5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo, Japan 100-8116 ("Assignee"), the entire right, title, and interest in and to:

- (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
- (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
- (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of

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PATENT REEL: 045629 FRAME: 0977 ASSIGNMENT U.S. Serial No. 15/770,803 Page 2 of 3

this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and

- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
- Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
- 3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
- 4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
- 5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
- 6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our [my] signatures [signature].

Signature:	Hirolei Watanale		Date:	February 26, 2018
	Hiroki WATANABE		~-	100000000000000000000000000000000000000
Signature:	akihito	akutsu	Date:	February 26, 2018
	Akihito AKUTSU		-	V.WEEROOM.

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ASSIGNMEN U.S. Serial N Page 3 of 3	NT o. 15/770,803		
Signature:	Yasuhiko MIYAZAKI	Date:	February 26, 2018
Signature:	Atsushi NAKADAIRA	Date:	February 26, 2018
Signature:	Shigeru Gujimowa Shigeru FUJIMURA	Date:	February 26, 2018
Signature:	Junichi KISHIGAMI	Date:	

# ASSIGNMENT

(Patent Application)

We [I], the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

BLOCKCHAIN GENERATION APPARATUS, BLOCKCHAIN GENERATION METHOD, BLOCKCHAIN

(1) VERIFICATION APPARATUS, BLOCKCHAIN VERIFICATION METHOD, AND PROGRAM

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For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we [I] acknowledge, we [I]:

Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to NIPPON TELEGRAPH AND TELEPHONE CORPORATION, a corporation organized and existing under the laws of Japan having a principal place of business at 5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo, Japan 100-8116 ("Assignee"), the entire right, title, and interest in and to:

- (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
- (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
- (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of

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ASSIGNMENT U.S. Serial No. 15/770,803 Page 2 of 3

this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and

- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
- Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
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- 4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
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Signed on the dates indicated beside our [my] signatures [signature].

Signature:		Date:
	Hiroki WATANABE	A A A A A A A A A A A A A A A A A A A
Signature:		Date:
Digital Sale W.	Akihito AKUTSU	Date.

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## ASSIGNMENT U.S. Serial No. 15/770,803 Page 3 of 3

Signature:		Date:
	Yasuhiko MIYAZAKI	
Signature:		Date:
	Atsushi NAKADAIRA	
Signature:		Date:
Ü	Shigeru FUJIMURA	Dutc.
Signature:	1 1/2 A	Date: 2/8/2018
Digitalai V.	Junichi KISHIGAM	Date70/2018

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