

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KEIICHI CHONO	03/19/2021
MASATO TSUKADA	03/16/2021
CHISATO FUNAYAMA	03/16/2021
RYUICHI AKASHI	03/18/2021
YUKA OGINO	03/16/2021
TAKASHI SHIBATA	03/17/2021
SHOJI YACHIDA	03/17/2021
HIROSHI IMAI	03/16/2021
EMI KITAGAWA	03/17/2021
YASUHIKO YOSHIDA	05/21/2021
YUSUKE MORI	04/01/2021

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17280226

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PATENT

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NAME OF SUBMITTER:	HAFIDA SAMMANE
SIGNATURE:	/Hafida Sammane/
DATE SIGNED:	07/27/2022
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 20

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ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, I/we, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; (the "invention") and

Whereas, NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan, (assignee), desires to acquire the entire and exclusive right, title, and interest in the application and invention, and to any patents that may be obtained therefor in the United States, in any U.S. territorial possessions, and in any and all foreign countries;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/we, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire and exclusive right, title and interest in the application and the invention disclosed therein for the United States, U.S. territorial possessions, and in any and all foreign countries, including all divisions, and continuations, and continuations-in-part thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues and reexaminations, renewals, and substitutions thereof, and including the right to claim priority under 35 U.S.C. §119, and all rights for past infringement, under the International Convention, and under any other relevant International Treaties and Arrangements, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; I/we will execute without further consideration all papers deemed necessary by the assignee, and generally perform all necessary acts to aid the assignee, its successors and assigns, to obtain and enforce proper protection for the invention in connection with the United States and foreign applications, including but not limited to all divisional, continuation, reissue and other applications for Letters Patent on the invention and execute all assignments thereof to the above named assignee its successors and assigns, when called upon to do so by the assignee; and I/we will communicate to the above named assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, testify in any legal proceedings in which any of the applications or patents may become involved, and do generally everything necessary to assist the above named assignee its successors or assigns to obtain patent protection for the invention in the United States and foreign countries.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

As the below named inventor, I hereby declare that:

- This assignment with declaration is directed to:
 - The attached application, or
 - United States Application or PCT International Application Number PCT/JP2018/036039 filed on September 27, 2018 (Confirmation No. _____).

The application is entitled:

AUTHENTICATION SYSTEM, AUTHENTICATION METHOD, AND STORAGE MEDIUM

The above identified application was made or was 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 application for which this assignment with declaration is being submitted, including the claims.

I am aware of the duty to disclose to the U.S Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

NAME OF SOLE OR FIRST INVENTOR:			
Given Name (first and middle [if any])	KEIICHI	Family Name or Surname	CHONO
Inventor's signature	<i>Keiichi Chono</i>	Date	2021/03/19
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Inventor's signature	<i>Masato Tsukada</i>	Date	2021/03/16
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Inventor's signature	<i>Chisato Funayama</i>	Date	2021/3/16
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Inventor's signature	<i>Ryuichi Akashi</i>	Date	2021/3/18
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Given Name (first and middle [if any])	YUKA	Family Name or Surname	OGINO
Inventor's signature	<i>Yuka Ogino</i>	Date	2021/3/16
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Family Name or Surname	SHIBATA
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Family Name or Surname	YACHIDA
Inventor's signature	Date 2021/3/17
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NAME OF EIGHTH INVENTOR:	
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Family Name or Surname	IMAI
Inventor's signature	Date 2021/3/16
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF NINTH INVENTOR:	
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Family Name or Surname	KITAGAWA
Inventor's signature	Date
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF TENTH INVENTOR:	
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Family Name or Surname	YOSHIDA
Inventor's signature	Date
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

NAME OF ELEVENTH INVENTOR:

Given Name

(first and middle [if any])

YUSUKE

Family Name or Surname

MORI

Inventor's signature

Date

Residence: Tokyo, Japan

Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

NAME OF TWELFTH INVENTOR:

Given Name

(first and middle [if any])

Family Name or Surname

Inventor's signature

Date

Residence:

Mailing Address:

NAME OF THIRTEENTH INVENTOR:

Given Name

(first and middle [if any])

Family Name or Surname

Inventor's signature

Date

Residence:

Mailing Address:

NAME OF FOURTEENTH INVENTOR:

Given Name

(first and middle [if any])

Family Name or Surname

Inventor's signature

Date

Residence:

Mailing Address:

NAME OF FIFTEENTH INVENTOR:

Given Name

(first and middle [if any])

Family Name or Surname

Inventor's signature

Date

Residence:

Mailing Address:

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Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/we, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire and exclusive right, title and interest in the application and the invention disclosed therein for the United States, U.S. territorial possessions, and in any and all foreign countries, including all divisions, and continuations, and continuations-in-part thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues and reexaminations, renewals, and substitutions thereof, and including the right to claim priority under 35 U.S.C. §119, and all rights for past infringement, under the International Convention, and under any other relevant International Treaties and Arrangements, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; I/we will execute without further consideration all papers deemed necessary by the assignee, and generally perform all necessary acts to aid the assignee, its successors and assigns, to obtain and enforce proper protection for the invention in connection with the United States and foreign applications, including but not limited to all divisional, continuation, reissue and other applications for Letters Patent on the invention and execute all assignments thereof to the above named assignee its successors and assigns, when called upon to do so by the assignee; and I/we will communicate to the above named assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, testify in any legal proceedings in which any of the applications or patents may become involved, and do generally everything necessary to assist the above named assignee its successors or assigns to obtain patent protection for the invention in the United States and foreign countries.

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Inventor's signature	Date		
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Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan			
NAME OF FIFTH INVENTOR:			
Given Name (first and middle [if any])	YUKA	Family Name or Surname	OGINO
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan			

NAME OF SIXTH INVENTOR:	
Given Name (first and middle [if any])	TAKASHI
Family Name or Surname	SHIBATA
Inventor's signature	<i>Takashi Shibata</i>
Date	March 17, 2021
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NAME OF SEVENTH INVENTOR:	
Given Name (first and middle [if any])	SHOJI
Family Name or Surname	YACHIDA
Inventor's signature	
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Given Name (first and middle [if any])	YUSUKE
Family Name or Surname	MORI
Inventor's signature	Date
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Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan	
NAME OF TWELFTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
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Mailing Address:	
NAME OF THIRTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF FOURTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
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NAME OF SOLE OR FIRST INVENTOR:			
Given Name (first and middle [if any])	KEIICHI	Family Name or Surname	CHONO
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan			
NAME OF SECOND INVENTOR:			
Given Name (first and middle [if any])	MASATO	Family Name or Surname	TSUKADA
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NAME OF THIRD INVENTOR:			
Given Name (first and middle [if any])	CHISATO	Family Name or Surname	FUNAYAMA
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NAME OF FOURTH INVENTOR:			
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Inventor's signature	Date		
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NAME OF FIFTH INVENTOR:			
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NAME OF SIXTH INVENTOR:	
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Family Name or Surname	SHIBATA
Inventor's signature	Date
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NAME OF SEVENTH INVENTOR:	
Given Name (first and middle [if any])	SHOJI
Family Name or Surname	YACHIDA
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF EIGHTH INVENTOR:	
Given Name (first and middle [if any])	HIROSHI
Family Name or Surname	IMAI
Inventor's signature	Date
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF NINTH INVENTOR:	
Given Name (first and middle [if any])	EMI
Family Name or Surname	KITAGAWA
Inventor's signature	Date
	March 17, 2021
Residence:	Tokyo, Japan
Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF TENTH INVENTOR:	
Given Name (first and middle [if any])	YASUHIKO
Family Name or Surname	YOSHIDA
Inventor's signature	Date
Residence:	Tokyo, Japan
Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

NAME OF ELEVENTH INVENTOR:	
Given Name (first and middle [if any])	YUSUKE
Family Name or Surname	MORI
Inventor's signature	Date
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Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan	
NAME OF TWELFTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF THIRTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF FOURTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF FIFTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, I/we, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; (the "invention") and

Whereas, NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan, (assignee), desires to acquire the entire and exclusive right, title, and interest in the application and invention, and to any patents that may be obtained therefor in the United States, in any U.S. territorial possessions, and in any and all foreign countries;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/we, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire and exclusive right, title and interest in the application and the invention disclosed therein for the United States, U.S. territorial possessions, and in any and all foreign countries, including all divisions, and continuations, and continuations-in-part thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues and reexaminations, renewals, and substitutions thereof, and including the right to claim priority under 35 U.S.C. §119, and all rights for past infringement, under the International Convention, and under any other relevant International Treaties and Arrangements, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; I/we will execute without further consideration all papers deemed necessary by the assignee, and generally perform all necessary acts to aid the assignee, its successors and assigns, to obtain and enforce proper protection for the invention in connection with the United States and foreign applications, including but not limited to all divisional, continuation, reissue and other applications for Letters Patent on the invention and execute all assignments thereof to the above named assignee its successors and assigns, when called upon to do so by the assignee; and I/we will communicate to the above named assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, testify in any legal proceedings in which any of the applications or patents may become involved, and do generally everything necessary to assist the above named assignee its successors or assigns to obtain patent protection for the invention in the United States and foreign countries.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

As the below named inventor, I hereby declare that:

- This assignment with declaration is directed to:
 - The attached application, or
 - United States Application or PCT International Application Number PCT/JP2018/036039 filed on September 27, 2018 (Confirmation No. _____).

The application is entitled:

AUTHENTICATION SYSTEM, AUTHENTICATION METHOD, AND STORAGE MEDIUM

The above identified application was made or was 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 application for which this assignment with declaration is being submitted, including the claims.

I am aware of the duty to disclose to the U.S Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

NAME OF SOLE OR FIRST INVENTOR:	
Given Name (first and middle [if any])	KEIICHI
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Given Name (first and middle [if any])	CHISATO
Family Name or Surname	FUNAYAMA
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Family Name or Surname	SHIBATA
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NAME OF EIGHTH INVENTOR:	
Given Name (first and middle [if any])	HIROSHI
Family Name or Surname	IMAI
Inventor's signature	Date
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Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
NAME OF NINTH INVENTOR:	
Given Name (first and middle [if any])	EMI
Family Name or Surname	KITAGAWA
Inventor's signature	Date
Residence:	Tokyo, Japan
Mailing Address:	c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
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Given Name (first and middle [if any])	YASUHIKO
Family Name or Surname	YOSHIDA
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NAME OF ELEVENTH INVENTOR:	
Given Name (first and middle [if any])	YUSUKE
Family Name or Surname	MORI
Inventor's signature	Date
Residence: Tokyo, Japan	
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan	
NAME OF TWELFTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF THIRTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
Inventor's signature	Date
Residence:	
Mailing Address:	
NAME OF FOURTEENTH INVENTOR:	
Given Name (first and middle [if any])	
Family Name or Surname	
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As the below named inventor, I hereby declare that:

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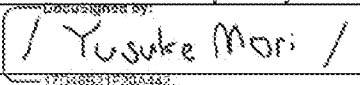
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