507598619 11/15/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7645509

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TORU TAKAHASHI	10/25/2021
RUI ISHIYAMA	10/18/2021
KENGO MAKINO	10/25/2021
YUTA KUDO	10/25/2021

RECEIVING PARTY DATA

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Street Address:	7-1, SHIBA 5-CHOME,		
Internal Address:	MINATO-KU,		
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State/Country:	JAPAN		
Postal Code:	108-8001		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17606488

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	3270002718US01	
NAME OF SUBMITTER:	DEANNA THOMAS, SECRETARY	
SIGNATURE:	/DEANNA THOMAS/	
DATE SIGNED:	11/15/2022	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

PATENT 507598619 REEL: 061772 FRAME: 0089

Total Attachments: 8 source=3270002718US01_DEC_Assignment_with_Declaration#page1.tif source=3270002718US01_DEC_Assignment_with_Declaration#page2.tif source=3270002718US01_DEC_Assignment_with_Declaration#page3.tif source=3270002718US01_DEC_Assignment_with_Declaration#page4.tif source=3270002718US01_DEC_Assignment_with_Declaration#page5.tif source=3270002718US01_DEC_Assignment_with_Declaration#page6.tif source=3270002718US01_DEC_Assignment_with_Declaration#page7.tif source=3270002718US01_DEC_Assignment_with_Declaration#page8.tif

327 00227 (& Docket No.: Only After Sept. 16, 2012

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, (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,

t/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:

United States Application or PCT International Application Number PCT/JP2019/019532
filed on 16 May 2019 (Confirmation No._____).

IMAGE MATCHING APPARATUS

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.

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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]) Toru	Family Name or Surname TAKAHASHI		
Inventor's signature Toll Takahashi	Date October 25,2021		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan			
NAME OF SECOND INVENTOR:			
Given Name (first and middle [if any]) Rui	Family Name or Surname ISHIYAMA		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-k	au, Tokyo 108-8001, Japan		
NAME OF THIRD INVENTOR:	<u>, , , , , , , , , , , , , , , , , , , </u>		
Given Name (first and middle [if any]) Kengo	Family Name or Surname MAKINO		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-k	tu, Tokyo 108-8001, Japan		
NAME OF FOURTH INVENTOR:			
Given Name (first and middle [if any]) Yuta	Family Name or Surname KUDO		
nventor's signature Date			
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan			
NAME OF FIFTH INVENTOR:			
Given Name (first and middle [if any]) Family Name or Surname			
Inventor's signature	Date		
Residence:			
Mailing Address:			

Docket No.: Only After Sept. 16, 2012

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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.

As the below named inventor, I hereby declare that:

This assignment with declaration is directed to:

United States Application or PCT International Application Number PCT/JP2019/019532 filed on 16 May 2019 (Confirmation No._____).

IMAGE MATCHING APPARATUS

The above identified application was made or was authorized to be made by me.

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NAME OF SOLE OR FIRST INVENTOR:			
Given Name			
(first and middle [if any]) Toru	Family Name or Surname TAKAHASHI		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato	-ku, Tokyo 108-8001, Japan		
NAME OF SECOND INVENTOR:	T		
Given Name (first and middle [if any]) Rui Family Name or Surname ISHIYAMA			
Inventor's signature / Kui shiyama/	2021/10/18 Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku	ı, Tokyo 108-8001, Japan		
NAME OF THIRD INVENTOR:			
Given Name (first and middle [if any]) Kengo	Family Name or Surname MAKINO		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku	ı, Tokyo 108-8001, Japan		
NAME OF FOURTH INVENTOR:			
Given Name (first and middle [if any]) Yuta	Family Name or Surname KUDO		
Inventor's signature Date			
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan			
NAME OF FIFTH INVENTOR:			
Given Name (first and middle [if any]) Family Name or Surname			
Inventor's signature Date			
Residence:			
Mailing Address:			

PATENT [Page 2] **REEL: 061772 FRAME: 0094**

32/0002718

Docket No.:

Only After Sept. 16, 2012

ASSIGNMENT WITH DECLARATION FOR LITLITY 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

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(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)		
As the below named inventor, I hereb	y decla	are that:
This assignment with declaration is directed to:		The attached application, or
		United States Application or PCT International Application Number <u>PCT/JP2019/019532</u> filed on 16 May 2019 (Confirmation No).
The application is entitled:		

IMAGE MATCHING APPARATUS

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NAME OF SOLE OR FIRST INVENTOR:			
Given Name			:
(first and middle [if any])	Toru	Family Name or Surnar	me TAKAHASHI
Inventor's signature	nature		Date
Residence: Tokyo, Japan	······································		
Mailing Address: c/o NEC Corporat	tion, 7-1, Shiba 5-chome, Minato	o-ku, Tokyo 108-8001, Ja	apan
NAME OF SECOND INVENTOR:	, , , , , , , , , , , , , , , , , , ,		
Given Name (first and middle [if any])	Rui	Family Name or Surnar	me ISHIYAMA
Inventor's signature			Date
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporati	on, 7-1, Shiba 5-chome, Minato-k	u, Tokyo 108-8001, Japan	
NAME OF THIRD INVENTOR:			· · · · · · · · · · · · · · · · · · ·
Given Name (first and middle [if any])	Kengo	Family Name or Sumar	me MAKINO
Inventor's signature	Kinger Makino		Date October 25,2021
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporati	on, 7-1, Shiba 5-chome, Minato-k	u, Tokyo 108-8001, Japan	
NAME OF FOURTH INVENTOR:			
Given Name (first and middle [if any])	Yuta	Family Name or Surname	¢ KUDO
Inventor's signature			
Residence: Tokyo, Japan			
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NAME OF FIFTH INVENTOR:			
Given Name (first and middle [if any]) Family Name or Surname			
Inventor's signature Date			
Residence:			
Mailing Address:			
······································			······

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| The attached application, or directed to: | United States Application or PCT International Application Number PCT/JP2019/019532 filed on 16 May 2019 (Confirmation No._____).

The application is entitled: | IMAGE MATCHING APPARATUS

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Given Name			
(first and middle [if any]) Toru	Family Name or Surname TAKAHASHI		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minat	o-ku, Tokyo 108-8001, Japan		
NAME OF SECOND INVENTOR:			
Given Name (first and middle [if any]) Rui	Family Name or Surname ISHIYAMA		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-k	cu, Tokyo 108-8001, Japan		
NAME OF THIRD INVENTOR:			
Given Name (first and middle [if any]) Kengo	Family Name or Surname MAKINO		
Inventor's signature	Date		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-k	tu, Tokyo 108-8001, Japan		
NAME OF FOURTH INVENTOR:			
Given Name (first and middle [if any]) Yuta	Family Name or Surname KUDO		
Inventor's signature Lucia Kudo	Date October 25,2021		
Residence: Tokyo, Japan			
Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan			
NAME OF FIFTH INVENTOR:			
Given Name (first and middle [if any])	Family Name or Surname		
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