### 505861997 01/14/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5908934

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
MARC DELCROIX	01/07/2020
KEISUKE KINOSHITA	01/07/2020
ATSUNORI OGAWA	01/07/2020
TAKUYA HIGUCHI	01/07/2020
TOMOHIRO NAKATANI	01/07/2020

#### **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:	16630856

### **CORRESPONDENCE DATA**

Fax Number:

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:** 5713766333

**Email:** anaquadocketing@Xsensus.com

Correspondent Name: XSENSUS LLP

Address Line 1: 200 DAINGERFIELD ROAD

Address Line 2: SUITE 201

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	13816US01
NAME OF SUBMITTER:	TIERNEY FARRELL
SIGNATURE:	/Tierney Farrell/
DATE SIGNED:	01/14/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 051501 FRAME: 0775

505861997

# Total Attachments: 5 source=13816US01\_Assignments#page1.tif source=13816US01\_Assignments#page2.tif source=13816US01\_Assignments#page3.tif source=13816US01\_Assignments#page4.tif

source=13816US01\_Assignments#page5.tif

Title of MASK CALCULATION DEVICE, CLUSTER WEIGHT LEARNING DEVICE, MASK CALCULATION NEURAL NETWORK LEARNING DEVICE, MASK CALCULATION METHOD, CLUSTER WEIGHT LEARNING METHOD, AND MASK CALCULATION NEURAL NETWORK LEARNING METHOD	
As the below named inventor, I hereby declare that:	
This declaration   The attached application, or	
is directed to: United States application or PCT international application number <a href="PCT/JP2018/026960">PCT/JP2018/026960</a> filed on <a href="July 18, 2018">July 18, 2018</a>	
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.	
WHEREAS, NIPPON TELEGRAPH AND TELEPHONE CORPORATION	
(hereinafter referred to as "ASSIGNEE") having places of business at: 5-1, Otemachi 1-chome, Chiyoda-ku,	
Tokyo 100-8116 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and	
to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any	
and all foreign countries;	
NOW, THEREFORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.	
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.	
Further, I agree that I will communicate to said ASSIGNEE or its representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.  LEGAL NAME OF INVENTOR	
Inventor: Marc DELCROIX Date: Tan 7 2020	
Signature: Marc Delcroix	

XSENSUS LLP ATTORNEYS AT LAW 200 DAINGERFIELD ROAD, SUITE 201 Alexandria, VA 22314

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LEGAL NAME OF INVENTOR			
Inventor: Keisuke KINOSHITA Date: Jan. 7, 2020			
Signature: Kesuka Kinoshta			

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Invention MASK CALCULATION DEVICE, CLUSTER WEIGHT LEARNING DEVICE, MASK CALCULATION METHOD, CLUSTER WEIGHT LEARNING METHOD, AND MASK CALCULATION NEURAL NETWORK LEARNING METHOD
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eventor: Atsunori OGAWA Date: Jan. 7, 2020
ignature: Atsunori Ogalva

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LEGAL NAME OF INVENTOR	
Inventor: Takuya HIGUCHI Date: Jan. 7, 2020	
Signature: Talya Higueli	

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Inventor: Tomohiro NAKATANI Date: Jan. 7, 2020		
Signature: 70molin halatani		

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> PATENT REEL: 051501 FRAME: 0781

RECORDED: 01/14/2020