507246505 04/22/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7293425

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ERI MATSUNAGA	12/03/2020
TADASHI MINOTANI	12/08/2020
MASAHITO NAKAMURA	02/02/2022
MASAYUKI TSUDA	12/03/2020
TAKASHI SAWADA	12/08/2020

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:	1008116

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17614660

CORRESPONDENCE DATA

Fax Number: (801)328-1707

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: 801.533.9800

dwilson@wnlaw.com Email: WORKMAN NYDEGGER **Correspondent Name:**

Address Line 1: 60 EAST SOUTH TEMPLE, SUITE 1000

Address Line 4: SALT LAKE CITY, UTAH 84111

ATTORNEY DOCKET NUMBER:	22120.152
NAME OF SUBMITTER:	DANA L. TANGREN
SIGNATURE:	/dana I. tangren/
DATE SIGNED:	04/22/2022
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 059678 FRAME: 0042

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Total Attachments: 5

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of LOOSENING DETECTION STRUCTURE AND LOOSENING DETECTION METHOD USING SAID STRUCTURE		
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 PCT/JP2019/021473 filed on May 30, 2019		
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, Chivoda-ku, Tokyo, Japan 100-8116, 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: Eri MATSUNAGA Date: QeC · 3 · 2020		
Signature: Fri Matsunaga		

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of LOOSENING DETECTION STRUCTURE AND LOOSENING DETECTION METHOD Invention USING SAID STRUCTURE
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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.
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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: Tadashi MINOTANI Date: December 8, 2020
Signature: Jadashi mindoni

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Invention USING SAID STRUCTURE LOOSENING DETECTION METHOD LOOSENING DETECTION METHOD
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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: Masahito NAKAMURA Date: Feb. 2. 2022
Signature: Masahite Naponitor

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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.		
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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: Masayuki TSUDA Date: Dec. 3. 2020		
Signature: Masayuki Lsuda		

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The above-identifie	d application was made or authorized to be made by me.
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	PONTELEGRAPH AND TELEPHONE CORPORATION
18080 183-8110, 18	I to as "ASSIGNEE") having places of husiness at <u>S-1, Otenachi 1-chome. Chiyoda-ku, Tokyo</u> destrous of acquiring the entire right, title and interest in and to said invention and in and to any may be granted therefore in the United States and as territorial pessessions and in any and all foreign
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and all foreign count of my entire right, it and assigns, to the f	e and request the Patent Office Officials in the United States and its territorial possessions and any stries to issue any and all of said Letters Patent, when gramed, to said ASSIGNEE as the assignee ittle and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors till end of the term for which said Letters Patent may be granted, as fully and entirely as the same id by me had this Assignment and sale not been made.
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I bereby acknowl by fine or imprison LEGAL NAME OF	ledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1(8)1 next of not more than five (5) years, or both. INVENTOR
Investor: Takashi	SAWADA Daw 2020/12/8
Signature:	Takashi Jawahu

PATENT REEL: 059678 FRAME: 0048

RECORDED: 04/22/2022