PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7882570

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
NEC LABORATORIES AMERICA, INC.	04/04/2023

RECEIVING PARTY DATA

Name:	NEC CORPORATION	
Street Address:	7-1, SHIBA 5-CHOME	
Internal Address:	ddress: MINATO-KU	
City:	ty: TOKYO	
State/Country:	ate/Country: JAPAN	
Postal Code:	1088001	

PROPERTY NUMBERS Total: 13

Property Type	Number			
Application Number:	16458687			
Application Number:	16508512			
Application Number:	17181735			
Application Number:	17195538			
Application Number:	17227313			
Application Number:	17227309			
Application Number:	17228577			
Application Number:	17196939			
Application Number:	17580572			
Application Number:	17317202			
Application Number:	17506471			
Application Number:	17511381			
Application Number:	17555924			

CORRESPONDENCE DATA

Fax Number: (609)951-2483

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.

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PATENT REEL: 063213 FRAME: 0514 507835431

Correspondent Name: NEC LABORATORIES AMERICA, INC.

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Address Line 4: PRINCETON, NEW JERSEY 08540

ATTORNEY DOCKET NUMBER:	APRIL 2023 TRANSFER
NAME OF SUBMITTER:	JILL BEHR
SIGNATURE:	/Jill Behr/
DATE SIGNED:	04/04/2023

Total Attachments: 1

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PATENT REEL: 063213 FRAME: 0515

PATENT ASSIGNMENT

WHEREAS, NEC Laboratories America, Inc., a New York corporation, having a place of business at 4 Independence Way, Suite 200, Princeton, New Jersey 08540, is an owner and assignee of record of the patent listed below;

WHEREAS, NEC Corporation, a Japanese corporation, having its principal place of business at 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan 108-8001 is desirous of obtaining a title to the patents listed in Table 1 below;

NOW, THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, NEC Laboratories America, Inc., hereby sells, assigns and transfers to NEC Corporation, its successors and assigns, its entire right, title and interest in each of the following United States patents listed below:

Docket#	Title	Serial #	Filing Date	Inventor(s)
18031	FAILURE PREDICTION	16458687	7/1/2019	NATSUMEDA ET AL.
18033	OPTIMIZATION OF CYBER-PHYSICAL SYSTEMS	16508512	7/11/2019	HAN ET AL.
18147	COMBINED LIGHT AND HEAVY MODELS FOR IMAGE FILTERING	17181735	2/22/2021	YANG ET AL.
19105	SPARSE EXCITATION METHOD FOR 3- DIMENSIONAL UNDERGROUND CABLE LOCALIZATION BY FIBER OPTIC SENSING	17195538	3/8/2021	HUANG ET AL.
19107	CONTINUOUS UTILITY POLE HEALTH MONITORING BASED ON FINITE ELEMENT ANALYSIS AND OPERATIONAL MODAL	17227313	4/10/2021	DING ET AL.
19113	SMART REFRIGERATION USING DISTRIBUTED FIBER OPTIC SENSING	17227309	4/10/2021	HUANG ET AL.
19135	UTILITY POLE LOCALIZATION USING DISTRIBUTED ACOUSTIC SENSING	17228577	4/12/2021	TIAN ET AL.
20001	METHOD FOR PROVIDING A HYBRID DISTRIBUTED FIBER OPTIC SENSING SYSTEM WITH IMPROVED CONNECTION TO EXISTING DEPLOYED FIBER INFRASTRUCTURE	17196939	3/9/2021	HUANG ET AL.
20013	CONCURRENT SENSING DISTRIBUTED FIBER OPTIC SENSOR PLACEMENT	17580572	1/20/2022	JI ET AL.
20016	SELF-SUPERVISED CROSS-VIDEO TEMPORAL DIFFERENCE LEARNING FOR UNSUPERVISED DOMAIN ADAPTATION	17317202	5/11/2021	SHARMA ET AL.
20036	POLARIZATION DIVERSITY COMBINING METHOD IN COHERENT DAS MAINTAINING PHASE CONTINUITY	17506471	10/20/2021	HU ET AL.
20072	SATURATION CAUSED PHASE JUMP AVOIDANCE IN DAS METHOD PROVIDING INCREASED SIGNAL-TO-	17511381	10/26/2021	HU ET AL.
20095	NOISE (SNR) FOR COHERENT DISTRIBUTED ACOUSTIC SENSING	17555924	12/20/2021	HU ET AL.

IN WITNESS WHEREOF, NEC Laboratories America, Inc. has executed this Assignment by a duly authorized person.

NEC Laboratories America, Inc.

Christophe a Whi

Name: Christopher A. White

Title: President
Date: 4/4/2025

PATENT REEL: 063213 FRAME: 0516

RECORDED: 04/04/2023