#### 504841135 03/28/2018

EPAS ID: PAT4887872

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

**SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT** 

#### **CONVEYING PARTY DATA**

Name	Execution Date
Takeshi SHIBAHARA	02/26/2018
Yuki NAGAMINE	02/28/2018
Kumiko YAMAZAKI	02/28/2018

## **RECEIVING PARTY DATA**

Name:	Tdk Corporation		
Street Address:	3-9-1, Shibaura, Minato-ku		
City:	Tokyo		
State/Country:	Japan		
Postal Code:	108-0023		

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15938344

## CORRESPONDENCE DATA

(703)836-2787 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: 703-836-6400 Email: email@oliff.com **Correspondent Name:** JAMES A. OLIFF Address Line 1: **OLIFF PLC** 

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 180901 NAME OF SUBMITTER: PAMELA BALLARD SIGNATURE: /Pamela Ballard/ **DATE SIGNED:** 03/28/2018

**Total Attachments: 2** 

source=5652161\_1#page1.tif source=5652161\_1#page2.tif

> **PATENT** REEL: 045374 FRAME: 0293 504841135

# ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

#### ASSIGNMENT

	Insert	(1)	Takeshi SHIBAHARA	(2)	Yuki NAGAMINE	
(1-8)	Legal Name(s)	(3)	Kumiko YAMAZAKI	(4)		
	of Inventor(s)	(5)		(6)		
(9)	Insert Name of	the unde		hich are he	good and valuable consideration paid to each of reby acknowledged, each undersigned agrees to	
	Assignee Insert Address of					
(10)	Assignee	(10)	(10) c/o TDK Corporation, 3-9-1, Shibaura, Minato-ku, Tokyo 108-0023, JAPAN			
an)	Insert Identification	the entire invention continue and rees	re right, title and interest for the United St on, and in all applications for patent include	tates of An ding any an applicatio	rs, successors, assigns and legal representatives, nerica as defined in 35 U.S.C. § 100, in the nd all provisional, non-provisional, divisional, n(s), and all Letters Patent, extensions, reissues extension known as	
(11)	such as Title, Case	(11)				
	Number, or Foreign Application Number	(Attor	mey Docket No.	), 1	filed on even date herewith or as	
(12)	Alternative	(12)	U.S. Application Number			
	Identification for		****			
	filed applications	filed				

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

#### (13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

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

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the 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 declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	Fob. 26.2018	Inventor Signature	Theshi Alidahara Takeshi SHIBAHARA	(SEAL)
Date	Feb, 28, 2018	Inventor Signature	Yuki NAGAMINE	(REAL)
Date	řeb. 28, 2018	Inventor Signature	Kumiko Yamazaki	(SEAL)

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here: