PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT		

CONVEYING PARTY DATA

Name	Execution Date
Tetsuya HIDAKA	08/24/2016
Takuma HAYAKAWA	08/24/2016
Makoto IWASAKI	08/24/2016
Ayato KAKOKI	08/24/2016

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15285113

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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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Correspondent Name: JAMES A. OLIFF
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ATTORNEY DOCKET NUMBER:	173330		
NAME OF SUBMITTER:	CYNTHIA KLINE		
SIGNATURE:	/Cynthia Kline/		
DATE SIGNED:	10/04/2016		
	This document serves as an Oath/Declaration (37 CFR 1.63).		

PATENT 504035621 REEL: 039934 FRAME: 0733

Total Attachments: 2

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> PATENT REEL: 039934 FRAME: 0734

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)	Tetsuya HIDAKA	((2)	Takuma HAYAKAWA
(1-8)	Legal Name(s)	(3)	Makoto IWASAKI	[((4)	Ayato KAKOKI
	of Inventor(s)	(5)		((6)	
		the unde		iency of which ar	e he	good and valuable consideration paid to each of reby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9) TDK Corporation				
(10)	Insert Address of Assignee	(10)	c/o TDK Corporation, 3-9-1, Shibaura, Minato-ku, Tokyo 108-0023, JAPAN			
		the entir inventio continua	e right, title and interest for the n, and in all applications for pa	e United States of atent including ar and reissue applic	f An ny an cation	rs, successors, assigns and legal representatives, nerica as defined in 35 U.S.C. §100, in the ad all provisional, non-provisional, divisional, n(s), and all Letters Patent, extensions, reissues exention known as
(11)	Insert Identification such as Title, Case	(11)				
	Number, or Foreign					
	Application Number	(Attor	ney Docket No. 173330), f	iled on even date herewith or as
(12)	Alternative	(12)	U.S. Application Number	15/285,113		
	Identification for filed applications	filed	October 4, 2016	-)		

- 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 mc.

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.

PATENT REEL: 039934 FRAME: 0735 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	August 24, 2016	Inventor Signature	Tetsma Hidake	(SEAL
Date	August 24, 20/6	Inventor Signature	Takuma Hayakawa	_ (SEAL
Date	August 24, 20/6	Inventor Signature	makoto Juasaki	(SEAL
Date	August 24, 2016	Inventor Signature	Ayato Kakoki	(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:

Date August 17,2016 Witness Makate Makane

Date August 24.2016 Witness

RECORDED: 10/04/2016

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