504308158 04/05/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4354839

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Hiroyuki HIRANO	03/13/2017
Seiji FUKUOKA	03/22/2017
Toshihiko OYAMA	03/16/2017
Takahiro MORIYA	03/13/2017
Kaoru NARITA	03/17/2017

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:	15511456

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 JAMES A. OLIFF **Correspondent Name: OLIFF PLC** Address Line 1:

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 175593 **IFETAYO SIMMONS** NAME OF SUBMITTER: **SIGNATURE:** /ifetayo simmons/ **DATE SIGNED:** 04/05/2017

Total Attachments: 2

PATENT REEL: 042168 FRAME: 0356

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> PATENT REEL: 042168 FRAME: 0357

ASSIGNMENT

Whereas, I/we, Name Of TR Copnesion, 3-1, Nilema, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-1, Nilema, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Nilema, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Of TR Copnesion, 3-9-1, Sinkman, Mante-Ka, Tokyo 18-0023 Japan Hereinefier called assignor(s), have invented certain improvements in POSITION DETECTING DEVICE AND STRUCTURE FOR USING POSITION DETECTING DEVICE and executed an application for Letters Patent of the United States of America therefor on even date berewith unless other indicated below. filed on March 15 · 2017 , Serial No. 15 / 511 45 6 ; ar Whereas TDK Corporation 3-9-1, Sinkman, Mante-Ka, Tokyo 108-0023 Japan (assigned), desires to acquire the entire right, title and interest in the application and invention, and to any United States attents to be obtained therefor, NOW THEREFORE, be it known that, for good and valuable consideration from assignee, the receipt of which, is hereby soknowledged, IWK, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, the may be granted thereon, and all rissues thereof, and AWD hereby attherize and acquest the Commissioner of Patents on Trademerks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, and on the surface of the Sastignment, AND, I/WE HEREBY There overanat and agree that I/WE will, without further consideration, communicate will assignee, its successors and assigns, and accordance with the terms of this Assignment, AND, I/WE HEREBY There overanat and agree that I/WE will, without further consideration, communicate will assignee, its successors and assigns, and accordance with the			ASSICINIVIEU	
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Setji FUKUOKA Setji FUKUOK		Name	<u>Address</u>	
Selji FUKUOKA 3-9-1, liklavia, Mante-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Mante-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Mante-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Mante-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Mante-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Minte-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Minte-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Minte-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Minte-kay Telys 108-0023 lapan of TUK Corporation, 3-9-1, liklavia, Minte-kay Telys 108-0023 lapan of TUK Corporation 3-9-1, Shibaura, Minte-kay Telys 108-0023 lapan Minte-kay Telys 108-0023 lapan Minte-kay Telys 108-0023 lapan of TUK Corporation 3-9-1, Shibaura, Minte-kay Telys 108-0023 lapan Minte-kay Telys 108-0023 lapan (assignee), desires to acquire the enthe right, title and interest in the application and invention, and to any United States patents to be obtained therefor, NOW THEREFORE, be it known that, for good and valuable consideration from assignee, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, tw and set over undo the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States with invention and this application, and all divisions, and continuation and all Letters Patent of the United States with the terms of the United States via saccordence with the terms of all Patent Patent of the United States with the terms of the United States via saccordence with the terms of the Sassignee, and assignee, its successors and assigns, in a secondarion, and all relative the patent of the United States via sacco			c/o TOK Comeration.	
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control of the Companion, 3-9-1, Salbaura, Matate-by, Teleyo 108-0023 Japan 10 Tashihiko OYAMA 11 Tashihiko OYAMA 12 Tashihiko OYAMA 13 Tashihiko OYAMA 13 Tashihiko OYAMA 14 Tashihiko OYAMA 15 Tashihiko OYAMA 16 Tashihiko OYAMA 17 Tashihiko OYAMA 18 Tashihiko OYAMA 18 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 10 Tashihiko OYAMA 11 Tashihiko OYAMA 12 Tashihiko OYAMA 13 Tashihiko OYAMA 14 Tashihiko OYAMA 15 Tashihiko OYAMA 16 Tashihiko OYAMA 16 Tashihiko OYAMA 17 Tashihiko OYAMA 18 Tashihiko OYAMA 18 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 10 Tashihiko OYAMA 11 Tashihiko OYAMA 11 Tashihiko OYAMA 12 Tashihiko OYAMA 13 Tashihiko OYAMA 14 Tashihiko OYAMA 15 Tashihiko OYAMA 16 Tashihiko OYAMA 17 Tashihiko OYAMA 18 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 10 Tashihiko OYAMA 11 Tashihiko OYAMA 11 Tashihiko OYAMA 12 Tashihiko OYAMA 12 Tashihiko OYAMA 13 Tashihiko OYAMA 14 Tashihiko OYAMA 15 Tashihiko OYAMA 16 Tashihiko OYAMA 17 Tashihiko OYAMA 18 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 19 Tashihiko OYAMA 10 Tashihiko OYAMA 11 Tashihiko OYAMA 11 Tashihiko OYAMA 12 Tashihiko OYAMA 13 Tashihiko OYAMA 14 Tashihiko OYAMA 15 Tashihiko OYAMA 16 Tashihiko OYAMA 16 Tashihiko OYAMA 16 Tashihiko OYAMA 16 Tashih	7	-	Minato-ku, Tokyo 108-0023 Japan	ensilo.
Manate-En Teleyo 18-0023 Japan by TRK Corporation, 3-9-1, Shibaura, Manate-En Teleyo 18-0023 Japan by TRK Corporation, 3-9-1, Shibaura, Manate-En Teleyo 18-0023 Japan by TRK Corporation, 3-9-1, Shibaura, Manate-En Teleyo 18-0023 Japan by TRK Corporation, 3-9-1, Shibaura, Manate-En Teleyo 18-0023 Japan by TRK Corporation Televant of the United States of America therefor on even date berewith unless other and executed an application for Letters Patent of the United States of America therefor on even date berewith unless other andicated below: filed on March 15', 2017, Serial No. 15/511456 Whereas TDK Corporation 3-9-1, Shibaura, Minato-En, Tokyo 108-0023 Japan (assignee), desires to acquire the entire right, title and interest in the application and invention, and to any United States patents to be obtained therefor, NOW THERTEFORE, be it known that, for good and valuable constideration from assignee, the receipt of which is hereby acknowledged, IVER, as assignor(s), have sold, assigned, transferred, and set over und the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all extress Patent of the United States whi invention and this application, and all divisions, and continuations thereof, and all recisuses therefor, and IVER bereby authorize and request the Commissioner of Patents an Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordence with the terms of this Assignment, AND, IVEL HERREPY further covenant and agree that IVER will, without further consideration, communicate will assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceed sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to per the title to this invention in said assignee, its successors and assigns, executed a				
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Takahiro MORIYA 3-9-1, Shibsus, Minatoka, Takyo 108-0023 lapsa of DEK Corporation, 3-9-1, Shibsus, Minatoka, Takyo 108-0023 lapsa of DEK Corporation, 3-9-1, Shibsus, Minatoka, Tokyo 108-0023 lapsa of DEK Corporation filed on March 15-, 2017, Serial No. 15/511456; are whereas TDK Corporation, 3-9-1, Shibsura, Minatoka, Tokyo 108-0023 lapsa (assignee), desires to acquire the entire right, title and interest in the application and invention, and to any United States patents to be obtained therefor; Now THEREFORE, be it known that, for good and valuable consideration from assignce, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transferred, and set over unto the assignce, its lawful successors and assigns, MyOUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States while invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States while invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States while invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States while invention and the supplication, and all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment; AND, I/WE HERREPS I further covenant and agree that I/WE will, without further consideration, communicate will assignee, its successors and assigns, in successors and assigns, and eventually all and the papers when called upon to do so, execute and deliver all papers that may be necessary or destributions, and relastive applications, make all rightful oaths and generally do everything possible	, 			
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and executed an application for Letters Patent of the United States of America therefor on even date berewith unless other indicated below: filed onMarch _ 15 · 2017			Minate-Ku, 10Kyo 108-0023 Japan	
whereas TDK Corporation 3.9-1, Shibaura, Minato-ku, Tokyo 108-0023 Japan (assignce), desires to acquire the entire right, title and interest in the application and invention, and to any United States patents to be obtained therefor; NOW THEREFORE, be it known that, for good and valuable consideration from assignce, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, trained set over unto the assignce, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and I/WE hereby authorize and request the Commissioner of Patents and Tradennarks of the United States to issue all Letters Patent for this invention to assignce, its successors and assigns, in accordance with the terms of this Assignment; AND, I/WE HERREY further covenant and agree that I/WE will, without further consideration, communicate with assignce, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceed sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to per the title to this invention in said assignce, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignes, its successors and assigns, and enforce proper patent protection for this invention in the United States, it being understood that any expense incident execution of such papers shall be borne by the assignee, its successors and assigns. INVENTORS DATE SIGNED I): Self [ere: POS	matter called assignor(s), have inv	emed certain improvements in AND STRUCTURE FOR USING PO	OSITION DETECTING DEVICE
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1): Hive/UK/ Hivano 2017. 3.13 Name: Hiroyalia HIRANO 2017. 3.22 2): Seiji FUKUOKA 2017. 3.22	sign the app and	gnee, its successors and assigns, a all lawful papers when called upon title to this invention in said assign lications, make all rightful oaths a enforce proper patent protection to	ny facts known to ME/US respecting this on to do so, execute and deliver all paper nee, its successors and assigns, execute a nd generally do everything possible to ai for this invention in the United States, it I	s invention and testify in any legal proceeding, is that may be necessary or desirable to perfect ill divisional, continuation, and reissue d assignee, its successors and assigns, to obtain being understood that any expense incident to the
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Page 1 of 2

3) : Name :

4):	lakali) ro Mori ya	2017. 03. 19
Name:	Takahiro MORIYA	**************************************
5):	Kaoru Navita	2017, 3,17
Name:	Kaoru NARITA	

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