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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5362235

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΔΤΑ			
		Name	Execution Date	
MASARU TERAKAWA			01/28/2019	
YOICHI KANEMAKI			01/29/2019	
MINORU YAMAGA			01/29/2019	
RECEIVING PARTY D	ΑΤΑ			
Name:	Sony Co	Sony Corporation		
Street Address:	1-7-1 Ko	1-7-1 Konan, Minato-ku		
City:	Tokyo			
State/Country:	JAPAN			
Application Number:				
Application Number:	1	6321291		
CORRESPONDENCE	DATA	312)827-8185		
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CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER: SIGNATURE:	DATA (; be sent to i provided; 3 c c c c F C UMBER:	312)827-8185 the e-mail address first; if that is unsuc if that is unsuccessful, it will be sent v 312-372-1121 chicago.patents@klgates.com K&L GATES P.O. BOX 1135 CHICAGO, ILLINOIS 60690-1135 3712174.04237 THOMAS C. BASSO /Thomas C. Basso/ 02/06/2019	via US Mail.	
CORRESPONDENCE I Fax Number: Correspondence will I using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 1: Address Line 4: TTORNEY DOCKET N AME OF SUBMITTER: IGNATURE: ATE SIGNED:	DATA (: be sent to provided; 3 c : K F C UMBER:	312)827-8185 the e-mail address first; if that is unsuc if that is unsuccessful, it will be sent v 312-372-1121 chicago.patents@klgates.com K&L GATES P.O. BOX 1135 CHICAGO, ILLINOIS 60690-1135 3712174.04237 THOMAS C. BASSO /Thomas C. Basso/ 02/06/2019	via US Mail.	

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Attorney Docket No.: Sony Ref. No.: SP368142US00

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 Invention	MAGNETIC RECORDING MEDIUM			
As the below	As the below named inventor, I hereby declare that:			
This declarati is directed to:	The interfact method for			
	United States application or PCT international application number <u>PCT/JP2017/041462</u> filed on <u>2017/11/17</u>			
The above-ide	entified application was made or authorized to be made by me.			
l believe that WHEREAS,	I am the original inventor or an original joint inventor of a claimed invention in the application, SONY CORPORATION , with offices at			
1-7-1 KO	DNAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of			
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, tide and interest thereto; And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto; And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful further remuneration, applications and Letters Patent of the United States and countries foreign thereto;				
application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense; And 1 further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;				
And I hereby this assignme	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with int and sale.			
	I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by line or imprisonment of not more than five (5) years, or both.			
LEGAL NAM	ME OF INVENTOR			
Inventor:	MASARU TERAKAWA Date: 2019/1/28			
Signature:	MASARO TEPAKAWA			

PATENT REEL: 048266 FRAME: 0559

Attorney Docket No.: Souy Ref. No.: SP368142US00

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 Invention	MAGNETIC RECORDING MEDIUM		
As the below	As the below named inventor, I hereby declare that		
This declarati	1 1 Min Meridian Martin and Constant and		
	United States application or PCT international application number <u>PCT/JP2017/041462</u> filed on <u>2017/11/17</u> .		
The above-id	entified application was made or authorized to be made by me.		
WHEREAS,			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	DNAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of		
legal protecti	interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Pateni or similar on which may be granted therefor in the United States and in any and all foreign countries;		
NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filling of applications for patents to issue said United States Letters Patent to said ASSIGNEE, as the assignce of the whole right, title and interest thereto;			
And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;			
And 1 further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense;			
And 1 further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;			
And I hereby this assignme	covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with nt and sale.		
	iowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of 1 five (3) years, or both.		
LEGAL NAM	AE OF INVENTOR		
Inventor:	YOICHI KANEMAKI Date: 2019/1/29		
Signature:	YOICHI KANEMAKI		

Attorney Bocket No.: Sony Ref. No.: SP368142US00

## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE MAGNETIC RECORDING MEDIUM Title of Invention 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/JP2017/041462 filed on 2017/11/17 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. SONY CORPORATION with offices at 1-7-1 KONAN, MINATO-KU, TOKYO, 108-0075, JAPAN (hereinafter referred to as ASSIGNEE), is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries, NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I by these presents do hereby assign, sell and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property. Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accrume or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said ASSIGNEE, as the assignce of the whole right, title and interest thereto; And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto; And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be gramed for my aforesaid invention, as said ASSIGNEE thereof shall hereafter require and prepare at its own expense; And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto; And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale 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 MINORU YAMAGA Date: 20/9 Inventor: Mirosu Jawafa Signature:

PATENT REEL: 048266 FRAME: 0561

**RECORDED: 02/06/2019**