

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																		
NATURE OF CONVEYANCE:	ASSIGNMENT																		
CONVEYING PARTY DATA																			
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hideo Kawabe</td> <td>02/21/2012</td> </tr> <tr> <td>Masatoshi Ueno</td> <td>02/27/2012</td> </tr> <tr> <td>Shinobu Kuriya</td> <td>02/27/2012</td> </tr> <tr> <td>Yusaku Kato</td> <td>02/27/2012</td> </tr> <tr> <td>Kenichi Kabasawa</td> <td>02/28/2012</td> </tr> <tr> <td>Tetsuro Goto</td> <td>02/17/2012</td> </tr> <tr> <td>Tsubasa Tsukahara</td> <td>02/29/2012</td> </tr> <tr> <td>Toshiyuki Nakagawa</td> <td>02/24/2012</td> </tr> </tbody> </table>		Name	Execution Date	Hideo Kawabe	02/21/2012	Masatoshi Ueno	02/27/2012	Shinobu Kuriya	02/27/2012	Yusaku Kato	02/27/2012	Kenichi Kabasawa	02/28/2012	Tetsuro Goto	02/17/2012	Tsubasa Tsukahara	02/29/2012	Toshiyuki Nakagawa	02/24/2012
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RECEIVING PARTY DATA																			
Name:	Sony Corporation																		
Street Address:	1-7-1 Konan, Minato-ku																		
City:	Tokyo																		
State/Country:	JAPAN																		
Postal Code:	108-0075																		
PROPERTY NUMBERS Total: 1																			
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13435336</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13435336														
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Application Number:	13435336																		
CORRESPONDENCE DATA																			
Fax Number:	(617)646-8646																		
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CH \$40.00 13435336

ATTORNEY DOCKET NUMBER:	S1459.71204US00
NAME OF SUBMITTER:	Helen K. Kim
Total Attachments: 4 source=Executed Assignment 71204#page1.tif source=Executed Assignment 71204#page2.tif source=Executed Assignment 71204#page3.tif source=Executed Assignment 71204#page4.tif	

ASSIGNMENT

WHEREAS, I, as below named inventors, residing at the addresses stated next to our names, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in
OPERATION APPARATUS

for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address;

AND WHEREAS, SONY CORPORATION, a Japanese corporation, with offices at 1-7-1 Konan, Minato-ku, Tokyo, 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, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the 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 the said United States Letters Patent to said ASSIGNEE, as the assignee 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 granted for my aforesaid invention, as the 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.

And I hereby authorize and request my attorney(s) of record in this application to insert the serial number and filing date of this application in the spaces that follow: Serial Number: 13/435,326, Filing Date: March 30, 2012

This assignment executed on the dates indicated below.

<u>HIDEO KAWABE</u> Name of first or sole inventor	_____
<u>SAITAMA, JAPAN</u> Residence of First or sole inventor	_____
<u>Hideo Kawabe</u> Signature of first or sole inventor	<u>Feb 21, 2012</u> Date of this assignment
<u>MASATOSHI UENO</u> Name of second inventor	_____
<u>KANAGAWA, JAPAN</u> Residence of second inventor	_____
_____ Signature of second inventor	_____ Date of this assignment
<u>SHINOBU KURIYA</u> Name of third inventor	_____
<u>KANAGAWA, JAPAN</u> Residence of third inventor	_____
_____ Signature of third inventor	_____ Date of this assignment

ADDITIONAL INVENTOR(S)

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Residence of fourth inventor
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Signature of fourth inventor

Execution date of U.S. Patent Application

Feb 27, 2012
Date of this assignment

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Execution date of U.S. Patent Application

Feb 28, 2012
Date of this assignment

TETSURO GOTO
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Residence of sixth inventor

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Execution date of U.S. Patent Application

Date of this assignment

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Date of this assignment

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Execution date of U.S. Patent Application

Date of this assignment

Name of ninth inventor
Residence of ninth inventor
Signature of ninth inventor

Execution date of U.S. Patent Application

Date of this assignment

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Residence of fourth inventor

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Date of this assignment

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Residence of eighth inventor

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Signature of eighth inventor

Execution date of U.S. Patent Application

February 24, 2012
Date of this assignment

Name of ninth inventor

Residence of ninth inventor

Signature of ninth inventor

Execution date of U.S. Patent Application

Date of this assignment