

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	TAKAHIRO KUBO	03/27/2016
	MASAHIDE KOBAYASHI	03/24/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	JNC CORPORATION	
<b>Street Address:</b>	2-1, OTEMACHI 2-CHOME, CHIYODA-KU	
<b>City:</b>	TOKYO	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	100-8105	
<b>Name:</b>	JNC PETROCHEMICAL CORPORATION	
<b>Street Address:</b>	2-1, OTEMACHI 2-CHOME, CHIYODA-KU	
<b>City:</b>	TOKYO	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	100-0004	
<b>PROPERTY NUMBERS Total: 1</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	15079218	
<b>CORRESPONDENCE DATA</b>		
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<b>ATTORNEY DOCKET NUMBER:</b>	19629-0192	
<b>NAME OF SUBMITTER:</b>	TERESA LAVENUE	
<b>SIGNATURE:</b>	/Teresa Lavenue/	
<b>DATE SIGNED:</b>	06/13/2016	

**Total Attachments: 4**

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ASSIGNMENT

WHEREAS WE, the below named inventors [hereinafter referred to as Assignors], have made an invention entitled:

**LIQUID CRYSTAL COMPOUND HAVING CYCLOHEXENE RING, LIQUID  
CRYSTAL COMPOSITION AND LIQUID CRYSTAL DISPLAY DEVICE**

for which an application for United States Letters Patent is filed herewith or an application for United States Letters Patent was filed as application number 15/079,218 on March 24, 2016;

AND WHEREAS, JNC CORPORATION a corporation of JAPAN, whose post office address 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8105 JAPAN, and JNC PETROCHEMICAL CORPORATION a corporation of JAPAN, whose post office address is 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004 JAPAN, [hereinafter referred to as Assignee], is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW, THEREFORE, be it known that, for and in consideration paid and other good and valuable consideration the receipt of which from assignee, is hereby acknowledged, WE, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, OUR entire right, title and interest in and to this invention and this application, and all non-provisional applications, divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals and reissues thereof; and WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that WE have the full right to convey the interest assigned by this Assignment, and WE have not executed and will not execute any agreement in conflict with this Assignment;

AND WE HEREBY further covenant and agree that WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all non-provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by assignees, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set our hands.

Takahiro KUBO  
Full Name of First Inventor

c/o JNC PETROCHEMICAL CORPORATION  
ICHIHARA RESEARCH CENTER  
5-1, Goikaigan  
Ichihara-shi, Chiba 290-8551 JAPAN  
Address

Takahiro Kubo  
Assignor's Signature

March 27, 2016  
Date

Names of Additional Inventors' Signatures Attached ☒ Yes ☐ No

ASSIGNMENT

WHEREAS WE, the below named inventors [hereinafter referred to as Assignors], have made an invention entitled:

**LIQUID CRYSTAL COMPOUND HAVING CYCLOHEXENE RING, LIQUID  
CRYSTAL COMPOSITION AND LIQUID CRYSTAL DISPLAY DEVICE**

for which an application for United States Letters Patent is filed herewith or an application for United States Letters Patent was filed as application number 15/079,218 on March 24, 2016;

AND WHEREAS, JNC CORPORATION a corporation of JAPAN, whose post office address 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8105 JAPAN, and JNC PETROCHEMICAL CORPORATION a corporation of JAPAN, whose post office address is 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004 JAPAN, [hereinafter referred to as Assignee], is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW, THEREFORE, be it known that, for and in consideration paid and other good and valuable consideration the receipt of which from assignee, is hereby acknowledged, WE, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, OUR entire right, title and interest in and to this invention and this application, and all non-provisional applications, divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals and reissues thereof; and WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that WE have the full right to convey the interest assigned by this Assignment, and WE have not executed and will not execute any agreement in conflict with this Assignment;

AND WE HEREBY further covenant and agree that WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all non-provisional, divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by assignees, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set our hands.

Masahide KOBAYASHI

Full Name of Second Inventor

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Ichihara-shi, Chiba 290-8551 JAPAN

Address

Masahide Kobayashi

Assignor's Signature

March 24, 2016

Date

Names of Additional Inventors' Signatures Attached [ ] Yes [X] No