

## 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>Min Shik ROH</td> <td>12/28/2011</td> </tr> <tr> <td>Hyun woo LEE</td> <td>12/28/2011</td> </tr> <tr> <td>Min SONG</td> <td>12/28/2011</td> </tr> </tbody> </table>		Name	Execution Date	Min Shik ROH	12/28/2011	Hyun woo LEE	12/28/2011	Min SONG	12/28/2011
Name	Execution Date								
Min Shik ROH	12/28/2011								
Hyun woo LEE	12/28/2011								
Min SONG	12/28/2011								
RECEIVING PARTY DATA									
Name:	TOSHIBA SAMSUNG STORAGE TECHNOLOGY KOREA CORPORATION								
Street Address:	14F, Bldg. No. 102, Digital Empire 2, 486, Sin-Dong, Yeongtong-Gu, Gyeonggi do								
City:	Suwon-si								
State/Country:	REPUBLIC OF KOREA								
Postal Code:	443-734								
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>13339471</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13339471				
Property Type	Number								
Application Number:	13339471								
CORRESPONDENCE DATA									
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ATTORNEY DOCKET NUMBER:	2476.0002								
NAME OF SUBMITTER:	Charles Y. Park								
Total Attachments: 2 source=NewApp_24760002_Assignmentpdf#page1.tif source=NewApp_24760002_Assignmentpdf#page2.tif									

OP \$40.00 13339471

## ASSIGNMENT

For valuable consideration, we,

ROH, Min Shik	101-501, Hyundai Apt. 1 Danji, Gaebong 2-dong, Guro-gu, Seoul 152-755, Republic of Korea
LEE, Hyun woo	125-1702, Sinmaetan Weve Haneulchae Apt., Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-751, Republic of Korea
SONG, Min	204-601, Hengrim Maeul Samsung Raemian 2 Cha Apt., Banwol- dong, Hwaseong-si, Gyeonggi-do 445-786, Republic of Korea

hereby assign to:

**TOSHIBA SAMSUNG STORAGE TECHNOLOGY KOREA CORPORATION**, a Republic of Korea corporation/institute/institution having principal executive office(s) or place of business at: 14F, Bldg. No. 102, Digital Empire 2, 486, Sin-Dong, Yeongtong-Gu, Suwon-si, Gyeonggi-do 443-734, Republic of Korea; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of U.S. Patent Application Number 13/339,471 filed 12/29/2011 at the U.S. Patent & Trademark Office signed by us, with title **OPTICAL DEVICE**, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and application serial number of said application when known; this Assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, preliminary statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN TESTIMONY/WITNESS WHEREOF, we, undersigned inventors (Assignors) intending to be legally bound, have hereto affixed our signatures.

This 28 day of 12, 2011

Roh. Min-Shik

Signature: ROH, Min Shik

This 28 day of 12, 2011

LEE Hyun woo

Signature: LEE, Hyun woo

This 28 day of 12, 2011

SONG MIN

Signature: SONG, Min