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PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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WONJONG LEE	12/16/2014
JAEDON LEE	12/16/2014
SEOKJOONG HWANG	12/16/2014

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14591757

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DATE SIGNED:	01/07/2015

Total Attachments: 2

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PATENT REEL: 034749 FRAME: 0641 503127041

COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

DECLARATION

As a below-named	inventor, I hereby declare that this declaration is directed to the application attached hereto, or
to United States Ap	plication Number or PCT International Application Number
filed on	(if applicable), entitled:
	METHOD AND APPARATUS FOR PROCESSING RAY TRACING
The above-identifie	d application was made or authorized to be made by me.
I believe I am the or application.	riginal inventor or an original joint inventor of a claimed invention in the above-identified
	ge that any willful false statement made in this declaration is punishable under 18 USC 1001 nent of not more than five (5) years, or both.
I have reviewed and	funderstand the contents of the above-identified application, including the claims.
to be material to pat information that bec	uty to disclose to the United States Patent and Trademark Office all information known to me tentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material came available between the filing date of the prior application and the national or PCT ate of the continuation-in-part application.

ASSIGNMENT

For valuable consideration, I, as a below-named assignor, hereby assign to:

Samsung Electronics Co., Ltd. 129, Samsung-ro, Yeongtorig-gu Suwon-si, Gyeonggi-do 443-742 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 that are the subject of the application identified in the above declaration, which is United States Application Number or PCT International Application Number $\frac{14/591,757}{\text{filed on }} \qquad \frac{\text{January } 7, \text{ } 2015}{\text{January } 7, \text{ } 2015}$

I authorize and request the attorneys appointed in the above-identified application to hereafter complete this Assignment by inserting above the application number and the illing date of the above-identified application when known, and to correct any typographical errors that may be discovered in this Assignment.

This Assignment includes the above-identified application, any and all United States and foreign patents, utility models, and design registrations granted for any of the inventions and improvements that are the subject of the above-identified application, and the right to claim priority based on the filing date of the above-identified 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 I authorize the Assignes to apply in all countries in my name or in its own name for patents, utility models, design registrations, like rights of exclusion, and inventors' certificates for any of the inventions and improvements that are the subject of the above-identified application; and I agree for myself and my heirs, legal representatives, and assigns without further

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COMBINED DECLARATION AND ASSIGNMENT UNDER 37 CFR 1.63(e)

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 witness whereof, I, as a below-named inventor and assignor, intending to be legally bound, have hereunto affixed my signature on the date indicated below next to my signature.

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