PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	ASSIGNMENT

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Name	Execution Date
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14190079

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PATENT 502976599 REEL: 033743 FRAME: 0001

ASSIGNMENT

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Title of Invention:

SEMICONDUCTOR DEVICES, PACKAGE SUBSTRATES, SEMICONDUCTOR PACKAGES, PACKAGE STACK

STRUCTURES, AND ELECTRONIC SYSTEMS HAVING

FUNCTIONALLY ASYMMETRIC

CONDUCTIVE ELEMENTS

U.S. Patent Application:

Application Serial No.:

14/190,079

PATENT REEL: 033743 FRAME: 0002

PATENT APPLICATION Attorney Docket No. 8421-007 Client Ref. No. IB-201011-040-1 SPX201102-0002US

Filing Date:

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Issued:

For good and valuable consideration, the receipt of which is hereby acknowledged, the above-named Assignor hereby sells, assigns and transfers to Assignee, the full and exclusive right, title and interest in and to the above-identified invention, patent application and patent rights throughout the world, including foreign patent priority rights; said invention, application and letters patent in this or any foreign country, and all divisions, continuations, reissues, non-provisionals and extensions thereof, to be held and enjoyed by Assignee, for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted in this or any foreign country, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and covenant that Assignor has full right so to do, and agree that Assignor will communicate to Assignee, or its successors and assigns, any facts known to Assignor respecting said invention, and testify in any legal proceeding, sign all lawful papers execute all divisional, continuing, non-provisional and reissue applications, make all rightful oaths, and do everything possible to aid Assignee, its successors and assigns to obtain and enforce proper patent protection for said invention in this or any foreign country.

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Executed at Yongin Rokorea, this >5 day of (city) (country)

HEUNG-KYU KWON

Assignor

PATENT APPLICATION Attorney Docket No. 8421-007 Client Ref. No. IB-201011-040-1 SPX201102-0002US

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