PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| DEOKKYUNG YANG | 05/10/2018 |
| OHHAN KIM | 05/10/2018 |
| HEESOO LEE | 05/10/2018 |
| HUNTEAK LEE | 05/10/2018 |
| INSANG YOON | 05/10/2018 |
| IL KWON SHIM | 05/09/2018 |

RECEIVING PARTY DATA

| Name: | STATS CHIPPAC PTE. LTD. | |
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| Internal Address: | TECHPOINT #04-08/09 | |
| City: | SINGAPORE | |
| State/Country: | SINGAPORE | |
| Postal Code: | 569059 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15976455 |

CORRESPONDENCE DATA

Fax Number:

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| ATTORNEY DOCKET NUMBER: | 2515.0508 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | LISA ROSSETTI |
| SIGNATURE: | /Lisa Rossetti/ |
| DATE SIGNED: | 05/10/2018 |

504909427 PATENT REEL: 045771 FRAME: 0395

Total Attachments: 6 source=15976455ASSIGNMENT#page1.tif

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PATENT REEL: 045771 FRAME: 0396

For good and valuable consideration, the receipt of which is hereby acknowledged, I, DEOKKYUNG YANG of KOREA, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STAT5 CHIPPAC, PTE. LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 65, Techpoint #04-08/09, Singapore S69059, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled SEMICONDUCTOR DEVICE AND METHOD OF FORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE, which is described, illustrated, and/or claimed in an application for patent under Aftorney Docket No. 2515.0508, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

I hereby sell, assign, and transfer unto STATS CHIPPAC, the entire right, title, and interest in and to application(s) for patent filed in all countries foreign to the United States, and in and to application(s) for patent filed under any and all international conventions and treaties, and in and to any patent issuing therefrom, which describe, illustrate, and claim the above-identified invention(s). I hereby also sell, assign, and transfer unto STATS CHIPPAC, the entire right, title, and interest in and to all rights under any and all international conventions and treaties in respect of the above-identified invention(s). I authorize STATS CHIPPAC to apply for patent in foreign countries directly in its own name, and to claim the priority of the filing date under the provisions of any and all domestic laws and international conventions and treaties.

I hereby authorize and request the government authority in the United States to issue patent(s) upon the aforesaid application, continuation, division, reissue, reexamination, extension, renewal, or substitute, to STATS CHIPPAC, for the sole use and behalf of STATS CHIPPAC, its successors, assigns, and legal representatives, to the full end of the term for which the patent(s) may be granted, the same as they would have been held and enjoyed by me had this assignment not been made. I authorize and request the equivalent authorities in countries foreign to the United States to issue the patents of their respective countries to and in the name of STATS CHIPPAC in the same manner.

I agree that, when requested, I will, without charge to STATS CHIPPAC, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents for the invention(s) in any and all countries and for vesting title thereto in STATS CHIPPAC, its successors, assigns, and legal representatives or nominees.

I covenant with STATS CHIPPAC, its successors, assigns, and legal representatives that the interest and property hereby conveyed is free from any prior assignment, grant, mortgage, license, or other encumbrance.

Signature for DEOKKYUNG YANG

For good and valuable consideration, the receipt of which is hereby acknowledged, I, OHHAN KIM of Korea, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STATS CHIPPAC, PTE. LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 6S, Techpoint #04-08/09, Singapore 5690S9, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled SEMICONDUCTOR DEVICE AND METHOD OF FORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE, which is described, illustrated, and/or claimed in an application for patent under Attorney Docket No. 2515.0508, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

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20(9 - 0)5 - 70 24 July Date Signed Signature for OHHAN KIM

> PATENT REEL: 045771 FRAME: 0398

For good and valuable consideration, the receipt of which is hereby acknowledged, I, HEESOO LEE of Korea, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STATS CHIPPAC, PTE. LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 65, Techpoint #04-08/09, Singapore 569059, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled SEMICONDUCTOR DEVICE AND METHOD OF EORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE, which is described, illustrated, and/or claimed in an application for patent under Attorney Docket No. <u>2515.0508</u>, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

I hereby sell, assign, and transfer unto STATS CHIPPAC, the entire right, title, and interest in and to application(s) for patent filed in all countries foreign to the United States, and in and to application(s) for patent filed under any and all international conventions and treaties, and in and to any patent issuing therefrom, which describe, illustrate, and claim the above-identified invention(s). I hereby also sell, assign, and transfer unto STATS CHIPPAC, the entire right, title, and interest in and to all rights under any and all international conventions and treaties in respect of the above-identified invention(s). Lauthorize STATS CHIPPAC to apply for patent in foreign countries directly in its own name, and to claim the priority of the filing date under the provisions of any and all domestic laws and international conventions and treaties.

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I covenant with STATS CHIPPAC, its successors, assigns, and legal representatives that the interest and property hereby conveyed is free from any prior assignment, grant, mortgage, license, or other encumbrance.

Signature for HEESOO LEE

For good and valuable consideration, the receipt of which is hereby acknowledged, I, HUNTEAK LEE of Korea, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STATS CHIPPAC, PTE, LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 65, Techpoint #04-08/09, Singapore 569059, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled SEMICONDUCTOR DEVICE AND METHOD OF FORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE, which is described, illustrated, and/or claimed in an application for patent under Attorney Docket No. 2515.0508, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

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I covenant with STATS CHIPPAC, its successors, assigns, and legal representatives that the interest and property hereby conveyed is free from any prior assignment, grant, mortgage, license, or other encumbrance.

Date Signed Signature for HUNTEAK LEE

For good and valuable consideration, the receipt of which is hereby acknowledged, I, INSANG YOON of Korea, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STATS CHIPPAC, PTE. LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 65, Techpoint #04-08/09, Singapore 569059, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled SEMICONDUCTOR DEVICE AND METHOD OF FORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE, which is described, illustrated, and/or claimed in an application for patent under Attorney Docket No. 2515.0508, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

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2019-45-10

Signature for INSANG YOON

For good and valuable consideration, the receipt of which is hereby acknowledged, I, IL KWON SHIM of Singapore, have sold, assigned, and transferred, or do hereby sell, assign, and transfer unto STATS CHIPPAC, PTE. LTD. (STATS CHIPPAC), having its principal office at 10 Ang Mo Kio Street Street 65, Techpoint #04-08/09, Singapore 569059, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled <u>SEMICONDUCTOR DEVICE AND METHOD OF FORMING A 3D INTERPOSER SYSTEM-IN-PACKAGE MODULE</u>, which is described, illustrated, and/or claimed in an application for patent under Attorney Docket No. <u>2515.0508</u>, together with the entire right, title and interest in and to the application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant upon such application(s).

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Signed Signature for U. K

Signature for IL KWON SHIM

PATENT REEL: 045771 FRAME: 0402

RECORDED: 05/10/2018