505536828 06/20/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5583625

| SUBMISSION TYPE: | CORRECTIVE ASSIGNMENT |
|-----------------------|--|
| NATURE OF CONVEYANCE: | Corrective Assignment to correct the THE RECEIVING PARTY DATA TO ADD THE SECOND ASSIGNEE'S NAME previously recorded on Reel 043135 Frame 0849. Assignor(s) hereby confirms the ASSIGNMENT. |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| JIN-SUNG LEE | 06/02/2017 |
| KYUNGHAN LEE | 06/13/2017 |
| JUNG-SHIN PARK | 06/02/2017 |
| HAN-NA LIM | 06/02/2017 |
| JOO-HYUNG LEE | 07/13/2017 |

RECEIVING PARTY DATA

| Name: | SAMSUNG ELECTRONICS CO., LTD |
|--------------------------|---|
| Street Address: | 129, SAMSUNG-RO, YEONGTONG-GU |
| City: | SUWON-SI, GYEONGGI-DO |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 16677 |
| | |
| Name: | ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY |
| Name: Street Address: | ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY 50, UNIST-GIL, EONYANG-EUP ULJUGUN |
| | |
| Street Address: | 50, UNIST-GIL, EONYANG-EUP ULJUGUN |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15547470 |

CORRESPONDENCE DATA

Fax Number: (972)628-3616

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 972-628-3600

Email: patents@munckwilson.com

Correspondent Name: DOCKET CLERK
Address Line 1: P.O. DRAWER 800889
Address Line 4: DALLAS, TEXAS 75380

PATENT 505536828 REEL: 049552 FRAME: 0004

| ATTORNEY DOCKET NUMBER: P22415-US (SAMS05-22415) | |
|--|----------------------------------|
| NAME OF SUBMITTER: JACOB L. LACOMBE | |
| SIGNATURE: | /Jacob L. LaCombe, Reg. #63,036/ |
| DATE SIGNED: 06/20/2019 | |
| Total Attachments: 6 | |

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PATENT REEL: 049552 FRAME: 0005

504479795 07/28/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4526497

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| JIN-SUNG LEE | 06/02/2017 |
| KYUNGHAN LEE | 06/13/2017 |
| JUNG-SHIN PARK | 06/02/2017 |
| HAN-NA LIM | 07/25/2017 |
| JOO-HYUNG LEE | 07/13/2017 |

RECEIVING PARTY DATA

| Name: | SAMSUNG ELECTRONICS CO., LTD |
|-----------------|-------------------------------|
| Street Address: | 129, SAMSUNG-RO, YEONGTONG-GU |
| City: | SUWON-SI, GYEONGGI-DO |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 16677 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15547470 |

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Phone: 972-628-3600

Email: patents@munckwilson.com

Correspondent Name: DOCKET CLERK

Address Line 1: P.O. DRAWER 800889
Address Line 4: DALLAS, TEXAS 75380

| ATTORNEY DOCKET NUMBER: | P22415-US (SAMS05-22415) | |
|-------------------------|--------------------------|--|
| NAME OF SUBMITTER: | WILLIAM A. MUNCK | |
| SIGNATURE: | /William A Munck/ | |
| DATE SIGNED: | 07/28/2017 | |

Total Attachments: 5

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PATENT REEL: 049552 FRAME: 0006

PATENT

ASSIGNMENT

WHEREAS, We, Jin-Sung LEE, resident of Seocho-gu, Seoul, Republic of Korea, citizen of Republic of Korea, Kyunghan LEE, resident of Nam-gu, Ulsan, Republic of Korea, citizen of Republic of Korea, Jung-Shin PARK, resident of Yeongdeungpo-gu, Seoul, Republic of Korea, citizen of Republic of Korea, Han-Na LIM, resident of Seongdong-gu, Seoul, Republic of Korea, citizen of Republic of Korea, Joo-Hyung LEE, resident of Bucheon-si, Gyeonggi-do, Republic of Korea, citizen of Republic of Korea have invented certain new and useful improvements in "METHOD AND APPARATUS FOR CONTROLLING CONGESTION IN COMMUNICATION SYSTEM" disclosed in an application for United States Letters Patent (Application Serial No. ___/_____, filed on _______, said application having been executed concurrently herewith;

WHEREAS, SAMSUNG ELECTRONICS CO., LTD. & ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY, a corporation organized under the laws of the Republic of Korea, having a place of business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea & 50, UNIST-gil, Eonyang-eup Uljugun, Ulsan, 44919, Republic of Korea (hereinafter referred to as "ASSIGNEES"), is desirous of acquiring our entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we do hereby sell, assign and transfer unto said ASSIGNEES, their successors, assigns and legal representatives, the full and exclusive right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, continuations-in-part and extensions thereof; We authorize William A. Munck of Munck Wilson Mandala, LLP. to insert in the parenthesis above the application number and filing date of said application when known; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our interest is concerned, to the said ASSIGNEES of our entire right, title and interest.

We also hereby sell and assign to said ASSIGNEES, their successors, assigns and legal re presentatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility mo dels, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any ot her papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNE ES, their successors, assigns and legal representatives.

DOCKET NO. P22415-US Client Ref. No. MJ-201408-017-1-US0

We hereby further agree that we will communicate to said ASSIGNEES, or to their successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEES, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEES and to aid said ASSIGNEES, their successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

| Date: 20/9,0%,02 | Jin-Sung LPE |
|-------------------|----------------|
| Date: | Kyunghan I.EE |
| Date: 2017, 06.02 | Jung-Shin PARK |
| Date: | Han-Na LIM |
| Date: | Joo-Hyung LEE |

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PATENT

REEL: 049552 FRAME: 0008

DOCKET NO. P22415-US Client Ref. No. MJ-201408-017-1-US0

We hereby further agree that we will communicate to said ASSIGNEES, or to their successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEES, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEES and to aid said ASSIGNEES, their successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

| Date: | |
|-------------------|-----------------|
| | Jin-Sung LEE |
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| Date: 6, 13, 2217 | 2-4 |
| | Kyunghan LEE |
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| D. 1 | |
| Date: | Jung-Shin PARK |
| | Jung-Sum I Arek |
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| Date: | |
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| Date: | Joo-Hyung LEE |
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DOCKET NO. P22415-US Client Ref. No. M.J-201408-017-1-US0

We hereby further agree that we will communicate to said ASSIGNEES, or to their successors, assigns and legal representatives, any facts known to us respecting any improvements; and, at the expense of said ASSIGNEES, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEES and to aid said ASSIGNEES, their successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

| Date: | |
|------------------|----------------|
| | Jin-Sung LEE |
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| Date: | |
| | Kyunghan LEE |
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| Date: | |
| | Jung-Shin PARK |
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| Date: 20/1. 1.25 | 066600 |
| | Han-Na LIM |
| | |
| Date: | |
| | Joo-Hyung LEE |

DOCKET NO. P22415-US Chem Ref. No. NJ-201408-017-1-1/80

We hereby further agree that we will communicate to said ASSIGNES, or to their successors assigns, and legal representatives, any facts known to us respecting any organizations, and, at the expense of said ASSIGNES, to testify in any legal proceedings, signal limits) papers, execute all dissional, continuation, continuation-in-part, ressue and substitute applications, and make all limital oaths, and generally do exerything possible to vest title in said SSIGNES and to aid said ASSIGNES, their successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

| | Date: | Simultananania, st |
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| | | Joo-Hyung LEE |
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| | | Winds Williams |

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