

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE	10/10/2016
SK TELECOM., CO., LTD.	09/29/2016
KT CORPORATION	11/08/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	KT CORPORATION
<b>Street Address:</b>	206, JUNGJA-DONG, BUNDANG-GU, KYEONGGI-DO
<b>City:</b>	SEONGNAM-CITY
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	463-711
<b>Name:</b>	TECHBI CO., LTD.
<b>Street Address:</b>	#304, 18, SEOCHO-DAERO 49-GIL, SEOCHO-GU
<b>City:</b>	SEOUL
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Patent Number:</b>	8630279
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)659-8822
<i>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.</i>	
<b>Phone:</b>	2022630809
<b>Email:</b>	info@kilepark.com
<b>Correspondent Name:</b>	KILE PARK REED & HOUTTEMAN PLLC
<b>Address Line 1:</b>	1101 30TH STREET, NW
<b>Address Line 2:</b>	SUITE 500
<b>Address Line 4:</b>	WASHINGTON, D.C. 20007
<b>ATTORNEY DOCKET NUMBER:</b>	PAN-0516-ET
<b>NAME OF SUBMITTER:</b>	JAE Y. PARK
<b>SIGNATURE:</b>	/Jae Y. Park/

<b>DATE SIGNED:</b>	12/20/2016
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**Total Attachments: 9**  
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UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

**ASSIGNMENT**

WHEREAS, **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE**, a corporation organized and existing under the laws of the Republic of Korea, having its principal place of business at 161 Gajeong-Dong, Yuseong-Gu, Daejeon, 305-350, Republic of Korea; **SK TELECOM., CO., LTD.**, a corporation organized and existing under the laws of the Republic of Korea, having its principal place of business at 11 Euljiro 2-Ga, Jung-Gu, Seoul, 100-999, Republic of Korea; and **KT CORPORATION**, a corporation organized and existing under the laws of the Republic of Korea, having its principal place of business at 206, Jungja-Dong, Bundang-Gu, Kyeonggi-Do, Seongnam-City, 463-711, Republic of Korea (hereinafter referred to as "**Assignors**"), are the owner of the entire right, title and interest in the following United States patent application:

Title: METHOD FOR GENERATING DOWNLINK SIGNAL, AND  
METHOD FOR SEARCHING CELL

U.S. Patent No.: 8,630,279

Date of Patent: January 14, 2014

U.S. Patent Application No.: 12/160,719

WHEREAS, **KT CORPORATION**, a corporation organized and existing under the laws of Republic of Korea, having a place of business at 206, Jungja-Dong, Bundang-Gu,

Kyeonggi-Do, Seongnam-City, 463-711, Republic of Korea; and **TechBI Co., Ltd.** , a corporation organized and existing under the laws of Republic of Korea, having a place of business at #304, 18, Seocho-daero 49-gil, Seocho-gu, Seoul, Republic of Korea; its heirs, successors, legal representatives and assigns (hereinafter referred to as "**Assignees**"), are desirous of acquiring the entire right, title and interest in and to the patent and the invention therein disclosed;

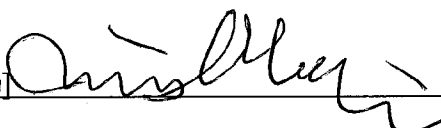
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the **Assignors** do hereby assign, sell, transfer and set over unto the **Assignees** all of its right, title and interest in and to the patent, and any and all applications for patent and patents therefor in the United States and in all foreign countries, including all divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of the patent and application thereof.

The **Assignors** hereby authorize and request the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from the patent and application thereof or any continuing, divisional conversion or reissue applications thereof to the **Assignees**, and hereby covenants that the **Assignors** have the full right to convey the entire interest herein assigned, and that the **Assignors** have not executed, and will not execute, any agreement in conflict herewith.

The undersigned declare that all statements made herein of his/her/their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both,

under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent and application thereof or any patent issuing thereon.

In WITNESS WHEREOF, the **Assignors** have caused this Assignment to be executed by:

Date: October 10, 2016 [sign]  L.S.

[name] Min-Sheo Choi

[title] Director

ELECTRONICS AND TELECOMMUNICATIONS RESEARCH  
INSTITUTE

Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_

Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_

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In WITNESS WHEREOF, the **Assignors** have caused this Assignment to be executed by:

Date: Sep. 29, 2016 [sign]  \_\_\_\_\_ L.S.

[name] 2HJOON SONG \_\_\_\_\_

[title] Project Leader, ZPR  
SK Telecom Co., Ltd.

Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_

Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_



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Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_

Date: \_\_\_\_\_ [sign] \_\_\_\_\_ L.S.

[name] \_\_\_\_\_

[title] \_\_\_\_\_

Date: 11/08/2016 [sign] Eunkyung Kwak L.S.

[name] Eunkyung Kwak

[title] Senior Manager  
KT Corporation