

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JIANGXING WU	02/27/2019
HONGCHANG CHEN	02/27/2019
PENG YI	02/27/2019
HAILONG MA	02/27/2019
LEI HE	02/27/2019
JUNFEI LI	02/27/2019
JIANMIN PANG	02/27/2019
RECEIVING PARTY DATA	
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City:	SHANGHAI
State/Country:	CHINA
Postal Code:	201112
Name:	CHINA NATIONAL DIGITAL SWITCHING SYSTEM ENGINEERING & TECHNOLOGICAL R&D CENTER
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Internal Address:	ZHENGZHOU
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State/Country:	CHINA
Postal Code:	450002
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16330691
CORRESPONDENCE DATA	
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PATENT

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ATTORNEY DOCKET NUMBER:	16046-000033-US-NP
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NAME OF SUBMITTER:	SUSAN MCGAW
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SIGNATURE:	/Susan McGaw/
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DATE SIGNED:	03/05/2019
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Total Attachments: 5

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ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made this 27 day of February, 2019,
by Jiangxing WU; Hongchang CHEN; Peng YI; Hailong MA; Lei HE; Junfei LI; and
Jianmin PANG (hereinafter referred to as Assignors), all residing at No. 7 Jianxue
Street, Henan, Zhengzhou 450002, PEOPLE'S REPUBLIC OF CHINA, respectively;

WHEREAS, Assignors have invented certain new and useful improvements
in APPARATUS FOR GENERATING HETEROGENEOUS FUNCTIONAL
EQUIVALENT AND METHOD THEREOF, set forth in a Patent application for which
an International Application was filed on September 1, 2017, PCT/CN2017/100197,
designating the United States; and

WHEREAS, SHANGHAI HONGZHEN INFORMATION SCIENCE &
TECHNOLOGY CO. LTD and CHINA NATIONAL DIGITAL SWITCHING SYSTEM
ENGINEERING & TECHNOLOGICAL R&D CENTER, respectively organized under
and pursuant to the laws of and , respectively having their principal places of business
at Room A501, Building 3, No. 1588 Lianhang Road, Minhang District, Shanghai
201112, PEOPLE'S REPUBLIC OF CHINA; and No. 7 Jianxue Street, Henan,
Zhengzhou 450002, PEOPLE'S REPUBLIC OF CHINA, respectively (hereinafter
referred to as Assignees), are desirous of acquiring the entire right, title and interest in
and to said inventions and said Application for Letters Patent of the United States, and
in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of
which is hereby acknowledged, Assignors have sold, assigned, transferred and set
over, and by these presents do sell, assign, transfer and set over, unto Assignees,
their successors, legal representatives and assigns, the entire right, title and interest in
and to the above-mentioned inventions and application for Letters Patent, and in and
to any and all direct and indirect divisions, continuations and continuations-in-part of
said application, and any and all Letters Patent in the United States and all foreign
countries which may be granted therefore and thereon, and reissues, reexaminations
and extensions of said Letters Patent, and all rights under the International Convention

for the Protection of Industrial Property, including the right to recover for past infringements, the same to be held and enjoyed by Assignees, for their own use and benefit and the use and benefit of their successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignees, their successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignees under law or that have already been transferred to Assignees, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignees, their successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignees, their successors, legal representatives and assigns, whenever counsel of Assignees, or counsel of their successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignees, as

Assignees of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignees, their successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

HARNESS, DICKEY & PIERCE, P.L.C.

All practitioners at Customer Number 27572

AND Assignors acknowledge an obligation of assignment of this invention to Assignees at the time the invention was made.

Jiangxing Wu

Jiangxing Wu

February 27, 2019
Dated

Witness 1

Signature:

Min FU

Witness 1

Printed Name:

Min FU

Witness 2

Signature:

Luhua LI

Witness 2

Printed Name:

Luhua LI

Hongchang Chen

Hongchang Chen

February 27, 2019
Dated

Witness 1

Signature:

Min FU

Witness 1

Printed Name:

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Witness 2

Signature:

Luhua LI

Witness 2

Printed Name:

Luhua LI

Peng Yi

Peng Yi

February 27, 2019
Dated

Witness 1

Signature:

Min FU

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Printed Name:

Min FU

Witness 2

Signature:

Luhua LI

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Printed Name:

Luhua LI

Hailong Ma

Hailong Ma

February 27, 2019
Dated

Witness 1

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Witness 2

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Luhua LI

Witness 2

Printed Name:

Luhua LI

Lei He
 Lei He
February 27, 2019
 Dated

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 Witness 2
 Signature: Luhan LI
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 Printed Name: Luhan LI

Junfei LI
 Junfei Li
February 27, 2019
 Dated

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 Signature: Min FU
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 Witness 2
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Jianmin Pang
 Jianmin Pang
February 27, 2019
 Dated

Witness 1
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 Printed Name: Min FU
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