504243071 02/24/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOYONG GUO	02/22/2017
DONG WANG	02/22/2017
YINGHUA CHEN	02/22/2017

RECEIVING PARTY DATA

Name:	SAP SE
Street Address:	DIETMAR-HOPP-ALLEE 16
City:	WALLDORF
State/Country:	GERMANY
Postal Code:	D-69190

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15441283

CORRESPONDENCE DATA

Fax Number: (656)846-2005

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

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Email: info@horizonip.com.sg HORIZON IP PTE. LTD. **Correspondent Name:**

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Address Line 2: THE PLAZA

Address Line 4: SINGAPORE, SINGAPORE 199591

ATTORNEY DOCKET NUMBER: SAPP2016NAT123US0 **NAME OF SUBMITTER:** CARMEN S. NG /Carmen S. Ng/ SIGNATURE: **DATE SIGNED:** 02/24/2017

Total Attachments: 5

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PATENT REEL: 041810 FRAME: 0452 ASSIGNMENT

For good and valuable consideration, we, Xiaoyong GUO, residing at No. 1001

Chenhui Road, Shanghai 201203, China, a citizen of the People's Republic of China; Dong

WANG, residing at No. 1001 Chenhui Road, Shanghai 201203, China, a citizen of the

People's Republic of China; Yinghua CHEN, residing at No. 1001 Chenhui Road, Shanghai

201203, China, a citizen of the People's Republic of China;

Hereby sell, assign, and transfer to SAP SE, a corporation of Germany, having its

principal place of business at Dietmar-Hopp-Allee 16, Walldorf, D-69190 Germany,

hereinafter "Assignee", its successors, assigns and legal representatives, the entire

right, title and interest in and for the United States and all foreign countries, in and to any and

all improvements which are disclosed in the application for United States Letters Patent.

which has been executed by the undersigned concurrently here within, and is entitled:

OPTIMIZED RECOMMENDATION ENGINE

and in and to said application and all divisional, continuing substitute, renewal, reissue, and

all other applications for Letters Patent which have been or shall be filed in the United States

and all foreign countries on any of said improvements; and in and to all original and reissued

patents which have been or shall be filed in the United States and all foreign countries on said

improvements;

Agree that Assignee may apply for and receive Letters Patent for said improvements

in its own name, and that, when requested, without charge to but at the expense of said

Assignee, their successors, assigns, and legal representatives to carry out in good faith the

intent and purpose of this agreement, the undersigned will execute all divisional, continuing

substitute, renewal, reissue, and all other patent applications on any and all said

improvements; execute all rightful oaths, assignments, powers of attorney and other papers;

communicate to said Assignee, its successors, assigns, and representatives, all facts known to

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the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

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Date:	2017, 2.22
	,

郭山亮

(Signature)

Xiaoyong <u>GUO</u>

Witness 1:

(Signuure)

WANG DONG (Print name)

Witness 2;

劢、某件

(Signature)

CHEN YINGHUA

(Print name)

Dong WANG

Witness 1:

GUO XIAO YOAG (Print name)

Witness 2:

(Signature)

CHEN YINGHUA

(Print name)

Date:

2.17 7.22

伪类华

(Signature)

Yinghua <u>CHEN</u>

Witness 1:

郭水鳥

(Signature)

GUO XIAO YONG

(Print name)

Witness 2:

I Ma (Signature)

WANG DOM (Print name)

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RECORDED: 02/24/2017