

PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | |
|--|----------------------------------|---------------|----------------|---------------------|------------|------------|------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | |
| CONVEYING PARTY DATA | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Zhenlong ZHANG</td> <td>09/10/2012</td> </tr> <tr> <td>Shuai ZHOU</td> <td>09/10/2012</td> </tr> </tbody> </table> | | Name | Execution Date | Zhenlong ZHANG | 09/10/2012 | Shuai ZHOU | 09/10/2012 |
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| Zhenlong ZHANG | 09/10/2012 | | | | | | |
| Shuai ZHOU | 09/10/2012 | | | | | | |
| RECEIVING PARTY DATA | | | | | | | |
| Name: | Huawei Technologies Co., Ltd. | | | | | | |
| Street Address: | Huawei Administration Building | | | | | | |
| Internal Address: | Bantian, Longgang District | | | | | | |
| City: | Shenzhen, Guangdong | | | | | | |
| State/Country: | CHINA | | | | | | |
| Postal Code: | 518129 | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13777334</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13777334 | | |
| Property Type | Number | | | | | | |
| Application Number: | 13777334 | | | | | | |
| CORRESPONDENCE DATA | | | | | | | |
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| ATTORNEY DOCKET NUMBER: | HW710970 | | | | | | |
| NAME OF SUBMITTER: | John B. Conklin | | | | | | |
| Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif | | | | | | | |

CH \$40.00 13777334

PATENT

Attorney Docket No. HW710970
Client Reference No. 83243349US03

ASSIGNMENT

WHEREAS, WE,

Zhenlong ZHANG
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

Shuai ZHOU
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA;

have invented and own a certain invention entitled:
METHOD AND DEVICE FOR RECOVERING DESCRIPTION INFORMATION, AND
METHOD AND DEVICE FOR CACHING DATA IN DATABASE
for which invention we have executed an application (provisional or non-provisional) for a U.S.
patent, which was filed on 09/17/12, under U.S. Application No. _____ and

13/777,334

WHEREAS, HUAWEI TECHNOLOGIES CO., LTD., of Huawei Administration
Building, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter
referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and
interest in and under the invention described in the patent application.

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of
which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's
legal representatives, successors and assigns the full and exclusive rights in and to the invention
in the U.S. and every foreign country and the entire right, title, and interest in and to the patent
application and other such applications (e.g., provisional applications, non-provisional
applications, continuations, continuations-in-part, divisionals, reissues, reexaminations,
National phase applications, including petty patent applications, and utility model applications)
that may be filed in the United States and every foreign country on the invention, and the
patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon,
and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to
the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing
date and application number of the application if the date and number are unavailable at the
time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any
writing or do any act whatsoever conflicting with the terms of this assignment document set
forth herein, and that we will at any time upon request, without further or additional
consideration, but at the expense of the Assignee, execute such additional assignments and
other writings and do such additional acts as the Assignee may deem necessary or desirable to
perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in
making application for and obtaining original, continuation, continuation-in-part, divisional,
reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries
on the invention, and in enforcing any rights or chooses in action accruing as a result of such
applications or patents, and by executing statements and other affidavits, it being understood
that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns
and legal representatives of all parties hereto.

In re Appln. of Zhang et al.
Attorney Docket No. HW710970

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date sep 10, 2012 Zhenlong ZHANG
Zhenlong ZHANG

Date sep 10, 2012 He LING
Witness

Date sep 10, 2012 Linbo SHEN
Witness

Date sep 10, 2012 Shuai ZHOU
Shuai ZHOU

Date sep 10, 2012 Hui ZHOU
Witness

Date sep 10, 2012 Hui WANG
Witness