

PATENT ASSIGNMENT

Electronic Version v1.1

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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>Ningjuan CHANG</td> <td>01/11/2012</td> </tr> <tr> <td>Ke WANG</td> <td>01/09/2012</td> </tr> <tr> <td>Yan PENG</td> <td>01/09/2012</td> </tr> </tbody> </table>		Name	Execution Date	Ningjuan CHANG	01/11/2012	Ke WANG	01/09/2012	Yan PENG	01/09/2012
Name	Execution Date								
Ningjuan CHANG	01/11/2012								
Ke WANG	01/09/2012								
Yan PENG	01/09/2012								
RECEIVING PARTY DATA									
Name:	HUAWEI TECHNOLOGIES CO., LTD.								
Street Address:	Huawei Administration Building, Bantian, Longgang District								
City:	Shenzhen, Guangdong, P.R.								
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>13361203</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13361203				
Property Type	Number								
Application Number:	13361203								
CORRESPONDENCE DATA									
Fax Number:	(202)408-4400								
Phone:	202-408-4000								
Email:	will.chen@finnegan.com								
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Huawei Technologies Co., Ltd./Finnegan								
Address Line 1:	901 New York Avenue								
Address Line 2:	NW								
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20001								
ATTORNEY DOCKET NUMBER:	11005.0636								
NAME OF SUBMITTER:	R. CREMEANS								
Total Attachments: 4 source=ASSIGNMENT#page1.tif source=ASSIGNMENT#page2.tif source=ASSIGNMENT#page3.tif source=ASSIGNMENT#page4.tif									

OP \$40.00 13361203

PATENT

Attorney Docket No. _____
Client Reference No. 81362631US04

ASSIGNMENT

WHEREAS, WE,

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

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

Yan PENG
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA;

have invented and own a certain invention entitled:
**METHOD, APPARATUS, AND SYSTEM FOR DETERMINING AND MAINTAINING
QUALITY OF SERVICE PARAMETERS ON A MULTI-HOP NETWORK**
for which invention we have executed an application (provisional or non-provisional) for a U.S.
patent, which was filed on _____, under U.S. Application No. _____ and

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,

In re Appin. of Chang et al.
Attorney Docket No. _____

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 assignee and legal representatives of all parties hereto.

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

Date January 11, 2012 Ningjuan CHANG
Ningjuan CHANG

Date January 11, 2012 Jian ZHANG
Witness

Date January 11, 2012 Xu Yueziao
Witness

Date _____ Ke WANG

Date _____
Witness

Date _____
Witness

Date _____ Yan PENG

Date _____
Witness

Date _____
Witness

PATENT

Attorney Docket No. _____
Client Reference No. 81362631US04

ASSIGNMENT

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

Ke WANG
Huawei Administration Building
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Shenzhen, 518129, Guangdong
P.R. CHINA; and

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

Date: _____ Ninguan CHANG

Date: _____ Witness

Date: _____ Witness

Date: Jan 9 2012 Ke WANG
Ke WANG

Date: Jan 9 2012 Zhongmei Gong
Witness

Date: Jan 9 2012 Yingyu Zhang
Witness

Date: Jan 09 2012 Yan PENG
Yan PENG

Date: Jan 9 2012 Xinyu Huang
Witness

Date: Jan 9 2012 Li GU
Witness