### 502074179 09/25/2012

#### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Mohammadhadi Baligh	11/03/2011
Jianglei Ma	11/08/2011
Hua Xu	11/03/2011

### RECEIVING PARTY DATA

Name:	Nortel Networks Limited	
Street Address:	5945 Airport Road	
Internal Address:	Suite 360	
City:	Mississauga	
State/Country:	ONTARIO	
Postal Code:	L4V 1R9	

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13068837

## CORRESPONDENCE DATA

Fax Number: 8777697945

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

 Phone:
 (214) 747-5070

 Email:
 apsi@fr.com

Correspondent Name: Fish & Richardson P.C.

Address Line 1: P.O. Box 1022

Address Line 4: Minneapolis, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	29717-0216001
NAME OF SUBMITTER:	Paige Nordell

## Total Attachments: 5

source=InventorAssignment#page1.tif source=InventorAssignment#page2.tif source=InventorAssignment#page3.tif source=InventorAssignment#page4.tif source=InventorAssignment#page5.tif

> PATENT REEL: 029022 FRAME: 0784

502074179

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, I (we) the undersigned, whose full post office address(es) is(are) listed below my (our) name(s), do hereby sell, assign and transfer to:

#### NORTEL NETWORKS LIMITED

(hereinafter "Nortel"), its successors, assigns and legal representatives, whose full post office address is:

5945 Airport Road, Suite 360 Mississauga, Ontario Canada, L4V 1R9

all their right, title, and interest worldwide in and to the invention relating to

## CLOSED LOOP AND SEMI LOOP MULTI-SITE MIMO COOPERATION

as described in an application for letters patent filed concurrently herewith <u>or</u> filed in United States on September 21, 2009 and given serial number 13/068837 as well as all rights and privileges including priority rights arising from the aforesaid application and corresponding applications in other countries, all continuations, continuations-in-part, divisions, renewals, substitutes or reissues thereof, and all the rights and privileges under any and all letters patent that may be granted for said invention.

I (We) undertake without charges to Nortel but at its request and expense to execute all documents, take all oaths and do all reasonable acts to enable Nortel, its successors assigns and legal representatives to procure and maintain patent or any other intellectual property protection for said invention in any and all countries and to vest title thereto to Nortel, its successors assigns and legal representatives.

THE UNDERSIGNED hereby authorizes the firm of Smart & Biggar whose full office address is 438 University Avenue, Toronto, ON, Canada, M5G 2K8 to correct clerical errors in this Assignment or to insert any further identification or other information necessary or desirable to make this Assignment suitable for recordal in a domestic or foreign Patent Office.

Mohammadhadi Baligh 149 Saltspring PVT

Kanada, ON K2M 0B1

Canada

(date)

Witness Signature

Witness Name (Print) Bayes teh

PATENT REEL: 029022 FRAME: 0786 2

THE UNDERSIGNED hereby authorizes the firm of Smart & Biggar whose full office address is 438 University Avenue, Toronto, ON, Canada, M5G 2K8 to correct clerical errors in this Assignment of to insert any further identification of other information necessary of desirable to make this Assignment suitable for recordal in a domestic or foreign Patent Office.

Jignglei Ma

3 Bon Echo Crescent Kanata, ON K2M 2W5

Canada

ZHONGXI ZHANG

Witness Name (Print)

PATENT REEL: 029022 FRAME: 0787 US

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, I (we) the undersigned, whose full post office address(es) is(are) listed below my (our) name(s), do hereby sell, assign and transfer to:

#### NORTEL NETWORKS LIMITED

(hereinafter "Nortel"), its successors, assigns and legal representatives, whose full post office address is:

5945 Airport Road, Suite 360 Mississauga, Ontario Canada, L4V 1R9

all their right, title, and interest worldwide in and to the invention relating to

# CLOSED LOOP AND SEMI LOOP MULTI-SITE MÎMO COOPERATION

as described in an application for letters patent filed concurrently herewith  $\underline{or}$  filed in United States on September 21, 2009 and given serial number 13/068837 as well as all rights and privileges including priority rights arising from the aforesaid application and corresponding applications in other countries, all continuations, continuations-in-part, divisions, renewals, substitutes or reissues thereof, and all the rights and privileges under any and all letters patent that may be granted for said invention.

I (We) undertake without charges to Nortel but at its request and expense to execute all documents, take all oaths and do all reasonable acts to enable Nortel, its successors assigns and legal representatives to procure and maintain patent or any other intellectual property protection for said invention in any and all countries and to vest title thereto to Nortel, its successors assigns and legal representatives.

THE UNDERSIGNED hereby authorizes the firm of Smart & Biggar whose full office address is 438 University Avenue, Toronto, ON, Canada, M5G 2K8 to correct clerical errors in this Assignment or to insert any further identification or other information necessary or desirable to make this Assignment suitable for recordal in a domestic or foreign Patent

Office.

Hua Xu

5 Appaloosa Drive

Ottawa, ON K2M 1N6 Canada Nev 3, 2011

(date)

Witness Signature

SHINEI GAO

Witness Name (Print)

PATENT REEL: 029022 FRAME: 0789

RECORDED: 09/25/2012