

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| | |
|---|-------------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| Han SUN | 04/01/2009 |
| Kuang Tsan WU | 04/02/2009 |
| Kim B. ROBERTS | 04/01/2009 |
| RECEIVING PARTY DATA | |
| Name: | NORTEL NETWORKS LIMITED |
| Street Address: | 2351 Boulevard Alfred Nobel |
| City: | St. Laurent |
| State/Country: | CANADA |
| Postal Code: | H4S 2A9 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 13288375 |
| CORRESPONDENCE DATA | |
| Fax Number: | (613)788-2247 |
| Phone: | 613-788-2200 |
| Email: | sharon.mattocks@blakes.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: | BLAKE, CASSELS & GRAYDON, LLP |
| Address Line 1: | 45 O'CONNOR ST., 20TH FLOOR |
| Address Line 4: | OTTAWA, CANADA K1P 1A4 |
| ATTORNEY DOCKET NUMBER: | 102831/00458 |
| NAME OF SUBMITTER: | Kent Daniels |

CH \$40.00 13288375

Total Attachments: 6
 source=458Inv_to_Nortel_Assignment#page1.tif

501712658

**PATENT
 REEL: 027169 FRAME: 0841**

source=458Inv_to_Nortel_Assignment#page2.tif
source=458Inv_to_Nortel_Assignment#page3.tif
source=458Inv_to_Nortel_Assignment#page4.tif
source=458Inv_to_Nortel_Assignment#page5.tif
source=458Inv_to_Nortel_Assignment#page6.tif

TO:BLAKE,CASSELS & GRAYDON L COMPANY:45 O'CONNOR STREET

**UNITED STATES PATENT AND TRADEMARK OFFICE**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

APRIL 17, 2009

500836565A

PTAS

BLAKE,CASSELS & GRAYDON LLP
45 O'CONNOR STREET
SUITE 2000
OTTAWA, K1P 1A4 CANADAUNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 04/16/2009

REEL/FRAME: 022555/0113

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: 64457/149

ASSIGNOR:

SUN, HAN

DOC DATE: 04/01/2009

ASSIGNOR:

WU, KUANG TSAN

DOC DATE: 04/02/2009

ASSIGNOR:

ROBERTS, KIM B.

DOC DATE: 04/01/2009

ASSIGNEE:

NORTEL NETWORKS LIMITED
2351 BOULEVARD ALFRED-NOBEL
ST. LAURENT, CANADA H4S 2A9

SERIAL NUMBER: 12419368

FILING DATE: 04/07/2009

PATENT NUMBER:

ISSUE DATE:

TITLE: CLOCK RECOVERY WITH CHANNEL COEFFICIENTS

TO:BLAKE,CASSELS & GRAYDON L. COMPANY:45 O'CONNOR STREET

022555/0113 PAGE 2

ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

| |
|--------------------------|
| PATENT ASSIGNMENT |
|--------------------------|

Electronic Version v1.1
 Stylesheet Version v1.1

04/16/2009
500836565

| | |
|--|-----------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| Han SUN | 04/01/2009 |
| Kuang Tsan WU | 04/02/2009 |
| Kim B. ROBERTS | 04/01/2009 |
| RECEIVING PARTY DATA | |
| Name: | NORTEL NETWORKS LIMITED |
| Street Address: | 2351 Boulevard Alfred-Nobel |
| City: | St. Laurent |
| State/Country: | CANADA |
| Postal Code: | H4S 2A9 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 12419368 |
| CORRESPONDENCE DATA | |
| Fax Number: | (613)788-2247 |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> | |
| Phone: | 613-788-2252 |
| Email: | sharon.mattocks@blakes.com |
| Correspondent Name: | BLAKE,CASSELS & GRAYDON LLP |
| Address Line 1: | 45 O'Connor Street |
| Address Line 2: | Suite 2000 |
| Address Line 4: | Ottawa, CANADA K1P 1A4 |
| ATTORNEY DOCKET NUMBER: | 64457/149 |
| NAME OF SUBMITTER: | Kent Daniels |
| Total Attachments: 2 source=149 Assignment#page1.tif | |

CH \$40.00 12419368

TO:BLAKE,CASSELS & GRAYDON I

COMPANY:45 O'CONNOR STREET

source=149 Assignment#page2.tif

FILE NO. 64457/149
UNITED STATES

PATENT APPLICATION
ASSIGNMENT

FOR THE 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:

2351 Boulevard Alfred-Nobel
St. Laurent, Quebec
Canada, H4S 2A9

all their rights, title, and interest worldwide in and to the invention relation to:


CLOCK RECOVERY WITH CHANNEL COEFFICIENTS

as described in an application for letters patent filed concurrently herewith, 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.

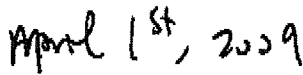
I(We) undertake without charges to Nortel but at its request and expense to execute all documents, take all oaths and do all reasonable acts to enable Nortel, its successors, assigns and legal representatives to procure and maintain patent or any other intellectual property protection for said invention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

THE UNDERSIGNED hereby authorize(s) the firm of *Blake, Cassels & Graydon LLP* whose full office address is *45 O'Connor Street, Suite 2000, World Exchange Plaza, Ottawa, Ontario, K1P 1A4 Canada* to correct clerical errors in the Assignment or to insert further identification or other information necessary or desirable to make this Assignment suitable for recordal in a domestic or foreign Patent Office.


This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same document.




Han SUN
10 Brady Avenue
Kanata, ON K2K 2R1
Canada



Insert Date



Witness Signature



Witness Name (Print)

.../2

FILE NO. 64457/149
UNITED STATES

PATENT APPLICATION
ASSIGNMENT

Kuang Tsan Wu

Kuang Tsan WU
99 Hansen Avenue
Kanata, ON K2K 2M2
Canada

Apr. 2, 2009

Insert Date

Chris Kurowski

Witness Signature

April 02/2009

Witness Name (Print)

Chris Kurowski

Kim B Roberts

Kim B. ROBERTS
10 Mission Inn Grove
Nepean, ON K2R 1C6
Canada

April 1 2009

Insert Date

Eric Cauchon

Witness Signature

Eric Cauchon

Witness Name (Print)