| A = 1/3/9 REC   | ET 28   |  |  |
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| Our Ref.: NTL-3.2.007-1840 (RO-3692)  | /200  |  |  |
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| Qiang Shen, Peter Savinsky, Rui Wang, Wen Tong, Dmitry<br>Menyailov, Dmitry Pogorilko and Alexander Garmonov  | NORTHERN TELECOM LIMITED<br>P.O. Box 6123, Station A, Montreal<br>Quebec, Canada H3C 3J5  |  |  |
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## ASSIGNMENT NORTHERN TELECOM LIMITED

For value received, 1 (we) the undersigned, whose full post office address(es) is (are) adjacent my (our) name(s), hereby sell, assign and transfer to:

## NORTHERN TELECOM LIMITED

whose full post office address is:

P.0 Box 6123, Station A, Montreal, Ouebec, Canada H3C 3J5

its successors, assigns and legal representatives, the entire right, title and interest, including priority rights, for all countries, in and to certain inventions relating to:

## CARRIER PHASE RECOVERY OF MULTI-RATE SIGNALS

set forth in an application for letters patent of the UNITED STATES OF AMERICA

executed concurrently herewith,

and all rights and privileges under any and all letters patent that may be granted for said inventions.

Date Nov. 11, 1998 Assignor Qiang She Witness Signature Runbo Fy 1218 Meadowlands Drive Apt. 604 Witness Name (print) Nepean, Ontario K2E 6K1 Canada Date Nov. 13. 1558 Assignor Peter Savinsky ness Signature Ichernuk lexalidi-e Witness Name (print) Date Nov. 14 Assigno Witness Signature Runbo Fa Witness Name (print) Date Nev. 11, 1993 Witness Signature Assignor ONP Runbo Fa

Witness Name (print)

X Additional Assignors on attached Page

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|--|----------------------------------|-------------|-------------|--|
| ASSIGNMENT   |                                  |             |             |  |
| NORTHERN TELECOM LIMITED [PAGE 2]  |                                  |             |             |  |
| Alet   |                                  | This Date   | Nov. 13. 98 |  |
| Winess Signature Tehrony Hu<br>Alexander, Tehrony Hu<br>Winess Name (print)        | Dmitty<br>Dinity                 | Menyailov   | Assignor    |  |
| - The  | Joe                              | Po gorilko  | Nov. 13, 98 |  |
| Witness Signature<br><u>Alexanders</u> [ <u>Telierwy</u> ]<br>Witness Name (print) | Dmitry                           | 7Po gorilko | Assignor    |  |
| - Ale  |                                  |             | Nov. 13. 98 |  |
| Witness Name (print)   | Alexander                        | Gamonov     | Assignor    |  |

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