

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 May 2010 (20.05.2010)

PCT

(10) International Publication Number
WO 2010/054471 A8

- (51) International Patent Classification:
H04L 12/46 (2006.01) H04L 12/56 (2006.01)
- (21) International Application Number:
PCT/CA2009/001622
- (22) International Filing Date:
17 November 2009 (17.11.2009)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/115,412 17 November 2008 (17.11.2008) US
- (71) Applicant (for all designated States except US): SIERRA WIRELESS, INC. [CA/CA]; 13811 Wireless Way, Richmond, British Columbia V6V 3A4 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): VOS, Gustav, Gerald [CA/CA]; 14882 25th Avenue, Surrey, British Columbia V4P 1N8 (CA). KAVANAUGH, Richard, Thomas [US/US]; 736 Birchview Drive, Encinitas, California 92024 (US). MITCHELL, Andrew, Hasley, Watson [CA/CA]; 4807 Underwood Avenue, North Vancouver, British Columbia V7K 3B2 (CA). WAUNG,

William, Yih, Yuan [CA/CA]; 3515 Lynndale Crescent, Burnaby, British Columbia V5A 3Z6 (CA).

(74) Agent: MBM INTELLECTUAL PROPERTY LAW LLP; 2200 - 200 Granville Street, Vancouver, British Columbia V6C 1S4 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR NETWORK PORT AND NETWORK ADDRESS TRANSLATION

(57) Abstract: The present invention provides a method and apparatus for network port and network address translation. Several problems with limited addressability may occur when transmitting data packets between a terminal in a first network and a terminal in a second network that is outside the first network. Data forwarding rules are used to define if and how identifiers of data packets to be forwarded between the two networks correlate with each other. According to embodiments, a data forwarding rule includes a first identifier associated with the first network and a second identifier associated with the second network, wherein each identifier has two parts: a source address and source port number corresponding to a source network node, and a destination address and destination port number corresponding to a destination network node.

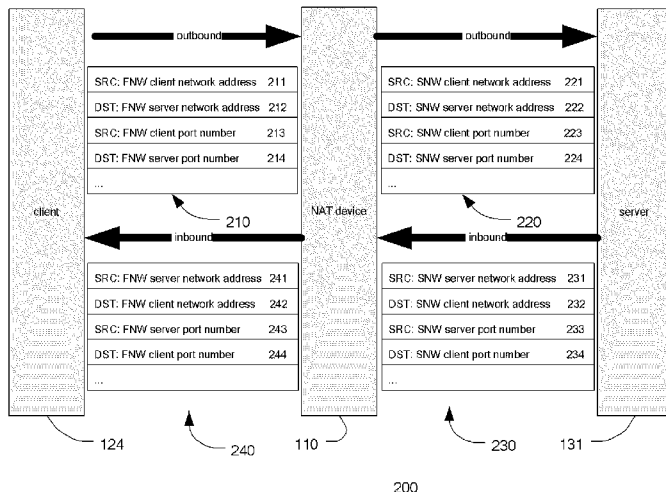


FIGURE 2

WO 2010/054471 A8



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG). (48) Date of publication of this corrected version:

5 August 2010

Published:

— with international search report (Art. 21(3))

(15) Information about Correction:

see Notice of 5 August 2010