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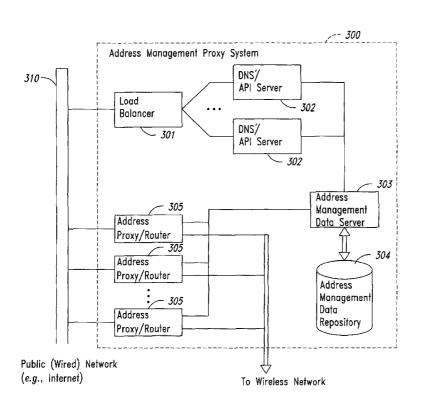
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR TWO-WAY INITIATED DATA COMMUNICATION WITH WIRELESS DEVICES



(57) Abstract: Methods and systems for providing two-way initiated, bi-directional communication wireless devices using connection-based or connection-less protocols, such as, TCP/IP and UDP/IP, are provided. An Address Management Proxy System ("AMPS"), which enables devices and systems connected to a public internet, is provided, to initiate communication with and to send data to wireless devices connected to a private wireless network, without exposing the non-routable private addresses of these wireless The AMPS allocates a devices. public (routable) network address for temporarily use by a requesting device on a public network to communicate with a wireless device on a wireless network. A pool of public addresses, maintained by the AMPS and allocated dynamically to wireless network devices as required. The AMPS comprises one or more modified DNS/API servers, Address Proxy/Routers, an Address Management Data Server, data

repositories, and optionally a load balancer. The AMPS DNS'/API server receives a request from a device on a public network for a particular wireless device, and returns an appropriate temporary public address, which is internally mapped to the private address of the wireless device.



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LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

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INTERNATIONAL SEARCH REPORT

International Application No PCT/US 02/18485

PCT/US 02/18485 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L29/12 H04L H04L12/06 H04L29/08 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04L H04Q Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. χ EP 1 003 315 A (MITSUBISHI MATERIALS CORP) 1 - 10824 May 2000 (2000-05-24) column 1, line 33 - line 36 column 9, line 43 - line 48 column 10, line 15 - line 16 column 10, line 44 - line 53 paragraphs '0002!, '0046!, '0053!-'0067! figures 4-6 Α EP 0 883 271 A (HEWLETT PACKARD CO) 1 - 1089 December 1998 (1998-12-09) figure 2 Α WO 99 07108 A (NOKIA TELECOMMUNICATIONS OY 15, 16, ;YLAE JAEAESKI ANTTI (FI); EKBERG JAN) 36.37 11 February 1999 (1999-02-11) page 9, line 17 - line 21 -/--Χ Further documents are listed in the continuation of box C. Х Patent family members are listed in annex. ° Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled *P* document published prior to the international filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 29 November 2002 16/12/2002

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