

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 March 2006 (23.03.2006)

PCT

(10) International Publication Number
WO 2006/031460 A3

(51) International Patent Classification:

G06F 9/00 (2006.01)

(21) International Application Number:

PCT/US2005/031262

(22) International Filing Date:

1 September 2005 (01.09.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/606,875 1 September 2004 (01.09.2004) US
11/216,971 31 August 2005 (31.08.2005) US

(71) Applicant (for all designated States except US): **INTER-NETWORK, INC.** [US/US]; 50 California Street, Suite 1500, San Francisco, CA 94111 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PATZSCHKE, Till, Immanuel** [DE/DE]; Kleiststrasse 23, 65187 Wiesbaden (DE). **WESEMANN, Darren, Leroy** [US/US]; 229 North Fairway Drive, San Francisco, CA 94111 (US).

(74) Agents: **ISRAESEN, R., Burns** et al.; 60 East South Temple, 1000 Eagle Gate Tower, Salt Lake City, UT 84111 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

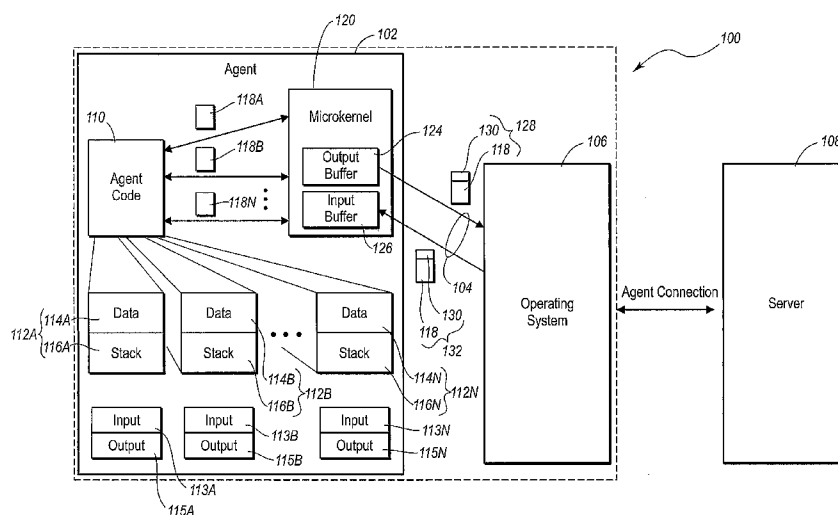
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:

17 January 2008

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NETWORK TESTING AGENT WITH INTEGRATED MICROKERNEL OPERATING SYSTEM



(57) Abstract: A system for performing testing of a network device includes an agent (102). The agent (102) can simulate multiple simultaneous users that access the network device or test the service provided to individual users. The agent (102) generally includes: a plurality of microprocesses (112A-112N), each corresponding to a simulated user and including data packet templates; agent code (110) configured to switch between the plurality of microprocesses (112A-112N) to enable the microprocesses to create data packets from the data packet templates and to initiate the transmission of the data packets in response to the state of the corresponding simulated user; and a microkernel (120) configured to preformat the data packets prior to transmitting the data packets to an operating system (106) associated with the agent (102). The agent (102) can also be used to determine quality of service ratings.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31262

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 9/00(2006.01)
G06F 1/12(2006.01)

USPC: 718/105;702/182

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)
U.S. : 718/105; 702/182

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0115266 A1 (SWEET et al.) 19 June 2003 (19.06.2003), sections [0012] to [0055].	1-21
A,P	US 2004/0199815 A1 (DINKER et al.) 07 October 2004 (07.10.2004), see the whole reference.	1-21
A	US 5,692,192 A (SUDO) 25 November 1997 (25.11.1997), see the whole reference.	1-21
A	US 5,838,968 A (CULBERT) 17 November 1998 (17.11.1998), see the whole reference.	1-21

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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 invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"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 documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

07 November 2007 (07.11.2007)

Date of mailing of the international search report

23 NOV 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Zarni Maung

Telephone No. 703-305-3900