

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 March 2006 (09.03.2006)

PCT

(10) International Publication Number
WO 2006/026721 A3

(51) International Patent Classification:
G06F 9/44 (2006.01) *G06F 9/445* (2006.01)

(21) International Application Number:
PCT/US2005/031180

(22) International Filing Date: 31 August 2005 (31.08.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/605,736 31 August 2004 (31.08.2004) US
60/606,875 1 September 2004 (01.09.2004) US

(71) Applicant (for all designated States except US): **INTERNETWORK, 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). **WESERMANN, Darren, Leroy** [US/US]; 229 North Fairway Drive, San Francisco, CA 94111 (US).

(74) Agents: **BURNS, R., Israelsen** 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:
6 December 2007

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.



WO 2006/026721 A3

(54) Title: DYNAMICALLY PROGRAMMABLE EMBEDDED AGENTS

(57) Abstract: Agents embedded in connectivity devices are dynamically reprogrammed or upgraded without appreciably altering the footprint, requiring the entire agent to be replaced, or exposing the rest of the computing system to possible corruption or failure. The invention is achieved by constructing an agent with a modular programming data structure or architecture and embedding that agent in a connectivity device. New program modules that have been tested in a test agent similar to the embedded agent are added to the embedded agent as new or replacement modules.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31180

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **G06F 9/44(2006.01),9/445(2006.01)**

 USPC: **717/168-178,124-135**
 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. : 717/168-178, 124-135

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)
 EAST BRS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,009,274 (FLETCHER et al) 28 December 1999 (28.12.1999), entire.	1-22

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	"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
"E" earlier application or patent published on or after the international filing date	"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
"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 documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
 01 October 2007 (01.10.2007)

Date of mailing of the international search report
17 OCT 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
 Kakali Chaki
 Telephone No. (703)305-3900

