

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/060138 A3

(51) International Patent Classification : G06F 15/16, 15/173

(21) International Application Number:
PCT/IB2004/052766

(22) International Filing Date:
12 December 2004 (12.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/529,532 15 December 2003 (15.12.2003) US
60/579,575 14 June 2004 (14.06.2004) US
60/605,993 31 August 2004 (31.08.2004) US
10/904,919 5 December 2004 (05.12.2004) US

(71) Applicant (for all designated States except US):
AUTOUPTODATE LLC D/B/A ARMORPOST
[US/US]; Attn: Chief Technology Officer, Suite 200, 8430
Terrapin Trail, Colorado Springs, CO 80919 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MO, Richard
[US/US]; 8430 Terrapin Trail, Colorado Springs, CO
80919 (US). BISHOP, JR., James William [US/US];
3876 Clovergate Drive, Colorado Springs, CO 80920
(US). AU, Sandra [US/US]; 8430 Terrapin Trail, Col-
orado Springs, CO 80919 (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, 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).

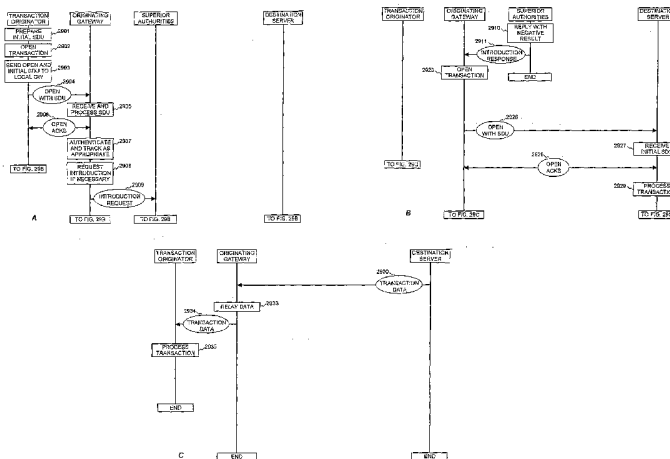
Published:

— with international search report

(88) Date of publication of the international search report:
23 February 2006

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

(54) Title: SYSTEMS AND METHODS FOR PREVENTING SPAM AND DENIAL OF SERVICE ATTACKS IN MESSAGING,
PACKET MULTIMEDIA, AND OTHER NETWORKS



(57) Abstract: A system, various methods, and various apparatuses are provided for the purpose of supplying and including in an electronic message or multimedia session signalling unit a valid cryptographic authentication token, verifying said token's validity upon arrival of said message or signalling unit, and thereby providing message recipients or session parties with the assurance that said message or signalling unit is from a valid sender. A system, apparatus, and various methods are further provided for the purpose of protecting legitimate application traffic and the network elements exchanging it from intrusion by wild packets attempting to consume application resources and thereby deny service to legitimate users or network elements. A system, various methods, and various apparatuses are further provided for the purpose of enabling legitimate advertising via electronic messages, relying upon message and sender authentication to assure both advertisers and viewers of advertising messages that all participants are valid, legitimate, and accountable for any abuse that may occur.

WO 2005/060138 A3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB04/52766

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : G06F 15/16, 15/173
 US CL : 709/206, 223, 224, 225, 228
 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. : 709/206, 223, 224, 225, 228

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)
 IEEE, ACM

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,484,197 B1 (DONOHUE) 19 November 2002 (19.11.2002), column 2, line 42 through column 3, line 46.	3, 9, 10, and 14 ----- 1-2, 4-8, 11-13, and 15-24
Y, P	US 6,829,654 B1 (JUNGCK) 7 December 2004 (07.12.2004), column 21, line 24 through column 22, line 33.	1-24
A, P	US 6,826,627 B2 (SJOLLEMA et al) 30 November 2004 (30.11.2004), whole document.	1-24
A	US 6,393,465 B2 (LEEDS) 21 May 2002 (21.05.2002), whole document.	1-24
A	US 6,643,686 B1 (HALL) 4 November 2003 (04.11.2003), whole document.	1-24

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"
"A" document defining the general state of the art which is not considered to be of particular relevance	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: 06 July 2005 (06.07.2005)
 Date of mailing of the international search report: 20 JUL 2005

Name and mailing address of the ISA/US:
 Mail Stop PCT, Attn: ISA/US
 Commissioner of Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 Facsimile No. (571) 273-8300

Authorized officer:
 Andrew Caldwell
 Telephone No. 703-305-3800