(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
16 May 2002 (16.05.2002)

PCT

(10) International Publication Number
WO 02/039237 A3

(51) International Patent Classification[7]: G06F 1/00

(21) International Application Number: PCT/EP01/12361

(22) International Filing Date: 25 October 2001 (25.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/710,926 9 November 2000 (09.11.2000) US

(71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, NY 10504 (US).

(71) Applicant *(for LU only)*: **IBM DEUTSCHLAND GMBH** [DE/DE]; Pascalstrasse 100, 70569 Stuttgart (DE).

(72) Inventors: **HINTON, Heather, Maria**; 3512 Rip Ford Drive, Austin, TX 78732 (US). **WINTERS, David, John**; 707 Pelton Ave. #205, Santa Cruz, CA 95060 (US).

(74) Agent: **TEUFEL, Fritz**; IBM Deutschland GmbH, Intellectual Property, Pascalstr. 100, 70548 Stuttgart (DE).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

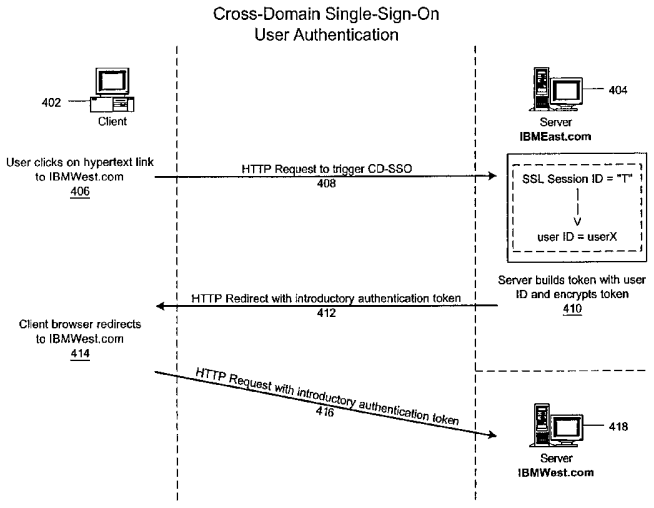
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
9 October 2003

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: METHOD AND SYSTEM FOR WEB-BASED CROSS-DOMAIN SINGLE-SIGN-ON AUTHENTICATION



(57) Abstract: A method, system, or computer program product is presented for cross-domain, single-sign-on, authentication functionality. The methodology uses an introductory authentication token to introduce an already authenticated user from one domain to a new domain. This token is passed from one domain to the other domain using HTTP-redirection. This token is protected by encryption with a cryptographic key shared only between the two domain in a secure manner such that an external user cannot generate a counterfeit introductory token. An introductory token is further protected by enabling it with a limited lifetime so that an unauthorized user would not be able to use or reuse the introductory token within the token s lifetime. After a user has been introduced to a new security domain, then all of the user's resource requests are authorized by the new domain.

WO 02/039237 A3

INTERNATIONAL SEARCH REPORT

Internat plication No
PCT/EP 01/12361

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F1/00

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 G06F

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 940 960 A (HEWLETT PACKARD CO) 8 September 1999 (1999-09-08)	1-8, 12-19, 23-30
Y	column 1-2, paragraphs 6-8 column 11, paragraph 11 column 4, paragraphs 16,17 column 5, paragraph 20 -column 7, paragraph 29 column 8, paragraph 31 -column 9, paragraph 32 column 10, paragraph 36 figures 4,5	9-11, 20-22

	-/--	

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in 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 document but 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	Date of mailing of the international search report
21 May 2003	10/06/2003

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Bichler, M

INTERNATIONAL SEARCH REPORT

Interna pplication No
PCT/EP 01/12361

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
Y	"smb.conf - The configuration file for the Samba suite" UNIX MAN PAGES, 'Online! 23 October 1998 (1998-10-23), XP002241870 Retrieved from the Internet: <URL:http://web.archive.org/web/20001001062644/http://de.samba.org/samba/docs/man/smb.conf.5.html> 'retrieved on 2003-05-20! page 77, section "username map" ---	9-11, 20-22
A	MICHAEL FLEMING GRUBB ET AL: "Single Sign-On and the System Administrator" USENIX, 6 December 1998 (1998-12-06), XP002154500 Retrieved from the Internet: <URL:http://www.usenix.org/publications/library/proceedings/lisa98/full_papers/grubb/> 'retrieved on 2000-12-04! * the whole document * -----	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

Interna plication No
PCT/EP 01/12361

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0940960 A	08-09-1999	EP 0940960 A1	08-09-1999