

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 March 2002 (28.03.2002)

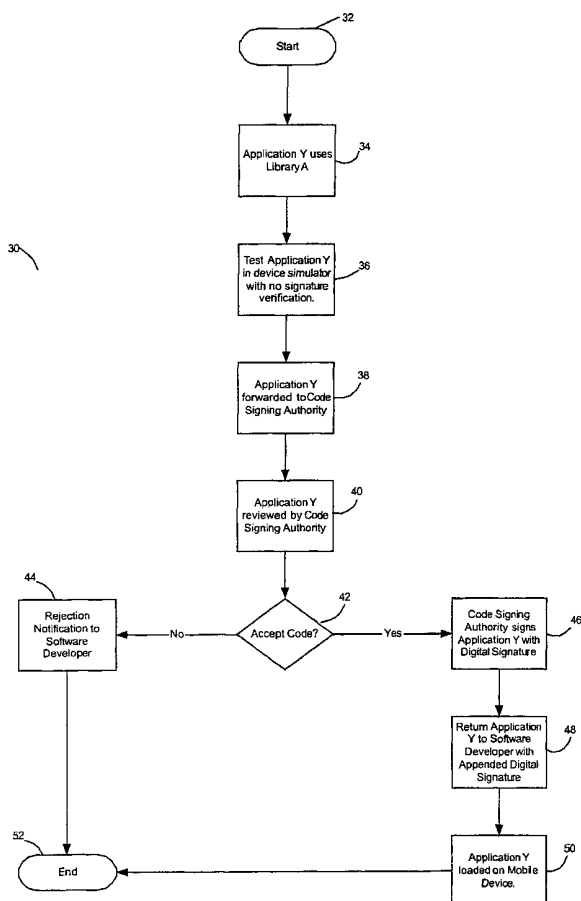
PCT

(10) International Publication Number
WO 02/25409 A3

- (51) International Patent Classification⁷: G06F 1/00
- (21) International Application Number: PCT/CA01/01344
- (22) International Filing Date:
20 September 2001 (20.09.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/234,152 21 September 2000 (21.09.2000) US
60/235,354 26 September 2000 (26.09.2000) US
60/270,663 20 February 2001 (20.02.2001) US
- (71) Applicant (for all designated States except US): **RESEARCH IN MOTION LIMITED** [CA/CA]; 295 Phillip Street, Waterloo, Ontario N2L 3W8 (CA).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **YACH, David, P.** [CA/CA]; 254 Castlefield Avenue, Waterloo, Ontario N2K 2N1 (CA). **BROWN, Michael, S.** [CA/CA]; 7 Danube Street, Heidelberg, Ontario N0B 1Y0 (CA). **LITTLE, Herbert, A.** [CA/CA]; 504 Old Oak Place, Waterloo, Ontario N2T 2V8 (CA).
- (74) Agent: **PATHIYAL, Krishna, K.**; Research In Motion Limited, 295 Phillip Street, Waterloo, Ontario N2L 3W8 (CA).
- (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, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: SOFTWARE CODE SIGNING SYSTEM AND METHOD



(57) Abstract: A code signing system and method is provided. The code signing system operates in conjunction with a signed software application having a digital signature and includes an application platform, an application programming interface (API), and a virtual machine. The API is configured to link the software application with the application platform. The virtual machine verifies the authenticity of the digital signature in order to control access to the API by the software application.



WO 02/25409 A3



(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).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

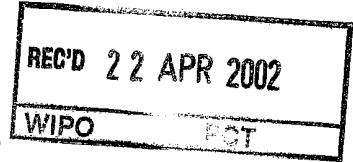
(88) Date of publication of the international search report:
13 June 2002

Published:
— *with international search report*

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.

PATENT COOPERATION TREATY

PCT



INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PCA-0445	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/CA 01/ 01344	International filing date (day/month/year) 20/09/2001	(Earliest) Priority Date (day/month/year) 21/09/2000
Applicant RESEARCH IN MOTION LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. **Certain claims were found unsearchable** (See Box I).

3. **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

SOFTWARE CODE SIGNING SYSTEM AND METHOD

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

2
 None of the figures.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

national Application No
PCT/CA 01/01344

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, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 05600 A (APPLE COMPUTER) 4 February 1999 (1999-02-04)	1, 2, 6, 7, 12-15, 21, 26, 27, 29, 32
Y	abstract; figures 5, 6, 9 page 6, line 1 - line 15 page 19, line 4 - line 14 page 20, line 19 - page 21, line 4 page 24, line 6 - line 23 page 25, line 23 - line 26	11, 18, 19, 26, 31, 38-56
	---	-/--

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*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</p> <p>*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</p> <p>*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.</p> <p>*&* document member of the same patent family</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Date of the actual completion of the international search	Date of mailing of the international search report
12 April 2002	22/04/2002

Name and mailing address of the ISA 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	Authorized officer Powell, D
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------

INTERNATIONAL SEARCH REPORT

national Application No
PCT/CA 01/01344

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 930 793 A (TEXAS INSTRUMENTS INC) 21 July 1999 (1999-07-21)	1, 3-6, 8-10, 20, 22-24, 28-33, 36, 37
	abstract; figure 6 page 15, line 54 - page 16, line 5 page 16, line 32 - line 44	
Y	---	34, 35
P, Y	US 6 157 721 A (SIBERT W OLIN ET AL) 5 December 2000 (2000-12-05)	11, 18, 19, 26, 31, 34, 35, 38-56
	abstract; figures 2, 3, 5, 8, 14 column 2, line 27 - line 65 column 11, line 7 - line 19 column 15, line 23 - line 41	
Y	& AU 36815 97 A (INTERTRUST TECHNOLOGIES CORP) 19 February 1998 (1998-02-19)	
A	US 5 978 484 A (APPERSON NORMAN ET AL) 2 November 1999 (1999-11-02)	11, 18, 19, 31, 34, 35
	abstract; figure 5 column 2, line 41 - line 60 column 3, line 44 - line 57 column 8, line 17 - line 25 -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No
PCT/CA 01/01344

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9905600	A	04-02-1999	US 6188995 B1	13-02-2001
			EP 1023664 A2	02-08-2000
			WO 9905600 A2	04-02-1999
EP 0930793	A	21-07-1999	CN 1249643 A	05-04-2000
			EP 0930793 A1	21-07-1999
			JP 11312152 A	09-11-1999
US 6157721	A	05-12-2000	AU 3205797 A	05-12-1997
			AU 3681597 A	19-02-1998
			CN 1225739 A	11-08-1999
			EP 0898777 A2	03-03-1999
			JP 2001501763 T	06-02-2001
			WO 9743761 A2	20-11-1997
			US 6292569 B1	18-09-2001
			US 2002023214 A1	21-02-2002
US 5978484	A	02-11-1999	NONE	