

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 February 2003 (06.02.2003)

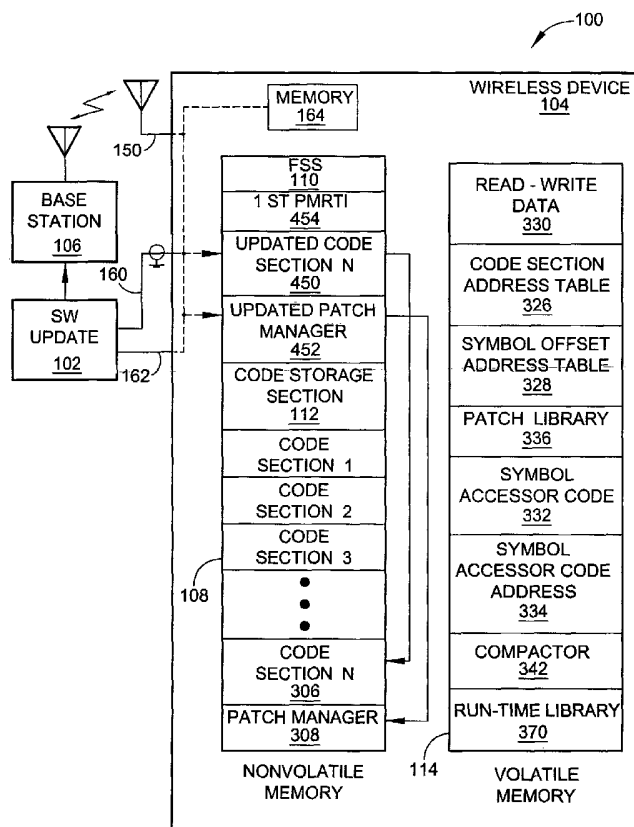
PCT

(10) International Publication Number
WO 03/010668 A3

- (51) International Patent Classification⁷: **G06F 11/273** (72) Inventors: **RAJARAM, Gowri**; 3520 Lebon Drive, Apt. 5330, San Diego, CA 92122 (US). **SECKENDORF, Paul**; 14074 Davenport Avenue, San Diego, CA 92129 (US). **KAPLAN, Diego**; 5288 Soledad Mt. Road, San Diego, CA 92109 (US).
- (21) International Application Number: PCT/IB02/02877
- (22) International Filing Date: 23 July 2002 (23.07.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- | | | |
|------------|-----------------------------|----|
| 09/917,026 | 26 July 2001 (26.07.2001) | US |
| 09/916,460 | 26 July 2001 (26.07.2001) | US |
| 09/916,900 | 26 July 2001 (26.07.2001) | US |
| 09/927,131 | 10 August 2001 (10.08.2001) | US |
| 09/969,305 | 2 October 2001 (02.10.2001) | US |
- (71) Applicant: **KYOCERA WIRELESS CORPORATION**
[US/US]; 10300 Campus Point Drive, San Diego, CA 92121 (US).
- (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, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR FIELD DIAGNOSIS OF WIRELESS COMMUNICATIONS DEVICE SYSTEM SOFTWARE



(57) Abstract: A system and method are provided for field diagnosing system software in a wireless communications device. The method comprises: executing system software; launching a run-time engine; receiving patch manager run time instructions (PMRTI), including dynamic instruction sets and new code sections, in a file system section nonvolatile memory; and, processing dynamic instruction sets to field diagnose the system software. Processing the dynamic instruction sets includes: executing the diagnosis instruction sets with the system software to collect data; analyzing the collected data; and, in response to analyzing the collected data, operating on system data and system software. The method further comprises: following the operating on the system software and system data, executing the system software.



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).

(88) Date of publication of the international search report:
25 September 2003

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.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 02/02877

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F11/273

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	US 2001/054161 A1 (WOODDRUFF ROBERT J) 20 December 2001 (2001-12-20) paragraphs '0015!', '0017!', '0029!', '0032!'-'0038! ---	1, 2, 18, 19
A	US 5 699 275 A (KENNEDY III WILLIAM C ET AL) 16 December 1997 (1997-12-16) column 6, line 25 -column 8, line 10 ---	1, 2, 18, 19, 35
A	US 5 734 904 A (THOMASON JON ET AL) 31 March 1998 (1998-03-31) abstract claims 11-13 ---	3-17, 20-35
A	EP 0 459 344 A (CIT ALCATEL) 4 December 1991 (1991-12-04) ---	
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ 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

1 April 2003

Date of mailing of the international search report

07/04/2003

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

Renault, S

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 02/02877

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 800 963 A (WAVECOM SA) 11 May 2001 (2001-05-11) -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 02/02877

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2001054161	A1	20-12-2001	NONE	
US 5699275	A	16-12-1997	AU 5440096 A CA 2217856 A1 EP 0820614 A1 JP 11503545 T WO 9632679 A1	30-10-1996 17-10-1996 28-01-1998 26-03-1999 17-10-1996
US 5734904	A	31-03-1998	US 6438621 B1	20-08-2002
EP 0459344	A	04-12-1991	FR 2662891 A1 AU 643526 B2 AU 7739591 A EP 0459344 A1	06-12-1991 18-11-1993 05-12-1991 04-12-1991
FR 2800963	A	11-05-2001	FR 2800963 A1 AU 1284001 A EP 1228654 A1 WO 0135686 A1	11-05-2001 06-06-2001 07-08-2002 17-05-2001