

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 May 2007 (18.05.2007)

PCT

(10) International Publication Number  
**WO 2007/056230 A3**

(51) International Patent Classification:  
**G06F 15/173** (2006.01)

(21) International Application Number:  
PCT/US2006/043110

(22) International Filing Date:  
3 November 2006 (03.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/734,008 4 November 2005 (04.11.2005) US  
11/592,815 2 November 2006 (02.11.2006) US

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(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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).

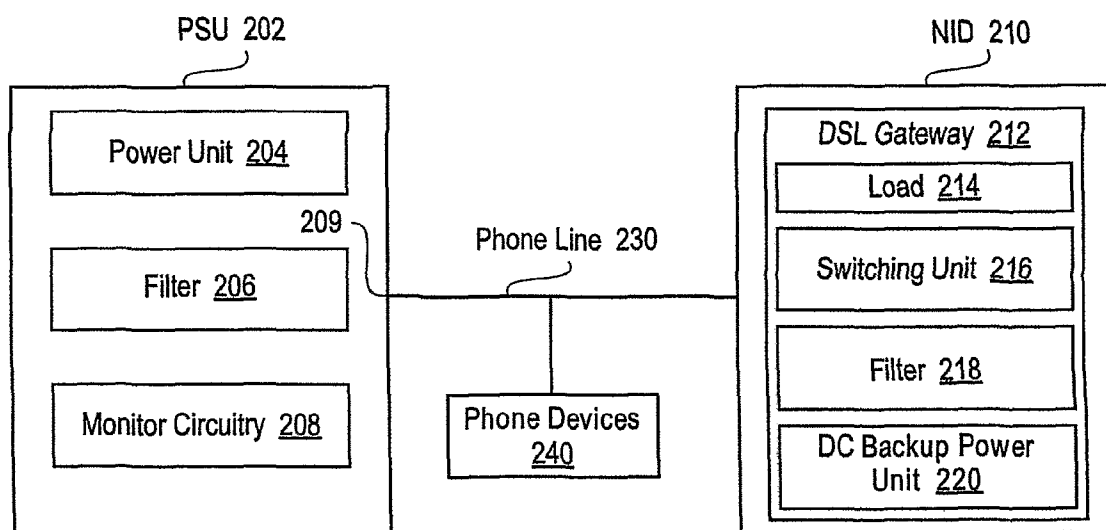
**Published:**

- 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:  
18 October 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.

(54) Title: METHODS AND APPARATUSES TO PROVIDE FAULT MONITORING FOR A NETWORK INTERFACE DEVICE



(57) Abstract: Various methods, apparatuses, and systems in which fault monitoring is provided to a network interface device are described. In one embodiment, an apparatus includes a network interface device (NID) located outside a building and a power supply unit located inside the building. The power supply unit has one or more ports that couple via a phone line to the NID to provide a power signal to the NID. The apparatus further includes a monitor circuitry located in the power supply unit. The monitor circuitry monitors the power signal received by the NID via the phone line. The monitor circuitry checks for a fault condition of at least one phone device coupled to the phone line when the power signal changes by a predetermined amount.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/43110

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 15/173 (2007.01)

USPC - 709/224

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)

USPC: 709/224

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
709/223, 229; 370/242, 252, 259; 340/7.32, 7.36, 7.37

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,PGPB,EPAB,JPAB)

Search Terms: backup or standby power, network, detect or monitor line failure, switch backup, interface or gateway indicator, power failure, phone line, wire, power supply, monitor circuit, fault detection, switching unit, power signal.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,774,316 A (MCGARY et al.) 30 June 1998 (30.06.1998), entire document, especially Abstract, col 3, ln 18-32; claims 1-5, and 12-15.	1-20
Y	Applicant's Admitted Prior Art, para [0004]-[0006]	1-20

☐ Further documents are listed in the continuation of Box C.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

25 May 2007 (25.05.2007)

Date of mailing of the international search report

28 AUG 2007

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