(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 3 January 2008 (03.01.2008)

PCT

(10) International Publication Number WO 2008/003070 A3

(51) International Patent Classification: *H04L 12/26* (2006.01)

(21) International Application Number:

PCT/US2007/072418

(22) International Filing Date: 28 June 2007 (28.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/817,315 28 June 2006 (28.06.2006) US 11/769,637 27 June 2007 (27.06.2007) US

(71) Applicant and

(72) Inventor: SHANKAR, Pradip [US/US]; 3003 Woodside Terrace, Fremont, California 94539 (US).

(74) Agent: WEST, Stuart J; 2815 Mitchell Drive, Suite 209, Walnut Creek, California 94598 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, 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, MT, 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).

Declarations under Rule 4.17:

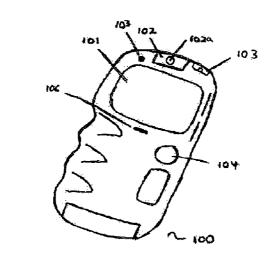
- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

Published:

with international search report

[Continued on next page]

(54) Title: PORTABLE COMMUNICATION DEVICE





(57) Abstract: A novel system for remotely providing technical support services. The system utilizes a handheld device to provide bi-directional communications to a centralized center. Video or still images are used to convey the information to the remote support center for diagnosis, and instructions on how to fix the problem is relayed via text, video and /or voice to the remote user.



- 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: 17 April 2008

INTERNATIONAL SEARCH REPORT

International application No. PCT/US 07/72418

IPC(8) - HO4L 12/26 (2007.10) USPC - 370/241 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 - 370/241; 710/10; 714/4 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 370/241; 710/10; 714/4 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (USPT, PGPB, EPAB, JPAB); DiatogPRO (Engineering); Google Scholar Search term-handset, handheld, whelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X. US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] Y. US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] Y. US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 12 US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6 13 US 2003/0163623 A1 (YEUNG) 28 August 2003 (28.08.2003), fig 3, para [0032] 16
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) USPC - 370/241; 710/10; 714/4 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 370/241; 710/10; 714/4 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (USPT, PGPB, EPAB, JPAB); DialogPRO (Engineering); Google Scholar Search term: handset, handheld, wirelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0047] 4, 8, 12-13, 16 Y US 2006/0074639 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] 4, 8 US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
Minimum documentation searched (classification system followed by classification symbols) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 370/241; 710/10; 714/4 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (USPT, PGPB, EPAB, JPAB); DialogPRO (Engineering); Google Scholar Search term: handset, handheld, wirelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] 4, 8, 12-13, 16 Y US 2006/0074639 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] 4, 8 US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 370/241; 710/10; 714/4 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (USPT, PGPB, EPAB, JPAB); DialogPRO (Engineering); Google Scholar Search term: handset, handheld, wirelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer 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 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] 4, 8 Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 12 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
USPC - 370/241; 710/10; 714/4 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (USPT, PGPB, EPAB, JPAB); DialogPRO (Engineering); Google Scholar Search term: handset, handheld, wirelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 12 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
PubWEST (USPT, PGPB, EPAB, JPAB); DialogPRO (Engineering); Google Scholar Search term: handset, handheld, wirelessphone, wireless phone, screen, video, camera, microphone, speaker, transceiver, network, microprocessor, processor, computer C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X
Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X Y Y Y US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] (10.4 moles) 1-3, 5-7, 9-11, 14-15, 17 moles (10.4 moles) Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] Y
X US 2003/0222889 A1 (PARULSKI et al.) 04 December 2003 (04.12.2003), entire document especially fig 1-2, 4, 6 and para [0029], [0042], [0045], [0047] 1-3, 5-7, 9-11, 14-15, 17 4, 8, 12-13, 16 Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] 4, 8 Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 12 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6 13
Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
Y US 2005/0282582 A1 (SLOTZNICK) 22 December 2005 (22.12.2005), para [0035] 4, 8 Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6 13
Y US 2006/0074639 A1 (GOUDAR et al.) 06 April 2006 (06.04.2006), fig 1 Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6 13
Y US 2006/0091268 A1 (LEE) 04 May 2006 (04.05.2006), fig 6
Y US 2003/0163623 A1 (YEUNG) 28 August 2003 (28.08.2003), fig 3, para [0032] 16
Further documents are listed in the continuation of Box C.
* Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand to be of particular relevance * Special categories of cited documents: "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
"E" earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive
"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) step when the document is taken alone document of particular relevance; the claimed invention cannot be
"O" document referring to an oral disclosure, use, exhibition or other means 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" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family
Date of the actual completion of the international search Date of mailing of the international search report 19 FEB 2008
26 December 2007 (26.12.2007)
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents Authorized officer: Lee W. Young
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201 PCT OSP: 571-272-7774 PCT OSP: 571-272-7774