## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 18 January 2007 (18.01.2007)

# (10) International Publication Number WO 2007/009096 A3

- (51) International Patent Classification: *G06F 17/30* (2006.01)
- (21) International Application Number:

PCT/US2006/027525

- (22) International Filing Date: 13 July 2006 (13.07.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

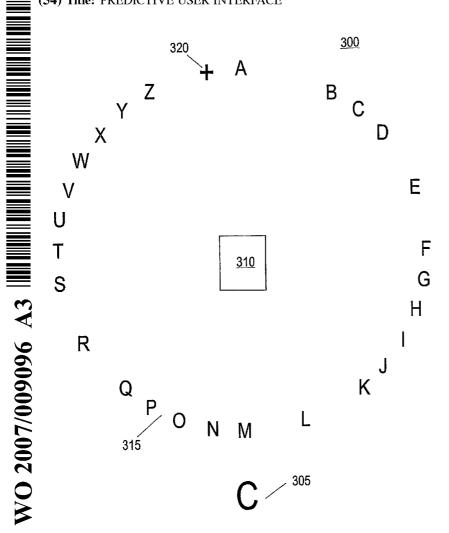
11/181,540 13 July 2005 (13.07.2005)

- (71) Applicant (for all designated States except US): SONY COMPUTER ENTERTAINMENT INC. [JP/JP]; 2-6-21 Minami-Aoyama, Minato-ku, Tokyo 107-0062 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BATES, John, P. [US/US]; 919 East Hillsdale Boulevard, 2nd Floor, Foster City, California 94404 (US). WHITE, Payton, R. [US/US]; 919 East Hillsdale Boulevard, 2nd Floor, Foster City, California 94404 (US). TAKEDA, Yutaka [JP/US];

- 919 East Hillsdale Boulevard, 2nd Floor, Foster City, California 94404 (US).
- (74) Agents: HOLLANDER, Jonathan, M. et al.; Two Embarcadero Center, 8th Floor, San Francisco, California 94111 (US).
- (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, 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, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, 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,

[Continued on next page]

(54) Title: PREDICTIVE USER INTERFACE



(57) Abstract: A user interface enables the input of text and other complicated inputs by identifying entities having an increased likelihood of being selected and decreasing the precision needed to select these entities. The user interface displays a set of entities in a radial pattern. The user manipulates a pointer with a joystick or other input device to select entities. The entities having a higher selection probabilities are allocated more space in the pattern than the other entities. The entities having a higher selection probabilities may also be emphasized with visual cues. Selection probabilities may be determined by comparing a sequence of entities previously selected, such as a partially input word, with a set of commonly selected sequences of entities, such as a set of words commonly used by users. The user interface can display a list of words corresponding with a sequence of selected entities, including characters from different writing systems.

### WO 2007/009096 A3

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).

#### **Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv))

#### **Published:**

with international search report

(88) Date of publication of the international search report:

16 April 2009

#### INTERNATIONAL SEARCH REPORT

International application No. PCT/US 06/27525

A. CLASSIFICATION OF SUBJECT MATTER IPC (8): G06F 17/30 (2007.01)			
USPC: 707/5 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: 707/5			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
USPC: 705/2,10,26			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
Pub WEST (USPT, PGPB, JPAB, EPAB), Google Patents Search Terms Used: interface, input, text, pointer, input adj device, input adj device or joystick, color, character, dictionary, selection adj probabli\$, interface.ti, pointer, select, priority, visual adj cue.			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
	US 5,963,671 A (COMERFORD et al.) 05 October 199 fig 2 and 6; col 1, ln 32-40; col 1, ln 56-59; col 2, ln 2-6 1-12; col 6, ln 61-64; col 11, ln 25-39; col 13, ln 1-6.		1-28
Α	US 6,573,844 B1 (VENOLIA et al.) 03 June 2003 (03.06.2003) entire documnet		1-28
A	US 5,128,672 A (KAEHLER) 07 July 1992 (07.07.1992) entire document		1-28
Further documents are listed in the continuation of Box C.			
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "I" 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 ap filing da	" earlier application or patent but published on or after the international "X" document of particular relevance; the filing date considered novel or cannot be considered.		claimed invention cannot be red to involve an inventive
cited to			
"O" document referring to an oral disclosure, use, exhibition or other means combined being		combined with one or more other such d being obvious to a person skilled in the	ocuments, such combination art
the priority date claimed		a document memori of the same patent	
Date of the actual completion of the international search  02 August 2007 (02.08.2007)		31 JAN 2008	
Name and ma	ailing address of the ISA/US	Authorized officer:	
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450		Lee W. Young	
PCI		PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	