## (19) World Intellectual Property Organization

International Bureau



# 

### (43) International Publication Date 11 January 2007 (11.01.2007)

### (10) International Publication Number WO 2007/004125 A3

(51) International Patent Classification: G06F 3/01 (2006.01)

(21) International Application Number:

PCT/IB2006/052120

(22) International Filing Date: 27 June 2006 (27.06.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0513637.9 2 July 2005 (02.07.2005) GB

(71) Applicant and

(72) Inventor: BUTCHER, Raymond [GB/GB]; 36 Bells Hill, Barnet Hertfordshire EN5 2RY (GB).

(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, 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

(88) Date of publication of the international search report: 9 August 2007

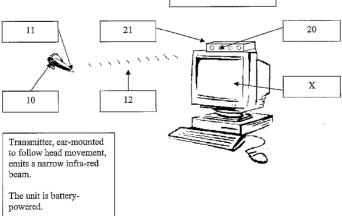
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR PREVENTING VISUAL IMPAIRMENT

#### TRANSMITTER & RECEIVER

Receiver preferably sits on top of the monitor (VDU or screen). LEDs indicate if the user:

- Is working
- Is resting



(Apparatus 1)

Should rest soon Should rest now The unit is battery powered.

(57) Abstract: a) a component for fitment to the head of the user - said head component having a transmitter to transmit a signal in the direction in which the user is looking, and b) a receiver component adapted to be placed adjacent to the user's computer screen - said receiver component receiving signals from the head component only when the user is looking at the screen, and said receiver component generating a warning signal when the user has been looking at the screen for more than a predetermined period of time. The apparatus of the invention may have applications for preventing visual impairment in other situations e.g. people who need to read for long periods of time, children playing computer games (where a game could be programmed to suspend or save for later resumption), or simply watching TV, etc.

### INTERNATIONAL SEARCH REPORT

International application No PCT/IB2006/052120

A. CLASSIFICATION OF SUBJECT MATTER INV. G06F3/01					
<u> </u>	o International Patent Classification (IPC) or to both national classification	ation and IPC			
	SEARCHED ocumentation searched (classification system followed by classification)	on symbols)			
G06F	rounternation scaroned (decomposition of statement by statements)	,			
Documental	tion searched other than minimum documentation to the extent that s	uch documents are included in the fields se	parched		
Electronic d	ata base consulted during the international search (name of data base	se and, where practical, search terms used	)		
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.		
Υ	GB 2 349 320 A (SU CHEN CHANG [TW 25 October 2000 (2000-10-25)	1])	1-29		
,	figures 1,2				
Y	US 2004/237002 A1 (SESSA VALENTIN AL) 25 November 2004 (2004-11-25) figures 1,3	NA [IT] ET	1–29		
Y	DE 41 14 926 C1 (FLANZ, MICHAEL, MAINZ, DE; MATHEIS, BERNHARD, 650	6500 )1	1–29		
:	HEIDESHEIM, DE) 17 September 1992 (1992-09-17) figure 1				
А	US 4 894 777 A (NEGISHI HIROKAZU AL) 16 January 1990 (1990-01-16) figures 1,8	[GB] ET	1-29		
	-	-/			
X Furti	I her documents are listed in the continuation of Box C.	X See patent family annex.			
* Special of	Special categories of cited documents :  "T" later document published after the international filing date				
consid	* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "A" 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				
filing o	document but published on or after the international tate ent which may throw doubts on priority claim(s) or	"X" document of particular relevance; the cannot be considered novel or cannot	be considered to		
which	cument is taken alone laimed invention				
citation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  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					
other means  "P" document published prior to the international filing date but later than the priority date claimed  ments, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family					
Date of the	Date of the actual completion of the international search  Date of mailing of the international search report				
23 April 2007 02/05/2007					
Name and mailing address of the ISA/  European Patent Office, P.B. 5818 Patentiaan 2					
	NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Kirsten, Karl			

### INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2006/052120

C(Continual	ion). DOCUMENTS CONSIDERED TO BE RELEVANT	PC1/1B2006/052120
		·
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 142 910 A (HEUVELMAN JOHN A [US]) 7 November 2000 (2000-11-07) figure 2	1–29
A	US 6 270 467 B1 (YEE RICHARD W [US]) 7 August 2001 (2001-08-07) figure 4	1-29
j		
	(continuation of second sheet) (April 2005)	

### INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IB2006/052120

Patent document cited in search report			Publication date		Patent family member(s)	Publication date
GB	2349320	A	25-10-2000	NONE		
US	2004237002	A1	25-11-2004	NONE		
DE	4114926	C1	17-09-1992	NONE		
US	4894777	A	16-01-1990	DE JP	3724833 A1 63032624 A	18-02-1988 12-02-1988
บร	6142910	А	07-11-2000	NONE		
US	6270467	B1	07-08-2001	AU CA EP WO US	3557599 A 2368678 A1 1094768 A2 9952479 A2 6210000 B1	01-11-1999 21-10-1999 02-05-2001 21-10-1999 03-04-2001