

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 November 2004 (25.11.2004)

PCT

(10) International Publication Number
WO 2004/102364 A3

(51) International Patent Classification⁷: **G06F 1/16**, 1/32

(21) International Application Number:
PCT/US2004/008953

(22) International Filing Date: 24 March 2004 (24.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/437,757 13 May 2003 (13.05.2003) US

(71) Applicant: **INTEL CORPORATION** [US/US]; 2200
Mission College Boulevard, Santa Clara, CA 95052 (US).

(72) Inventor: **CLAPPER, Edward**; 101 East Riviera Drive,
Tempe, AZ 85282 (US).

(74) Agents: **MALLIE, Michael, J.** et al.; Blakely Sokoloff
Taylor & Zafman, 7th Floor, 12400 Wilshire Boulevard,
Los Angeles, CA 90025 (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, 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, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

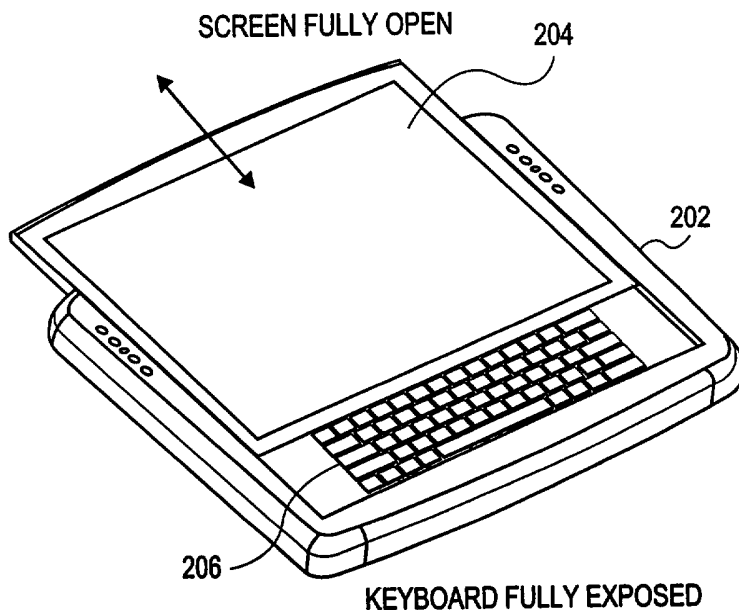
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, 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:
10 February 2005

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

(54) Title: SLIDING SCREEN EMERGING KEYBOARD



(57) Abstract: A mobile computing apparatus (202) that includes a sliding screen (204) and a keyboard (206) that moves from a storage position to a typing position in response to the screen being moved from a closed position to an open position.

WO 2004/102364 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/008953

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F1/16 G06F1/32

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/030971 A1 (DUARTE MATIAS G) 13 February 2003 (2003-02-13) paragraph '0006! paragraph '0016! - paragraph '0020! figures 1-3	1-17
X	US 2001/048589 A1 (KAY ROBERT L ET AL) 6 December 2001 (2001-12-06) paragraph '0023! - paragraph '0024! paragraph '0064! paragraph '0068! - paragraph '0072! figures 1-3	1-17
X	US 5 812 116 A (MALHI SATWINDER D S) 22 September 1998 (1998-09-22) column 1, line 55 - line 63 column 4, line 61 - column 5, line 37 figures 6-9	1-17
	----- -/--	

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document but published on or after the international filing date</p> <p>*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)</p> <p>*O* document referring to an oral disclosure, use, exhibition or other means</p> <p>*P* document published prior to the international filing date but later than the priority date claimed</p>	<p>*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</p> <p>*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</p> <p>*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.</p> <p>*Z* document member of the same patent family</p>
--	--

Date of the actual completion of the international search 10 November 2004	Date of mailing of the international search report 17/11/2004
---	--

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 Butler, M
--	-------------------------------------

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/008953

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 735 466 A (WOLTERS RICHARD H ET AL) 5 April 1988 (1988-04-05)</p> <p>column 2, line 22 - line 64 column 3, line 28 - column 4, line 51 figures 1-4</p> <p style="text-align: center;">-----</p>	<p>4-6, 11-13, 15,16</p>
A	<p>WO 01/84728 A (KWON YONG SOON) 8 November 2001 (2001-11-08)</p> <p>page 3, line 25 - page 4, line 6 page 6, line 20 - line 26 page 9, line 6 - page 10, line 9 page 15, line 1 - line 10 figures 2-4,8-11</p> <p style="text-align: center;">-----</p>	<p>1-17</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

National Application No PC 2/US2004/008953

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
US 2003030971	A1	13-02-2003	WO 03014897 A2 US 2004062000 A1	20-02-2003 01-04-2004
US 2001048589	A1	06-12-2001	AU 5316101 A WO 0176120 A2 US 2004174666 A1 US 2003063072 A1	15-10-2001 11-10-2001 09-09-2004 03-04-2003
US 5812116	A	22-09-1998	NONE	
US 4735466	A	05-04-1988	NONE	
WO 0184728	A	08-11-2001	KR 2000064177 A AU 5507701 A CN 1436406 T EP 1279236 A1 JP 2003533089 T WO 0184728 A1 US 2004203513 A1	06-11-2000 12-11-2001 13-08-2003 29-01-2003 05-11-2003 08-11-2001 14-10-2004