

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 January 2008 (10.01.2008)

PCT

(10) International Publication Number
WO 2008/004101 A3

- (51) International Patent Classification:
G06F 3/042 (2006.01)
- (21) International Application Number:
PCT/IB2007/001891
- (22) International Filing Date: 6 July 2007 (06.07.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/480,865 6 July 2006 (06.07.2006) US
- (71) Applicant (for all designated States except US): **TAKTIO APS** [DK/DK]; Runebergs Alle 49, 2860 Soeborg, Denmark (DK).

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, 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.

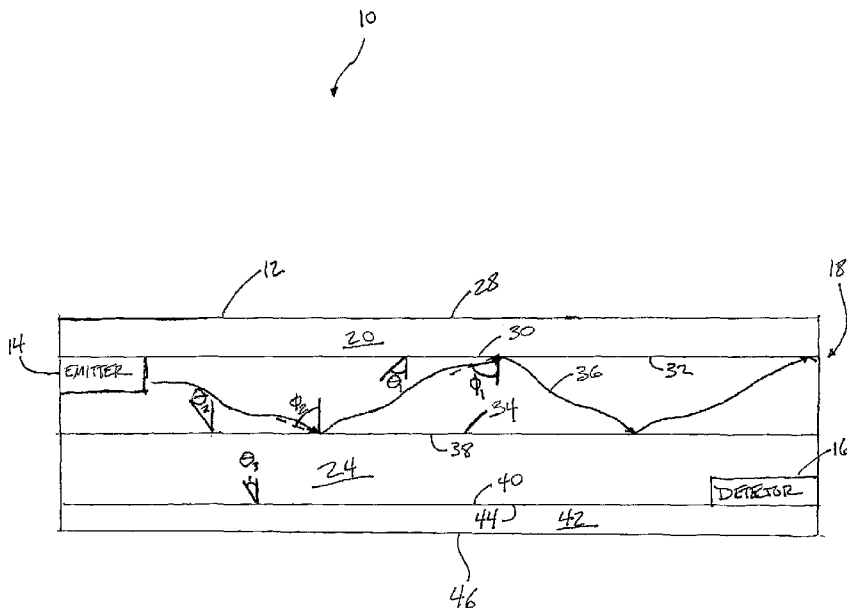
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT,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

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

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **OSTERGAARD, Jens, Wagenblast, Stubbe** [DK/DK]; Roglebakken 12, 4320 Lejre (DK).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

(88) Date of publication of the international search report:
26 June 2008

(54) Title: OPTICAL TOUCHPAD SYSTEM AND WAVEGUIDE FOR USE THEREIN



(57) Abstract: An optical touchpad system is disclosed that may be easily integrated into a variety of applications. One feature of the optical touchpad system that may contribute to this versatility may be the ability of the optical touchpad system to function in the same manner independent from a topology and/or opacity of an interface surface of the optical touchpad system. This may enable the interface surface to be composed of any of a variety of materials. This may further enable the interface surface to include various topologies adapted for the application in which the optical touchpad system may be employed.

WO 2008/004101 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2007/001891

A. CLASSIFICATION OF SUBJECT MATTER INV. G06F3/042		
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) 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		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2005/029172 A (KONINKL PHILIPS ELECTRONICS NV [NL]; VAN DELDEN MARTINUS H W M [NL]; C) 31 March 2005 (2005-03-31) page 6, line 22 - page 7, line 32; figures 2,3	1-23
A	US 2005/212774 A1 (HO CHI MUN [MY] ET AL) 29 September 2005 (2005-09-29) paragraphs [0021], [0022]; figure 3	1,3-7, 13-18
A	US 4 542 375 A (ALLES HAROLD G [US] ET AL) 17 September 1985 (1985-09-17) the whole document	
A	GB 2 409 515 A (NOKIA CORP [FI]) 29 June 2005 (2005-06-29) the whole document	8-12, 19-23
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *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) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		*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 *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 *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. *&* document member of the same patent family
Date of the actual completion of the international search 30 April 2008		Date of mailing of the international search report 08/05/2008
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 Mouton, Benjamin

INTERNATIONAL SEARCH REPORT

 International application No
 PCT/IB2007/001891

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2005029172	A	31-03-2005	CN 1853160 A	25-10-2006
			JP 2007506175 T	15-03-2007
			KR 20060135610 A	29-12-2006
			US 2006279558 A1	14-12-2006

US 2005212774	A1	29-09-2005	NONE	

US 4542375	A	17-09-1985	AU 555222 B2	18-09-1986
			AU 1113183 A	18-08-1983
			BE 895871 A1	30-05-1983
			CA 1196987 A1	19-11-1985
			CH 661360 A5	15-07-1987
			DE 3304378 A1	11-08-1983
			FR 2521330 A1	12-08-1983
			GB 2116007 A	14-09-1983
			HK 80386 A	31-10-1986
			IT 1170105 B	03-06-1987
			JP 1699083 C	28-09-1992
			JP 3063766 B	02-10-1991
			JP 58146928 A	01-09-1983
			NL 8300462 A	01-09-1983
SE 446233 B	18-08-1986			
SE 8300514 A	12-08-1983			

GB 2409515	A	29-06-2005	CN 1898635 A	17-01-2007
			EP 1697825 A1	06-09-2006
			WO 2005066754 A1	21-07-2005
			KR 20060103532 A	02-10-2006
			US 2007147731 A1	28-06-2007
