#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization

International Bureau





(10) International Publication Number WO 2012/106216 A3

## (43) International Publication Date 9 August 2012 (09.08.2012)

- (51) International Patent Classification: *G06F 1/18* (2006.01) *G06F 1/16* (2006.01)
- (21) International Application Number:

PCT/US2012/023026

(22) International Filing Date:

27 January 2012 (27.01.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/437,779	31 January 2011 (31.01.2011)	US
13/018,239	31 January 2011 (31.01.2011)	US
13/018,174	31 January 2011 (31.01.2011)	US
13/018,184	31 January 2011 (31.01.2011)	US
13/018,153	31 January 2011 (31.01.2011)	US
13/018,242	31 January 2011 (31.01.2011)	US
13/166,735	22 June 2011 (22.06.2011)	US

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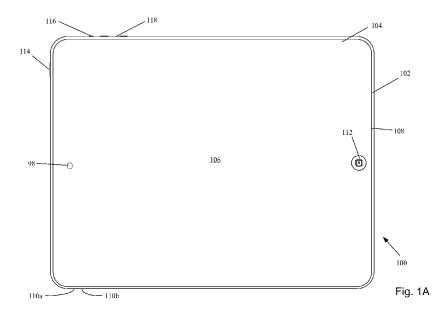
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[Continued on next page]

#### (54) Title: HOUSING FOR AN ELECTRONIC DEVICE



(57) Abstract: A portable computing device is disclosed.



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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, 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 applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

#### Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

8 November 2012

## **INTERNATIONAL SEARCH REPORT**

International application No PCT/US2012/023026

	FICATION OF SUBJECT MATTER G06F1/18 G06F1/16			
According to	o International Patent Classification (IPC) or to both national classific	ation and IPC		
	SEARCHED			
Minimum do G06F	ocumentation searched (classification system followed by classification	on symbols)		
Documentat	tion searched other than minimum documentation to the extent that s	such documents are included in the fields sea	arched	
	ata base consulted during the international search (name of data ba	se and, where practicable, search terms use	ed)	
EPO-In	ternal			
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appropriate, of the rel	evant passages	Relevant to claim No.	
Y	US 2009/257189 A1 (WANG ERIK L [ 15 October 2009 (2009-10-15) paragraph [0057], paragraph [008 paragraph [0093], paragraph [014 figures 3,5,32	3] -	1-7	
Υ	US 2002/085342 A1 (CHEN SHIN-CHE AL) 4 July 2002 (2002-07-04) the whole document	N [TW] ET	1-7	
А	WO 2009/126480 A2 (APPLE INC [US ERICK L [US]; HOBSON PHILLIP M [ KENNET) 15 October 2009 (2009-10 figure 3	US]; JENKS	1-7	
Furth	her documents are listed in the continuation of Box C.	X See patent family annex.		
"A" docume to be o "E" earlier a filing d cited to specia "O" docume means "P" docume the price	ent which may throw doubts on priority claim(s) or which is o establish the publication date of another citation or other al reason (as specified) ent referring to an oral disclosure, use, exhibition or other	"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 mailing of the international search report		
5	July 2012	14/09/2012		
Name and n	nailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Alonso Nogueiro,	М	

International application No. PCT/US2012/023026

## **INTERNATIONAL SEARCH REPORT**

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1-7
The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.  No protest accompanied the payment of additional search fees.

## **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No
PCT/US2012/023026

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2009257189	A1	15-10-2009	NONE		•
US 2002085342	A1	04-07-2002	NONE		
WO 2009126480	A2	15-10-2009	CN EP US US WO	102047645 A 2263367 A2 2009257207 A1 2011188225 A1 2009126480 A2	04-05-2011 22-12-2010 15-10-2009 04-08-2011 15-10-2009

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

## 1. claims: 1-7

The invention is directed to a housing for an electronic device comprising a first piece having a bottom coupled to four adjoining sidewalls and brackets mounted to and extending around each corner of the sidewalls, wherein the brackets are configured to reduce impact damage to the electronic device.

## 2. claims: 8-21

The invention is directed to an electronic device comprising a housing and an antenna system, the antenna system comprising an antenna, an adhesive layer and a compressible foam layer.

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## 3. claim: 22

The invention is directed to an apparatus for shaping an exterior surface of a metal alloy casing of a portable electronic device, the apparatus comprising a cutting tool having three surfaces and a computer numerically controlled positioning assembly configured to rotate the cutting tool at a constant rotational velocity, wherein the at least three cutting surfaces of the cutting tool include a first flat cutting surface, a curved convex shaped cutting surface and a second flat cutting surface, wherein the predetermined continuous path includes a continuous spiral path.

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## 4. claims: 23-30

The invention is directed to an apparatus for shaping an exterior surface of a metal alloy casing of a portable electronic device, the apparatus comprising a bell shaped cutting tool having a plurality of cutting surfaces and a computer numerically controlled positioning assembly configured to rotate the bell shaped cutting tool at a constant rotational velocity, wherein adjacent cutting surfaces of the cutting tool shape adjacent regions on the exterior surface of the metal alloy casing.

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## 5. claims: 31-40

The invention is directed to a method for machining an edge surface and a bottom surface of a metal alloy casing of a portable electronic device, the method comprising adjusting the pitch of vertical movement of the cutting tool.

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# FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

6. claims: 41-55

The invention relates to a flat object ejector comprising a tray with a receiving area, a tray contact area and an arm mechanically attached to a pivot, wherein the arm receives a force acting at the arm and further wherein the force acting at the arm input position causes a lever action to drive an ejection end of the arm with the ejection force.

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7. claims: 56-62

The invention is directed to an apparatus in a portable electronic device, the apparatus comprising a first pivot element, a second pivot element and a foam element positioned adjacent to the second pivot element arranged to rotate the second pivot element back to a neutral position.

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