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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 June 2009 (04.06.2009)

PCT

(10) International Publication Number
WO 2009/070025 A3

(51) International Patent Classification:
G06F 1/16 (2006.01)

(21) International Application Number:
PCT/NL2008/050760

(22) International Filing Date:
28 November 2008 (28.11.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/991,174 29 November 2007 (29.11.2007) US

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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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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 (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:
24 September 2009

(54) Title: AN ELECTRONIC APPARATUS COMPRISING COLLAPSIBLE DISPLAY WITH NON-DEFORMABLE ACTIVE AREAS

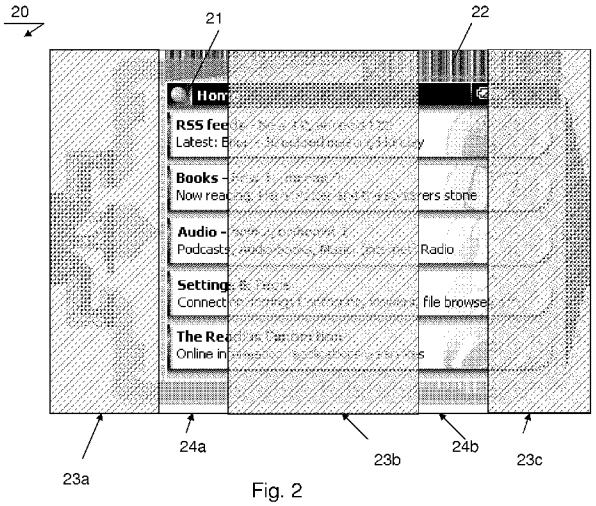


Fig. 2

(57) Abstract: The invention relates to an electronic apparatus comprising a collapsible electronic display (20) having an active region (21) conceived to be extendable and comprising a substantially deformable area (24a, 24b) and a substantially non- deformable area in use; and electronic components for enabling electrical connectivity for the electronic display, wherein the electronic components are arranged on the substantially non- deformable area (23a, 23b, 23c) outside the active region (21).

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INTERNATIONAL SEARCH REPORT

International application No
PCT/NL2008/050760

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F1/16

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 G02F H05K

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	JP 11 272205 A (TOKYO SHIBAURA ELECTRIC CO) 8 October 1999 (1999-10-08) abstract	1-3,6
Y		11
X	WO 03/067564 A (SILVERBROOK RES PTY LTD [AU]; SILVERBROOK KIA [AU]) 14 August 2003 (2003-08-14) page 2, line 1 - page 4, line 30; figures 1-7	1-3,6
Y		11
X	WO 2004/047059 A (KONINKL PHILIPS ELECTRONICS NV [NL]; SLIKKERVEER PETER J [NL]; VAN REN) 3 June 2004 (2004-06-03)	1-3,6
Y	page 2, line 20 - page 5, line 23; figures 1-6	11

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[X] Further documents are listed in the continuation of Box C.

[X] 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	Date of mailing of the international search report
7 August 2009	18/08/2009

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Vertua, Arturo

Form PCT/ISA/210 (second sheet) (April 2005)

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/119071 A1 (TAKAHARA KENICHI [JP]) 24 June 2004 (2004-06-24)	11
A	paragraph [0023] - paragraph [0183]; figures 1-9	6
Y	US 2003/132443 A1 (KIM DONG-GYU [KR]) 17 July 2003 (2003-07-17)	11
A	paragraph [0013] - paragraph [0117]; figures 1-27c	6
Y	WO 89/05034 A (MAGELLAN CORP AUSTRALIA [AU]) 1 June 1989 (1989-06-01) page 6, line 27 - line 35; figures 1,2	11
Y	GB 2 332 294 A9 (SHARP KK [JP]) 16 June 1999 (1999-06-16) page 7, line 16 - page 14, line 24; figures 1-20	11
A	WO 2004/088490 A (KONINKL PHILIPS ELECTRONICS NV [NL]; HUITEMA HJALMAR E A [NL]; CANTATO) 14 October 2004 (2004-10-14) the whole document	1-3

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 5

Claim 5 is unclear (Art. 6 PCT). The claim refers to an "interconnecting layer" which is not previously claimed. Moreover it is not clear which display configuration results from the feature "arranged on the electronic display".

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2008/050760

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.: 5
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:

see FURTHER INFORMATION sheet PCT/ISA/210

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

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable 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 reportcovers only those claims for which fees were paid, specifically claims Nos.:

1-3,6,11

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.:

Remark on Protest

☐ 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-3

   Electronic device wherein the interconnecting element is arranged underneath the electronic display.

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2. claim: 4

   Electronic device wherein the interconnecting element comprises a harness structure arranged on the backplane of the electronic display.

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3. claims: 6,11

   Electronic device wherein the interconnecting element comprises an interconnecting layer patterned on a substrate of the electronic display.

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4. claims: 7,8

   Electronic device wherein the flexible display is arranged on a member having substantially flat surfaces for supporting the substantially non-deformable area of the electronic display.

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5. claims: 9,10

   Electronic device wherein the electronic components are flexible or drivers

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NL2008/050760

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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