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— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: COMPUTER CARTRIDGE

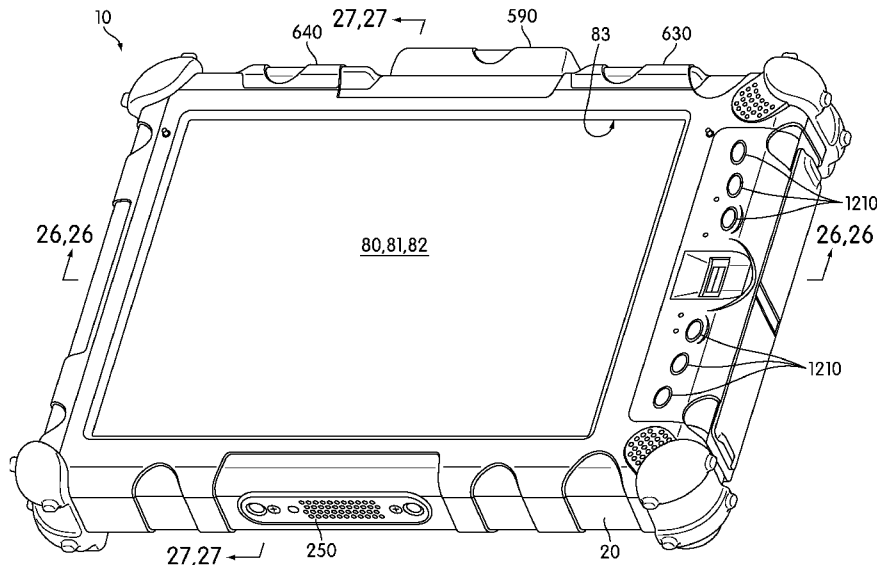


FIG. 1

(57) Abstract: A computer includes various features that improve its functionality and/or ease of use. A modular electronics cartridge that includes a piston seal and opposed-direction latches removably engages a cartridge bay of the computer. A high intensity touch-screen display and a high power processor are disposed in a sealed compartment of the computer, and a remote heat exchanger is used to cool the sealed compartment. An interface converter/adaptor converts a standard mini-PCI Express slot into a specialized mini-PCI Express slot with voice capabilities. SIM and microSD card slots mount to a pivoting door on the computer such that opening the door provides easier access to the card slots.



— *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))*

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
 INV. G06F1/16 G06F1/18 G06F1/20 G06K13/08
 ADD.
 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 G06K H01R
 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 practicable, search terms used)
 EPO-Internal

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 539 193 A (GIBBS WILLIAM T [US] ET AL) 23 July 1996 (1996-07-23) abstract column 1, line 44 - line 48 column 2, line 55 - column 3, line 40 column 6, line 35 - line 67; figures 11, 12	1-18
X	----- US 6 099 355 A (JOHNSON WILLIAM A [US] ET AL) 8 August 2000 (2000-08-08) the whole document ----- -/--	1-18

Further documents are listed in the continuation of Box C.

See patent family 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 application or patent 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>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 7 May 2012	Date of mailing of the international search report 11/05/2012
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Name and mailing 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 Vieira, Alexandre
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/056830

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 656 600 A2 (FUJITSU LTD [JP]) 7 June 1995 (1995-06-07) abstract column 3, line 40 - column 5, line 29 column 12, line 34 - column 13, line 10; figures 6-8 column 18, line 8 - column 20, line 2; figures 16-19 -----	19-23
X	EP 0 349 210 A2 (TOPCON CORP [JP]) 3 January 1990 (1990-01-03) the whole document -----	50-61
X	EP 0 843 273 A2 (OLYMPUS OPTICAL CO [JP]) 20 May 1998 (1998-05-20) the whole document -----	50-61
X	"AirPort Extreme Card Replacement Instructions", 1 January 2003 (2003-01-01), pages 1-8, XP55024596, Retrieved from the Internet: URL: http://manuals.info.apple.com/en_US/pb_g4-12in-apc.pdf [retrieved on 2012-04-16] the whole document -----	24-31
X	US 2008/080128 A1 (CHIKAZAWA NAGAHISA [JP] ET AL) 3 April 2008 (2008-04-03) abstract paragraph [0055] - paragraph [0056]; figures 1,2 paragraph [0063]; figures 1,4 paragraph [0103] - paragraph [0116]; figures 4,12,20-26 -----	32-43
X	EP 1 217 598 A2 (VISTEON GLOBAL TECH INC [US]) 26 June 2002 (2002-06-26) abstract paragraph [0023]; figures 1,2 paragraph [0028]; figures 1,2 paragraph [0037]; table 1 -----	44-49
X	US 2004/004680 A1 (KIM CHONG-DU [KR]) 8 January 2004 (2004-01-08) the whole document -----	62-76

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/056830

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

1. 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.:

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: 1-18

Weather proofing of removable cartridges

2. claims: 19-23, 50-61

Electronic interface connectors

3. claims: 24-31

Mounting of peripherals in a computer case

4. claims: 32-43

Cooling of computers

5. claims: 44-49

Properties of the display of a tablet computer

6. claims: 62-76

Weather-proofing of portable computer displays

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2011/056830

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5539193	A	23-07-1996	NONE

US 6099355	A	08-08-2000	US 6099355 A 08-08-2000
			US 6244903 B1 12-06-2001

EP 0656600	A2	07-06-1995	DE 69432723 D1 26-06-2003
			DE 69432766 D1 03-07-2003
			DE 69432767 D1 03-07-2003
			DE 69432768 D1 03-07-2003
			EP 0656600 A2 07-06-1995

EP 0349210	A2	03-01-1990	DE 68905390 D1 22-04-1993
			DE 68905390 T2 24-06-1993
			EP 0349210 A2 03-01-1990
			JP 2014393 A 18-01-1990
			JP 2628346 B2 09-07-1997
			US 4986618 A 22-01-1991

EP 0843273	A2	20-05-1998	EP 0843273 A2 20-05-1998
			US 5980294 A 09-11-1999

US 2008080128	A1	03-04-2008	JP 4669460 B2 13-04-2011
			JP 2008084217 A 10-04-2008
			US 2008080128 A1 03-04-2008

EP 1217598	A2	26-06-2002	EP 1217598 A2 26-06-2002
			US 2002118182 A1 29-08-2002

US 2004004680	A1	08-01-2004	CN 1467544 A 14-01-2004
			JP 2004046835 A 12-02-2004
			KR 20040003375 A 13-01-2004
			US 2004004680 A1 08-01-2004
