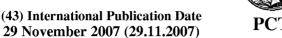
(19) World Intellectual Property Organization

International Bureau





(10) International Publication Number WO 2007/137019 A3

(51) International Patent Classification: *G06F 1/20* (2006.01)

(21) International Application Number:

PCT/US2007/068854

(22) International Filing Date: 14 May 2007 (14.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/800,715 16 May 2006 (16.05.2006) US 11/736,965 18 April 2007 (18.04.2007) US

(71) Applicant (for all designated States except US): HARD-CORE COMPUTER, INC. [US/US]; 5329 54th Avenue NW, Rochester, MN 55901 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ATTLESEY, Chad, Daniel [US/US]; 5329 54th Avenue NW, Rochester, MN 55901 (US). KLUM, R., Daren [US/US]; 1314 W. Royal Oaks Drive, Shoreview, MN 55126 (US). BERN-ING, Allen, James [US/US]; 1439 Bell Oaks Lane SW, Rochester, MN 55902 (US).

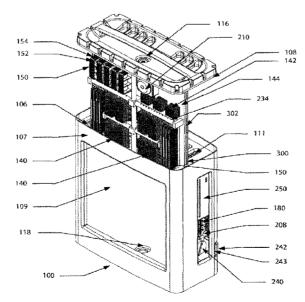
- (74) Agent: LARSON, James, A.; Hamre, Schumann, Mueller & Larson, P.C., P.O. Box 2902, Minneapolis, MN 55402-0902 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, 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, 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

(88) Date of publication of the international search report: 28 February 2008

(54) Title: A CASE FOR A LIQUID SUBMERSION COOLED ELECTRONIC DEVICE



(57) Abstract: A case for a liquid submersion cooled computer includes a plurality of walls defining a liquid-tight interior space. At least a portion of one of the walls is made of a material that permits viewing of objects, for example, a motherboard, within the interior space. A removable lid closes the top of the interior space. The lid forms a liquid-tight seal with the plurality of walls, and the lid includes a sealed electrical connector fixed thereto that is configured to attach to the motherboard disposed in the interior space and to provide electrical connection between the motherboard and an exterior of the case. The case can include a drain valve for draining liquid from the case. Further, the lid can have an opening for introducing liquid into the interior space, and a handle to facilitate lifting of the lid along with the motherboard connected to the lid.





International application No. PCT/US2007/068854

CLASSIFICATION OF SUBJECT MATTER A.

G06F 1/20(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models since 1975 Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKIPASS(KIPO internal), IEEE(http://ieeexplore.ieee.org/), Keyword : direct, immersion and liquid

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A	YOKOUCHI, K. et al. 'Immersion Cooling for High-Density Packaging' In :IEEE Transactions on Components, Hybrids, and Manufacturing Technology, Dec. 1987, vol. 10, No 4, pp. 643-646 See the whole document	1-17
A	SIMONS, R. E. 'The evolution of IBM High Performance Cooling Technology' In: :IEEE Transactions on Components, Packaging, and Manufacturing Technology-Part A, Dec. 1995, vol. 18, No 4, pp. 805-811 See the whole document	1-17
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A	US 2003/0081380 A1 (TSUYOSHI NAKAGAWA et al.) 1 May 2003 See Paragraph[0028]-[0039] & Fig. 1	1-17
A	US 6,972,954 B2 (RINTARO MINAMITANI et al.) 6 December 2005 See Column 4, Line 48 - Column 5, Line 2 & Fig. 1	1-17

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority
"A"	document defining the general state of the art which is not considered		date and not in conflict with the application but cited to understand
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	special reason (as specified)		considered to involve an inventive step when the document is
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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

See patent family annex.

Date of the actual completion of the international search Date of mailing of the international search report 15 NOVEMBER 2007 (15.11.2007) 15 NOVEMBER 2007 (15.11.2007)

Name and mailing address of the ISA/KR

than the priority date claimed



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document published prior to the international filing date but later

Further documents are listed in the continuation of Box C.

Facsimile No. 82-42-472-7140

Authorized officer

YEO, Won Hyeon

Telephone No. 82-42-481-5696



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2007/068854

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