

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/065866 A1

(51) International Patent Classification⁷: **F25D 9/00**

(21) International Application Number:

PCT/KR2003/002282

(22) International Filing Date: 28 October 2003 (28.10.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:

10-2003-0004932 24 January 2003 (24.01.2003) KR

(71) Applicant (for all designated States except US): **ICURIE LAB INC.** [KR/KR]; 5F, Daewon Bldg., 946-18, Daechi-dong, Kangnam-gu, 135-280 Seoul (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHOI, Jae Joon** [KR/KR]; 218-1107 WooSung Apt., 96 Seohyun-dong, Bundang-gu, 463-050 Seongnam-si, Gyeonggi-do (KR). **PARK, Jihwang** [KR/KR]; 201-1305 Hyundai 2cha Apt., 79-4 Yangpyeong-dong-3ga, Yeongdeungpo-gu, 150-789 Seoul (KR). **LEE, Jeong Hyun** [KR/KR]; 475-1 Gwacheon-dong, 427-060 Gwacheon-si, Gyeonggi-do (KR).

(74) Agent: **OH, Byeongseok**; #1003 Shinbong Bldg., 736-6 Yoksam-dong, Gangnam-gu, Seoul 135-924 (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

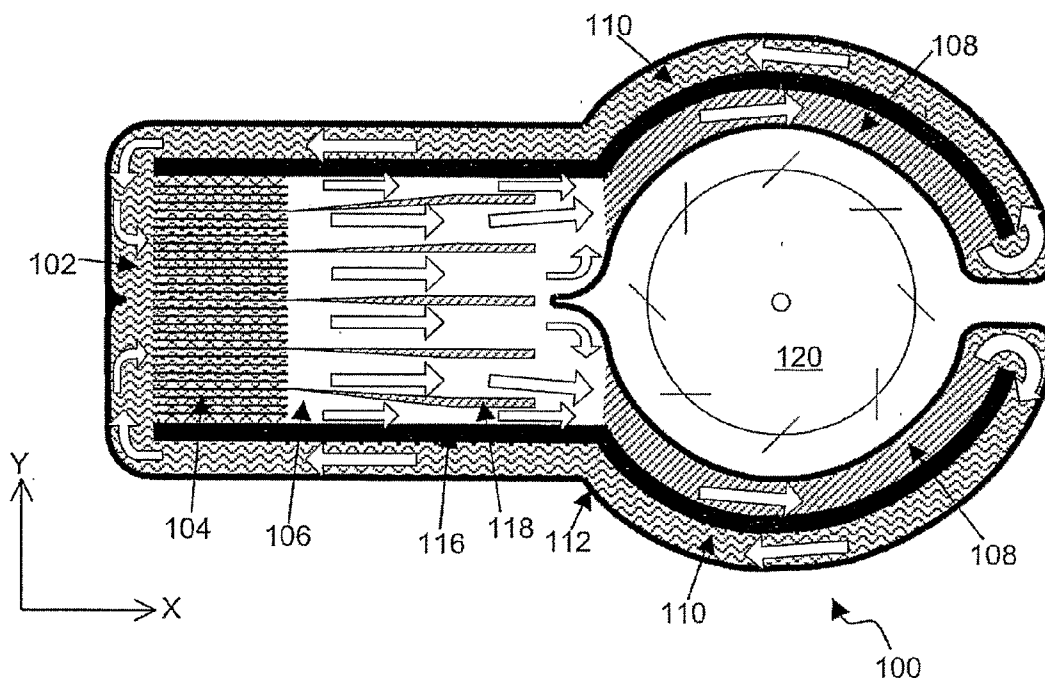
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COOLING DEVICE OF HYBRID-TYPE



(57) Abstract: The present invention provides a hybrid-type cooling device which can perform cooling by phase transition, ventilation and convection.

WO 2004/065866 A1