



(51) International Patent Classification:
F25D 11/00 (2006.01) *F25D 16/00* (2006.01)

(21) International Application Number:
PCT/GB2010/051129

(22) International Filing Date:
9 July 2010 (09.07.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0912286.2 15 July 2009 (15.07.2009) GB
0916160.5 15 September 2009 (15.09.2009) GB

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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, RO, RS, RU, 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.

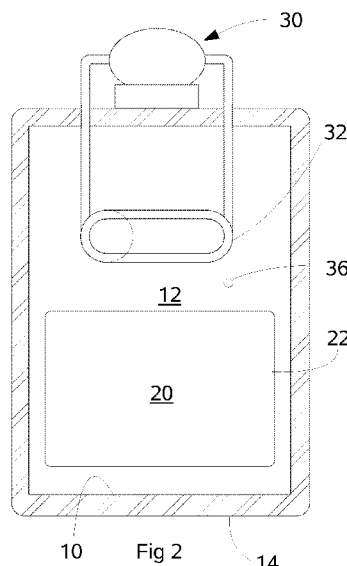
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, 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:
26 May 2011

(54) Title: REFRIGERATION APPARATUS



(57) Abstract: Refrigerators, with particular, but not exclusive, application to the storage and transport of vaccines are disclosed. A refrigerator has a payload container (20) within which items can be placed for temperature-controlled storage. The payload container (20) is submerged in a reservoir (21) that contains water. The reservoir has a cooling region containing the payload container and a headspace containing water that is, in use, higher than the payload container. Cooling means, that might include a refrigeration unit (30) having cooling elements (32) or a cold thermal mass can cool water within the headspace. Where there is a refrigeration unit, a power supply, typically solar powered, can act as a source of power for the refrigeration unit. Embodiments may include a freezer compartment close to the cooling elements (32). Alternatively, the cooling region may comprise a pipe manifold within the payload container.

