

Abstract

Cold Energy Recovery Apparatus for a Self-Powered Data Centre

5 A cold energy recovery apparatus (100) for a self-powered data centre is disclosed. The apparatus comprises a fluid storage tank (102) having at least a pair of inlet and outlet (104a, 104b), the inlet configured to receive a coolant; and a heat exchanger (106) arranged in the tank, the heat exchanger having a pair of inlet and outlet (108a, 108b), the inlet configured to receive liquefied
10 natural gas. The apparatus is operable to permit the coolant to flow from the inlet to the outlet of the tank causing the coolant to be in fluid contact with the heat exchanger, in which the coolant is progressively cooled to a lower temperature by heat transfer to the liquefied natural gas via fluid contact with the heat exchanger. The liquefied natural gas is vaporized into natural gas due to
15 the heat transfer and is directed out from the outlet of the heat exchanger.

FIG. 1a