

ABSTRACT

A device for regasifying liquefied natural gas (LNG) and co-generating cool freshwater and cool dry air, which device comprises at least one hermetic outer recipient (1) containing an intermediate fluid in liquid phase and gaseous phase, said fluid having high latent heat and high capillary properties, traversed by at least one intermediate fluid evaporation tube (3) inside the tube flows moist air whose moisture condenses, at least partly, in a capillary condensation regime on its inner face and on its outer face the liquid phase of the intermediate fluid evaporates, at least partially, in a capillary evaporation regime, and traversed by at least one GNL evaporation tube (2) on which outer face the gaseous phase of the intermediate fluid condenses at least partially, under a capillary condensation regime, and inside the tube, the LNG is heated and changes phase and the regasified natural gas (NG) is heated to a temperature greater than 5°C.