

ABSTRACT

Provided is an electric power generating system which exhibits favorable energy recovery efficiency compared to the prior art and, further, can generate not only cold heat but also warm heat. In an electric power generating system where working fluid is circulated in a system of a pressure resistant closed circuit while changing a state of the working fluid, power is generated by converting external heat energy given to the working fluid into kinetic energy, and electric power is generated by driving an electric power generator by the power, a pressure resistant closed circuit is formed of a main circuit and a sub circuit, the main circuit includes an evaporation chamber, an adiabatic expansion chamber, a power generating part, a warming-use heat exchange mechanism, and a liquefied working fluid return means, and the sub circuit includes a heating medium divided flow path, a liquefied auxiliary fluid supply path, a cooling equipment, a second-fluid-to-be-warmed supply path, a warming equipment, and a return flow compression means.