receive the primary cooling medium in the gas phase from the evaporator, transfer heat from the primary cooling medium unit to change the primary cooling medium from a gas to a liquid, and supply the primary cooling medium in the liquid phase to the evaporator.

[0008a] In another aspect, the invention relates to a cooling system comprising a plurality of airstream cooling assemblies of the above aspect.

[0009] In another aspect, the invention relates to an airstream cooling assembly that includes an evaporator, a heat exchanger, and a passive condenser. The evaporator has an outer surface and contains a primary cooling medium. The evaporator is configured to have a first airstream directed over the outer surface thereof and, when the first airstream is directed over the outer surface, to change the phase of the primary cooling medium from liquid to gas. The heat exchanger is fluidly coupled to the evaporator and configured to accept a secondary cooling medium. When the heat exchanger is accepting the secondary cooling medium, the heat exchanger is configured to receive the primary cooling medium in the gas phase from the evaporator, transfer heat from the primary cooling medium, and change the phase of the primary cooling medium from gas to liquid. The passive condenser has an outer surface and is fluidly coupled to the evaporator. The passive condenser is configured to have a second airstream directed over the outer surface thereof. When the heat exchanger is not accepting the secondary cooling medium, the passive condenser is configured to receive the primary cooling medium in the gas phase from the evaporator, transfer heat from the primary cooling medium, and change the phase of the primary cooling medium from gas to liquid. The evaporator is configured to receive the primary cooling medium in the liquid phase from either the heat exchanger or the passive condenser.

[0010] In a further aspect, the invention relates to an airstream cooling assembly includes an evaporator, a passive condenser, and a heat exchanger. The evaporator has an outer

surface and contains a primary cooling medium. The evaporator is configured to have an airstream directed over the outer surface thereof and, when the airstream is directed over the