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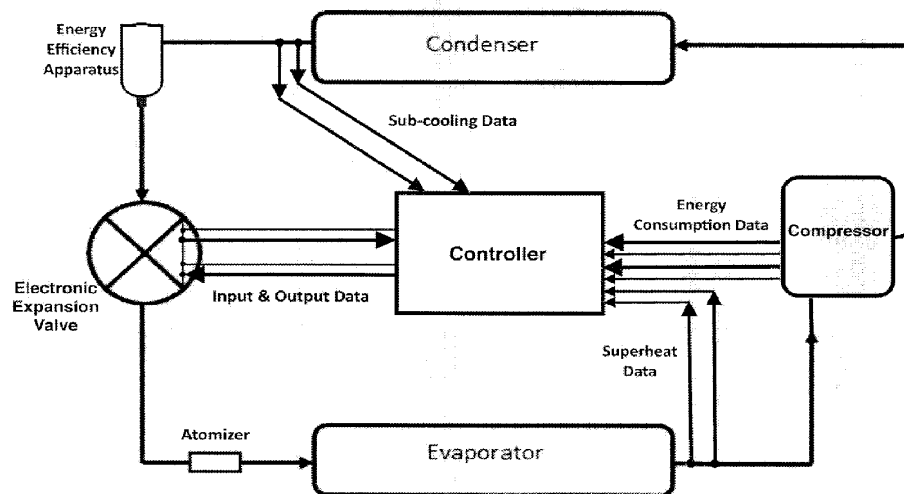


Fig. 1

(57) Abstract: A method of improving the efficiency of the heat exchange system using variable superheat and sub cooling values for a wide range of ambient conditions is provided. The heat exchange system comprises an efficiency enhancing apparatus positioned between the condenser and evaporator. Data analytics software module and artificial intelligence techniques are used to obtain optimum system parameters for achieving maximum efficiency.

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