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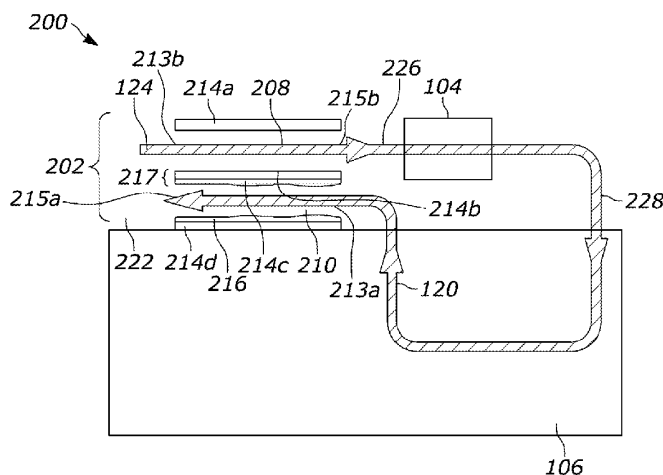


FIG. 2

(57) Abstract: The present disclosure relates to a system and method of controlling the temperature and humidity of a conditioned space. The method and system are based on the two-phase pre-cooling of an airflow prior to dehumidification, wherein the airflow passes through a heat exchanger which initially cools and dehumidifies the air before it enters the dehumidifier for additional dehumidification.

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