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(54) Title: DIRECT EVAPORATIVE COOLING SYSTEM FOR DATA CENTER WITH FAN AND WATER OPTIMIZATION

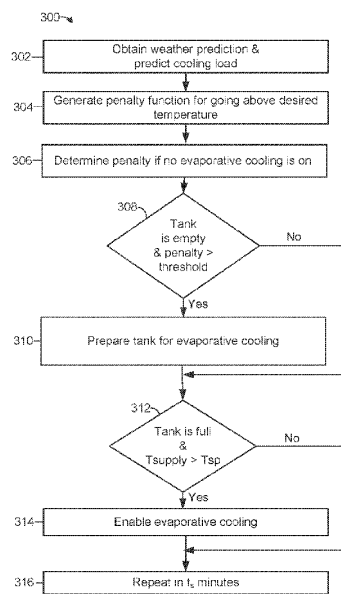


FIG. 3

(57) Abstract: A method of controlling a direct evaporative cooling unit includes predicting water consumption and energy consumption of the direct evaporative cooling unit based on possible supply air temperatures of the direct evaporative cooling unit, selecting a target supply air temperature based on an optimization of an objective function, the objective function comprising the water consumption and energy consumption, and controlling the direct evaporative cooling unit in accordance with the target supply air temperature.

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