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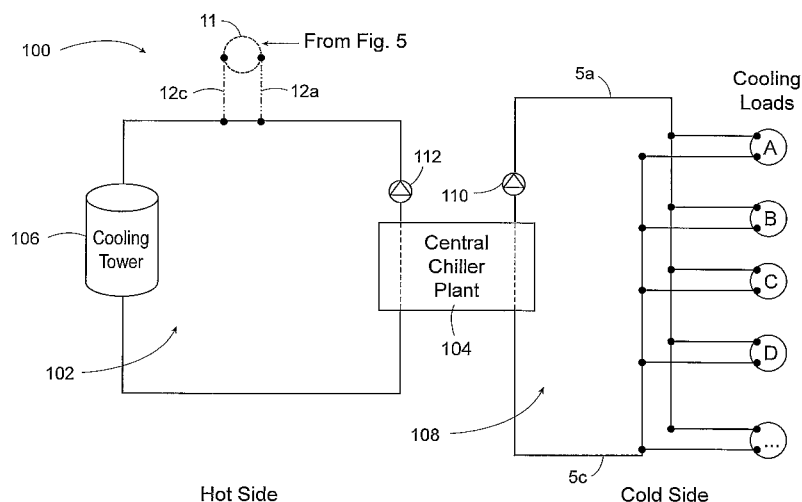
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(54) **Title:** DESICCANT DEHUMIDIFICATION SYSTEM WITH CHILLER BOOST

FIG. 1



(57) **Abstract:** A hybrid dehumidification system for controlling the humidity and/or both humidity and temperature in a space includes a cooling coil for first cooling, or cooling and reducing the humidity of, an airstream to be supplied to the space with an aqueous cooling medium, passing the thus cooled airstream through a desiccant adsorption means to further reduce the humidity of the airstream before supplying the airstream to the space, and regenerating the desiccant adsorption means by heating the desiccant with waste heat from a heat pump used to further cool the first aqueous cooling medium.