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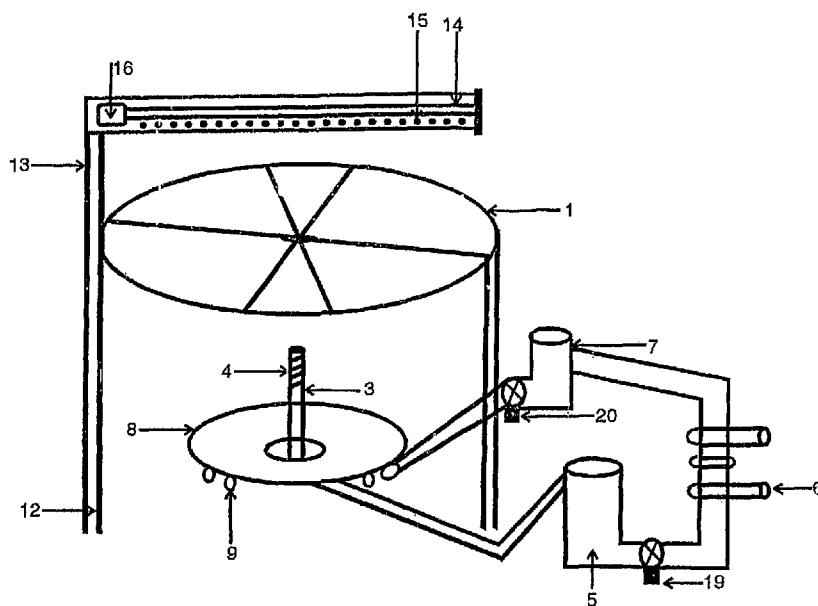
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[Continued on next page]

(54) Title: A LARGE LENS SOLAR ENERGY CONCENTRATOR



(57) Abstract: This invention uses small lens segments (2) assembled on appropriate supports and pillars (12) forming a single large lens (1), focusing solar rays to a circular parabolic mirror (8) that reflects to a heating coil (4) with oil on a central tower (3). High boiling oil stored in a cool tank (7) is pumped to the parabolic mirror coil (4) then goes to insulated hot tank (5) by insulated tubes and feeds the secondary exchanger (6) for steam, air heating, air-cooling, desalination etc in the same device. Cooled oil goes to cool oil tank (7) for circulation. Electronic controls (19) senses and monitors the system temperature, working and cleaning. A top arm (13) with a dust blowing air holes (15) and a motorized rollable cover (14) protects the lens (1). The lens (1) produces all day power with no sun tracking losses for the first time. Many lenses form a solar farm.

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