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(72) Inventors; and

(71) Applicants: **NEWMAN, Stephen D.** [AU/SG]; 50 Bayshore Road, #30-01 Aquamarine Tower, Bayshore Park, Singapore 469977 (SG). **NEWMAN, David L.** [AU/AU]; 15/196 North Terrace, Adelaide, South Australia 5000 (AU).

(74) Agent: **GHOWS LLC**; 10 Anson Road, #26-06A, international Plaza, Singapore 079903 (SG).

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(54) Title: SOLAR OPTICAL COLLECTION SYSTEM

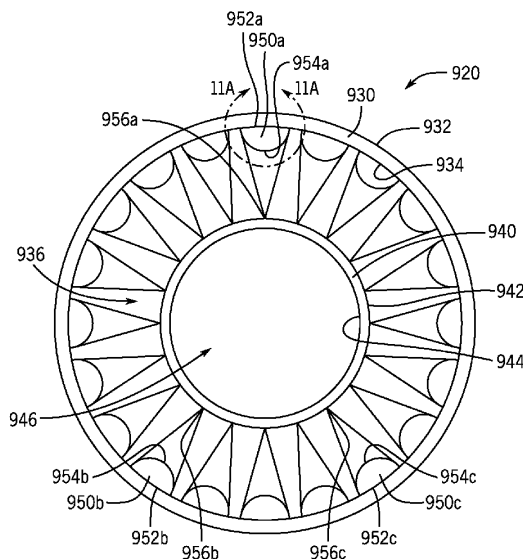


FIG. 10

(57) Abstract: A concentrator apparatus including a light receiver and a light concentrator is disclosed. The light concentrator is arranged for the omnidirectional concentration of light toward a first focal point and a second focal point on the light receiver. The light concentrator includes a first concentrating lens with a first focal point on the light receiver and a second concentrating lens with a second focal point on the light receiver, wherein the first and second concentrating lenses are circumferentially spaced about the light receiver. A concentrator apparatus is disclosed to comprise a pipe defining a fluid pathway and an energy collection system associated with the pipe and configured to concentrate thermal energy received from a plurality of azimuths and altitudes on the pipe and heat fluid of the fluid pathway is disclosed. A method for supplying energy to a transfer medium is also disclosed. The concentrator apparatus can be used in a wind turbine, a refrigeration truck and a shipping container.