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(54) Title: INDIRECT HEAT EXCHANGER PRESSURE VESSEL WITH CONTROLLED WRINKLE BENDS

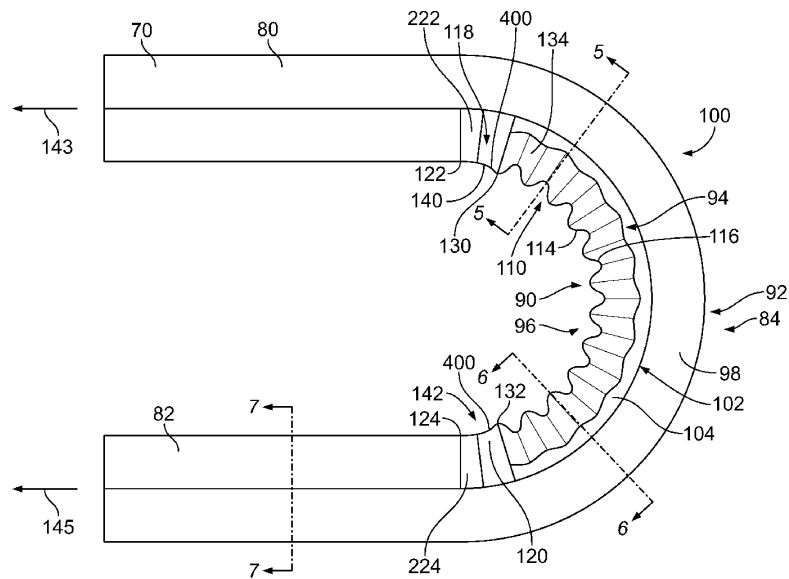


FIG. 4

(57) **Abstract:** In one aspect of the present disclosure, an indirect heat exchanger pressure vessel is provided that includes an inlet header to receive a pressurized working fluid, such as water, glycol, ammonia, and/or CO₂. The indirect heat exchanger pressure vessel includes an outlet header to collect the pressurized working fluid and a serpentine circuit tube connecting the inlet and outlet headers. The serpentine circuit tube permits the pressurized working fluid to flow from the inlet header to the outlet header. The serpentine circuit tube includes runs and a return bend connecting the runs. The return bend has a controlled wrinkled portion comprising alternating ridges and grooves. The alternating ridges and grooves strengthen the return bend and permit the indirect heat exchanger pressure vessel to facilitate working fluid heat transfer at a high internal operating pressure.

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