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(54) Title: PACKAGE AND A SYSTEM FOR COOLING A RADIO-FREQUENCY (RF) CIRCUIT

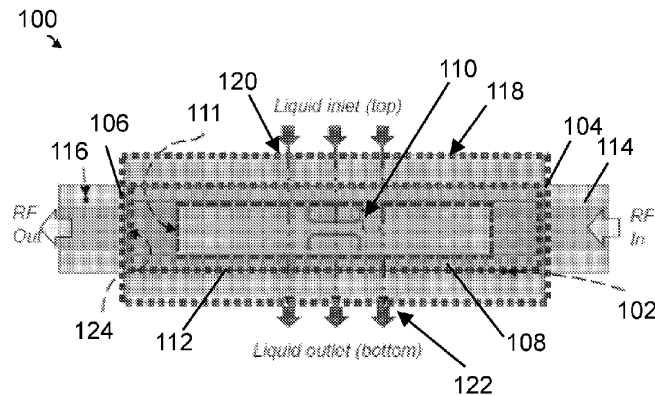


Figure 1

(57) Abstract: A package (100) for cooling a radio-frequency (RF) circuit (110) is described. In an embodiment, the package (100) comprises a hollow waveguide (102) having a first end (104), a second end (106), and a sidewall (108) connecting the first end (104) and the second end (106) to form an enclosure for the RF circuit (110), the first end (104) being opposite to the second end (106). The hollow-waveguide (102) has through-holes (112) formed on one or more portions of the sidewall (108), and the through-holes (112) are adapted to allow a liquid coolant to flow through the hollow waveguide (102) for cooling the RF circuit (110). In use, the hollow waveguide (102) is completely filled with the liquid coolant, and is adapted to propagate a RF signal from the first end (104) to the second end (106) of the hollow waveguide (102). Embodiments in relation to a system (1000) for cooling a radio-frequency (RF) circuit (110) is also described.

[Continued on next page]

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