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(54) Title: COMPACT DIRECT-BONDED METAL SUBSTRATE PACKAGE

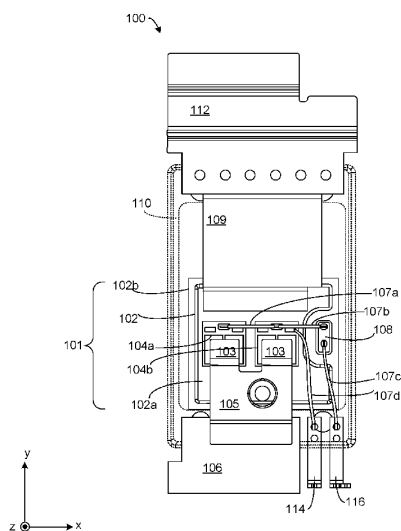


FIG. 2

(57) Abstract: A compact power inverter (100, 400, 450) is efficiently laid out on a multi-layer direct bond metal (DBM) structure (102), having a reduced footprint and straight, short-run wire bonds (107, 407, 457). The compact layout reduces an amount of material needed to fabricate a multi-layer DBM (102) that includes a silicon nitride ceramic layer (102b, 402b). The layout is further designed so that wire bonds (107, 407, 457) can be routed without bending around corners. The compact DBM structure (102) and short wire bonds (107, 407, 457) provide a solution that is both low-cost and highly reliable.

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