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[Continued on next page]

(54) **Title**: LAYERWISE HEATING, LINEWISE HEATING, PLASMA HEATING AND MULTIPLE FEED MATERIALS IN ADDITIVE MANUFACTURING

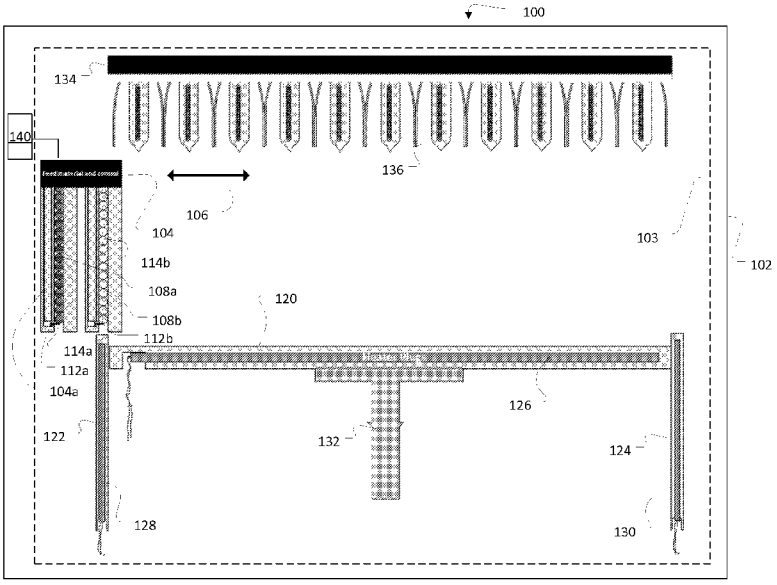

Fig. 1A

(57) **Abstract**: An additive manufacturing system that includes a platen, a feed material delivery system configured to deliver feed material to a location on the platen specified by a computer aided design program and a heat source configured to raise a temperature of the feed material simultaneously across all of the layer or across a region that extends across a width of the platen and scans the region across a length of the platen. The heat source can be an array of heat lamps, or a plasma source.

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