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(54) Title: A VALVE MODULE FOR A VACUUM PUMPING SYSTEM

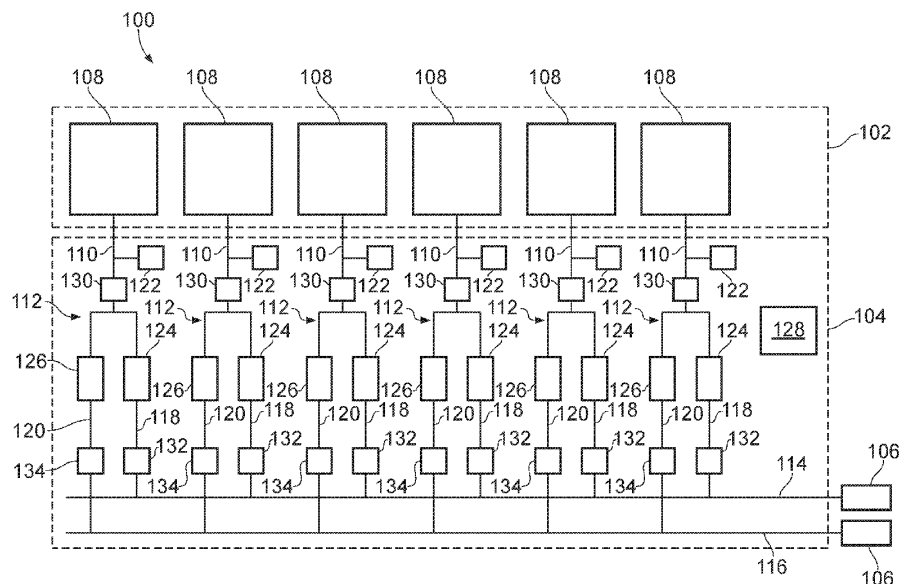


FIG. 1

(57) Abstract: A valve module (104) for a vacuum pumping system, comprising: a plurality of inlets (110) for receiving a fluid; a plurality of pressure sensors (122), each configured to measure a fluid pressure associated with a respective inlet (110); a first fluid line manifold (114); a second fluid line manifold (116); a plurality of multifurcating conduits (112), each connecting a respective inlet (110) to both the first and second fluid line manifolds (114, 116); a plurality of valves (124, 126) disposed in the multifurcating conduits (112); and a valve controller (128) coupled to the sensors (122) and the valves (124, 126); wherein the valve controller (128) is configured to control, based on pressure measurements from the sensors (122), the valves (124, 126) such that a fluid flow through a multifurcating conduit (112) is directed to either only the first fluid line manifold (114) or only the second fluid line manifold (116).

[Continued on next page]

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