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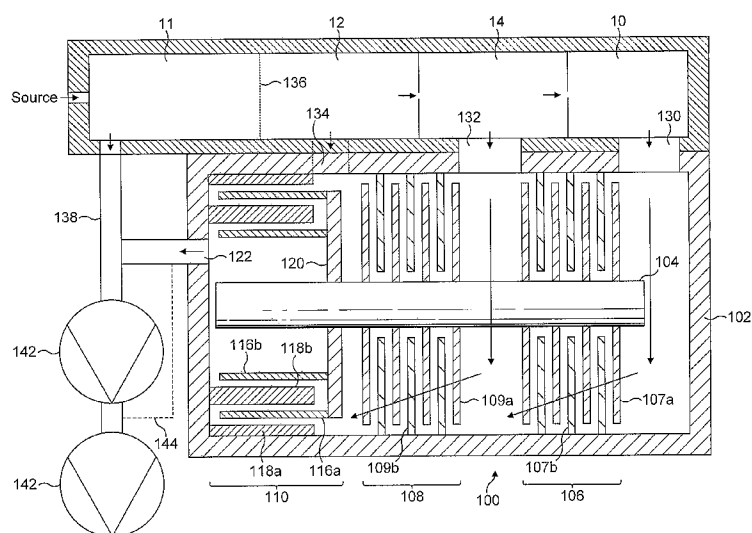
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(54) Title: PUMPING ARRANGEMENT



(57) **Abstract:** A differentially pumped vacuum system comprises first, second and third chambers, and a pumping arrangement for evacuating the chambers. The pumping arrangement comprises a compound pump having a first inlet connected to an outlet from the first chamber, a second inlet connected to an outlet from the second chamber, a first pumping section and a second pumping section downstream from the first pumping section, the sections being arranged such that fluid entering the compound pump from the first inlet passes through the first and second pumping sections and fluid entering the compound pump from the second inlet passes through, of said sections, only the second section. The pumping arrangement further comprises a booster pump having an inlet connected to an outlet from the third chamber, and a backing pump having an inlet connected to the exhaust from the booster pump. Fluid exhaust from the compound pump can be conveyed to either a second booster pump inlet or the backing pump inlet as required.

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