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(54) Title: ASPIRATORS FOR PRODUCING VACUUM USING THE VENTURI EFFECT

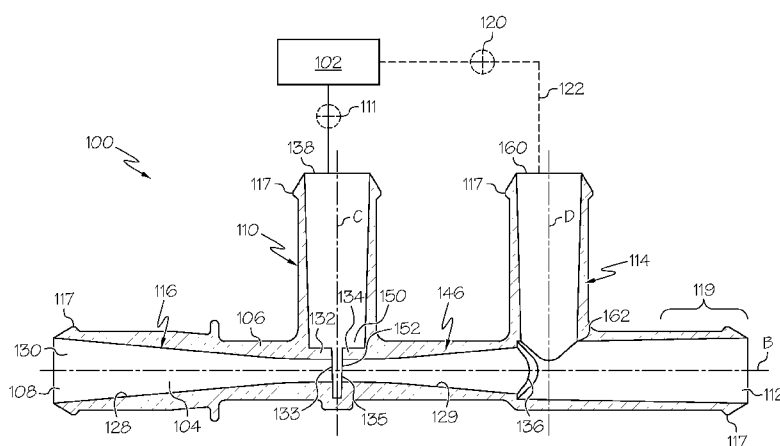


FIG. 1

(57) Abstract: Aspirators are disclosed herein that include a body defining a Venturi gap between an outlet end of a converging motive section and an inlet end of a diverging discharge section and have a suction port in fluid communication with the Venturi gap. The converging motive section defines a circular-shaped motive inlet and defines an elliptical- or polygonal-shaped motive outlet, and the diverging discharge section defines an elliptical- or polygonal-shaped discharge inlet. In one embodiment, the converging motive section defines an inner passageway that transitions as a hyperbolic function from the circular-shaped motive inlet to the elliptical- or polygonal-shaped motive outlet and the elliptical- or polygonal-shaped motive outlet has an area that is less than the area of the circular-shaped motive inlet.

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