Copying actuator

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Scheme of copying pneumatic drive with two differential pneumatic cylinders is proposed. One of the cylinders (master) specifies the movement, and another one (slave) copies it. Master cylinder is driven by a human. The slave cylinder fulfills the movement of a human hand with positional feedback. Valves for compensation of difference in masses of gas are provided. There are also provided feed valves. The supply system of pneumatic drive operates periodically and is designed for feed pressure maintenance in a receiver. Mathematical model of a copying drive is made and it's adequacy is verified.

Keywords: *copying pneumatic drive, master pneumatic drive, slave pneumatic drive, indicator of the criticality, feed valve.*

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