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60/024,415 **✓21 August 1996 (21.08.96)** US(71) Applicant: FISHER CONTROLS INTERNATIONAL, INC.
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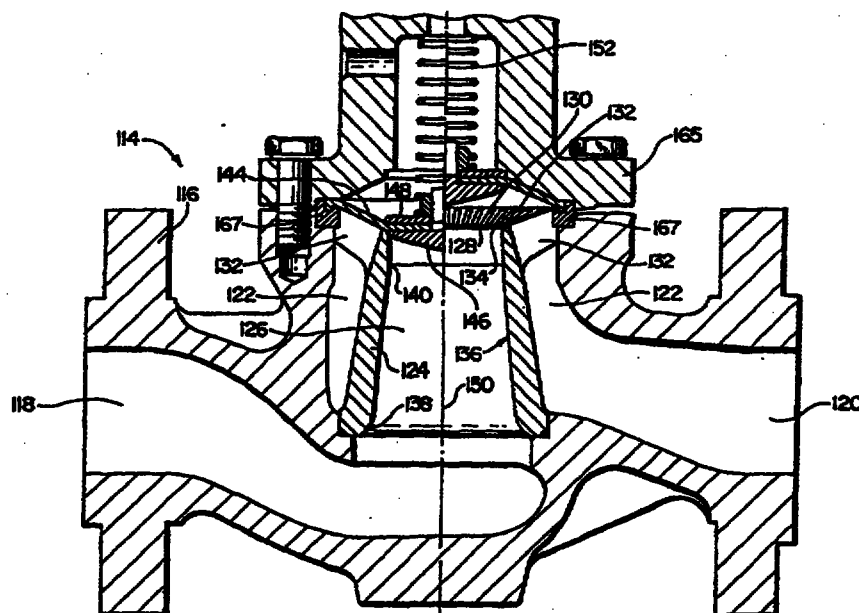
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(54) Title: ELASTOMERIC ELEMENT VALVE



(57) Abstract

A fluid control valve having a valve body (12, 116), a cage (20, 84, 124), and a flexible elastomeric diaphragm (38, 88, 144) with a formed convolution to fully open the cage opening. An elastomeric diaphragm regulator with a flow diverter in the fluid flow path to reduce fluid flow separation and thereby reduce the required flow recovery area before pressure throttling. A raised knife edge seat (134) located on the cage top (130) in a position of stagnant fluid flow to reduce the build-up of contaminants on the seat. An elastomeric diaphragm regulator with a valve actuator coupled to a guided valve stem (188, 198) attached to the regulator diaphragm.