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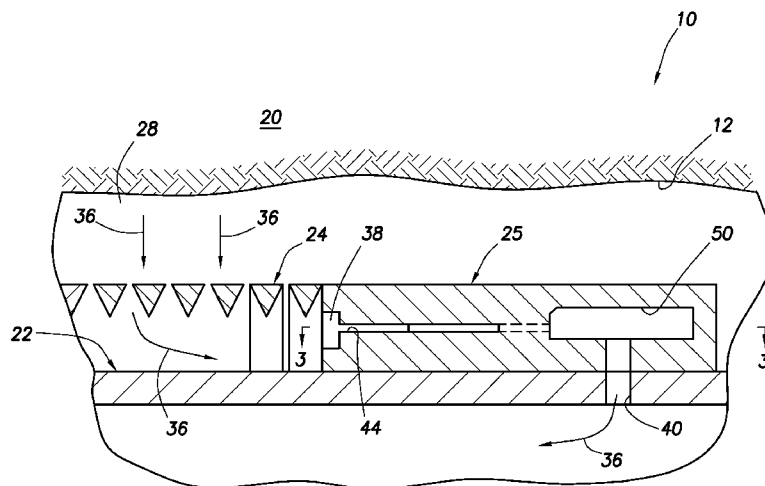
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(54) **Title:** VARIABLE FLOW RESISTANCE FOR USE WITH A SUBTERRANEAN WELL

**FIG. 2**

(57) **Abstract:** A variable flow resistance system for use with a subterranean well can include a structure which displaces in response to a flow of a fluid composition, whereby a resistance to the flow of the fluid composition changes in response to a change in a ratio of desired to undesired fluid in the fluid composition. Another system can include a structure which rotates in response to flow of a fluid composition, and a fluid switch which deflects the fluid composition relative to at least two flow paths. A method of variably resisting flow in a subterranean well can include a structure displacing in response to a flow of a fluid composition, and a resistance to the flow of the fluid composition changing in response to a ratio of desired to undesired fluid in the fluid composition changing. Swellable materials and airfoils may be used in variable flow resistance systems.