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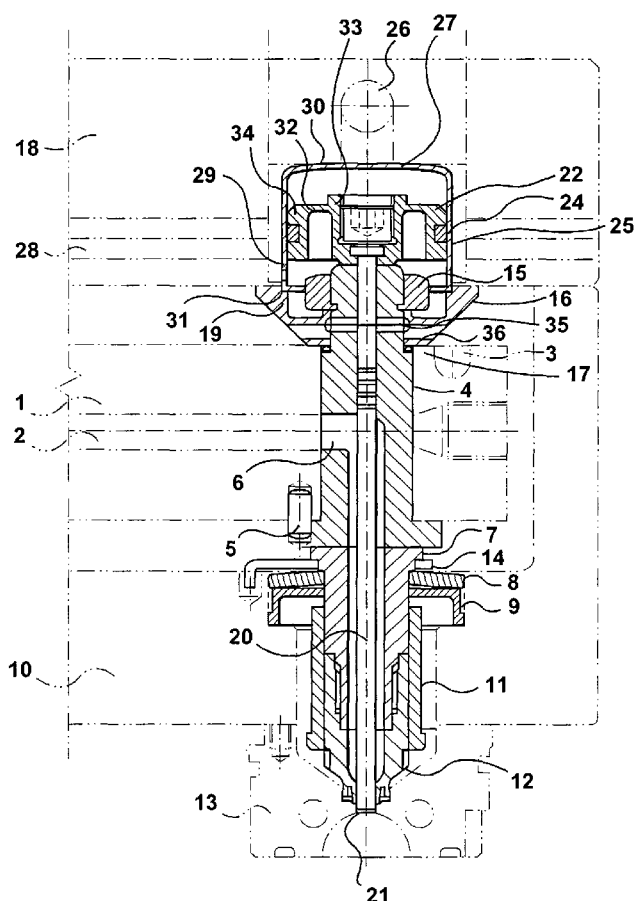
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(54) Title: IMPROVED HOT RUNNER VALVE GATE PISTON ASSEMBLY



(57) Abstract: Improved hot runner valve gate piston apparatus and method includes structure and steps whereby the air piston cylinder wall (25) transmits less than all of the compressive force between the backplate (18) and the manifold. Preferably, a backup pad (16) also transmits heat from the backplate (18) to the manifold (1), reducing the temperature of the cylinder wall (25). A flex member is preferably provided adjacent to or integral with the cylinder (25) for absorbing some of the compressive forces between the backplate (18) and the manifold (1), and in order to maintain the air seal between the piston cylinder (25) in the air channel in the hot runner backplate.

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