

ABSTRACT (SUMMARY)

This Valve intended for patent is a fluid-valve based on the Venturi principle and suction effect, principally for installation as an odour-preventive, waterless, chemical and oil free urinal valve for waterless urinals. It comprises 2 parts – an Upper and Lower part, the latter being a cylindrical valve body which narrows towards the central axis to form a flat vertical drainage area with a discharge-channel opening. A sealing flap is inextricably linked to the Lower part covering the entire vertical drainage area so that the fluid/urine flowing between the sealing flap and the vertical drainage area will wet the entire drainage area. A series of Venturi holes/slits strategically located and angled in the vertical drainage area to direct and accelerate fluid flow will create a suction effect for the flap to be drawn back to seal the channel opening, following the self-cleaning action of the fluid flow. This waterless urinal valve-system will therefore not allow any toxic gas or odour to re-enter the urinal. It will also not further contaminate the discharge to waste-water pipes (being chemical & oil free), allowing for possibly an easier waste-water recycling process.

FIG.3