



ABSTRACT
WATER SAVING VALVE

A water saving valve is fitted to a hose or a water pipe and mixes air bubbles
5 with water. Water receiving flask part 18 receives tap water from a water pipe 12.
Tapered hole part 20 has a flow path whose cross-sectional area is gradually reduced from
the upstream side toward the downstream side. Conduit part 32 has a large diameter
section 56 and a small diameter section 57. The large diameter section 56 is linked to the
tapered hole part 20. The conduit part 32 has a flow path 38 at an axial part thereof whose
10 cross-sectional area is substantially uniform. The large diameter section 56 has an air
suction port 30 running through from the flow path 38 of the axial section to the outer
peripheral surface. A check valve 64 is inserted into the air suction port 30. Sleeve 50 is
rigidly secured to the conduit part 32 by a support body 44 arranged at part of axial hole
90. The sleeve 50 has an eaves-like section 46. The eaves-like section 46 surrounds the
15 outer peripheral surface of the large diameter section 56 with a gap 48 interposed between
them. The sleeve 50 surrounds the periphery of the other end of the conduit part 32 with a
space interposed between them. Air is sucked in from the gap 48 through the air suction
port 30 so that water does not leak if hydraulic pressure is applied in the opposite
direction.

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Figure accompanying abstract: Fig 1