MANUALLY-ACTUATED REDUCED PRESSURE PUMP HAVING REGULATED PRESSURE CAPABILITIES

Abstract:

A manually-actuated reduced pressure pump comprising: a first barrel having a substantially cylindrical wall and a closed end; a piston movably disposed within the first barrel', a charging chamber being defined between the closed end of the first barrel and the piston; a piston spring operably associated with the piston to bias the piston in a direction that allows an increase in a volume of the charging chamber; a seal disposed within the first barrel, a regulated chamber being defined between the seal and the piston; a regulator passage providing fluid communication between the charging chamber and the regulated chamber; a second barrel operably associated with the piston to move the piston toward a compressed position when the reduced pressure pump is being manually actuated by a user; and a valve body operably associated with the regulator passage to selectively allow or prevent fluid communication between the charging chamber and the regulated chamber.

(FIG. 9)