**CLAIMS:**

**1.** An automatic gas purge valve comprising a housing configured with an automatic gas purge valve system comprising a normally closed gas discharge faucet for discharging gas at substantially high flow rates, and an automatic valve unit configured for selectively generating a flow pulse to displace the gas discharge faucet into its open position.

**2.** An automatic gas purge valve according to claim 1, comprising a housing configured with a an automatic valve unit having an inlet port in flow communication with the housing and an outlet port being in flow communication with a control chamber of a normally closed gas discharge faucet, said gas discharge faucet configured with a fluid inlet port being in flow communication with the housing and a fluid discharge port; and wherein the automatic valve is manipulable between a closed position and an open position responsive to liquid level within the housing.

**3.** An automatic gas purge valve according to claim 2, comprising a housing configured with a float member extending into the housing and articulated to an automatic valve unit having an inlet port in flow communication with the housing and an outlet port being in flow communication with a control chamber of a normally closed gas discharge faucet, said gas discharge faucet configured with a fluid inlet port being in flow communication with the housing and a fluid discharge port; and wherein the automatic valve is manipulable between a closed position and an open position responsive to liquid level within the housing.

**4.** An automatic gas purge valve according to claim 2, wherein the automatic valve unit is connected to the housing of the gas purge valve at a lower portion thereof, wherein manipulation between the closed position and the open position is responsive to liquid level within the housing by communicating vessels rule.

**5.** An automatic gas purge valve according to claim 2, wherein liquid rise within the housing displaces the automatic valve into a closed position and liquid decrease results in opening the automatic valve and consequently generating a pressure signal at the control chamber so as to displace the automatic gas purge valve into its open position to purge the valve.

**6.** An automatic gas purge valve according to claim 2, wherein the housing is configured for mounting at a substantially vertical position on a fluid flow line.

**7.** An automatic gas purge valve according to claim 2, wherein the housing has a height extending at least 4 times the diameter thereof.

**8.** An automatic gas purge valve according to claim 3, wherein the housing is configured at an upper end thereof with a mounting flange accommodating the gas discharge faucet and the automatic valve.

**9.** An automatic gas purge valve according to claim 3, wherein the float member is articulated to the automatic valve via a rigid link extending downwards from the automatic valve into an inside space of the housing downwards from the automatic valve.

**10.** An automatic gas purge valve according to claim 3, wherein the automatic valve is a peal-away type valve.

**11.** An automatic gas purge valve according to claim 2, wherein the control chamber is configured for airing after displacement of the gas discharge faucet into displace into its open position.

**12.** An automatic gas purge valve according to claim 2, wherein the housing is configured as a cylindrical chamber for mounting on a main fluid supply line.

**13.** An automatic gas purge valve according to claim 2, wherein the housing of the gas purge valve is configured with a vacuum breaker, for facilitating automatic ingress of gas into the housing at the event of pressure decrease therein.

**Claims:**

1. An automatic gas purge valve comprising a housing configured with an automatic gas purge valve system comprising

a normally closed gas discharge faucet having a control chamber, the gas discharge faucet being configured with a fluid inlet port being in flow communication with the housing and a fluid discharge port configured for discharging gas at substantially high flow rates; and

an automatic valve unit having an inlet port in flow communication with the housing and an outlet port being in flow communication with the control chamber, and configured for selectively generating a flow pulse at the control chamber to displace the gas discharge faucet into its open position;

wherein the automatic valve unit is manipulable between a closed position and an open position solely responsive to liquid level within the housing;

wherein the automatic valve unit is configured with a flexible closure membrane secured at one end to the housing and at an opposite end to a membrane displacing member; and

wherein displacement of the membrane displacing member in a downwards sense progressively detaches successive transverse portions of the flexible closure membrane so as to open the outlet port towards the open position of the automatic valve.

2. The automatic gas purge valve according to claim 1, further comprising a float member extending into the housing and articulated to the automatic valve unit.

3. The automatic gas purge valve according to claim 1, wherein the automatic valve unit is connected to the housing at a lower portion thereof, wherein manipulation between the closed

position and the open position is responsive to liquid level within the housing by communicating vessels rule.

4. The automatic gas purge valve according to claim 1, wherein liquid rise within the housing displaces the automatic valve unit into the closed position and liquid decrease results in opening the automatic valve unit and consequently generating a pressure signal at the control chamber so as to displace the automatic valve unit into its open position to purge the automatic gas purge valve.

5. The automatic gas purge valve according to claim 1, wherein the housing is configured for mounting at a substantially vertical position on a fluid flow line.

6. The automatic gas purge valve according to claim 1, wherein the housing has a height extending at least 4 times a diameter thereof.

7. The automatic gas purge valve according to claim 2, wherein the housing is configured at an upper end thereof with a mounting flange accommodating the gas discharge faucet and the automatic valve unit.

8. The automatic gas purge valve according to claim 2, wherein the float member is articulated to the automatic valve unit via a rigid link extending downwards from the automatic valve unit into an inside space of the housing downwards from the automatic valve unit.

9. The automatic gas purge valve according to claim 2, wherein the automatic valve unit is a peal-away type valve.

10. The automatic gas purge valve according to claim 1, wherein the control chamber is configured for airing after displacement of the gas discharge faucet into displace into its open position.

11. The automatic gas purge valve according to claim 1, wherein the housing is configured as a cylindrical chamber for mounting on a main fluid supply line.

12. The automatic gas purge valve according to claim 1, wherein the housing of the gas purge valve is configured with a vacuum breaker, for facilitating automatic ingress of gas into the housing at the event of pressure decrease therein.