

CLAIMS

1. A shear valve for use in a downhole tool between an annulus and tubing in a well for injecting an injection fluid into the tubing, comprising an outer housing (11) and an internal body (13) which is movable in a longitudinal direction within the housing (11) between a closed position and an open position when the valve is activated, in which closed position the internal body (13) rests on a valve seat (12) inside the housing (11) such that a seal is formed, and in which open position the internal body (13) is positioned away from the valve seat (12) such that the injection fluid is allowed to flow into the tubing, **characterised in that** the valve comprises an obstruction device (23, 24) which, when active, is arranged to obstruct the internal body (13) from moving within the housing (11), thus allowing pressurizing from an annulus side of the valve without the valve opening, which obstruction device (23, 24) is capable of being deactivated by pressurizing from a tubing side of the valve such that the obstruction device (23, 24), when in a deactivated state, is arranged to allow the internal body (13) to move within the housing (11).
2. Shear valve according to claim 1, **characterised in that** the obstruction device (23, 24) is designed to deactivate at a predetermined pressure difference between the tubing side of the valve and a secondary volume.
3. Shear valve according to claim 2, **characterised in that** the obstruction device is a breakable sealing device which breaks at a pressure difference between tubing and the secondary volume.
4. Shear valve according to claim 2 or 3, **characterised in that** the secondary volume is the annulus.
5. Shear valve according to claim 2 or 3, **characterised in that** the secondary volume is a vacuum chamber.
6. Shear valve according to claim 3, **characterised in that** the breakable sealing device is made of ceramics or glass, metal or other suitable material.
7. Shear valve according to claim 1, **characterised in that** the valve further comprising a trigger device for causing deactivation of the obstruction device.
8. Shear valve according to any one of claims 1 and 7, **characterised in that** the valve further comprising activating means to reactivate the obstruction device, the activating means being arranged on the tubing side of the valve.
9. Shear valve according to claim 1, **characterised in that** the obstruction device includes reactivation means.
10. Shear valve according to claim 8 or 9, **characterised in that** the reactivation means comprises a ratchet device.

11. Shear valve according to claim 8-10, **characterised in that** the reactivation means comprises a timer.

12. Shear valve according to claim 1, **characterised in that** the valve comprises a second obstruction device, the second obstruction device being deactivated by
5 pressurizing the annulus side of the valve.

13. Shear valve according to any one of the preceding claims, **characterised in that** the valve, when in said closed position, is arranged to act as a barrier element between the annulus and the tubing.

10

CLAIMS

1. A downhole tool comprising a shear valve arranged between an annulus and tubing in a well for injecting an injection fluid into the tubing, which shear valve comprises an outer housing and an internal body which is movable in a longitudinal direction within the housing between a closed position and an open position when the valve is activated, in which closed position the internal body rests on a valve seat inside the housing such that a seal is formed, and in which open position the internal body is positioned away from the valve seat such that the injection fluid is allowed to flow into the tubing, wherein the valve comprises an obstruction device which, when active, is arranged to obstruct the internal body from moving within the housing, thus allowing pressurizing from an annulus side of the valve without the valve opening, which obstruction device is capable of being deactivated by pressurizing from a tubing side of the valve such that the obstruction device, when in a deactivated state, is arranged to allow the internal body to move within the housing.
2. The downhole tool according to claim 1, wherein the obstruction device is designed to deactivate at a predetermined pressure difference between the tubing side of the valve and a secondary volume.
3. The downhole tool according to claim 2, wherein the obstruction device is a breakable sealing device which breaks at a pressure difference between tubing and the secondary volume.
4. The downhole tool according to claim 2 or 3, wherein the secondary volume is the annulus.
5. The downhole tool according to claim 2 or 3, wherein the secondary volume is a vacuum chamber.
6. The downhole tool according to claim 3, wherein the breakable sealing device is made of ceramics or glass, metal or other suitable material.
7. The downhole tool according to claim 1, wherein the valve further comprising a trigger device for causing deactivation of the obstruction device.
8. The downhole tool according to any one of claims 1 and 7, wherein the valve further comprising activating means to reactivate the obstruction device, the activating means being arranged on the tubing side of the valve.
9. The downhole tool according to claim 1, wherein the obstruction device includes reactivation means.
10. The downhole tool according to claim 8 or 9, wherein the reactivation means comprises a ratchet device.

11. The downhole tool according to claim 8-10, wherein the reactivation means comprises a timer.

12. The downhole tool according to claim 1, wherein the valve comprises a second obstruction device, the second obstruction device being deactivated by pressurizing the annulus side of the valve.

13. The downhole tool according to any one of the preceding claims, wherein the valve, when in said closed position, is arranged to act as a barrier element between the annulus and the tubing.

14. A method of activating a shear valve arranged between an annulus and a tubing in a well for injecting an injection fluid into the tubing, which shear valve comprises:

- an outer housing and an internal body which is movable in a longitudinal direction within the housing between a closed position and an open position when the valve is activated, in which closed position the internal body rests on a valve seat inside the housing such that a seal is formed, and in which open position the internal body is positioned away from the valve seat such that the injection fluid is allowed to flow into the tubing, and

- an obstruction device, which obstruction device, when active, is arranged to obstruct the internal body from moving within the housing thus allowing pressurizing from an annulus side of the valve without the valve opening, and which obstruction device, when in an deactivated state, is arranged to allow the internal body to move within the housing, which method comprises the step of deactivating the obstruction device by pressurizing the tubing such that a tubing side of the shear valve is pressurized.