CLAIMS

1. A double disk valve system (1) comprising:

- a valve housing (2) defining a fluid inlet (3) for receiving a fluid medium, and a fluid outlet (6) for delivering a fluid medium,

- at least two valve elements (7) arranged in an interior part of the valve housing (2), the valve elements (7) being movable relative to the valve housing (2), the position of the valve elements (7) relative to the valve housing (2) determining a flow rate of fluid medium through the valve system (1) from the fluid inlet (3) towards the fluid outlet (6),

- a moving mechanism (4) arranged to cause movements of the valve elements (7), and

- a sealing member (5) arranged in an interior part of the valve housing (2), the sealing member (5) being capable of separating the interior of the valve housing (2) into a first part comprising the fluid inlet (3) and the fluid outlet (6), and a second part,

wherein the sealing member (5) is mounted on the moving mechanism (4), the sealing member (5) thereby being movable along with the valve elements (7), and wherein the sealing member (5) is a plate member, the plate member forming a wall part of the first part of the interior of the valve housing (2) when the sealing member (5) is in a separating position in which the interior of the valve housing (2) is separated into the first part and the second part.

2. A valve system (1) according to claim 1, wherein the at least two valve elements (7), being movable by means of the moving mechanism (4) in a substantially synchronous manner.

3. A valve system (1) according to claim 1 or 2, wherein each valve element (7) is in the form of a disk, each disk being movable into sealing contact with a

valve seat, thereby preventing a fluid flow through the valve system (1) from the fluid inlet (3) towards the fluid outlet (6).

4. A valve system (1) according to any of the preceding claims, wherein the sealing member (5) has an outer shape which matches an interior cross section of the valve housing (2).

5. A valve system (1) according to any of the preceding claims, wherein the sealing member (5) comprises a rim portion adapted to form a sealing contact with a wall part of the valve housing (2).

6. A valve system (1) according to any of the preceding claims, wherein the sealing member (5) is automatically moved to a separating position in which the interior of the valve housing (2) is separated into the first part and the second part, when the moving mechanism (4) moves the valve element(s) (7) towards a position allowing an increased fluid flow through the valve system (1) from the fluid inlet (3) towards the fluid outlet (6).

7. A valve system (1) according to any of the preceding claims, wherein the valve element(s) (7) is/are arranged in the second part of the interior of the valve housing (2) when the sealing member (5) is in a separating position in which the interior of the valve housing (2) is separated into the first part and the second part.

8. A valve system (1) according to any of the preceding claims, wherein the sealing member (5) is or comprises two plate members (5a, 5b), a first plate member (5a) and a second plate member (5b), forming a double wall parts of the first part of the interior of the valve housing (2) when the sealing member (5) is in a separating position.

9. A valve system (1) according to claim 8, wherein the two plate members (5a, 5b), forming an intermediate room (14) in the interior of the valve housing (2) when the sealing member (5) is in a separating position, and an opening (15) is placed in the valve housing and forming an opening in the intermediate room

(14), a valve member (16) is placed in connection with the opening (15) for bleeding of the valve system.

10. A valve system (1) according to any of the preceding claims, wherein the moving mechanism (4) comprises a spindle and a nut adapted to cause a substantially linear movement of the valve element(s) (7) and the sealing member (5).

11. A valve system (1) according to any of the preceding claims, wherein the moving mechanism (4) comprises one or more articulated links (11) interconnecting each of the valve element(s) (7) to the moving mechanism (4), thereby allowing movement of each valve element (7) towards and away from the moving mechanism (4).

12. A valve system (1) according to any of the preceding claims, wherein the moving mechanism (4) is arranged to cause movements of the valve element(s) (7) along a first direction, and along a second direction being substantially transverse to the first direction.

13. A valve system (1) according to any of the preceding claims, wherein the valve housing (2) provides access to the second part of the interior of the valve housing (2).

14. A valve system (1) according to any of the preceding claims, further comprising a locking mechanism adapted to lock the valve element(s) (7) in a position defining a minimal flow rate of fluid medium through the valve system (1).

15. A fluid flow system comprising a valve system (1) according to any of the preceding claims.

16. A fluid flow system according to claim 15, wherein the fluid flow system is or forms part of an offshore installation.