Patent claims

1. A bearing for a pump with a shaft (10) rotating around an axial direction (A) said bearing comprising a housing (2) and a bearing cover (3) fixed to the housing (2), a bearing structure (4) for supporting the shaft (10) of the pump (100), a reservoir (22) for a lubricant and an oil ring (5) for transporting the lubricant and for supplying the lubricant to the bearing structure (4) wherein the oil ring (5) is arranged for being moved by the rotating shaft (10), wherein a retaining element (7) is provided for that is fixed with respect to the housing (2) or the cover (3), the retaining element (7) being designed and arranged such that it restricts a movement of the oil ring (5) at least in the axial direction (A), characterized in that the retaining element (7) is arranged on the same side below the shaft (10) as the reservoir (22).

2. A bearing in accordance with claim 1 wherein the retaining element (7) is extending perpendicular to the axial direction (A).

3. A bearing in accordance with anyone of the preceding claims wherein the retaining element (7) comprises two lateral bars (71) extending parallel and being spaced from each other to define a gap (72) in between, said gap (72) accommodating a part of the oil ring (5).

4. A bearing in accordance with claim 3, wherein each of the lateral bars (71) is curved for extending around a part of the shaft (10) in its circumferential direction.

5. A bearing in accordance with anyone of claims 3-4, wherein the two lateral bars (71) are connected by two end pieces (73), wherein each end piece (73) is located at an end of the lateral bars (71).

6. A bearing in accordance with claim 5, wherein each end piece (73) is extending perpendicular to the lateral bars (71).

7. A bearing in accordance with claim 6, wherein each end piece (73) is essentially L-shaped.

8. A bearing in accordance to anyone of the preceding claims, wherein the retaining element (7) is mounted to a side wall (23) of the housing (2).

9. A bearing in accordance with anyone of the preceding claims, wherein the retaining element (7) is mounted to a bottom (21) of the housing (2).

10. A bearing in accordance with claim 1, wherein the retaining element (7) comprises an essentially ring-shaped base body (76) for surrounding the shaft (10) and at least one mount (77) extending from the base body (76) and adapted for accommodating a part of the oil ring (5).

11. A bearing in accordance with claim 10, wherein the mount (77) is essentially U-shaped.

12. A bearing in accordance with anyone of claims 10-11, wherein the base body (76) of the retaining element is fixed to bearing cover (3).

13. A bearing in accordance with anyone of the preceding claims designed as a rolling bearing, in particular as a ball bearing, or designed as a journal bearing.

14. A pump comprising at least one bearing (1) according to anyone of the preceding claims.

15. A method of retrofitting a bearing for a pump with a shaft rotating around an axial direction, the bearing comprising a housing (2), a bearing cover (3) fixed to the housing (2), an oil ring (5) for transporting a lubricant and for supplying the lubricant to a bearing structure (4), and a reservoir (22) for the lubricant, comprising the steps of providing a retaining element (7) which is designed to restrict a movement of the oil ring (5), arranging the retaining element (7) on the same side below the shaft (10) as the reservoir (22), arranging the retaining element (7) such that it restricts the movement of the oil ring (5) at least in the axial direction and fixing the retaining element (7) with respect to the housing (2) of the bearing (1) or the bearing cover (3).