CLAIMS

1. A method of operating a system arrangement for lifting mechanisms comprising at least one drive motor (1, 1'), at least one cable drum (2, 2') connected thereto, a reduction transmission (3) arranged between the drive motor (1, 1') and the cable drum (2, 2'), an automatic overrun shutdown means, and at least one safety brake (4, 4'), wherein there is provided at least one active motor locking means (5, 5') for holding the load when the drive motor (1, 1') is slowed down and the motor locking means is activated immediately after electrical deceleration of the drive motor or motors to the rotary speed '0'.

2. A system arrangement for lifting mechanisms comprising at least one drive motor (1, 1'), at least one cable drum (2, 2') connected thereto, a reduction transmission (3) arranged between the drive motor (1, 1') and the cable drum (2, 2'), an automatic overrun shutdown means, and at least one safety brake (4, 4'), wherein there is provided at least one active motor locking means (5, 5') for holding the load when the drive motor (1, 1') is slowed down.

3. A system arrangement according to claim 2 wherein the motor locking means (5, 5') is of a positively locking configuration.

4. A system arrangement according to claim 2 wherein the motor locking means (5, 5') is of a force-locking or frictional-locking configuration.

5. A system arrangement according to claim 3 or claim 4 wherein the motor locking means (5, 5') is actuable hydraulically or electro-hydraulically, pneumatically or magnetically.

6. A system arrangement according to one of claims 2 to 5 wherein the motor locking means (5, 5') is arranged jointly with a motor coupling

(11, 11') between the drive motor (1, 1') and the reduction transmission (3).

7. A system arrangement according to one of claims 2 to 5 wherein the motor locking means (5, 5') is arranged on the side of the drive motor (1, 1'), that faces away from the reduction transmission (3).

8. A system arrangement according to claims 2 to 5 wherein the drive motor (1, 1') is flange-mounted directly to the reduction transmission (3) without the interposition of a motor coupling.

9. A system arrangement according to one of claims 2 to 8 wherein the motor locking means (5, 5') is in the form of a selector shift tooth arrangement.

10. A system arrangement according to claim 9 wherein a stator gear (13) which has an outside tooth arrangement (14) and which projects in a direction towards the drive motor (1, 1') is arranged on the housing (12) of the reduction transmission (3), that a rotor gear (16) also with an outside tooth arrangement (17) is arranged non-rotatably fixedly on the motor shaft (15) or the input shaft (7) of the transmission (3), and that there is provided a shift element (18) which is provided with an inside tooth arrangement and with which the stator gear (13) and the rotor gear (16) can be selectively coupled.

11. A system arrangement according to claim 7 and claim 9 wherein provided on the housing of the drive motor (1, 1') is a stator ring gear (20) which is fixedly connected thereto and which has a face tooth arrangement (21) operative in the axial direction and that arranged on the motor shaft (15) is a rotor ring gear (22) which is displaceable axially thereon and which is arranged non-rotatably and which has an equivalent face tooth arrangement (23), which rotor ring gear can be coupled to the stator ring

gear (20) fixedly connected to the motor housing for locking the drive motor (1, 1').

12. A system arrangement according to claim 11 wherein the rotor ring gear (22) is held in the uncoupled position by means of compression springs (24) and that to actuate the motor locking means (5, 5') the rotor ring gear (22) is displaced in a direction towards the stator ring gear (20) into the coupled position.

13. A system arrangement according to one of claims 2 to 12 wherein the overrun shutdown means is in the form of a freewheel (6).

14. A system arrangement according to claim 13 whereinthe freewheel (6) is integrated into the reduction transmission (3).

15. A system arrangement according to claim 14 wherein the freewheel (6) is arranged selectively on the input shaft (7), the intermediate shaft (8) or the output shaft (9) of the reduction transmission (3).

16. A system arrangement according to one of claims 13 to 15 wherein a cable drum joint connection (10, 10') is provided between the output shaft (9) of the reduction transmission (3) and the cable drums (2, 2'), and the freewheel (6) is integrated into the cable drum joint connection (10, 10').

17. A system arrangement according to one of claims 2 to 16 wherein the safety brakes (4, 4') are arranged in two independent control circuits (26, 27).