**Claims**

1. A portable class-II lubrication device or system, comprising:
   at least one class-II power supply;
   at least one electric motor controller powered by the at least one power supply;
   at least one electric motor controlled by the at least one motor controller;
   at least one pump activated by the at least one electric motor and connected to at least one lubricant container, the pump configured to pump a lubricant from the at least one container to at least one target to be lubricated,
   wherein an output voltage of the at least one power supply and an output voltage of the at least one motor controller and an operating voltage of the at least one motor is equal to or less than 50 Volts AC or 120 Volts DC.

2. The lubrication device or system according to claim 1, wherein an electrical mains connection of the lubrication device or system is not provided with an earth wire, and wherein the mains connection is single phase and provided with two wires, the two wires comprising an active and a neutral wire.

3. The lubrication device or system according to any one of the preceding claims, not comprising a frequency converter or a high voltage frequency converter or a frequency inverter.

4. The lubrication device or system according to any one of the preceding claims, wherein the motor controller comprises a relay.

5. The lubrication device or system according to any one of the preceding claims, wherein the device or system is independent from the target to be lubricated.

6. The lubrication device or system according to any one of the preceding claims, comprising a power cable and a plug or a power inlet connector for a cable with a plug.

7. The lubrication device or system according to any one of the preceding claims, wherein the lubricant is oil or grease or a viscous lubricant or similar.

8. The lubrication device or system according to any one of the preceding claims, wherein the container, such as a grease cartridge, is removable and/or detachable.

9. The lubrication device or system according to any one of the preceding claims, wherein the power supply is removable and/or detachable.

10. The lubrication device or system according to any one of the preceding claims, wherein the power supply is integrated into the lubrication device or a separate power supply being part of the lubrication system.

11. The lubrication device or system according to any one of the preceding claims, wherein the lubrication device or system weight does not exceed 25 Kg, or preferably 15 Kg, or more preferably 10 Kg, or even more preferably 5 Kg, or most preferably 3 Kg.

12. The lubrication device or system according to any one of the preceding claims, wherein a length of the device may not exceed 850 mm, or preferably 500 mm, or more preferably 420 mm, or even more preferably 350 mm, or most preferably 300 mm.

13. The lubrication device or system according to any one of the preceding claims, wherein a width of the lubrication device or system may not exceed 650 mm, or preferably 400 mm, or more preferably 325 mm, or even more preferably 300 mm, or most preferably 250 mm.

14. The lubrication device or system according to any one of the preceding claims, wherein a height of the lubrication device or system does not exceed 450 mm, or preferably 200 mm, or more preferably 180 mm, or even more preferably 150 mm, or most preferably 100 mm.

15. The lubrication device or system according to any one of the preceding claims, wherein the lubrication device or system dimensions do not exceed 850 x 650 x 450 mm.

16. The lubrication device or system according to any one of the preceding claims, wherein the container contains a maximum of 15 l, or preferably 5 l, or more preferably 3 l, or even more preferably 2 l, or most preferably 1 l in volume, of the lubricant.

17. The lubrication device or system according to any one of the preceding claims, wherein an output flow of the lubrication device or system is between 10 ml/min and 4000 ml/min, or preferably between 10 ml/min and 2500 ml/min, or more preferably between 10 ml/min and 1800 g/min, or most preferably between 10 ml/min and 1400 ml/min.

18. The lubrication device or system according to any one of the preceding claims, wherein an operating pressure is between 5 BAR and 400 BAR, or preferably between 5 BAR and 300 BAR, or more preferably between 5 BAR and 250 BAR, or even more preferably between 5 BAR and 150 BAR, or most preferably between 5 BAR and 100 BAR.

19. The lubrication device or system according to any one of the preceding claims, comprising a built-in dosing counter configured to stop the motor and the pump when a pre-set amount of lubricant has been reached.

20. The lubrication device or system according to any one of the preceding claims, comprising a gear pump or a piston pump.

21. The lubrication device or system according to any one of the preceding claims, wherein the motor controller and the power supply are separated.

22. The lubrication device or system according to any one of the preceding claims, wherein an input voltage of the power supply is comprised between 90 Volts AC and 250 Volts AC.

23. The lubrication device or system according to any one of claims 1-21, wherein an input voltage of the power supply is comprised between 100 Volts AC and 120 Volts AC.

24. The lubrication device or system according to any one of claims 1-21, wherein an input voltage of the power supply is comprised between 200 Volts AC and 240 Volts AC.

25. The lubrication device or system according to any one of the preceding claims, wherein the power supply is connectable to a mains supply.

26. The lubrication device or system according to any one of the preceding claims, wherein the lubrication device or system is configured to be supplied by a mains supply to the power supply during operation.

27. The lubrication device or system according to any one of the preceding claims, wherein the motor controller is a BLDC motor controller or a PMDC motor controller and/or wherein the motor is a BLDC motor or a PMDC motor.

28. The lubrication device or system according to any one of the preceding claims, wherein the motor controller is a PMAC motor controller and/or wherein the motor is a PMAC motor.

29. The lubrication device or system according to any one of the preceding claims, wherein the motor controller is a step motor controller and/or wherein the motor is a step motor.

30. The lubrication device or system according to any one of the preceding claims, wherein an output voltage of the at least one power supply and an output voltage of the at least one motor controller and an operating voltage of the at least one motor is equal to or less than 25 Volts AC or 60 Volts DC, preferably 48 Volts DC.

31. The lubrication device or system according to claim 30, comprising a grounding clump on a metal part of the lubrication device or system, such as a metal cabinet or metal frame, wherein such grounding clump may be connected to an electrical earth of a working area of the target, and wherein one of a low voltage output wires of the power supply of the lubrication device or system is connected to the metal part.

32. The lubrication device or system according to any one of claims 30-31, wherein touch parts of the lubrication device or system, that is parts that are exposed to a user of the device, have a voltage of no more than, or equal to 60 Volts DC or 25 Volts AC.

33. The lubrication device or system according to any one of claims 30-32, comprising a safety relay configured to terminate electrical supply to the lubrication device or system if a difference between an electric current flowing through a supply line active wire and an electric current flowing through a neutral wire is more than a threshold.

34. The lubrication device or system according to any one of the preceding claims, comprising at least one metal part, such as a cabinet, exposed to an user of the lubrication device or system.

35. The lubrication device or system according to any one of claims 30-34, wherein the lubrication device or system is a Protected Extra-Low Voltage (PELV) device.

36. The lubrication device or system according to claim 1-29, wherein the lubrication device or system is Safety Extra-Low Voltage (SELV) and comprises an external ground clump connected to a metal frame or a cabinet of the lubrication device or system.