

Title (en)

OPHTHALMIC LASER SYSTEM AND DEVICE FOR CONTROLLING AN ELECTRICAL ENERGY SUPPLY

Title (de)

OPHTHALMISCHES LASERSYSTEM UND VORRICHTUNG ZUR REGELUNG EINER ELEKTRISCHEN ENERGIEZUFUHR

Title (fr)

SYSTÈME DE LASER OPHTALMIQUE ET DISPOSITIF DE COMMANDE D'UNE ALIMENTATION EN ÉNERGIE ÉLECTRIQUE

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Application

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Abstract (en)

[origin: WO2023052417A1] The invention relates to an ophthalmic laser system (14) comprising at least one electrical load element (20) and a device (10) for controlling an electrical energy supply for the electrical load element (20). The device (10) for controlling an electrical energy supply comprises a first switching element (18a) which switchably connects a voltage source (16) and the at least one load element (20), and a second switching element (18b), which switchably connects the at least one load element (20) and an earth potential (22). In addition, the device comprises a current limiter (24) which is configured to determine a current flow between the voltage source (16) and the first switching element (18a) and to control a switching state of the first switching element (18a) depending on the determined current flow. Moreover, the device (10) comprises a gate driver (28) which is configured to control a switching state of the second switching element (18b) depending on an electrical potential of the at least one load element (20). The current limiter (24) and/or the gate driver (28) are configured to switch the first switching element (18a) and the second switching element (18b), respectively, to an open state when a predefined threshold value of the electrical current flow between the voltage source (16) and the first switching element (18a) is exceeded. The invention also relates to a device (10) for controlling an electrical energy supply and to a method for providing and interrupting an electrical energy supply.

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