Claims

1. A hand-held device for electrically powered skin treatment, comprising:

a first outer electrode (7) which is in contact with a hand when the device is held in the user's hand for use,

a second outer electrode (20) which can be placed on the area of skin to be treated,

batteries, the poles of which are electrically connected to the electrodes during operation of the device,

a compartment (72) for accommodating the batteries, whereby the compartment is covered by a shell-like housing cover (75) whose outside forms a section of the exterior area of the device housing,

characterised in that

the batteries are rechargeable batteries (73),

a charging circuit is provided,

the compartment (72) is covered by a removable compartment cover (77) whose inner side is directed to the batteries (73) in the compartment and on whose outer side a connector socket with at least two poles is arranged, and

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the compartment cover (77) is located within the housing cover (75).

2. The device according to claim 1, characterised in that the connector socket is a connector socket (82) according to the USB standard.

3. The device according to claim 1 or 2, characterised in that the upper end of the compartment (72) is formed by a circumferential web (74), that the housing cover (75) has, on its inner side, a circumferential counter web (76) of the same contour as the web (74), whereby the counter web (76) encloses the web (74) on its outer side, and that the compartment cover (77) is arranged inside the counter web (76).

4. The device according to claim 3, characterised in that the compartment cover (77) abuts the inner side of the housing cover (75).

5. The device according to claim 4, characterised in that the compartment cover (77) has an outer contour which corresponds to the inner contour of the web (74), so that the compartment cover (77) lies inside the compartment (72).

6. The device according to any one of the preceding claims, characterised in that the compartment cover (77) forms a connector casing (79) on is outer side which is open to the underside of the compartment cover (77) and which has, in one of its side walls, a casing opening (80), and that in the connector casing (79) a connector board (81) with the connector socket (82) is inserted, whereby the opening for the connector lies in front of the casing opening (80).

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7. The device according to claim 5 or 6, characterised in that the charging circuit can be arranged on the connector board (81).

8. The device according to claim 6, characterised in that the device has a user-operated switching device, which enables the electrical connection of the power source to the electrode (3, 7) and which is arranged on a main board inside the device, and that the charging circuit is arranged on the main board.

9. The device according to any one of the proceeding claims, characterised in that

a vibrator is arranged in the device in the vicinity of the second electrode (3), whereby the vibrator's drive is connected to the batteries in a switchable manner,

that a device for detecting a current flow through the second electrode (3) is provided,

a switch in the connection of the drive of the vibrator to the batteries (73) is provided, and

a control device for the switch is provided, wherein the control device is designed in such a manner that the switch is only closed when a current flows through the second electrode (3).

10. The device according to any one of the proceeding claims, characterised in that the switch is designed as a transistor (91).

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Claims

1. A hand-held device for electrically powered skin treatment, comprising:

a first outer electrode which is in contact with a hand when the device is held in a user's hand for use,

a second outer electrode which can be placed on the area of skin to be treated,

batteries, the poles of which are electrically connected to the electrodes during operation of the device,

a compartment for accommodating the batteries, whereby the compartment is covered by a shell-like housing cover whose outside forms a section of an exterior area of a housing of the device,

wherein

the batteries are rechargeable batteries,

a charging circuit is provided,

the compartment is covered by a removable compartment cover whose inner side is directed to the batteries in the compartment and on whose outer side a connector socket with at least two poles is arranged, and

the compartment cover is located within the housing cover.

2. The device according to claim 1, wherein the connector socket is a connector socket according to the USB standard.

3. The device according to claim 1 or 2, wherein an upper end of the compartment is formed by a circumferential web, that the housing cover has, on its inner side, a circumferential counter web of the same contour as the web, whereby the counter web encloses the web on its outer side, and that the compartment cover is arranged inside the counter web.

4. The device according to claim 3, wherein the compartment cover abuts the inner side of the housing cover.

5. The device according to claim 4, wherein the compartment cover has an outer contour which corresponds to an inner contour of the web, so that the compartment cover lies inside the compartment.

6. The device according to any one of the preceding claims, wherein the compartment cover forms a connector casing on its outer side which is open to an underside of the compartment cover and which has, in one of its side walls, a casing opening, and that in the connector casing a connector board with the connector socket is inserted, whereby the opening for the connector lies in front of the casing opening.

7. The device according to claim 6, wherein the charging circuit can be arranged on the connector board.

8. The device according to claim 6, wherein the device has a user-operated switching device, which enables the electrical connection of the power source to the electrode and which is arranged on a main board inside the device, and that the charging circuit is arranged on the main board.

9. A hand-held device for electrically powered skin treatment, comprising:

a first outer electrode which is in contact with a hand when the device is held in a user's hand for use,

a second outer electrode which can be placed on the area of skin to be treated,

batteries, the poles of which are electrically connected to the electrodes during operation of the device,

a compartment for accommodating the batteries, whereby the compartment is covered by a shell-like housing cover whose outside forms a section of an exterior area of a housing of the device,

wherein

the batteries are rechargeable batteries,

a charging circuit is provided,

the compartment is covered by a removable compartment cover whose inner side is directed to the batteries in the compartment and on whose outer side a connector socket with at least two poles is arranged,

the compartment cover is located within the housing cover,

a vibrator comprising a drive is arranged in the device in the vicinity of the second electrode, whereby the vibrator's drive is connected to the batteries in a switchable manner,

that a device for detecting a current flow through the second electrode is provided,

a switch in the connection of the drive of the vibrator to the batteries is provided, and

a control device for the switch is provided, wherein the control device is designed in such a manner that the switch is only closed when a current flows through the second electrode.

10. The device according to claim 9, wherein the switch is designed as a transistor.