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(54) **Combined shaving device**

(57) A combined shaving device (1) is proposed that comprises a first shaving device (100) having at least a first coupling arrangement (140), a second shaving device (200) having at least a second coupling arrangement (240), whereas the first and second coupling arrangements (140; 240) are being configured to mate with each other to detachably couple the first shaving device (100) and the second shaving device (200) in at least a first coupling position, the first shaving device (100) having an elongated handle (110) provided for individual operation of the first shaving device (100) in a detached state, and the second shaving device (200) having an elongated handle (210) provided for individual operation of the second shaving device (200) in a detached state. It is thus enabled that the shaving devices that form the combined shaving device can also individually be used in their detached state.

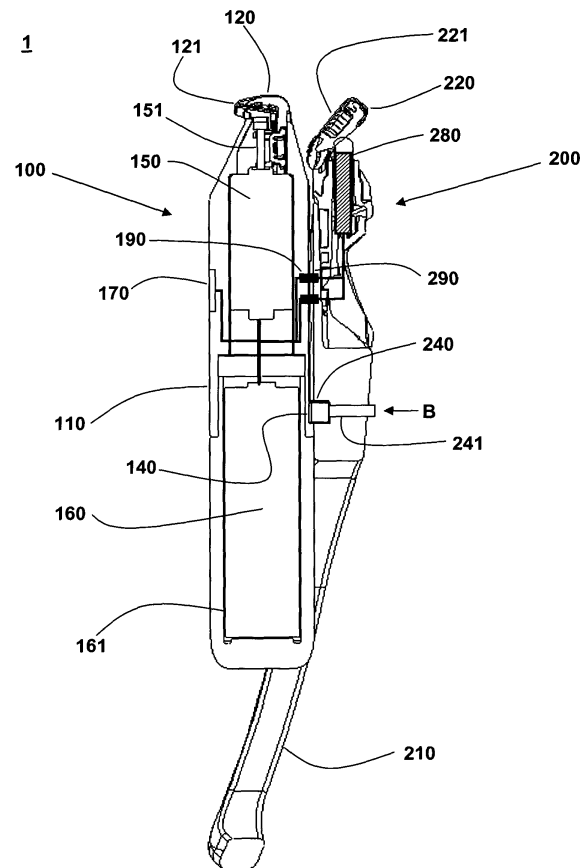


Fig. 3

Description

FIELD OF THE INVENTION

[0001] The present invention is concerned with combined shaving devices that comprise a first shaving device and a second shaving device and it is in particular concerned with such combined shaving devices where the first shaving device and the second shaving device are detachably coupled to each other.

BACKGROUND OF THE INVENTION

[0002] International patent application WO 2007/130680 A1 discloses a modular grooming tool that comprises a razor assembly coupled to a first end of a hand-piece for holding the tool such that the razor assembly is removable, and a nose/ear hair trimmer coupled to the first end of the hand-piece. The nose/ear hair trimmer is configured to couple with the razor assembly to nest within the razor assembly while the razor assembly is coupled to the first end of the hand-piece.

[0003] It is a disadvantage of this modular grooming tool that the nose/ear hair trimmer is covered by the razor assembly when the razor assembly is coupled to the first end of the hand-piece.

[0004] International patent application WO 2005/102623 A2 discloses a wet razor and electric trimmer assembly. The razor blade is disposed at or adjacent a first end of the handle. The trimmer mounts on the handle and includes a moving blade. The motor drives the moving blade. The wet razor and the electric trimmer are not detachable from each other.

[0005] It is a disadvantage of such an assembly that a heavy motor needs always to present in the assembly to drive the electric trimmer when it shall be used.

[0006] International patent application WO 2007/081850 A2 discloses a multi-use shaving implement that includes an elongated handle and swappable razor cartridge and trimmer head. The elongated handle has a powered motor that is at least partially located therein. A user is enabled to removably attach the razor cartridge to the handle and the user is also enabled to removably attach the trimmer head to the handle when the razor cartridge is not attached to the handle.

[0007] It is a disadvantage of such a shaving implement that the motor is at least partially present in the elongated handle also when the shaving implement is used with the razor cartridge attached to the handle. It is a further disadvantage that one of the heads is always detached from the handle and may get lost in the bathroom due to its small size.

SUMMARY OF THE INVENTION

[0008] It would therefore be desirable to provide a combined shaving device that is improved over the known devices.

[0009] Such a combined shaving device is given in accordance with claim 1. Further embodiments are given by the dependent claims.

[0010] A combined shaving device as proposed comprises a first shaving device that has at least a first coupling arrangement and a second shaving device that has at least a second coupling arrangement, the first and second coupling arrangements being configured to mate which each other to detachably couple the first and second shaving devices together. The first shaving device has an elongated handle provide for individual use of the first shaving device in a detached state. The second shaving device has an elongated handle provided for individual use of the second shaving device in a detached state. As the elongated handles are long enough for conveniently holding each of the devices in a user's hand, the combined shaving device can be used in its combined state and the first and second shaving devices can also be used individually, which is not possible for the devices as known from prior art. This increases the versatility of such a combined device. In one embodiment, the elongated handles of the first and second shaving devices extend longitudinally (in the direction of their elongated extension) side by side over a substantial part of their length, where this should include that one elongated handle is partially embraced by the other handle. In a refinement of this embodiment, one of the elongated handles has a longitudinally extending recess in which at least part of the other elongated handle is located. The side-by-side extending or partially embraced or nested elongated handles thus form a combined handle of the combined shaving device.

[0011] In one embodiment, at least one of the coupling arrangements has at least two or more coupling elements allowing for coupling the first and second shaving devices in at least two or more coupling positions. In another embodiment, at least one of the first and second coupling arrangements comprises a movable element for selectively moving the first and second shaving devices relatively to each other, which also allows for having several coupling positions.

[0012] In another embodiment, at least one of the first or second coupling arrangements has at least a release element for releasing the mated first and second coupling arrangements.

[0013] In a further embodiment, the combined shaving device has a contact arrangement enabling the transfer of electrical energy between the first and second shaving devices in the coupled state. This allows discarding a battery in one of the devices and allows energizing both devices in a coupled state.

[0014] In an even further embodiment, one of the first and second shaving devices is provided with a vibration motor and the combined shaving device has a mechanical coupling to transmit vibrations generated by the vibration motor to a shaving head of the other of the first and second shaving devices.

[0015] In one embodiment, one of the first and second

shaving devices is an electrical dry shaving device that comprises a trimmer head that has cooperating first and second toothed blades of which at least one is movable so that during operation hairs are cut off or shorn off that feed in between the teeth of the blades. In a refinement of this embodiment, the trimmer head is a detachable so that the trimmer head could e.g. be replaced by another trimmer head.

[0016] In another embodiment, one of the first and second shaving devices is realized as a wet shaving device that comprises a wet shaving head having at least an elongated, sharp blade arranged for contacting the skin during shaving operation to cut off hairs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] The invention will be further elucidated by detailed explanation of several exemplary embodiments and by reference to figures. In the figures

- Fig. 1 is a schematic side view onto an exemplary combined shaving device as proposed that comprises a first shaving device and a second shaving device that are coupled together in a first coupling position,
- Fig. 2A is a schematic side view onto a first shaving device designed as an electrical dry shaving device that can be individually used and that can be coupled to another shaving device to form the combined shaving device as shown in Fig. 1,
- Fig. 2B is a schematic side view onto a second shaving device designed as a wet shaving device that can be individually used and that can be coupled to another shaving device to form the combined shaving device as shown in Fig. 1,
- Fig. 3 is a cross sectional view through the combined shaving device as shown in Fig. 1,
- Fig. 4 is a side view onto the combined shaving device as depicted in Fig. 1 but where the first shaving device and the second shaving device are coupled together in a second coupling position,
- Fig. 5A is a perspective view onto a back side of the first shaving device as shown in Fig. 2A to visualize an exemplary first coupling arrangement, and
- Fig. 5B is a perspective view onto a front side of the second shaving device as shown in Fig. 2B to visualize an exemplary second coupling arrangement.

DETAILED DESCRIPTION OF THE INVENTION

[0018] Fig. 1 is a schematic side view of an exemplary embodiment of a combined shaving device 1 as proposed. The combined shaving device 1 comprises a first shaving device 100 and a second shaving device 200.

The first shaving device 100 is designed as an electrical dry shaving device in the form of an electrical trimmer. The second shaving device 200 is designed as a wet shaving device in the form of a safety razor. The first shaving device 100 and the second shaving device 200 are detachably coupled to each other in a first coupling position. The details of the coupling will be discussed further below.

[0019] The first shaving device 100 has an elongated handle 110 and the second shaving device 200 has an elongated handle 210. The elongated handle 110 of the first shaving device 100 and the elongated handle 210 of the second shaving device 200 form together an integrated elongated handle 10 of the combined shaving device 1. The integrated elongated handle 10 of the combined shaving device 1 is designed for holding the combined shaving device 1 in a hand of a user during operation of the combined shaving device 1. In particular, the elongated handle 110 of the first shaving device 100 and the elongated handle 210 of the second shaving device 200 are individually shaped in such a way that the combined handle 10 of the combined shaving 1 allows for easy and safe handling of the combined shaving device 1. The integrated elongated handle 10 can be designed to allow for a convenient use of the combined shaving device 1, i.e. the outer surface of the combined elongated handle 10 can be designed to be smooth and/or conveniently lying in a user's hand. Such convenient use is, e.g., affected through an integrated elongated handle 10 that is essentially seamless at the edges where the elongated handle 110 of the first shaving device 100 and the elongated handle 210 of the second shaving device 200 abut each other. In such a realization, it is sufficient that the seamlessness is achieved only in those outer surface areas of the combined elongated handle 10 that are intended for being held in a user's hand. The convenient use can, e.g., be achieved by a design of the combined elongated handle 10 that anatomically fits into a user's hand. The elongated handles 110 and 120 of the first and second shaving device 100 and 200 are provided so that they can be held in a user hand during individual operation of the first and second shaving devices 100 and 200 in a detached state. A typical length for an elongated handle that is provided for individual use is about 10 cm or longer.

[0020] The first shaving device 100 has a shaving head 120 in the form of an electric trimmer head and the second shaving device 200 has a shaving head 220 in the form of a safety razor cartridge in which a plurality of sharp, elongated razor blades are mounted. Each of the shaving heads is intended to cut-off or sheer-off hairs that grow on the skin during shaving operation.

[0021] In the shown embodiment, the wet shaving device is detachably coupled to the back of an electrical dry shaving device. In another embodiment, a combined shaving device comprises a wet shaving device that is detachably coupled to the front of an electrical dry shaving device. In an even other embodiment, the first and

the second shaving devices are coupled back-to-back.

[0022] Fig. 2A is a side view onto a first shaving device 100 that is designed as an electrical dry shaving device in the form of an electrical trimmer as is shown also in Fig. 1. The first shaving device 100 is shown in a detached state. The first shaving device 100 has an elongated handle 110 that is designed for an individual use of the first shaving device 100 in its detached state. The elongated handle 110 of the first shaving device 100 is specifically designed to be conveniently held in the hand of a user during shaving operation. The first shaving device 100 designed as an electrical dry shaving device in the form of an electrical trimmer has a dry shaving head 120 in the form of an electrical trimmer head and a motor (not visible) for driving the movable components of the dry shaving head 120. It may also be equipped with a battery provided in a battery compartment for powering the motor independently from a connection to mains voltage and additionally or equivalently the first shaving device 100 is equipped with a socket for connecting the first shaving device 100 to mains voltage with a respective cable. The dry shaving head 120 can be detachably mounted to the elongated handle 110 of the first shaving device such that the dry shaving head 120 can be cleaned independently from the elongated handle 110 of the first shaving device 100 or so that the dry shaving head 120 can be replaced by another dry shaving head (e.g. in case the dry shaving head is an electrical trimmer head as shown, the different electrical trimmer heads can have different cutting widths or differently styled trimmer blades). The motor of the dry shaving device can then fully be located in the elongated handle 110 or the motor can partially or fully be located in the dry shaving head 120, such that matched motor components or a matched motor can be provided in each of a plurality of replaceable dry shaving heads.

[0023] Fig. 2B is a side view onto a second shaving device 200 that is designed as a wet shaving device in the form of a safety razor as is shown also in Fig. 1. The second shaving device 200 is shown in a detached state. The second shaving device 200 has an elongated handle 210 that is designed for an individual use of the second shaving device in its detached state. The elongated handle 210 of the second shaving device is specifically designed to be conveniently held in the hand of a user during shaving operation. The second shaving device 200 designed as a wet shaving device has a wet shaving head 220 in the form of a safety razor cartridge and may comprise a vibration motor arranged for exciting vibrations of at least an elongated sharp razor blade provided at the wet shaving head 220. The wet shaving head 220 comprises at least one elongated sharp razor blade that is intended to contact the skin during shaving operation and to cut hairs growing on the skin. The wet shaving head can also comprise two or more such elongated sharp razor blades as is generally known in the art. The razor blade or razor blades may e.g. be mounted in a razor cartridge, which razor cartridge can be detachably

mounted at the elongated handle 210 of the second shaving device 200 as is as such known in the art. Additionally, the second shaving device 200 can comprise a battery compartment in which a battery can be provided for powering the vibration motor. Instead of having an arrangement for being powered by a battery provided in a battery compartment of the elongated handle 210 of the second shaving device 200 or alternatively to such an arrangement, the second shaving device 200 can have a contact arrangement provided for contacting a respective contact arrangement provided at the first shaving device so that energy transfer between the first and the second shaving devices 100, 200 in an attached state is enabled (this is also discussed with reference to Fig. 3).

[0024] Fig. 3 is a cross-sectional cut through the combined shaving device 1 as shown in Fig. 1. The first shaving device 100 is designed as an electrical dry shaving device in the form of an electric trimmer. The second shaving device 200 is designed as a wet shaving device in the form of a safety razor.

[0025] The first shaving device 100 comprises an elongated handle 110 and a shaving head 120 realized as an electric trimmer head. A motor 150 is located inside the elongated handle 110 of the first shaving device 100, which motor 150 can be selectively powered via a battery 160 provided in a battery compartment 161. The first shaving device 100 is equipped with a capacitive switch 170 for selectively activating the electric trimmer head. Instead of a capacitive switch any other kind of switch, e.g. a rotatable knob having various lock positions for switching the electric trimmer on or off and/or for e.g. setting various speeds of the movable trimmer blade is also possible. As is known in the art, the motor 150 drives a motor shaft 151 that has an eccentric tappet, which mates with a slot of a carrier to translate the rotational movement of the eccentric tappet into a linear oscillating movement of the carrier during operation. A moveable, toothed trimmer blade 121 is mounted to the carrier and interacts with a fixedly mounted, toothed trimmer blade so that hairs that feed in between the teeth of the trimmer blades are cut-off or shorn-off, respectively, depending on the concrete realization of the blade edges.

[0026] The second shaving device 200 comprises an elongated handle 210 and a shaving head 220 realized as a detachably mounted razor cartridge that carries a plurality of sharp, elongated razor blades 221.

[0027] As is schematically shown in Fig. 3, the first shaving device 100 has a first coupling arrangement 140 that releasably connects with a second coupling arrangement 240 provided at the second shaving device so that the combined shaving device 1 is formed. The first and second coupling arrangements 140, 240 are arranged to fixedly couple the first and second shaving devices 100, 200 during shaving operation of the combined shaving device 1. In an embodiment, the first and second coupling arrangements are realized as connectable parts of a snap-fit coupling, where the first coupling arrangement may be a positive coupling partner and the second cou-

pling arrangement may be a negative coupling partner designed to snap-fit onto the positive coupling partner. The snap-fit coupling may be realized as being flexible enough to release the first and second coupling arrangements from each other by applying a certain release force above a threshold value that does not occur in regular shaving operation. The snap-fit coupling may also be provided with an additional release mechanism as is schematically shown in Fig. 3, where a release element 241 is part of the second coupling arrangement 240. The release element 241 can be depressed in a direction B to act on a spring-tensioned element such as an engagement hook so that the engagement hook is moved against the spring tension so that the first and the second coupling arrangements 140, 240 can be separated without applying any additional force. In another embodiment, the first coupling arrangement is realized as a threaded hole and the second coupling arrangement as a corresponding threaded screw that can be turned via a knob provided at the second shaving device. Any other kind of coupling is also possible, such as couplings utilizing a detent lever, detent spring, a bayonet coupling, a spring loaded ball detent etc.

[0028] Obviously, it is irrelevant whether the first shaving device has e.g. a positive coupling partner and the second shaving device has a negative coupling partner etc., but such coupling arrangements could also be provided the other way around (negative coupling partner realized at first shaving device and positive coupling partner realized at the second shaving device) as long as the first coupling arrangement 140 and the second coupling arrangement 240 releasably connect the first and second shaving devices 100 and 200. The first and second coupling arrangements are usually located at a circumferential position on the elongated handles so that the first and second shaving devices are coupled side by side.

[0029] In one embodiment, the first shaving device has a recess that extends along the longitudinal axis of the first shaving device, which recess is designed to receive at least a part of the elongated handle of the second shaving device. The recess could be realized with an undercut so that at least a part of the elongated handle of the second shaving device can snap-fit into the recess. Obviously, such a longitudinally extending recess can also be provided in the elongated handle of the second shaving device.

[0030] In the embodiment shown in Fig. 3, the first and second shaving devices 100, 200 have a contact arrangement 190, 290 of contacts 190 arranged at the first shaving device 100 and contacts 290 arranged at the second shaving device that conductively couple together in at least the first coupling position (in one embodiment, contacts 190 or contacts 290 may be elongated so that conductive coupling is achieved e.g. in at least two different coupling positions). The contact arrangement 190, 290 is designed to enable transfer of electrical energy between the first and the second shaving devices. In the shown embodiment, energy is transferred from the bat-

tery 160 provided in the first shaving device 100 to a vibration motor 280 mounted in the second shaving device 200 for exciting a vibration of the razor blades. In another embodiment, a vibration motor is provided in the first shaving device and a mechanical coupling between the first and the second shaving devices enables transmission of the vibrations generated by the vibration motor to the second shaving device. In such an embodiment, the shaving head of the second shaving device may be arranged close to the mechanical coupling.

[0031] Fig. 4 is a side view of a combined shaving device 1 similar to the combined shaving device shown in Fig. 1. The first shaving device 100 and the second shaving device 200 are coupled together in different geometrical relationship as in Fig. 1. The coupling position shown in Fig. 4 may be the only coupling position. Alternatively, the first coupling arrangement and/or the second coupling arrangement provided at the first and second shaving devices, respectively, may allow for coupling the first and second shaving devices together in two or even more coupling positions. If the second coupling arrangement is realized as a threaded screw, then the first coupling arrangement could comprise two or even more threaded holes for detachably connecting the first and second shaving devices in two or even more coupling positions. Alternatively, the first coupling arrangement may comprise a threaded hole that is provided in a movable element being part of the first coupling arrangement, which movable element can e.g. be slid or pivoted into two or even more locked positions. The realization of the coupling arrangements will be discussed in more detail with reference to Fig. 5A and Fig. 5B.

[0032] Fig. 5A is a perspective view onto the back side of the first shaving device 100 as shown in Figs. 1, 2A, 3, and 4. The first coupling arrangement 140 is schematically indicated. In the shown exemplary embodiment, the first coupling arrangement 140 comprises three coupling elements 141, 142, 143 for coupling the second shaving device to the first shaving device 100 in three different coupling positions. The first coupling position may be the coupling position as shown in Fig. 4, which allows a simultaneous usage of the first shaving device and the second shaving device as the shaving heads of the first and second shaving devices are aligned so that hairs growing on the skin can be removed by a single stroke. In an embodiment with an electrical trimmer as first shaving device and a safety razor as second shaving device, the hairs are first cut-off (or shorn-off) by the shaving head of the trimmer and then are cut-off by the shaving head of the safety razor, so that a complete hair removal result can be achieved in one single stroke. A second coupling position may be a position as shown in Fig. 1, where the second shaving device is in a storage position in which the shaving head of the second shaving device is covered by the first shaving device in such a way that any direct contact between the fingers of a user and any sharp blades of the shaving head of the second shaving device is effectively avoided. In this second coupling po-

sition, the first shaving device can be used alone. A third coupling position may be a position in which the shaving head of the second shaving device projects above the shaving head of the first shaving device. In this third coupling position, the second shaving device will be used.

[0033] The first coupling arrangement 140 also comprises a movable element 145 that is provided for selective motion on the back of the first shaving device 100. In one embodiment, the first coupling arrangement 140 comprises only one coupling element 141 that is arranged on the movable element 145, but several coupling positions of the combined shaving device are achieved by a selective movement of the movable element 145 relative to the first shaving device. The movable element 145 may be provided with several lock-in positions that are achieved e.g. via a spring-loaded ball detent having a registration feature.

[0034] Fig. 5B is a perspective view onto the front side of the second shaving device 200 as shown in Figs. 1, 2B, 3, and 4. The second coupling arrangement 240 is schematically indicated. In this exemplary embodiment, the second coupling arrangement 240 comprises only one coupling element that is arranged to couple with any one of the three coupling elements of the first shaving device as shown in Fig. 5A so that the first shaving device and the second shaving device 200 can be connected in any one of three mentioned coupling positions.

[0035] The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as "40 mm" is intended to mean "about 40 mm."

Claims

1. Combined shaving device (1) comprising:

a first shaving device (100) having at least a first coupling arrangement (140);
 a second shaving device (200) having at least a second coupling arrangement (240), the first and second coupling arrangements (140; 240) being configured to mate with each other to detachably couple the first shaving device (100) and the second shaving device (200) in at least a first coupling position;
 the first shaving device (100) having an elongated handle (110) provided for individual operation of the first shaving device (100) in a detached state; and
 the second shaving device (200) having an elongated handle (210) provided for individual operation of the second shaving device (200) in a detached state.

2. Combined shaving device according to claim 1, wherein the first shaving device (100) and the second shaving device (200) are detachably coupled together so that the elongated handles (110; 210) extend longitudinally side by side over a substantial part of their length.
3. Combined shaving device according to claim 2, wherein the elongated handle (110; 210) of one of the first and second shaving devices (100; 200) has a longitudinally extending recess in which at least a part of the elongated handle (110; 210) of the other of the first and second shaving devices (100; 200) is located.
4. Combined shaving device according to claim 1, wherein at least one of the first and second coupling arrangements (140; 240) has two or more coupling elements (141, 142, 143) to allow coupling the first and the second shaving device (100; 200) in at least the first coupling position and a second coupling position.
5. Combined shaving device according to claim 1, wherein one of the first or second coupling arrangements (140; 240) comprises a movable element (145) for selectively moving the first and second shaving device (100, 200) relatively to each other.
6. Combined shaving device according to claim 1, wherein at least one of the first or second coupling arrangements (140; 240) comprises a release element (241) provided for releasing the mated first and second coupling arrangements (140, 240).
7. Combined shaving device according to claim 1 having a contact arrangement (190, 290) for transferring electrical energy between the first shaving device (100) and the second shaving device (200).
8. Combined shaving device according to claim 1, wherein the first shaving device (100) has a powered vibration motor (280) and a mechanical coupling arranged to transmit vibrations generated by the vibration motor to a shaving head (220) of the second shaving device (200).
9. Combined shaving device according to claim 1, wherein the first shaving device (100) is an electrical dry shaving device that comprises a trimmer head (120) having a first toothed blade (121) and a second toothed blade, at least one of the first and second toothed blades being arranged to be driven in an operation mode so as to cut off hairs that feed in between the teeth of the first and second toothed blades.
10. Combined shaving device according to claim 11,

wherein the trimmer head (120) is exchangeable.

- 11.** Combined shaving device according to claim 1 or claim 11, wherein the second shaving device (200) is a wet shaving device that comprises a wet shaving head (220) that has at least a blade (221) having a sharp, elongated edge arranged for contacting the skin during a shaving operation so as to cut off hairs growing on the skin.

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- 12.** Electrical dry shaving device (100) comprising:

an elongated handle (110) provided for individual operation of the first shaving device (100) and at least a first coupling arrangement (140) arranged to detachably couple the electrical dry shaving device (100) to at least a second coupling arrangement (240) of a wet shaving device (200) that has an elongated handle (210) provided for individual operation of the electrical dry shaving device (100).

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- 13.** Wet shaving device (200) comprising:

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an elongated handle (210) provided for individual operation of the second shaving device (200) and at least a second coupling arrangement (240) arranged for detachably coupling the wet shaving device to at least a first coupling arrangement (140) of an electrical dry shaving device (100) that has an elongated handle (110) provided for individual operation of the electrical dry shaving device (100).

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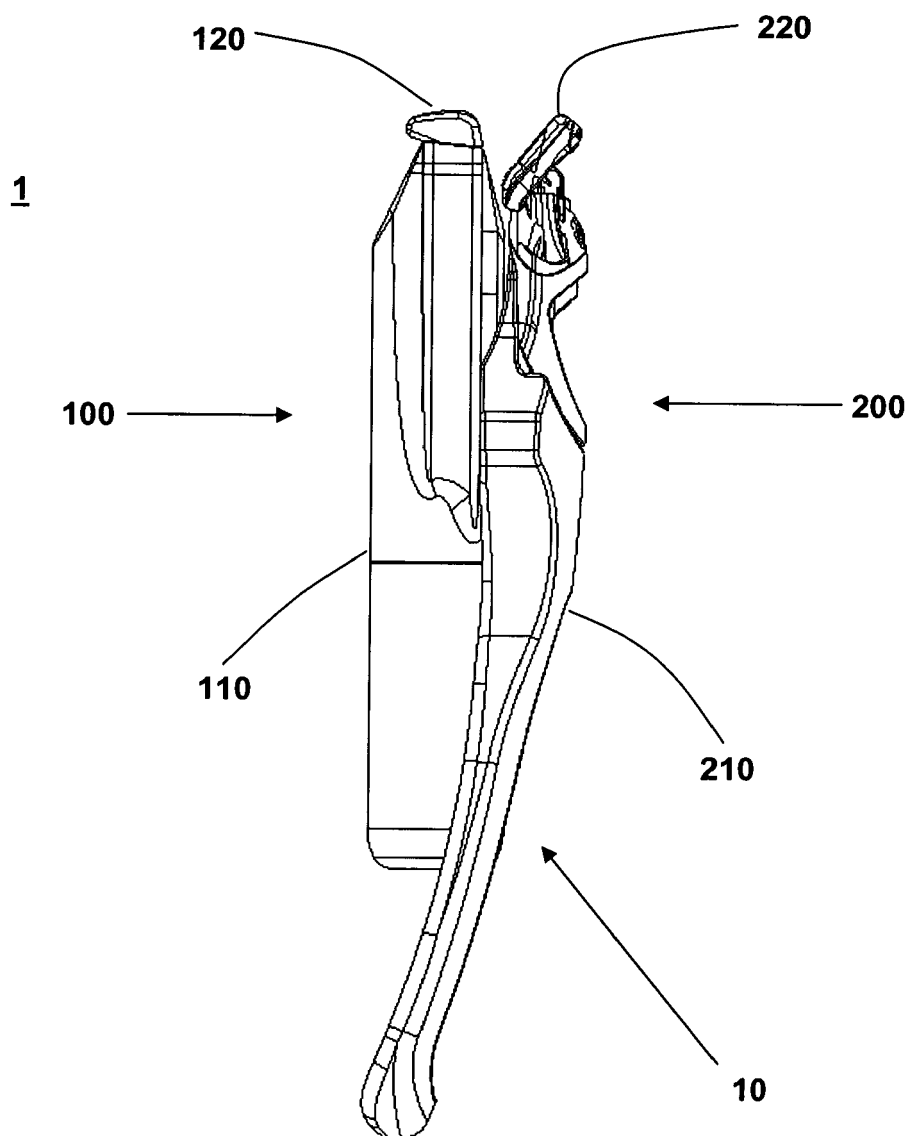


Fig. 1

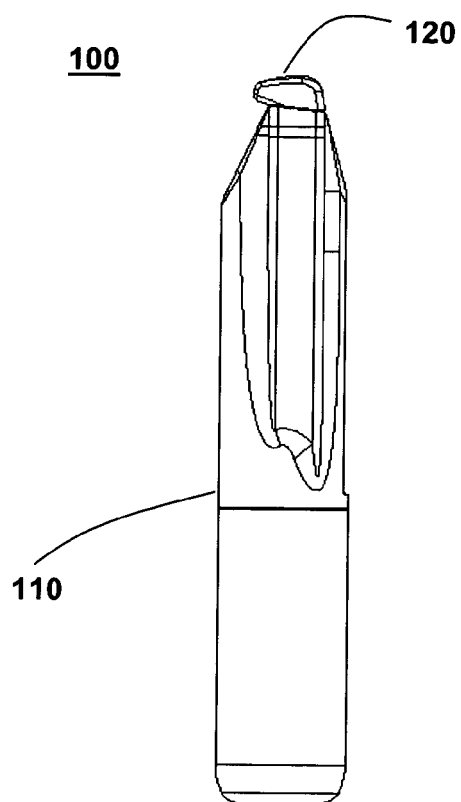


Fig. 2A

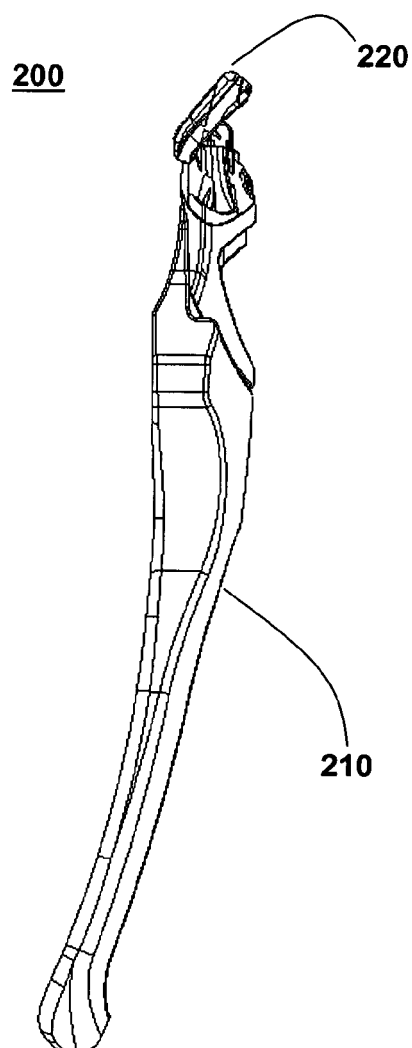


Fig. 2B

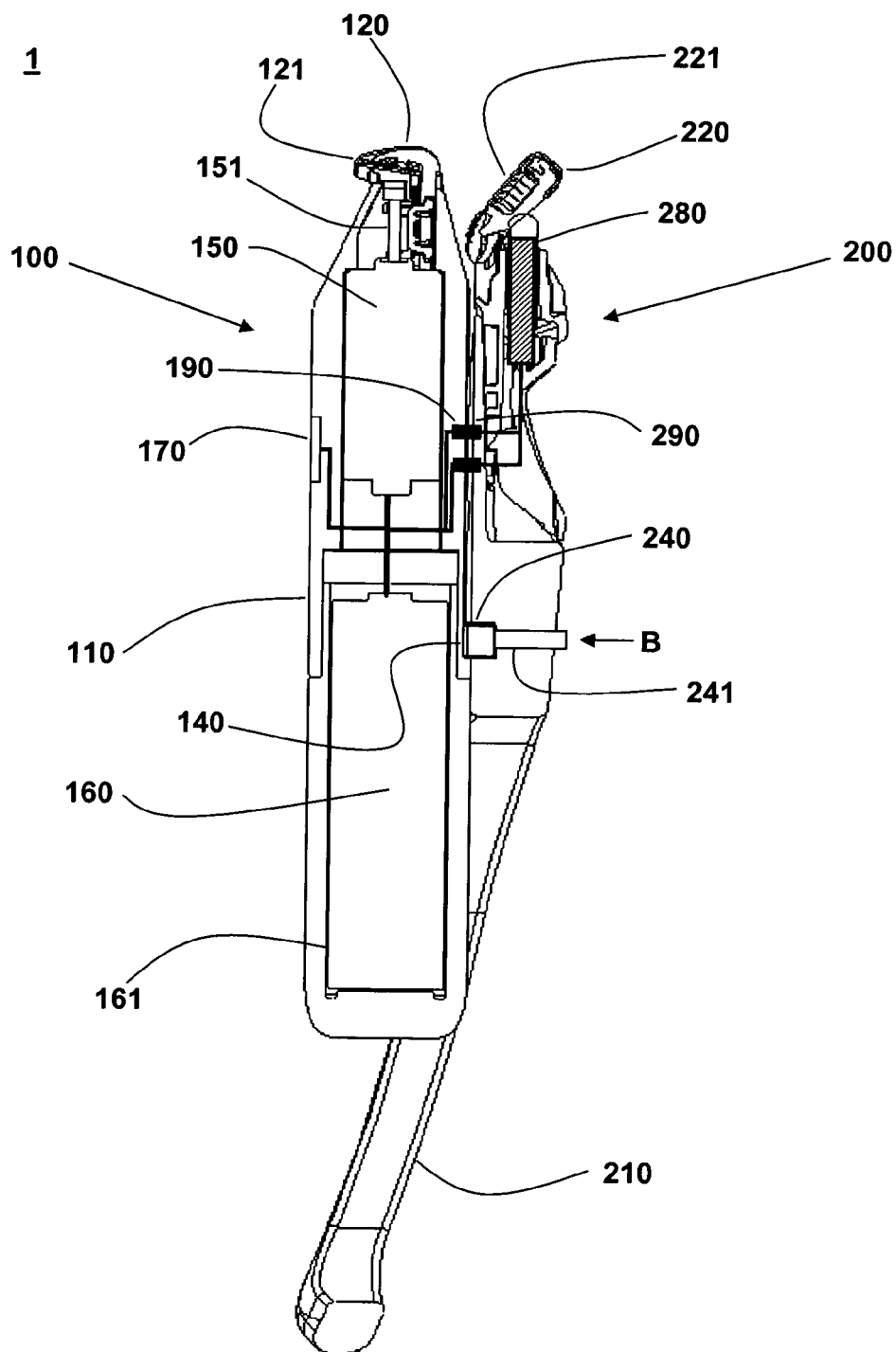


Fig. 3

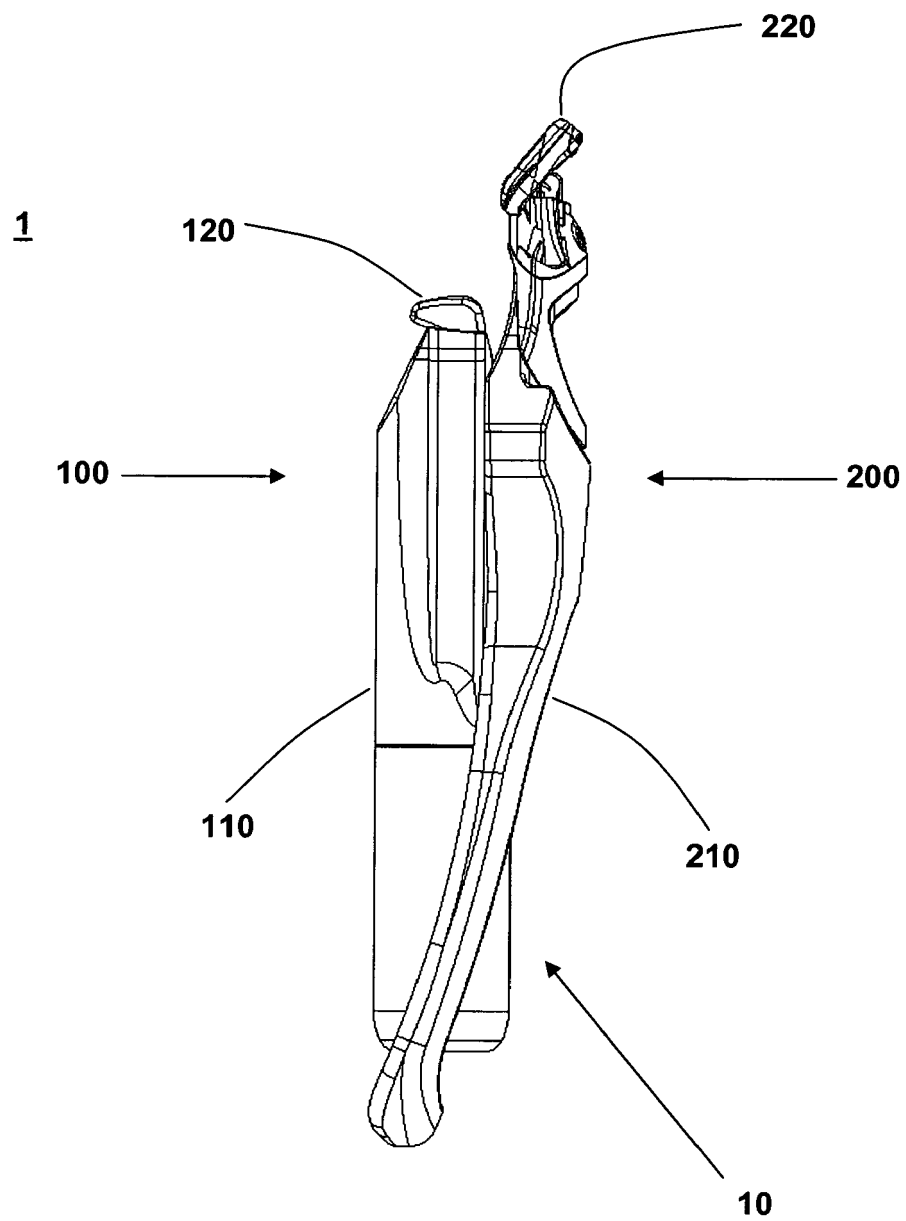


Fig. 4

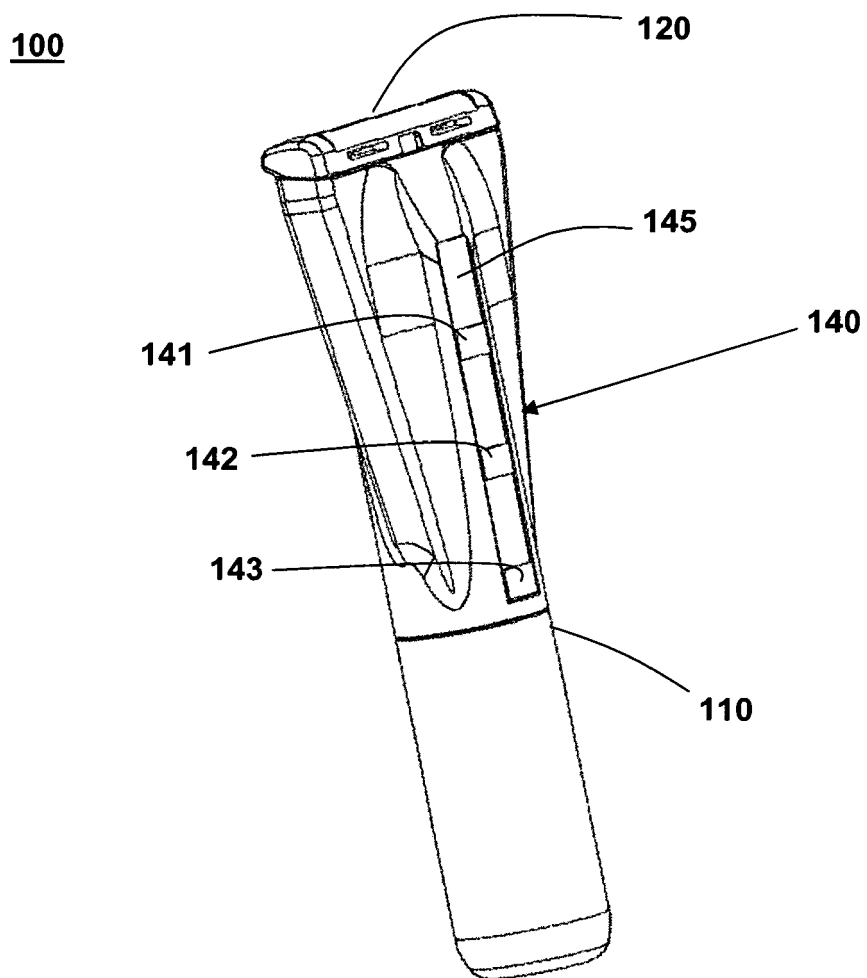


Fig. 5A

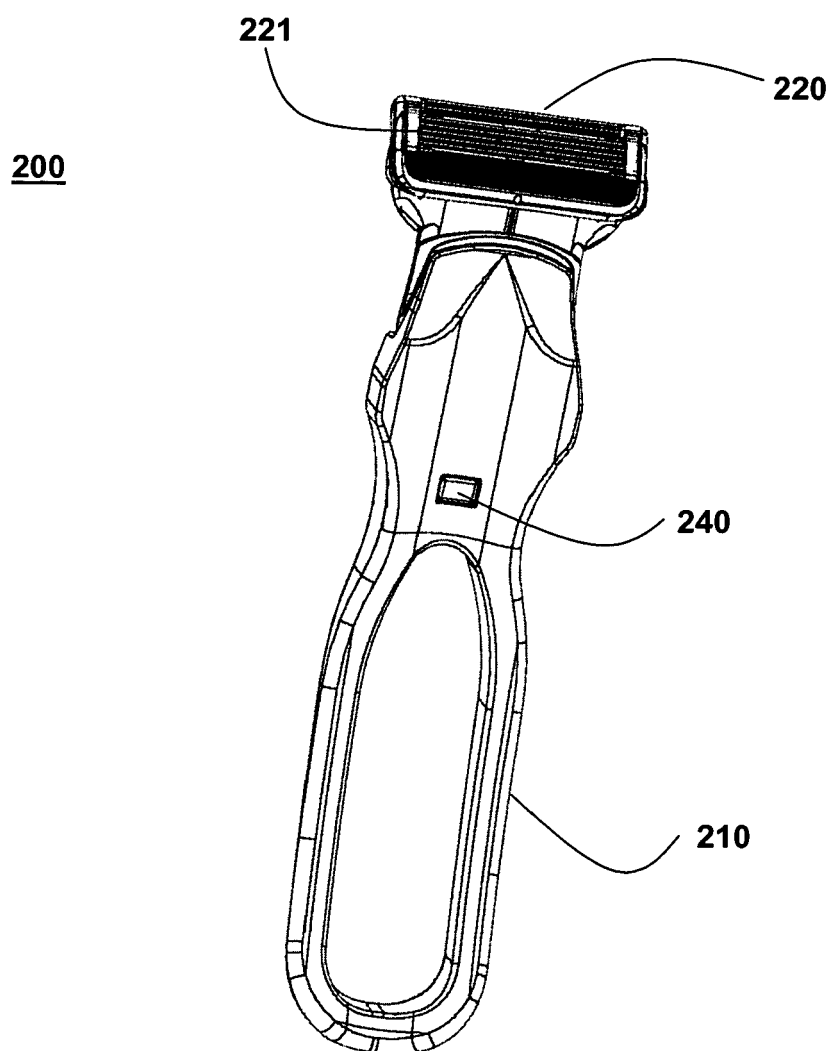


Fig. 5B



EUROPEAN SEARCH REPORT

Application Number
EP 08 01 2724

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 309 821 A (TERRY JOHN C ET AL) 12 January 1982 (1982-01-12) * column 2, lines 27-30; figures 1,2 *	1-3,11, 13	INV. B26B19/38 B26B19/06 B26B21/00 B26B21/40
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T	WO 2008/092623 A (BRAUN GMBH [DE]; FISCHER UWE [DE]; PEREZ-LOPEZ XAVIER [DE]; SCHMIDT RO) 7 August 2008 (2008-08-07) * abstract; figures 1a-c *		TECHNICAL FIELDS SEARCHED (IPC) B26B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 3 December 2008	Examiner Rattenberger, B
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.92 (P04C01)



Application Number

EP 08 01 2724

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

see annex

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 08 01 2724

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6,9-13

combined shaving device comprising a first shaving device having a first coupling arrangement and a second shaving device having a second coupling arrangement for detachably coupling with each other, wherein one of the shaving devices is an electrical dry shaving device

2. claim: 7

combined shaving device having a contact arrangement for transferring electrical energy between a first shaving device and a second shaving device

3. claim: 8

combined shaving device, wherein a first shaving device has a powered vibration motor and a mechanical coupling arranged to transmit vibrations to a second shaving device

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 01 2724

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-12-2008

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