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**(54) SYSTEM FOR COUNTING SCORES IN A SPORTS MATCH**

SYSTEM ZUM ZÄHLEN VON PUNKTEN BEI EINEM SPORTWETTKAMPF

SYSTÈME DE COMPTAGE DE SCORES DANS UN MATCH DE SPORT

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## Description

**[0001]** The present invention relates to a system for counting scores in a racket sports match, such as a badminton, table tennis or tennis game, comprising at least one counting device including a transmitter, activation means and a shell in which the transmitter is accommodated, and at least one display unit including a receiver and a screen, the transmitter of the counting device being configured to transmit a signal indicating a point, following activation of the activation means, to the receiver of the display unit to display a score based on the received signal.

**[0002]** In sports matches on a sub-elite level a majority of the matches are governed by the players themselves, and the players continuously need to keep track on the score. To that end, displays are known in which numbers are flipped to indicate the score. It is, however, inconvenient to the players to flip the numbers on a centrally positioned display at each point, and hence the score is normally committed to memory.

**[0003]** From badminton it is known to attach score indicators to the shaft which score indicators are scratched like a lottery ticket during the game. One disadvantage is that only the player himself or herself can see his or her own score. Another disadvantage is that the score indicator is for single use only.

**[0004]** DE 4006503 A1 describes an arrangement for counting and displaying the scores in a tennis match played on a court comprising two play areas separated by a net. An electronic counter and display are arranged in the field of vision of both players. A pulse generator placed on or in the racket of at least one player sends information on the score of each player to the counter and display via radio, ultrasound or laser.

**[0005]** US 2007/105666 A1 describes an electronic device to be used in rackets or paddles, comprising of an acoustic or vibration sensor, a microcontroller, a micro-transmitterreceiver, a microspeaker and a display. The device is adapted to count, calculate and show in the display the game time, game speed, the score and the quantity of hits that the player gave to the ball.

**[0006]** GB 2355203 A describes a playeroperated scorekeeping apparatus worn or carried by one player and connected by a radiocommunications link with a remote display. For example, a wrist band supports unit provided with pushbuttons for inputting points as they are won by either side and associated with respective signal encoders containing stored address data for modulating the radio transmission to the display unit which incorporates data decoding within the radio receiver to allow address storage matching before displaying the appropriate alteration to the previously displayed score. If an erroneous entry signal is received, e.g. by operating both buttons simultaneously, the display reverts to the previous score.

**[0007]** DE 195 46 410 A1 describes a display consisting of flap or LED elements controlled by microcomputer

and varying to suit the sport and other parameters indicating the results and receiving information by radio, infrared or ultrasonic signals. The elements are operated by transmitters clipped on the sportswear or a wrist watch of the participants. They may also operated by a compact hand transmitter on a judge or referee outside the playing area.

**[0008]** Other documents showing systems for capturing or measuring various properties such as match data include US patent No. 8,911,309 B1 and WO 2009/033298 A1. However, due to the complex functionality, such units are rendered expensive and difficult to mount and use.

**[0009]** With this background it is an object of the invention to provide an alternative which is simple, practical and less costly for players to keep track on the score in a game.

**[0010]** This and further objects are met by a system according to appended independent claim 1.

**[0011]** Further embodiments and advantages are set forth in the dependent claims, and will be apparent from the accompanying description of preferred embodiments.

**[0012]** In the following the invention will be described in further detail by means of examples of embodiments with reference to the schematic drawings, in which

Fig 1 shows a perspective view seen from below of a counting device of a system in an embodiment of the invention;

Fig. 2 shows a perspective view of the counting device of Fig. 1;

Fig. 3 shows a sectional perspective view of the counting device of Fig. 1;

Fig. 4 shows a schematic view of a net with two display units of a system in another embodiment of the invention, mounted on a fitting on a post;

Fig. 5 shows a partial perspective view, on a larger scale, of details of the system of Fig. 4;

Fig. 6 shows a perspective view of the front side of a display unit of a system in an embodiment of the invention;

Fig. 7 shows a photograph of the front side of a display unit of a system in an embodiment of the invention;

Fig. 8a shows a perspective view of a badminton racket for illustration purposes;

Fig. 8b shows a partial perspective view of a detail of the badminton racket of Fig. 8a, on a larger scale, with a counting device of an embodiment of the system according to the invention;

Figs 9 to 11 show perspective views of a counting device of a system in another embodiment, some details removed for clarity reasons;

Fig. 12 shows a perspective view of the counting device of Figs 9 to 11, with some details in place;

Fig. 13 shows a sectional perspective view of the counting device of Fig. 12; and

Fig. 14 shows a detail of a further embodiment of the system according to the invention.

**[0013]** In a first embodiment shown in Figs 1 and 2, a counting device 1 comprising a shell 2 is shown. The shell 2 has an exterior surface 3 and an interior surface 4, of which the exterior surface 3 is mainly conical to provide an aerodynamic shape.

**[0014]** The shell 2 is adapted to be releasably mounted on a racket. The shell 2 is provided with a single activation means to be described in further detail below.

**[0015]** The counting device 1 of the embodiment shown is adapted to fit a badminton racket. Alternatively, the counting device according to the invention could be made to fit a sport equipment of a similar kind, such as a tennis racket, a squash racket or the like.

**[0016]** The interior surface 4 has a substantially conical shape to fit a transition from the shaft to the handle of a badminton racket, i.e. in the position in which the front cap is located. The shell 2 has a first end 5 at which a number of barbs 18 are provided. The barbs 18 may dig into a soft material and hence reduce or even eliminate the risk that the counting device 1 falls off after mounting. The shell 2 furthermore has a second end 6, at which a contact surface 19 is provided. The contact surface 19 is provided on the interior surface 4 and is adapted to embrace the shaft of a badminton racket. The contact surface 19 may furthermore comprise a ductile material such that a range of shaft diameters may be embraced. Furthermore, it is possible optionally to provide the contact surface 19 and/or other parts of the interior surface 4 of the shell 2 with a friction-increasing means, such as an adhesive, to increase the retention of the counting device 1 to a racket. In case the contact surface 19 is provided by a ductile material, this area also has a sound-dampening effect.

**[0017]** In the embodiment shown, the shell 2 furthermore comprises an open section 7 extending from the first end 5 to the second end 6. The open section 7 comprises a first edge 8 and a second edge 9 of the shell 2, of which the first edge 8 and the second edge 9 are located at a distance from each other that is smaller than the internal diameter of the interior surface 4 of the shell 2.

**[0018]** Referring to Fig. 3, the shell 2 of the counting device 1 furthermore comprises a space 10 for accommodating the transmitter, a battery and further electronic equipment. The space 10 is delimited by a bottom 12 facing the interior surface 4 of the shell 2 and an openable lid 11 covering in a closed position the space 10. The lid 11 is, in the embodiment shown, connected to the shell 2 by means of a first snaplock part 14 and a second snaplock part 15 engaging with a first abutment face 16 and a second abutment face 17, respectively. In an alternative embodiment, not shown, the lid 11 may be mounted to the shell 2 with only one snaplock part engaging an abutment face of the shell. Moreover, other ways of connecting or mounting the lid on the shell are conceivable, for instance a friction lock mechanism, a click lock mech-

anism or fastening means such as a screw or the like.

**[0019]** In the embodiment shown, the single activation means comprises a pushbutton 13 provided on the lid 11, the pushbutton 13 acting as the activation means to activate the transmitter to transmit a signal to a receiver. In the preferred embodiment, the pushbutton functions as an incremental activation means, that is, increases the score. The space 10 is provided in a slightly raised portion of the exterior surface 3 of the shell, the lid 11 being flush with the exterior surface 3 in the closed position. In order to provide a smooth transition between the space 10 and the first end 5, the exterior surface 3 of the shell 3 is provided with an inclined portion 20 having a steeper inclination than the remaining parts of the exterior surface 3. It is conceivable that the space is made of a more flat configuration such that the exterior surface of the shell is substantially completely conical, all parts being flush.

**[0020]** In the shown embodiment, the counting device 1 comprises only one activation means, viz. the pushbutton 13. In other embodiments, not shown, it is possible to provide two or more buttons to allow for more functionalities of the counting device.

**[0021]** In the embodiment of Fig. 4, two display units 100 are shown, mounted on a fitting 200 which in turn is mounted on the top of a post 400 holding a net 300 of a badminton court. Hereby it is possible for two players to control the two display units 100 to keep track of the scores of the respective half of the court.

**[0022]** The display unit 100 comprises, referring now to Fig. 5, a screen 101, a housing 102, a first on/off button 104 and a second reset/link button 103. The first on/off button 104 is used for switching the display unit on and off. The second reset/link button 103 resets the displayed score by pushing for a short time period (for instance 0.5 s), and by pushing the button 103 longer (for instance 2 s) a scan or search for a transmitter to pair with is carried out. In order to allow the pairing, the pushbutton 13 of a counting device 1 is held down, while at the same time the display unit 100 scans for a transmitter. In other embodiments, the display unit may comprise another number of buttons than two. The screen 101 is able to display numbers from 00 to 99 and the display unit 100 may be set to battery-saving or automatic switching off mode if not active for predetermined periods of time. It is conceivable to incorporate a magnet in the lower side of each display unit 100 which holds the display unit 100 in place temporarily and thus allows the display unit to be moved from one half of the court to the other when switching sides in a game.

**[0023]** The display unit 100 furthermore has a number of mounting elements 105 assembling the screen 101 with the housing 102. These mounting elements 105 may be in the form of screw holes and threading in which a screw is introduced or other configurations. The mounting of the display unit or units 100 is carried out substantially as described in the above. Alternatively, it is possible to mount the display unit or units with the fitting at another

position in the surroundings of the court or the place where the game takes place.

**[0024]** Figs 7 and 9 to 13 show further design aspects of the system according to the invention.

**[0025]** Fig. 8a shows the parts of a badminton racket for information purposes, and Fig. 8b shows a detail of the badminton racket of Fig. 8a intended for cooperation with the counting device 1.

**[0026]** The dimensions and weight of the counting device are chosen to fit the requirements of being releasably mounted and retained on a racket without compromising the feel and handling of the racket. Hence, the shell 2 of the counting device 1 is for instance moulded by a light-weight durable material, such as ABS or PC. The length of the shell 2 from the first end 5 to the second end 6 lies in the range 35-70 mm, the outer diameter at the first end 5 is typically 25-35 mm and the outer diameter at the second end 6 is typically 12-20 mm. The internal diameter of the of the interior surface 4 is as mentioned dimensioned to allow mounting of the counting device 1 on a shaft on a racket and typically ranges from 10-25 mm for a badminton racket. This gives an approximate material thickness of 1-4 mm and an overall weight of the counting device 1 of approximately 4-7 g without the transmitter, battery and other electronic equipment and approximately 7-11 g including these elements. The dimensions of the open section 7 are also chosen to allow that the counting device 1 is able to be inserted over the shaft of a racket, and as mentioned the distance from the first edge 8 to the second edge 9 of the open section 7 is smaller than the internal diameter of the shell 2. For a badminton racket, this distance is approximately 8 mm thus being substantially the same as the diameter of the racket shaft. The configuration and material of the counting device are chosen such that it is possible to squeeze the shaft through the open section 7 during mounting and dismounting of the counting device without damage in order to allow for the releasable mounting provided for.

**[0027]** Referring now to Fig. 14, details of a further embodiment of the system are shown. Here, an additional transmitter device 500 is adapted to be paired with the display unit 100 described in the above. The additional transmitter device comprises a plus/minus transmitter having a plus pushbutton 513 and a minus pushbutton 523. The plus/minus transmitter 500 furthermore comprises a cord 501 so that it may easily be carried for instance around the wrist of the wearer. This embodiment is particularly advantageous in that a player having by error activated the single activation means on the counting device in those cases where the single activation means provides increments only, the erroneous point may be neutralized in that the minus pushbutton 523 is activated. The additional transmitter device 500 may for instance be carried by the referee or a neutral by-stander.

**[0028]** As an alternative feature, not shown, the counting device of the system may be used for counting other sports games as well such as street basket or soccer. In such cases, the counting devices may be provided with

means for carrying it on the wrist or the like.

**[0029]** The invention should not be regarded as being limited to the embodiments shown in the drawings and described in the above. Several modifications and combinations may be carried out within the scope of the appended claims.

**[0030]** The different features of the embodiments may be combined.

#### 10 Reference numerals

#### **[0031]**

	1	counting device
	2	shell
	3	exterior surface
	4	interior surface
	5	first end
	6	second end
15	7	open section
	8	first edge
	9	second edge
	10	space
	11	lid
25	12	bottom
	13	pushbutton
	14	first snaplock part
	15	second snaplock part
	16	first abutment face
30	17	second abutment face
	18	barbs
	19	contact surface
	20	inclined portion
35	100	display unit
	101	screen
	102	housing
	103	second button ("RESET"/"LINK")
	104	first button ("ON"/"OFF")
40	105	mounting element
	200	fitting
	300	net
45	400	post
	500	plus/minus transmitter
	501	cord
	513	plus pushbutton
50	523	minus pushbutton

#### **Claims**

- 55 1. A system for counting scores in a racket sports match, such as a badminton, table tennis or tennis game, comprising at least two counting devices (1), each counting de-

vice (1) including a transmitter, single activation means (13) and a shell (2) in which the transmitter is accommodated, and

at least two display units (100), each display unit (100) including a receiver and a screen (101), the transmitter of each counting device (1) being configured to transmit a signal indicating a point, following activation of the activation means (13), to the receiver of the corresponding display unit (100) to display a score based on the received signal,

**characterized in that**

the shell (2) of each counting device (1) is substantially tube-shaped and extends between a first end (5) and a second end (6) and has an exterior surface (3) and an interior surface (4) presenting an internal diameter dimensioned to allow mounting of the counting device (1) on a shaft of a racket,

and that the shell (2) of each counting device (1) comprises an open section (7) extending from the first end (5) of the shell (2) to the second end (6) of the shell (2)

such that the shell (2) is adapted to be releasably snapped on a shaft of a racket.

2. A system according to claim 1, wherein the shell (2) of each counting device (1) comprises a distance from a first edge (8) of the open section (7) to a second edge (9) of the open section (7) being smaller than the internal diameter of the shell (2).
3. A system according to any one of the preceding claims, wherein the single activation means comprises a pushbutton (13) acting as an incremental activation means.
4. A system according to any one of the preceding claims, wherein the interior surface (4) of the shell (2) is substantially conical to allow mounting of the shell (2) at the transition between a handle and a shaft of a badminton racket.
5. A system according to claim 4, wherein the interior surface (4) of the shell (2) at the first end (5) is provided with at least one barb (18) adapted to engage a soft material of the handle of a badminton racket, and the interior surface (4) of the shell (2) at the second end (6) preferably being provided with a contact surface (19) adapted to embrace the shaft of a badminton racket.
6. A system according to any one of the preceding claims, wherein the shell (2) of each counting device (1) comprises a space (10) for accommodating the transmitter, a battery and further electronic equipment and delimited by a bottom (12) facing the interior surface (4) of the shell (2) and an openable lid (11) covering in a closed position the space (10), the lid (11) being preferably connected to the shell (2)

by means of a first snaplock part (14) and a second snaplock part (15) engaging with a first abutment face (16) and a second abutment face (17), respectively.

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7. A system according to claim 6, wherein the space (10) is provided in a slightly raised portion of the exterior surface (3) of the shell (2), the lid (11) being preferably flush with the exterior surface (3) in the closed position.
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8. A system according to any one of the preceding claims, wherein each display unit (100) comprises a first on/off button (104) and a second reset/link button (103) adapted to enable pairing with the corresponding counting device (1).
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9. A system according to any one of the preceding claims, wherein each display unit (100) is mounted on a fitting (200) adapted to be connected to a post (400) of a net (300).
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10. A system according to any one of the preceding claims, wherein the system including two display units (100) and two counting devices (1) is provided as a set.
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11. A system according to any one of the preceding claims, wherein the system further comprises an additional transmitter device (500) adapted to be paired with at least one of said display units (100).
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12. A system according to claim 11, wherein said additional transmitter device comprises a plus/minus transmitter (500) having at least one plus pushbutton (513) and at least one minus pushbutton (523).
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**Patentansprüche**

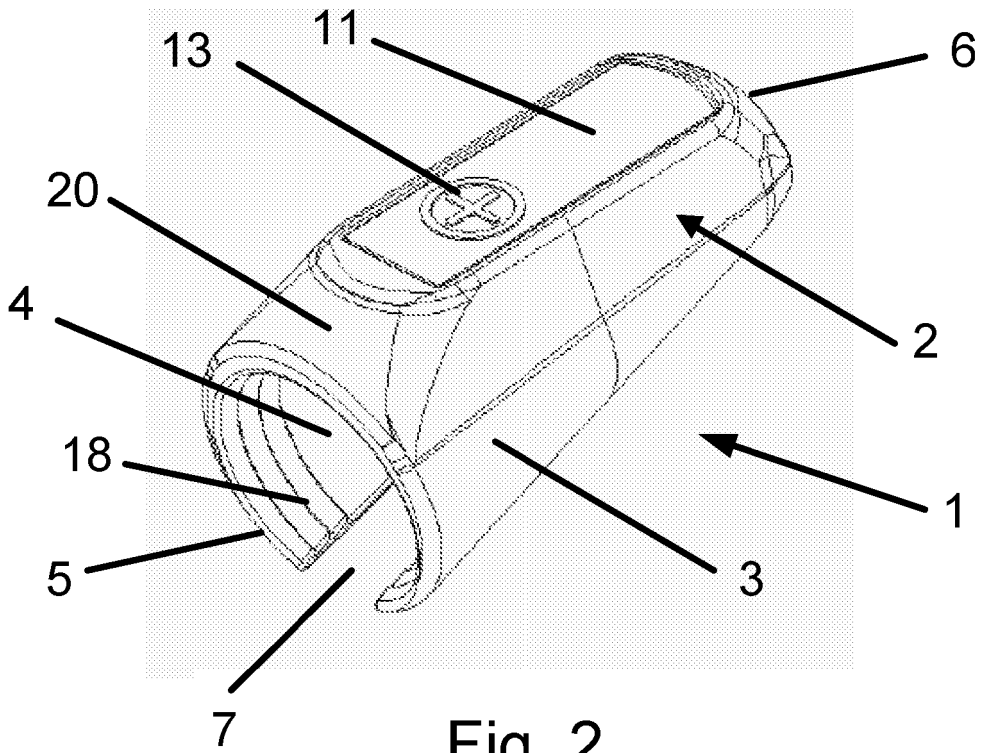
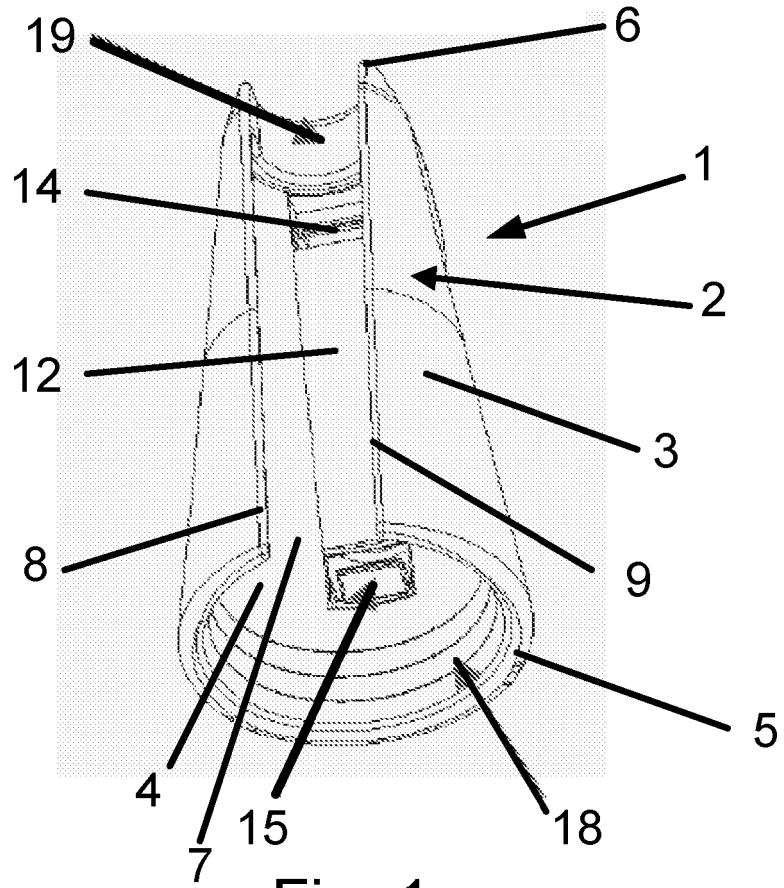
- 40
1. System zum Zählen von Punkten bei einem Sportwettkampf mit Schlägern, wie z.B. einem Badminton-, Tischtennis- oder Tennisspiel, umfassend zumindest zwei Zählvorrichtungen (1), wobei jede Zählvorrichtung (1) einen Sender, ein einzelnes Aktivierungsmittel (13) und ein Gehäuse (2), in dem der Sender untergebracht ist, beinhaltet, und mindestens zwei Anzeigeeinheiten (100), wobei jede Anzeigeeinheit (100) einen Empfänger und einen Bildschirm (101) beinhaltet, wobei der Sender jeder Zählvorrichtung (1) dazu ausgelegt ist, nach Aktivieren des Aktivierungsmittels (13) ein Signal, das einen Punkt angibt, an den Empfänger der entsprechenden Anzeigeeinheit (100) zu übertragen, um einen Punktestand basierend auf dem empfangenen Signal anzuzeigen, **dadurch gekennzeichnet, dass** das Gehäuse (2) jeder Zählvorrichtung (1) im We-
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- sentlichen rohrförmig ist und sich zwischen einem ersten Ende (5) und einem zweiten Ende (6) erstreckt und eine Außenfläche (3) und eine Innenfläche (4) aufweist, die einen Innendurchmesser aufweisen, der so bemessen ist, dass er die Montage der Zählvorrichtung (1) auf einem Schaft eines Schlägers ermöglicht, und dass das Gehäuse (2) jeder Zählvorrichtung (1) einen offenen Abschnitt (7) umfasst, der sich von dem ersten Ende (5) des Gehäuses (2) zu dem zweiten Ende (6) des Gehäuses (2) erstreckt, so dass das Gehäuse (2) angepasst ist, um lösbar auf einem Schaft eines Schlägers einzurasten.
2. System nach Anspruch 1, wobei das Gehäuse (2) jeder Zählvorrichtung (1) einen Abstand von einer ersten Kante (8) des offenen Abschnitts (7) zu einer zweiten Kante (9) des offenen Abschnitts (7) umfasst, der kleiner ist als der Innendurchmesser des Gehäuses (2).
  3. System nach einem der vorhergehenden Ansprüche, wobei das einzelne Aktivierungsmittel eine Drucktaste (13) umfasst, der als ein inkrementelles Aktivierungsmittel wirkt.
  4. System nach einem der vorhergehenden Ansprüche, wobei die Innenfläche (4) des Gehäuses (2) im Wesentlichen konisch ist, um die Montage des Gehäuses (2) am Übergang zwischen einem Griff und einem Schaft eines Badmintonschlägers zu ermöglichen.
  5. System nach Anspruch 4, wobei die Innenfläche (4) des Gehäuses (2) an dem ersten Ende (5) mit mindestens einem Widerhaken (18) versehen ist, der dazu angepasst ist, mit einem weichen Material des Griffs eines Badmintonschlägers in Eingriff zu kommen, und wobei die Innenfläche (4) des Gehäuses (2) an dem zweiten Ende (6) vorzugsweise mit einer Kontaktfläche (19) versehen ist, die dazu angepasst ist, den Schaft eines Badmintonschlägers aufzunehmen.
  6. System nach einem der vorhergehenden Ansprüche, wobei das Gehäuse (2) jeder Zählvorrichtung (1) einen Raum (10) zur Aufnahme des Senders, einer Batterie und weiterer elektronischer Ausrüstungen umfasst und durch einen der Innenfläche (4) des Gehäuses (2) zugewandten Boden (12) und einen zu öffnenden Deckel (11) begrenzt ist, der in einer geschlossenen Position den Raum (10) abdeckt, wobei der Deckel (11) vorzugsweise mit dem Gehäuse (2) mittels eines ersten Schnappverschlusssteils (14) und eines zweiten Schnappverschlusssteils (15) verbunden ist, die jeweils mit einer ersten Anschlagfläche (16) bzw. einer zweiten Anschlagfläche (17) in Eingriff stehen.
  7. System nach Anspruch 6, wobei der Raum (10) in einem leicht erhöhten Abschnitt der Außenfläche (3) des Gehäuses (2) bereitgestellt wird, wobei der Deckel (11) in der geschlossenen Position vorzugsweise bündig mit der Außenfläche (3) ist.
  8. System nach einem der vorhergehenden Ansprüche, wobei jede Anzeigeeinheit (100) eine erste Ein/Aus-Taste (104) und eine zweite Rückstell-/Verbindungs-Taste (103) umfasst, die so angepasst sind, dass sie eine Paarung mit der entsprechenden Zählvorrichtung (1) aktivieren können.
  9. System nach einem der vorhergehenden Ansprüche, wobei jede Anzeigeeinheit (100) auf einem Beschlag (200) montiert ist, der dazu angepasst ist, mit einem Pfosten (400) eines Netzes (300) verbunden zu werden.
  10. System nach einem der vorhergehenden Ansprüche, wobei das System zwei Anzeigeeinheiten (100) und zwei Zählvorrichtungen (1) beinhaltet und als Satz bereitgestellt wird.
  11. System nach einem der vorhergehenden Ansprüche, wobei das System ferner eine zusätzliche Sendevorrichtung (500) umfasst, die dazu angepasst ist, mit mindestens einer der Anzeigeeinheiten (100) gepaart zu werden.
  12. System nach Anspruch 11, wobei die zusätzliche Sendevorrichtung einen Plus/Minus-Sender (500) mit mindestens einer Plus-Drucktaste (513) und mindestens einer Minus-Drucktaste (523) umfasst.

#### Revendications

1. Système de comptage de scores dans un match de sport de raquette tel qu'un match de badminton, tennis de table ou tennis, comprenant aux moins deux dispositifs de comptage (1), chaque dispositif de comptage (1) comportant un émetteur, un moyen d'activation unique (13) et une coque (2) dans laquelle est reçu l'émetteur, et au moins deux unités d'affichage (100), chaque unité d'affichage (100) comportant un récepteur et un écran (101), l'émetteur de chaque dispositif de comptage (1) étant configuré pour transmettre au récepteur de l'unité d'affichage correspondante (100), suite à l'activation du moyen d'activation (13), un signal indiquant un point, pour afficher un score basé sur le signal reçu,  
**caractérisé en ce que**  
la coque (2) de chaque dispositif de comptage (1) est substantiellement en forme de tube et s'étend entre une première extrémité (5) et une deuxième extrémité (6) et présente une surface extérieure (3)

- et une surface intérieure (4) présentant un diamètre interne dimensionné de manière à permettre le montage du dispositif de comptage (1) sur un manche d'une raquette,
- et **en ce que** la coque (2) de chaque dispositif de comptage (1) comprend une section ouverte (7) s'étendant depuis la première extrémité (5) de la coque (2) jusqu'à la deuxième extrémité (6) de la coque (2) de telle sorte que la coque (2) soit apte à être encliquetée de manière amovible sur un manche d'une raquette.
2. Système selon la revendication 1, dans lequel la coque (2) de chaque dispositif de comptage (1) comprend une distance depuis un premier bord (8) de la section ouverte (7) jusqu'à un deuxième bord (9) de la section ouverte (7) qui est inférieure au diamètre interne de la coque (2).
  3. Système selon l'une quelconque des revendications précédentes, dans lequel le moyen d'activation unique comprend un bouton-poussoir (13) agissant en tant que moyen d'activation incrémental.
  4. Système selon l'une quelconque des revendications précédentes, dans lequel la surface intérieure (4) de la coque (2) est substantiellement conique de manière à permettre le montage de la coque (2) au niveau de la transition entre une poignée et un manche d'une raquette de badminton.
  5. Système selon la revendication 4, dans lequel la surface intérieure (4) de la coque (2) au niveau de la première extrémité (5) est pourvue d'au moins une barbelure (18) prévue pour venir en prise avec un matériau mou de la poignée d'une raquette de badminton, et la surface intérieure (4) de la coque (2) au niveau de la deuxième extrémité (6) étant de préférence pourvue d'une surface de contact (19) prévue pour envelopper le manche d'une raquette de badminton.
  6. Système selon l'une quelconque des revendications précédentes, dans lequel la coque (2) de chaque dispositif de comptage (1) comprend un espace (10) pour recevoir l'émetteur, une pile et un équipement électronique supplémentaire, et délimité par un fond (12) faisant face à la surface intérieure (4) de la coque (2) et un couvercle (11) pouvant être ouvert, recouvrant l'espace (10) dans une position fermée, le couvercle (11) étant de préférence connecté à la coque (2) au moyen d'une première partie d'encliquetage (14) et d'une deuxième partie d'encliquetage (15) venant en prise respectivement avec une première face de butée (16) et une deuxième face de butée (17).
  7. Système selon la revendication 6, dans lequel l'espace (10) est prévu dans une portion légèrement rehaussée de la surface extérieure (3) de la coque (2), le couvercle (11) étant de préférence en affleurement avec la surface extérieure (3) dans la position fermée.
  8. Système selon l'une quelconque des revendications précédentes, dans lequel chaque unité d'affichage (100) comprend un premier bouton marche/arrêt (104) et un deuxième bouton de réinitialisation/liaison (103) prévu pour permettre un appariement avec le dispositif de comptage correspondant (1).
  9. Système selon l'une quelconque des revendications précédentes, dans lequel chaque unité d'affichage (100) est montée sur un raccord (200) prévu pour être connecté à un poteau (400) d'un filet (300).
  10. Système selon l'une quelconque des revendications précédentes, le système comportant deux unités d'affichage (100) et deux dispositifs de comptage (1) étant fourni sous forme d'ensemble.
  11. Système selon l'une quelconque des revendications précédentes, le système comprenant en outre un dispositif émetteur supplémentaire (500) prévu pour être apparié avec au moins l'une desdites unités d'affichage (100).
  12. Système selon la revendication 11, dans lequel ledit dispositif émetteur supplémentaire comprend un émetteur plus/moins (500) ayant au moins un bouton-poussoir plus (513) et au moins un bouton-poussoir moins (523).





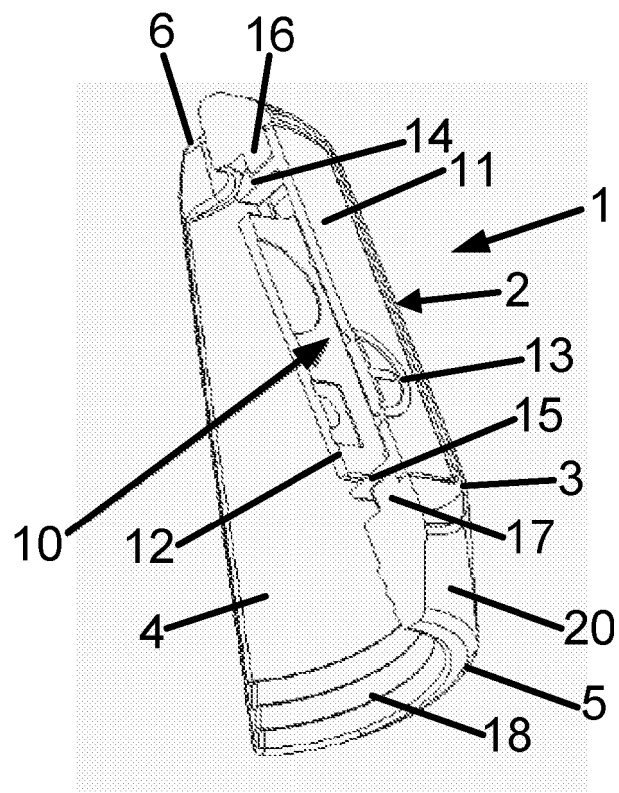


Fig. 3

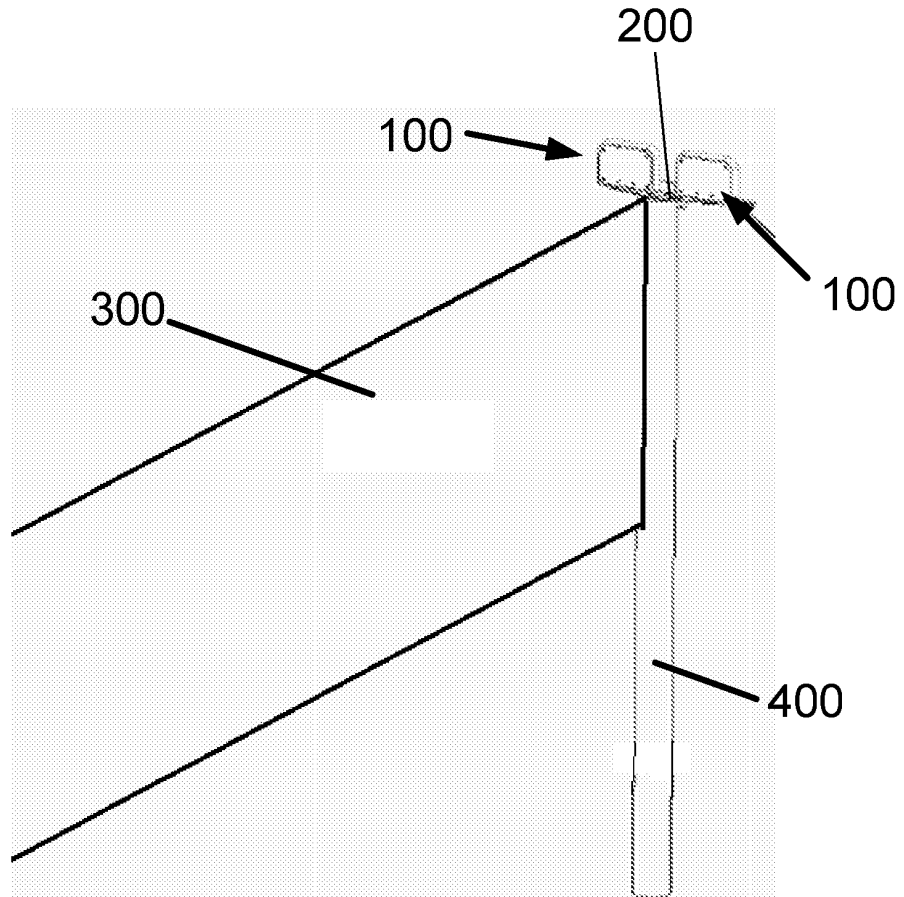


Fig. 4

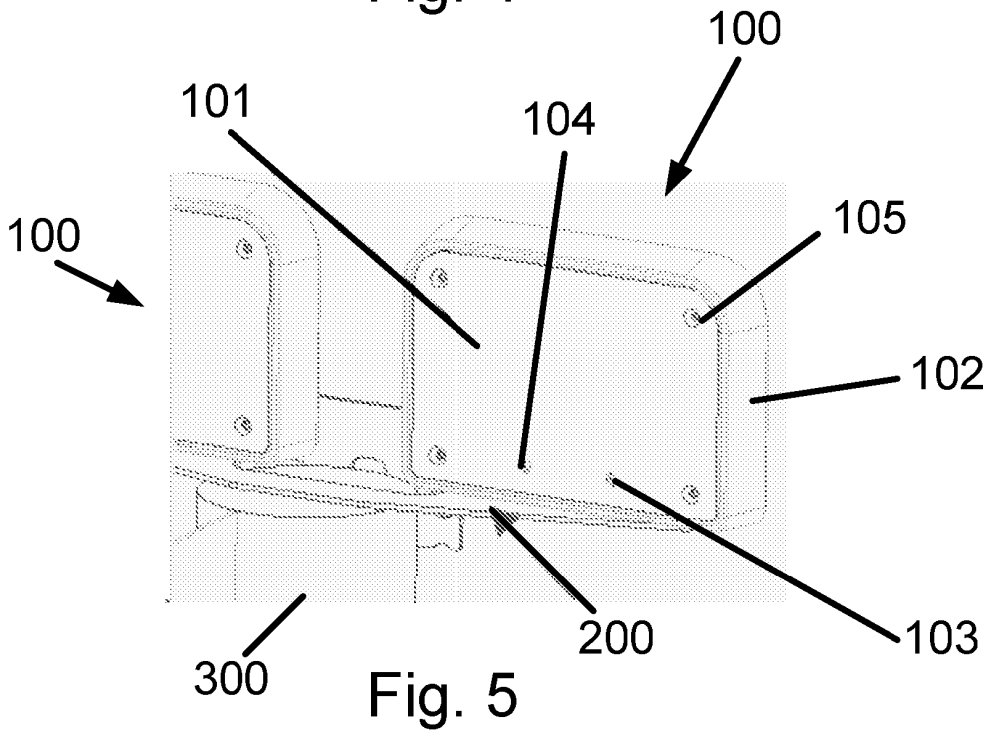


Fig. 5

100

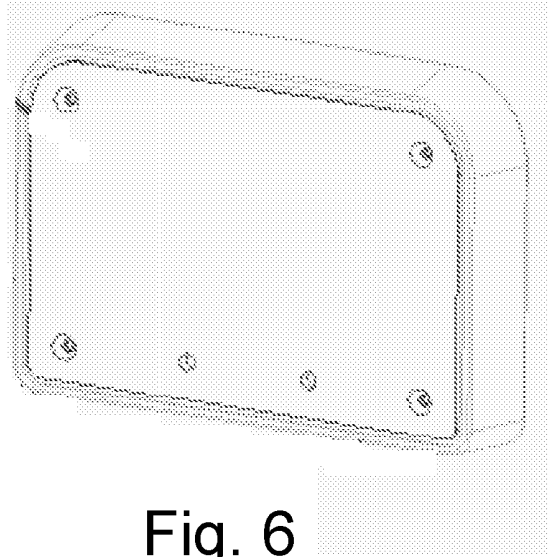


Fig. 6

100



Fig. 7



Fig. 8a

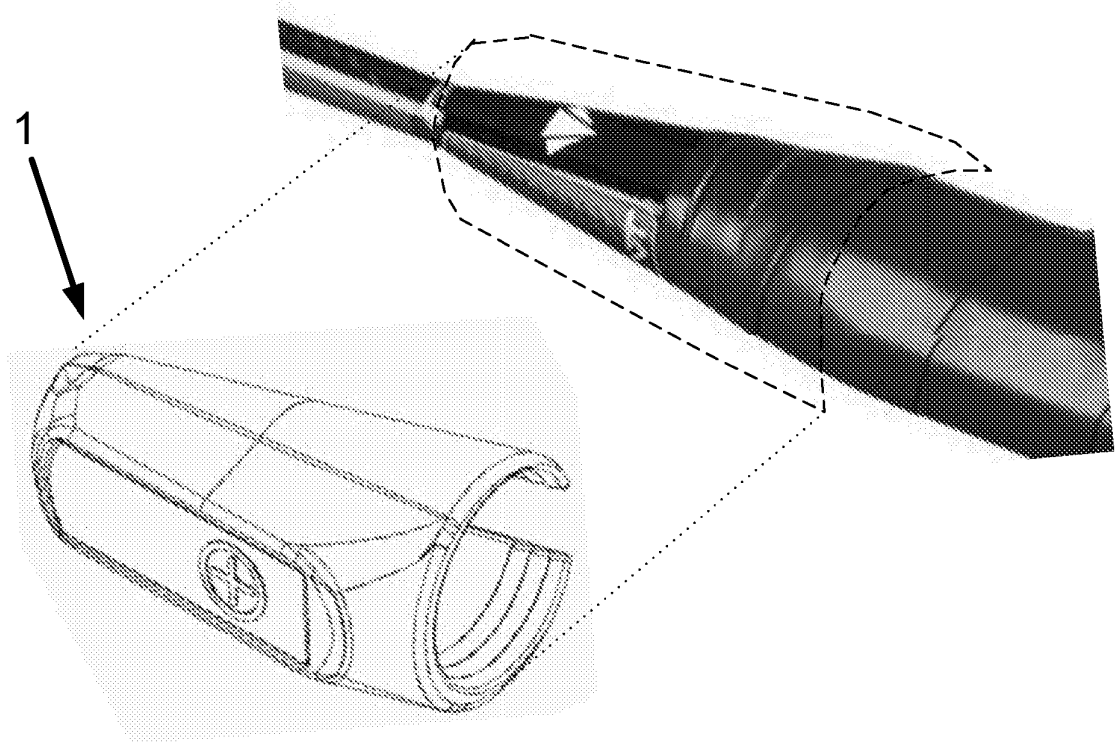


Fig. 8b

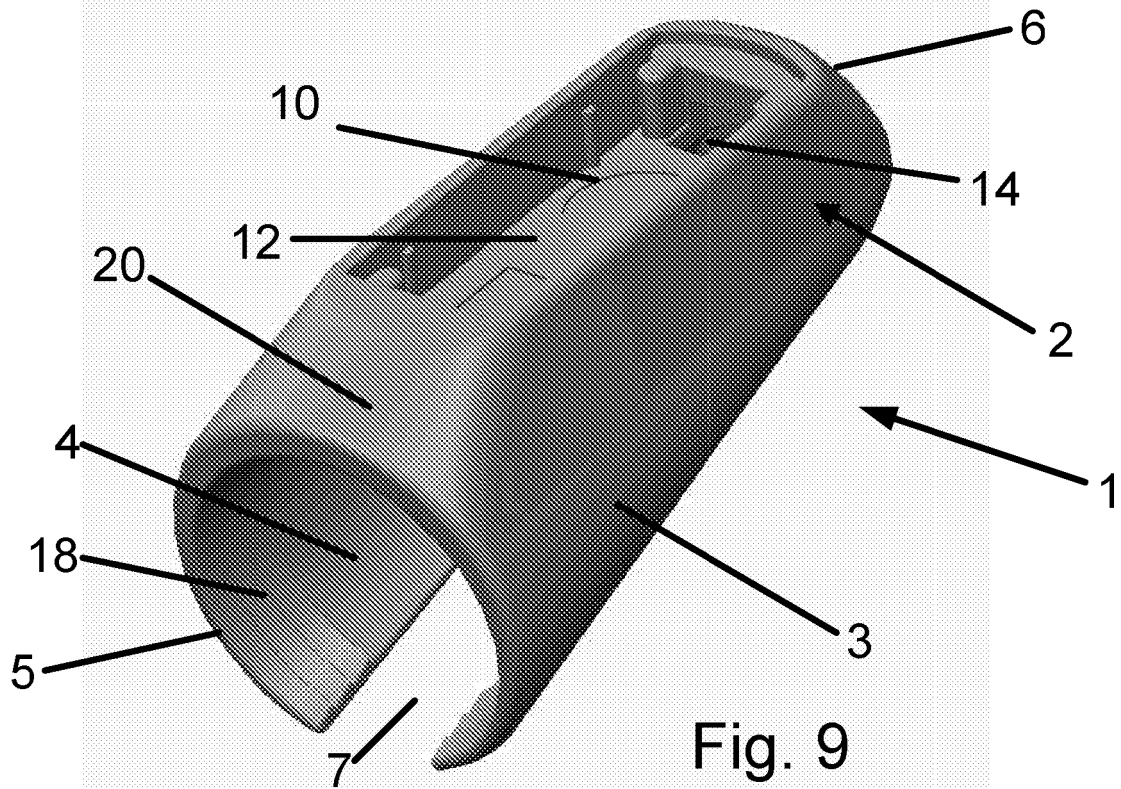


Fig. 9

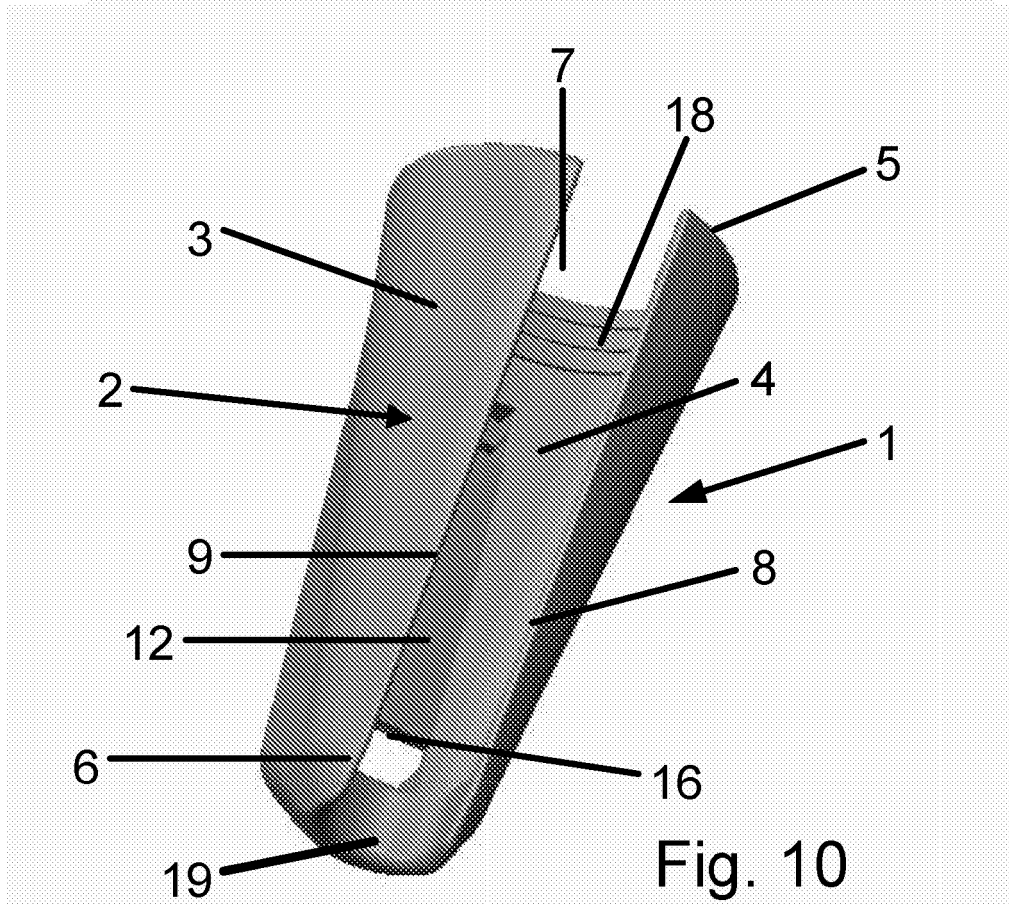


Fig. 10

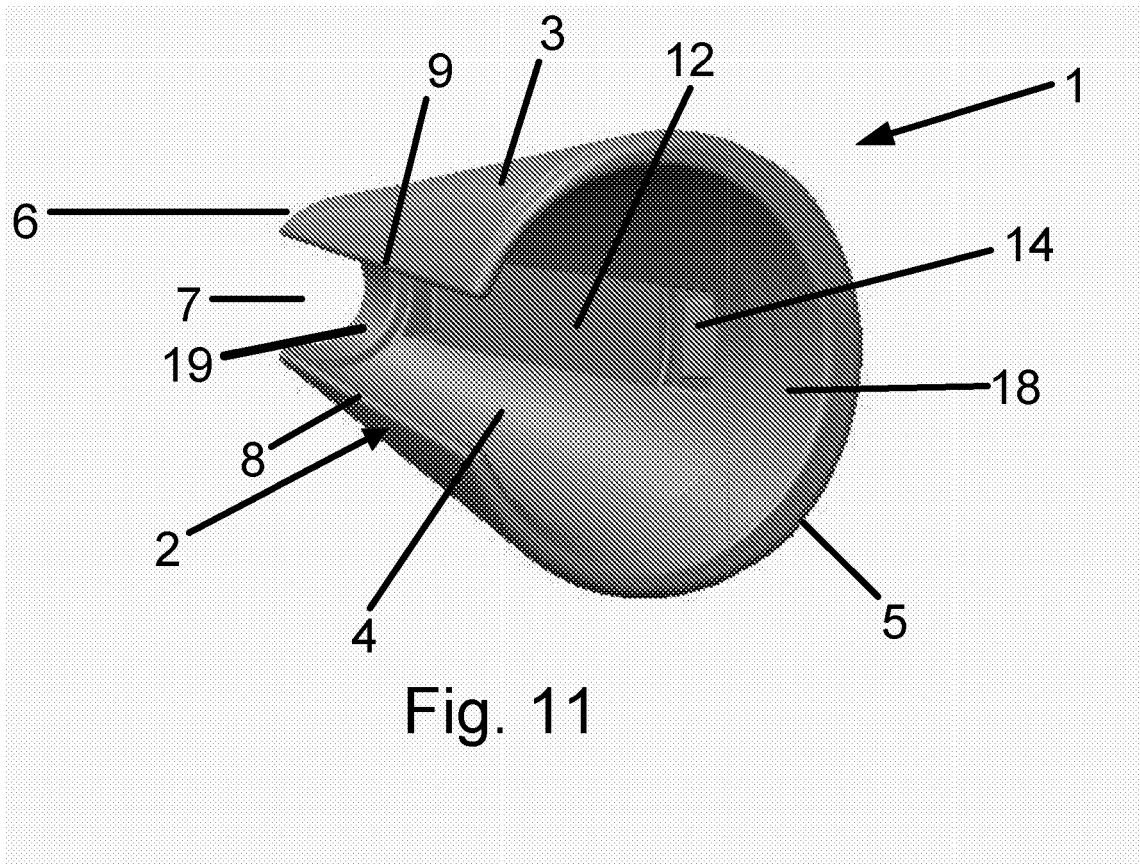


Fig. 11

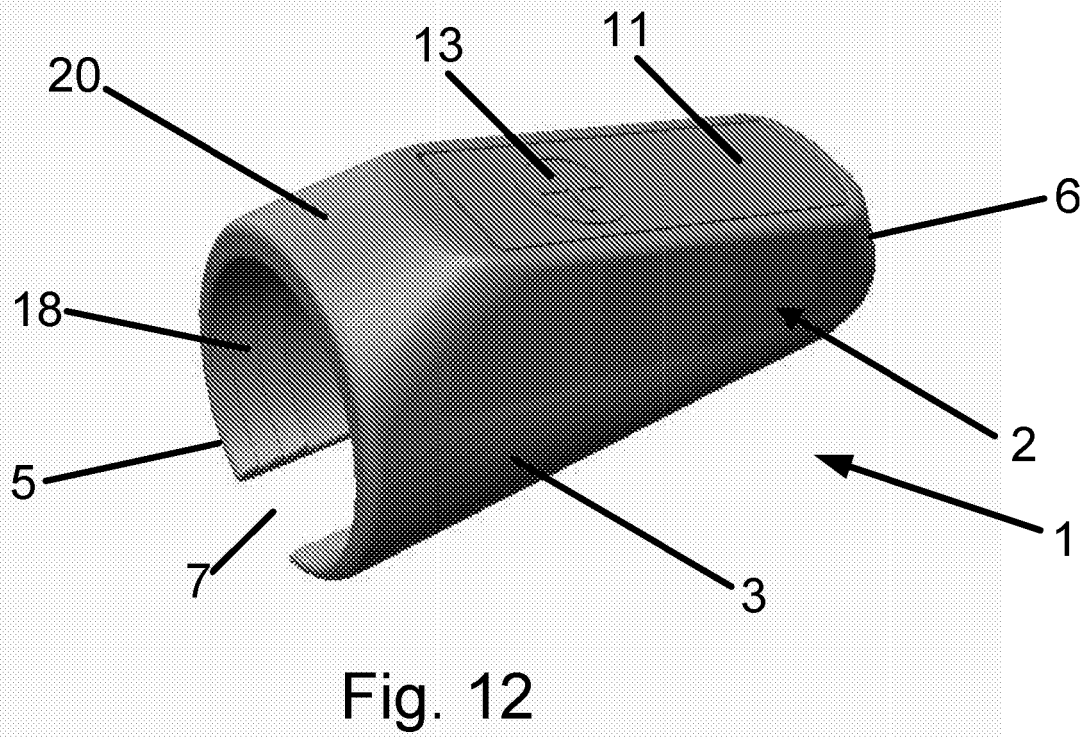


Fig. 12

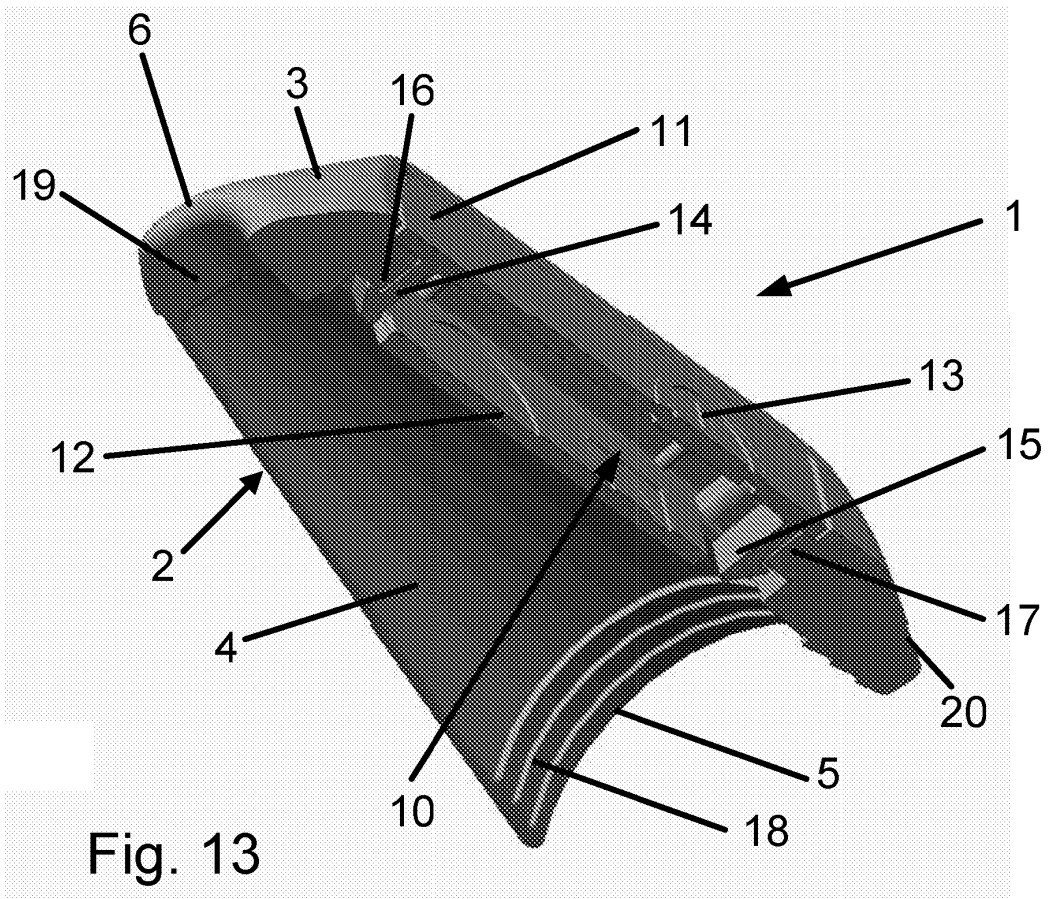


Fig. 13

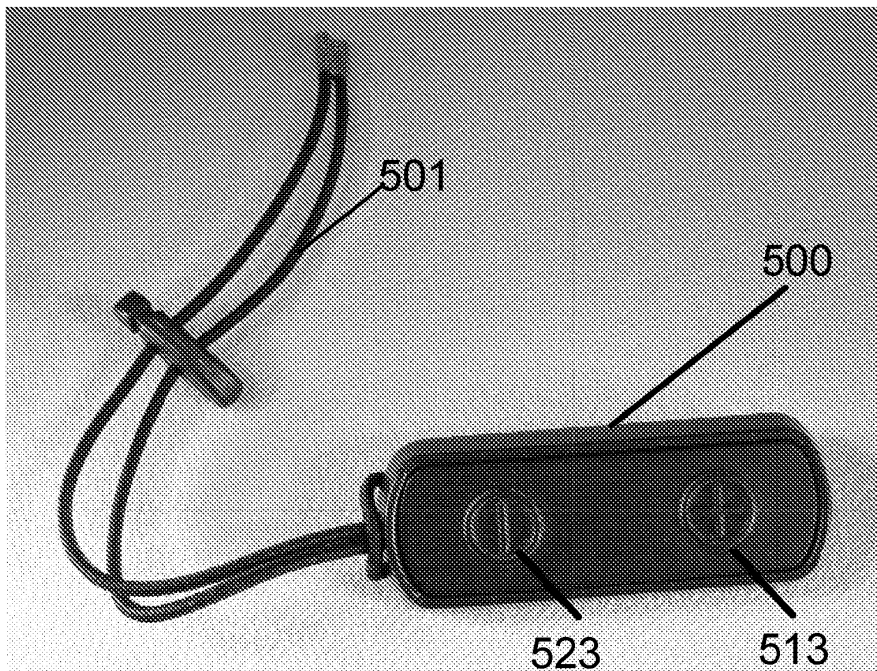


Fig. 14

**REFERENCES CITED IN THE DESCRIPTION**

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