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(54) **Billiard table maintenance device, arrangement of a billiard table maintenance device and a table, vacuum cleaner, and method for maintaining a table**

(57) The invention relates to a billiard table maintenance device (1). The billiard table maintenance device comprises a suction mouthpiece (2) for sucking up contamination from a billiard cloth (C). Further, the billiard table maintenance device comprises a table iron (3) for ironing a billiard cloth. The table iron is located substantially adjacent to the suction mouthpiece. In an advanta-

geous embodiment, the mouthpiece is substantially elongated. Preferably, the table iron is also substantially elongated and is located substantially parallel to the mouthpiece. In a further advantageous embodiment of the billiard table maintenance device, the device also comprises a cloth brush (4), preferably a roller brush, for loosening contamination from a billiard cloth.

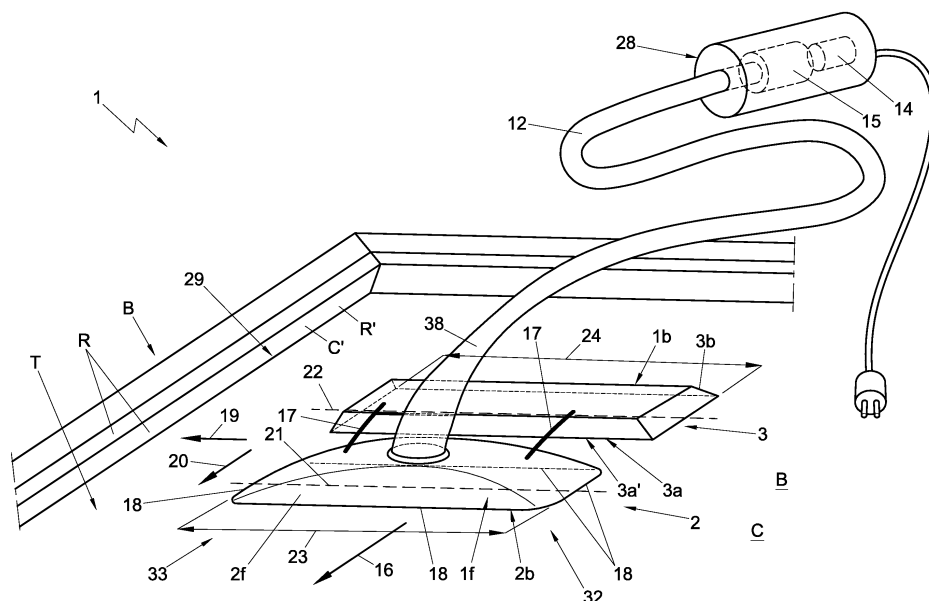


Fig. 1

Description

[0001] The invention relates to billiard table maintenance device. Further, the invention relates to an arrangement of a billiard table maintenance device and a billiard table. Furthermore, the invention relates to a vacuum cleaner for maintaining a billiard table. Moreover, the invention relates to a method for maintaining a table at least partly covered with cloth, such as a billiard table.

[0002] Generally billiard cloth, for instance baize, is provided on top of billiard tables, in other words tables arranged for playing cue sports, or so called billiard sports, such as snooker, pool or carom billiards. The billiard cloth on top of the billiard table has to be maintained in order to optimize the play and performance of the table and to prolong the longevity of the billiard cloth. For example, contaminants such as chalk, dust and/or ash, can be removed from the cloth. Further, the billiard cloth may have a certain, preferably a substantially consistent, fibre directionality, or so called nap. Preferably, the nap is maintained.

[0003] There are different known methods for maintaining a billiard cloth. For example, one known method comprises the steps of brushing contamination of a billiard cloth of a pool table into pockets of said table using a brush, vacuum cleaning the pockets, and ironing the brushed off billiard cloth. Disadvantages hereof include the risk of damaging the cloth during brushing, when sticking a nozzle of the vacuum cleaner into a pocket, or when ironing. Moreover, the known method is cumbersome and time consuming and many different devices are needed. Besides, the end result will very much depend on the skills of the person cleaning the billiard cloth.

[0004] An object of the present invention is to provide an alternative maintenance device and/or an alternative method for maintaining a table at least partly covered with cloth. In particular, it is an object of the invention to provide a billiard table maintenance device and/or a method for maintaining a billiard table at least partly covered with cloth, wherein at least one of the disadvantages mentioned above is counteracted. More in particular, the invention aims at providing a billiard table maintenance device which can prolong the longevity of a billiard cloth.

[0005] Thereto, a billiard table maintenance device is provided which comprises a suction mouthpiece for sucking up contamination from a billiard cloth and a table iron for ironing billiard cloth, wherein the table iron is located substantially adjacent to the suction mouthpiece.

[0006] By way of example only, embodiments of the present invention will now be described with reference to the accompanying figures in which:

Figure 1 shows a schematic perspective view of a first embodiment of a billiard table maintenance device according to the invention on a billiard table; Figure 2 shows a schematic perspective view of a second embodiment of a billiard table maintenance device according to the invention;

Figure 3 shows a schematic perspective view of a third embodiment of a billiard table maintenance device according to the invention; and

Figure 4 shows a schematic cross section of a fourth embodiment of a billiard table maintenance device according to the invention and a billiard table.

[0007] A first aspect of the invention relates to a billiard table maintenance device comprising a suction mouthpiece for sucking up contamination from a billiard cloth, and a table iron for ironing a billiard cloth, the table iron being located substantially adjacent to the suction mouthpiece.

[0008] By locating the table iron substantially adjacent to the suction mouthpiece it can be counteracted that not vacuum cleaned portions of a billiard cloth are ironed. Therefore, it can be counteracting that contamination is pressed into the billiard cloth. Consequently, the longevity of a billiard cloth can be prolonged.

[0009] Besides, a billiard table maintenance device comprising the suction mouthpiece and the iron can counteract that the suction mouthpiece is used for other purposes than maintaining billiard tables, such as cleaning a concrete floor of a billiard room. Therefore, it can be counteracted that the mouthpiece gets damaged, for instance rugged. It can thus be counteracted that a damaged mouthpiece can subsequently damage the billiard cloth. As a result of which, the longevity of a billiard cloth can be prolonged.

[0010] Furthermore, a billiard table maintenance device comprising the suction mouthpiece and the iron can counteract that the iron is used for other purposes than maintaining billiard tables. Since it is counteracted that the device will be used for other purposes, such as ironing jeans, the device will, for example if the iron comprises a temperature control for setting its temperature, not be set to a temperature being too high for the respective billiard cloth. As a result, it can be counteracted that the iron will damage the billiard cloth due to a too high temperature of the table iron.

[0011] Moreover, a billiard table maintenance device comprising the suction mouthpiece and the iron can advantageously be arranged such that said iron cannot be heated to a temperature so high that it can damage a common type of billiard cloth, such as commonly used types of baize.

[0012] By providing the device with a suction mouthpiece and a table iron which are substantially elongated and are located substantially parallel to each other, on the one hand the device can treat relative large, for example wide, portions of the billiard cloth at once, while on the other hand the device can be relatively compact and therefore relatively manoeuvrable.

[0013] By providing the device with a cloth brush, preferably a roller brush, contamination can be loosened from the billiard cloth. Therefore, the suction power of the device can be relatively low, which can spare the billiard cloth. Besides, the cloth brush can counteract that con-

tamination stays behind in or on a vacuumed portion of the billiard cloth, because loosened contamination is relatively easily sucked up from the billiard cloth, especially when the cloth brush sweeps the contamination in the direction of the mouthpiece. Therefore, the cloth brush can further counteract that an iron presses contamination into the billiard cloth.

[0014] By providing a roller brush substantially between the mouthpiece and the iron, which roller brush is arranged for sweeping contamination from a portion of the billiard cloth in the direction of the mouthpiece, said portion of the billiard cloth is already smoothened to some extent before the iron irons said portion. Moreover, said portion of the billiard cloth can then already be smoothened in substantially the same direction as in which the iron will iron said portion.

[0015] Preferably the device comprises a housing accommodating the suction mouthpiece and the table iron.

[0016] More preferably, the housing is provided with at least one rotatable support for at least partly supporting the housing when said housing is situated on a table top of a billiard table. Therefore, it can be counteracted that the table iron, the suction mouthpiece, the housing and/or one of the cloth brushes exerts too much force and/or pressure on the billiard cloth. Moreover, the rotatable support, such as a wheel, a ball, a roll or a brush roll, may provide for a relatively good manoeuvrability.

[0017] By arranging the device such that the location of the rotatable support or at least one of the rotatable supports is adjustable, a pressure exerted on the billiard cloth by the device or by one or a multiple number of parts of the device, such as the table iron, the suction mouthpiece, the housing and/or one of the cloth brushes, can be adjusted. For example, it can be advantageously to adjust said pressure depending on the degree of contamination, the compressibility of the billiard cloth and/or the quality of the billiard cloth.

[0018] Moreover, by arranging the device such that the location of the rotatable support or at least one of the rotatable supports is adjustable it can be counteracted that the rotatable support is in the way, for example when maintaining billiard cloth located close to a rail cushion of a billiard table and/or located close to a corner of the table.

[0019] Besides, by arranging that the position of the rotatable support can during use be raised relative to a table top of a billiard table, the rotatable support can be adjusted to roll over a rail and/or rail cushion. Preferably, the rotatable support can be temporary fixed in one or more at least partly raised positions, for instance in order to adapt the device to a certain rail height.

[0020] By providing the housing with a heating means for heating the table iron, and/or an actuator means for moving at least one of the cloth brushes, extra weight for pressing the iron onto the billiard cloth can be provided in the housing in a relatively economical way.

[0021] By providing a hose and/or a tube, the device can be relatively easily connectable to a vacuum cleaner.

Preferably the hose and/or the tube is provided with an earth wire and/or an electrical cord for powering the table iron, thereby counteracting that during use a loose cord will get in the way.

[0022] By providing the billiard table maintenance device with an air pump for generating suction power and a contamination reservoir for collecting sucked up contamination, a substantially independent device can be provided. Moreover, a maximum suction power can be limited, thereby counteracting that the suction force is too harsh for the billiard cloth. Therefore, the air pump can be relatively small. Since the table top of a billiard table has a relatively small surface area and/or since billiard cloth generally is not very contamination, a relative small contamination reservoir can satisfy. Since the air pump and/or the contamination reservoir can be relatively small, the device can be relatively small, thereby providing for a relatively good manoeuvrability of the device.

[0023] By providing the air pump and/or the contamination reservoir in the housing, the housing can be provided with extra weight for pressing the iron onto the billiard cloth in a relatively economical way. Besides, by providing the air pump and the contamination reservoir in the housing, substantially the complete device, which can for instance mean the device with the exception of its power cord, may be put on top of a billiard table. Therefore, a relatively good manoeuvrability of the device can be provided. Moreover, when no vacuum cleaner is pulled along over the floor around a billiard table, such vacuum cleaner cannot collide with a wooden construction of the billiard table either.

[0024] A further aspect of the invention relates to an arrangement of a billiard table maintenance device and a billiard table.

[0025] Yet a further aspect of the invention relates to a vacuum cleaner for maintaining a billiard table.

[0026] Moreover, a further aspect of the invention relates to a method for maintaining a table at least partly covered with cloth, such as a billiard table. By simultaneously sucking up contamination from a portion of a billiard cloth and ironing a second portion of the billiard cloth neighbouring the first portion, the billiard cloth can be maintained in a relatively fast and economical way.

[0027] Embodiments according to the invention are described in the appending claims.

[0028] Figure 1 shows a schematic perspective view of a first embodiment of a billiard table maintenance device 1 according to the invention on a billiard table B. The billiard table maintenance device 1 comprises a suction mouthpiece 2 for sucking up contamination from a billiard cloth C of billiard table B.

[0029] Further, the device 1 comprises a table iron 3 for ironing a billiard cloth C. Here, the iron 3 comprises a substantially flat bottom 3a for contacting the billiard cloth C to be ironed, the flat bottom 3a defining a contact surface 3a'.

[0030] Preferably, the iron 3 is an electric iron arranged for generating resistive heating from an electric current.

For example, the iron may comprise a not shown thermostat and/or a not shown temperature control, as are known in the art of ironing. Preferably, the thermostat and/or the temperature control are arranged such that the table iron 3 will not heat its flat bottom 3a to a temperature such that it could damage the table cloth C which can for example be made of baize and/or a certain other type of billiard cloth C.

[0031] Here, the device 1 also comprises an air pump 14 for generating suction power and a contamination reservoir 15 for collecting sucked up contamination. In the shown embodiment, said pump 14 and reservoir 15 are provided in a vacuum cleaner part 28 spaced apart from a table top part 29, which means a part 29 of the device 1 which is arranged to be positioned on top of a table top T of a billiard table B during use of the device 1. The vacuum cleaner part 28 of the device 1 may during use be located on the floor, for example next to a billiard table B or even further away. Additionally or alternatively, the vacuum cleaner part 28 could be part of a built in vacuum system or could be portable, for example on a back of a user. Therefore, the table top T of a billiard table B can be relieved from a part of the weight of the device 1.

[0032] In an alternative embodiment, the table top part 29, which at least comprises the mouthpiece 2 and the table iron 3, form the complete device 1. For example, the table top part 29 can comprise an air pump 14 for generating suction power and a contamination reservoir 15 for collecting sucked up contamination. Alternatively, the device 1 can comprise a connector for connecting a hose, a tube or a nozzle of a separate vacuum cleaner with the device 1, which device 1 then does not necessarily comprise an air pump and/or a contamination reservoir itself. Alternatively, the device 1 itself may comprise a hose 12 and/or a tube 38 which may be arranged to be connected with a separate vacuum cleaner and/or a built in vacuum system.

[0033] As can be seen from Fig. 1, the table iron 3 can be located substantially adjacent to the suction mouthpiece 2. Therefore, the table iron 3 can follow the suction mouthpiece 2 when the mouthpiece 2 is moved forward. In use, a forward direction 16 could be defined as a direction extending from the mouthpiece 2 substantially away from the table iron 3, more preferably substantially in a substantially horizontal plane, parallel to the top plane of a billiard table B. It is noted that in the context of this description directions and sides of the device 1 or the table top part 29 can be defined with respect to an orientation of said device 1 or said part 29 during normal use. During normal use, the device 1 or the table top part 29 of the device is placed on a substantially horizontal top of a table B. The bottom side of the device 1 or the table top part 29 is thus the side facing the table top T during normal use. The front side is the side that is in front when the device is moved in the forward direction 16, while the rear side is the side that is in the rear when the device is moved forward. Seen from the rear of the table top part 29 or the device 1, the right side is located

at the right and the left side is located at the left.

[0034] Preferably, the table iron 3 and the suction mouthpiece 2 are attached to each other, for example by means of one or multiple connection means such as a bridge 17, a frame and/or a housing. Therefore, the device 1 can relatively easily be arranged so as to let the iron 3 follow movements of the suction mouthpiece 3.

[0035] In embodiments, the table iron 3 and the suction mouthpiece 2 can be attached to each other such that a bottom 2b of the mouthpiece 2 extends above the table cloth C when the iron 3 is pushed on said cloth C. This may prevent edges 18 of the mouthpiece 2 from damaging the billiard cloth C by grating it and may prevent that the mouthpiece 2 will push dirt over and/or into the cloth C.

[0036] In an advantageous embodiment, sides of the device, the mouthpiece and/or the iron are inclined relative to the flat bottom 3a of the table iron 3 so as to allow moving at least a part of the device 1, the mouthpiece 2 and/or the iron 3 beneath a part of a leaning over rail cushion R. For example, the left and/or the right side of the device 1, the table top part 29, the mouthpiece 2 and/or the iron 3 are inclined. Additionally or alternatively, it can be advantageously that the front side 2f of the mouthpiece 2 and/or the front side 1f of the device 1 is inclined, and/or that the rear side 3b of the iron 3 and/or the rear side 1b of the device 1 is inclined, because the front side 1f and/or rear side 1b may then relatively easily be pushed at least partly beneath a part of a rail cushion R.

[0037] In the shown embodiment, the mouthpiece 2 and the table iron 3 are substantially elongated.

[0038] Elongated should be understood at least as meaning being substantially longer in a first direction 19 than in a second direction 20, the second direction 20 being substantially traverse to the first direction 19, wherein preferably the first and second direction both extend substantially in a substantially horizontal plane during use of the device 1. Preferably, the first direction 19 is substantially perpendicular to the forward direction 16. The first direction 19 can thus be parallel with the width of the mouthpiece 2 and/or table iron 3.

[0039] Here, the table iron 3 is located substantially parallel to the mouthpiece 2. This is, a longitudinal axis 21 of the mouthpiece 2 is substantially parallel to a longitudinal axis 22 of the table iron 3.

[0040] Preferably, as shown in Fig. 1, the width 23 of the mouthpiece 2 is at least substantially as wide as the width 24 of the table iron 3. More preferably, the table iron does widthwise not extend beyond the mouthpiece 2. Therefore, it may be prevented that the table iron 3 irons portions of a billiard cloth C that have not been vacuumed previously.

[0041] Moreover, the mouthpiece 2 and/or a housing 8 comprising the mouthpiece 2 does at least at one lateral side of the mouthpiece 32, 33 extend less than 10 cm, preferably less than 8 cm, more preferably less than 5 cm, yet more preferably less than 2 cm with respect to

the bottom 3a of the iron 3. Therefore, it can be prevented that the iron can not reach billiard cloth C close to edges of a billiard table B. It is noted that the housing 8 and/or the mouthpiece may widthwise extend beyond the mouthpiece, beyond at least one cloth brush 4 and/or beyond the iron to some extent, for instance because a billiard ball 40 generally cannot contact billiard cloth C" covering a portion of the table top T very close to the edge of the table B due to the shape and dimensions of the billiard ball 40 and a leaning over rail cushion R, as can for instance be seen in Figure 4.

[0042] Figure 2 shows a schematic perspective view of a second embodiment of a billiard table maintenance device 1 according to the invention, comprising an elongated suction mouthpiece 2 and an elongated table iron 3 located substantially adjacent and substantially parallel to the suction mouthpiece 2. The table iron 3 comprises an elongated iron rod 25.

[0043] Further, the device 1 comprises a cloth brush 4, here formed as a roller brush 4, for loosening contamination from a billiard cloth C.

[0044] Here, the cloth brush 4 is substantially elongated and is located substantially parallel with the mouthpiece 2, at a side 2a of the mouthpiece 2 opposite to the side 2b of the mouthpiece 2 where the table iron 3 is located. This is, the cloth brush 4 is located substantially at the front side 2f of the mouthpiece 2. Therefore, when the device is moved in the forward direction 16, the brush 4 may loosen contamination from a portion of a billiard cloth C before the mouthpiece 2 passes said portion. Preferably, the brush is arranged to sweep contamination in the direction 26 of the mouthpiece 2, which means substantially backwards.

[0045] Further, the billiard table maintenance device 1 may comprise a substantially elongated second cloth brush 5, located substantially parallel with the mouthpiece 2 and substantially between said mouthpiece 5 and the table iron 3. During use, the table iron 3 and the first and/or second cloth brush 4, 5 define a billiard cloth contact surface 3a, 4a, 5a. Said three billiard cloth contact surfaces 3a, 4a, 5a can be situated substantially in one plane 6, in other words plane substantially coinciding with the top surface of a billiard cloth C covering a table top T. Both the first and the second cloth brushes 4, 5 can comprise a roller brush 4, 5. For example, a roller brush can be a spiral brush.

[0046] Here, said roller brushes 4, 5 are arranged to rotate in substantially opposite directions 4d, 5d with respect to each other, such that when during use the roller brushes 4, 5 are situated on or at least in contact with a table top T of a billiard table B, the roller brushes 4, 5 can sweep substantially towards each other. This is, a portion of the respective brush 4, 5 which is located substantially at the respective contact surface 4a, 5a moves substantially towards the respective contact surface 5a, 4a of the other brush 5, 4. The brushes 4, 5, 7 can both be driven, for example by a motor. For example, an electromotor drives one 3 of the roller brushes and said roller brush

drives one or multiple other brushes 5, 7, for instance via a set of transmission means such as gear wheels 27 and/or other know means, such as a chain or a belt. Alternatively, one or more of the brushes are not actively driven. For example, a cloth brush 4 placed in front of the suction mouth 2 can be driven by pushing the device 1 and/or the table top part 29 over top of the table.

[0047] As shown, the billiard table maintenance device 1 can further comprises a further cloth brush 7. Here, the further cloth brush 7 is arranged for loosening contamination from a rail cushion R of a billiard table B. The further cloth brush 7 can be a roller brush 7 arranged for sweeping contamination substantially towards the mouthpiece 2. Thereto, a longitudinal axis 27 of the further cloth brush 7 may be substantially transverse to the longitudinal axis 21 of the mouthpiece 2 and/or to a longitudinal axis 30, 31 of the first or second cloth brush 4, 5. Although the shown embodiment comprises one further cloth brush 7, placed at a right side 1a of the device 1, the device 1 may comprise more than one further cloth brush. Additionally or alternatively, the or at least one of the further cloth brushes can be placed at another location, for example at the left side 1b of the device 1. It is noted that the further cloth brush may be arranged for sweeping contamination from a portion of billiard cloth C covering a table top T, such as from a portion located beneath a leaning over rail cushion R. Additionally or alternatively, the further brush may be arranged for sweeping contamination from the rail cushion R, for instance from cloth C' covering a lower and/or side portion R' of a leaning over rail cushion R. It is noted that during use the further brush 7 can thus be located above a billiard cloth C covering a table top to such an extent that said brush 7 does not substantially be in touch with said billiard cloth C.

[0048] Although the brushes 4, 5, 7 are here formed as rollers, other shaped brushes may be provided. For example, the first, second and/or further brush can be a substantially straight brush arranged to move back and forth. Moreover, a brush, for example a roller brush, can have an alternative shape. For example, the further brush 7 can be a conical shaped brush, preferably dimensioned to fit in a space underneath a rail cushion R and preferably arranged for rotating around a tilted central axis. For instance, said central axis can during use be tilted with respect to the top surface of a billiard table B. Additionally or alternatively, said central axis may, at least in the vertical plane, be tilted with respect to the central axis 30 of the first cloth brush 4 and/or the longitudinal direction 22 of the table iron 3.

[0049] A billiard table maintenance device 1 may further comprise a housing 8. Said housing 8 can accommodate the suction mouthpiece 2 and the table iron 3. Moreover, the housing 8 can also accommodate the first, second and/or third cloth brushes 4, 5, 7. As noted above, the housing 8 can have one or multiple tilted sides, such as a tilted front side 8f and/or a tilted right side, so as to enable the housing 8 to be moved partly beneath a side

cushion. Further, the housing 8 may comprise other parts and/or elements of the device 1, such as an air pump and/or a contamination reservoir.

[0050] Here, the housing 8 is provided with two rotatable supports 9 for at least partly supporting the housing 8 when said housing 8 is situated on a table top of a billiard table. It is noted that the housing can alternatively comprise another number of rotatable supports 9. For example, the housing can comprise one or four rotatable supports 9. Here, the rotatable supports 9 are formed as support rolls 9. By forming the rotatable supports 9 as support rolls, preferably relatively elongated support rolls and/or substantially compressible rolls, the supports can spread the pressure the device 1 is exerting to a table cloth C over a relatively large surface area. Therefore, damaging or deforming the cloth C may be counteracted relatively well. The support rolls 9 can be made of a relatively flexible and/or compressible material such as for example a rubber material in order to be compressible to a certain extent. For instance to counteract static electricity, the rotatable supports 9, the housing 8 and/or other parts of the billiard table maintenance device 1 may be earthed.

[0051] Other support means could be provided, such as but not limited to slides or air-cushioning elements as for example known from hoovercrafts.

[0052] It is noted that is also possible that the rotatable support and the cloth brush are integrated to form a rotatable support arranged for sweeping a billiard cloth C.

[0053] Besides, although the rotatable supports are here formed as rolls, one or a multiplicity of the rotatable supports can alternatively be formed as a wheel or as a ball.

[0054] Figure 3 shows a schematic perspective view of a third embodiment of a billiard table maintenance device 1 according to the invention. Here, two rotatable supports 9a, 9b are provided. One at the left side and one at the right side of the table top part 29. One or multiple rotatable supports 9a, 9b can be provided at a front section of the table top part. This is, one or multiple rotatable supports 9a, 9b may be provided at least in front of the table iron 3. The pressure which a cloth brush that is located at least partly between the rotatable support(s) 9a, 9b and the iron 3 exerts to a table cloth C can be kept small and/or controlled relatively well.

[0055] Figure 4 shows a schematic cross section of a fourth embodiment of a billiard table maintenance device 1 according to the invention and a billiard table B. Here, the further brush 7 is conical shaped and is dimensioned to fit at least partly in a space underneath a rail cushion R. The conical shaped further brush 7 is arranged for rotating around a central axis 39 tilted with respect to a horizontal plane of the table top portion 29. In the shown embodiment, the further brush 7 is arranged to remove contaminants from cloth C' covering the lower and/or the side portion R' of the leaning over rail cushion R of the billiard table B. Further, the further brush 7 is arranged to remove contaminants from cloth C" covering a portion

of the table top T, which portion is located beneath the leaning over rail cushion R.

[0056] Further, the embodiments of Fig. 3 and Fig. 4 show that the position of at least one of the rotatable supports 9a, 9b is arranged to be adjusted relative to a table top T of a billiard table B. Preferably, one or each support can be raised in the vertical direction 34, for example incrementally or stepwise, and can more preferably also be temporarily fixed in such position. Therefore, the pressure exerted by the cloth brushes may be adjustable. Besides, it is therefore also possible to move one or more rotatable supports 9a away temporarily, for instance in order to maintain a part C" of a cloth C located near a side and/or a corner of a table B. As can be seen in Fig. 4, the support 9 may be arranged to be moved away such that it can support at least a part of the device 1 in a moved away position. For example, said support 9 may rest on a rail cushion R in its moved away position.

[0057] Alternatively or additionally, a portion of the housing 8 may be arranged to be moved away temporarily, preferably in an at least partly upward direction 34. For example, one or two side portions 35 of the housing 8 can be arranged to be moved. Additionally or alternatively, a front and/or a rear portion of the housing may be arranged to move away temporarily. Preferably, the portion that can be moved away is hingedly connected 36 relative to a main portion 37 of the housing 8.

[0058] In the shown embodiment of Fig. 3, the housing 8 further comprises a heating means 10 for heating the table iron 3. For example, the heating means 10 uses resistive heating from an electric current to generate heat that can be conducted to the table iron 3, which is here formed as an elongated iron rod 25.

[0059] In embodiments, the iron 3 itself does not need to be heated directly, but may be heated indirectly, for example by hot air or dry steam heating the cloth C to be ironed and/or the table iron 3.

[0060] Besides, as shown in Fig. 3, the housing 8 may comprise an actuator means 11, such as for example an electromotor 11, for moving at least one of the cloth brushes 4, 5, 7. Additionally or alternatively, one or more of the rotatable supports 9 may be drivable by said actuator means 11.

[0061] Another aspect of the invention is an arrangement of a billiard table maintenance device 1 and a table having a table top at least partly covered with cloth, such as a billiard table B or a gaming table. Preferably, the billiard table maintenance device 1 is connected to a vacuum cleaner through a hose and/or a tube. Besides, the device is preferably connected to a power outlet, preferably via the vacuum cleaner or via a vacuum cleaner part of the device. Thereto, and/or to earth the device, the hose and/or the tube may be provided with an electrical cord for the iron and/or an actuator means of the device, and/or with an earth wire.

[0062] A further aspect of the invention is a vacuum cleaner. The vacuum cleaner may comprise a connector to connect an electrical cord of the billiard table maintenance

nance device 1 to the vacuum cleaner. Moreover the vacuum cleaner may comprise a connector to connect an earth wire of the table maintenance device to the vacuum cleaner. Besides, the vacuum cleaner may be arranged to conduct for example electricity from said connector to a power outlet and vice versa, for instance via electronics and an internal wiring inside a housing of the vacuum cleaner and via a power cord and a plug of said vacuum cleaner. Preferably, the connector for connecting an earth wire and/or the connector for connecting an electrical cord to the vacuum cleaner is integrated with a connector for connecting a hose and/or tube, arranged for guiding air and contamination, to said vacuum cleaner.

[0063] Yet another aspect of the invention is a method for maintaining a table at least partly covered with cloth C. The method comprises the steps of simultaneously sucking up contamination from a portion of a cloth C at least partly covering a table, for instance a billiard table B, and ironing a second portion of said cloth C, the second portion neighbouring the first portion. Preferably, the steps of sucking up contamination and ironing are executed using one of the billiard table maintenance devices as described above.

[0064] The invention is mostly described on the basis of a billiard table maintenance device. It is noted that said device suitable for maintenance of a billiard table, may alternatively or additionally be offered, sold and/or used for maintaining other tables which are at least partly covered with cloth C, the cloth C preferably being baize, a baize like fabric, and/or felt or a felt like fabric. For example, said other tables can comprise gaming tables, for instance tables for casino games such as card playing and/or dicing. It is noted that a billiard table maintenance device should be understood at least as meaning being a table maintenance device arranged for maintenance of a cloth which is at least covering a part of a table top of a gaming table suitable for playing a game such as for instance a billiard game and/or a casino game.

[0065] The invention is not restricted to the embodiments described above. It will be understood that many variants are possible.

[0066] It is noted that the billiard table maintenance device according to the invention may for example also comprise one or multiple handles. For example, the table top part and/or its housing may be provided with a handle. The handle can for instance be integrated with the tube or hose for connection with the vacuum cleaner part or a separate vacuum cleaner. Additionally or alternatively, a vacuum cleaner according to the invention or a vacuum cleaner part of the billiard table maintenance device may be provided with one or multiple handles.

[0067] Further, the device may be provided with control means, for instance means for controlling the temperature of the iron and/or means for controlling the suction power of the suction mouthpiece. Such means can for instance be provided at the table top part or its housing.

[0068] In another embodiment, the device can be provided with one or more connecting means, such as one

or more plugs, to connect the heating means, the iron, the vacuum pump, and/or other parts of the device and/or its table top part to the vacuum cleaner or to the vacuum cleaner part of the device.

[0069] Besides, in embodiments, the billiard table maintenance device can be a self-powering and/or self-driven device.

[0070] These and other embodiments, including at least but not limited to any combination of parts and/or elements of the embodiments described and/or shown here above, will be apparent for the person skilled in the art and are considered to lie within the scope of the invention as defined in the following claims.

Claims

1. Billiard table maintenance device comprising:

a suction mouthpiece for sucking up contamination from a billiard cloth; and
a table iron for ironing a billiard cloth, the table iron being located substantially adjacent to the suction mouthpiece.

2. Billiard table maintenance device according to claim 1, wherein the mouthpiece is substantially elongated, wherein the table iron is preferably also substantially elongated and is located substantially parallel to the mouthpiece.

3. Billiard table maintenance device according to claim 1 or 2, further comprising a cloth brush, preferably a roller brush, for loosening contamination from a billiard cloth.

4. Billiard table maintenance device according to claim 3, wherein the cloth brush is substantially elongated and preferably is located substantially parallel with the mouthpiece, more preferably at a side of the mouthpiece opposite to the side of the mouthpiece where the table iron is located.

5. Billiard table maintenance device according to claim 4, further comprising a substantially elongated second cloth brush, located substantially parallel with the mouthpiece and substantially between said mouthpiece and the table iron, wherein preferably the table iron and the first and second cloth brush during use each define a billiard cloth contact surface, the three billiard cloth contact surfaces being situated substantially in one plane, wherein more preferably both the first and the second cloth brush comprise a roller brush, the roller brushes arranged to rotate in substantially opposite directions with respect to each other, such that when during use the roller brushes are situated on a table top of a billiard table the roller brushes can sweep substantially to-

wards each other.

6. Billiard table maintenance device according to any one of the preceding claims, further comprising at least one further cloth brush for loosening contamination from a rail cushion of a billiard table, the further cloth brush preferably being a roller brush, wherein said roller brush preferably is arranged for sweeping contamination substantially towards the mouthpiece. 5
7. Billiard table maintenance device according to any one of the preceding claims, further comprising a housing, the housing accommodating the suction mouthpiece and the table iron, the housing preferably also accommodating the first, second and/or third cloth brush. 15
8. Billiard table maintenance device according to claim 7, wherein the housing is provided with at least one rotatable support for at least partly supporting the housing when said housing is situated on a table top of a billiard table. 20
9. Billiard table maintenance device according to claim 8, wherein the location of the rotatable support or at least one of the rotatable supports is adjustable, preferably such that the position of said rotatable support can during use be raised relative to a table top of a billiard table. 25 30
10. Billiard table maintenance device according to any one of claims 7-9, wherein the housing comprises a heating means for heating the table iron, and/or an actuator means for moving at least one of the cloth brushes. 35
11. Billiard table maintenance device according to any one of the preceding claims, further comprising a hose and/or a tube for connection between the suction mouthpiece and a vacuum cleaner having an air pump for generating suction power and a contamination reservoir for collecting sucked up contamination. 40 45
12. Billiard table maintenance device according to any one of the claims 9-10, further comprising an air pump for generating suction power and a contamination reservoir for collecting sucked up contamination, wherein the air pump and/or the contamination reservoir are preferably provided in the housing. 50
13. Arrangement of a billiard table maintenance device according to any one of the preceding claims and a table having a table top at least partly covered with cloth, preferably a billiard table, wherein the billiard table maintenance device is preferably connected to a vacuum cleaner through a hose and/or a tube, and 55

preferably an electrical cord for the iron and/or an actuator means of the device.

14. Vacuum cleaner for maintaining a billiard table comprising a connector for connecting an electrical cord to the vacuum cleaner, wherein preferably the vacuum cleaner also comprises a connector for connecting an earth wire to the vacuum cleaner.
15. Method for maintaining a table at least partly covered with cloth, comprising the steps of simultaneously:
 - sucking up contamination from a portion of a cloth at least partly covering a table; and
 - ironing a second portion of said cloth, the second portion neighbouring the first portion, wherein the steps of sucking up contamination and ironing are preferably executed using a billiard table maintenance device according to any one of claims 1-12.

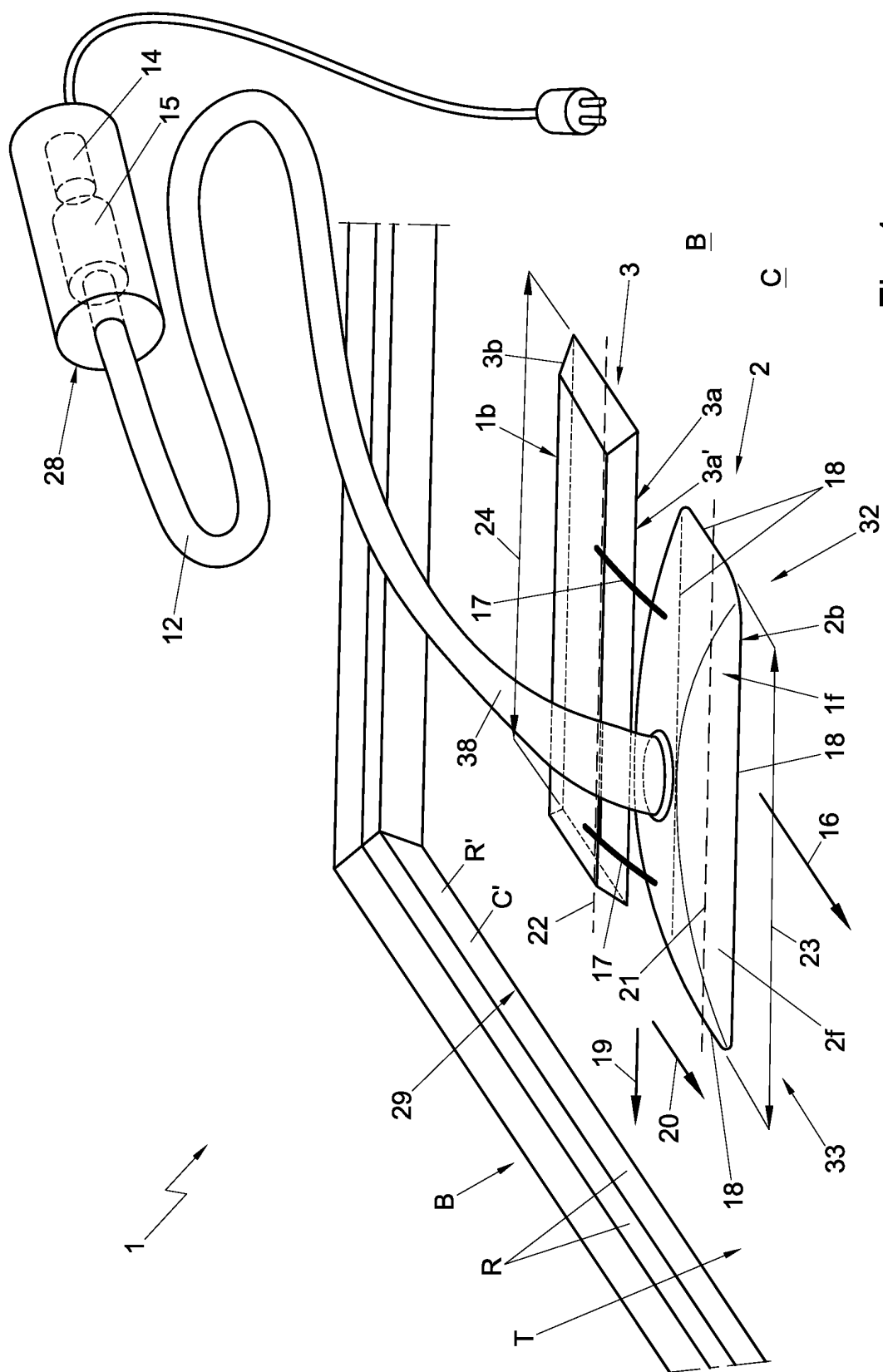


Fig. 1

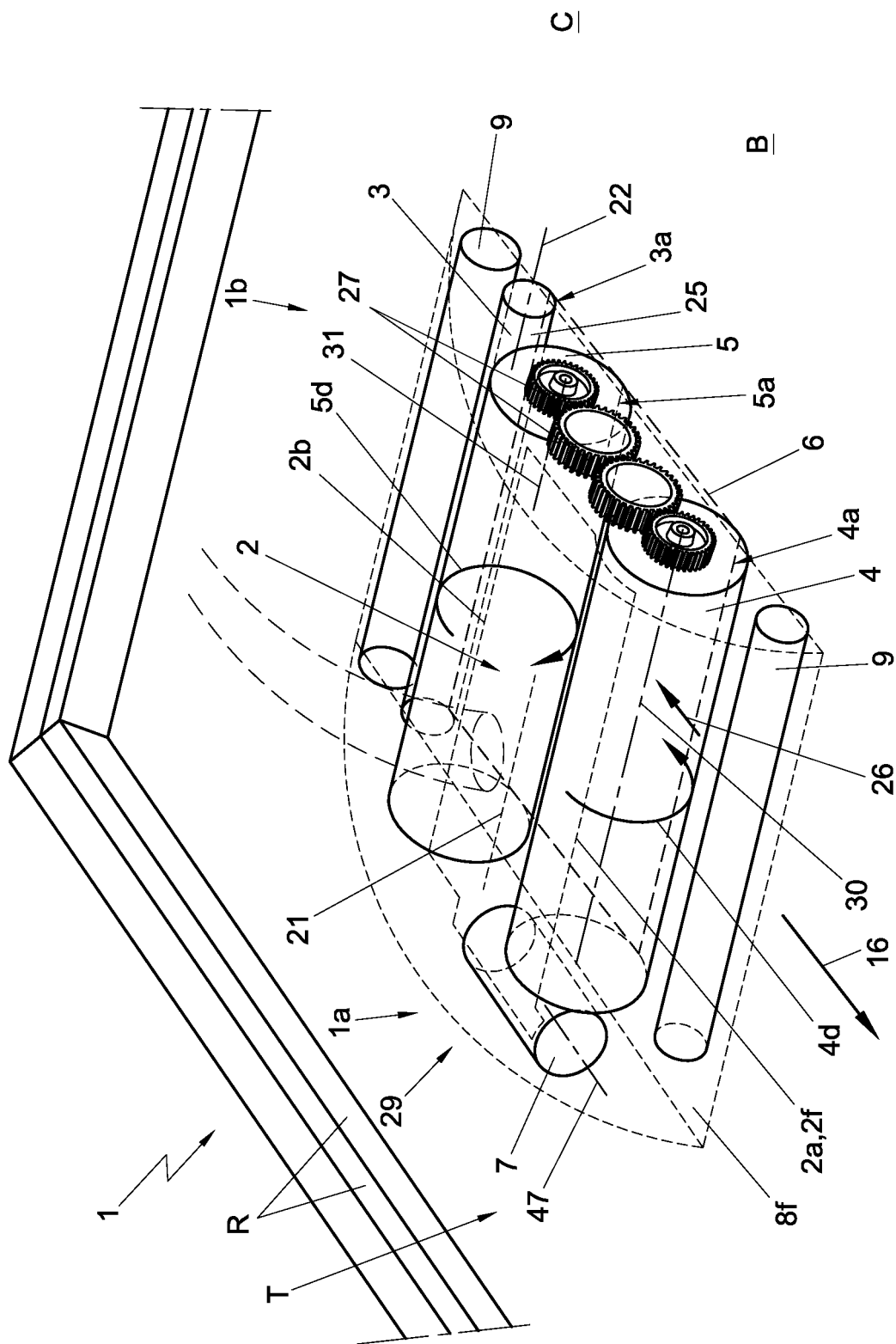


Fig. 2

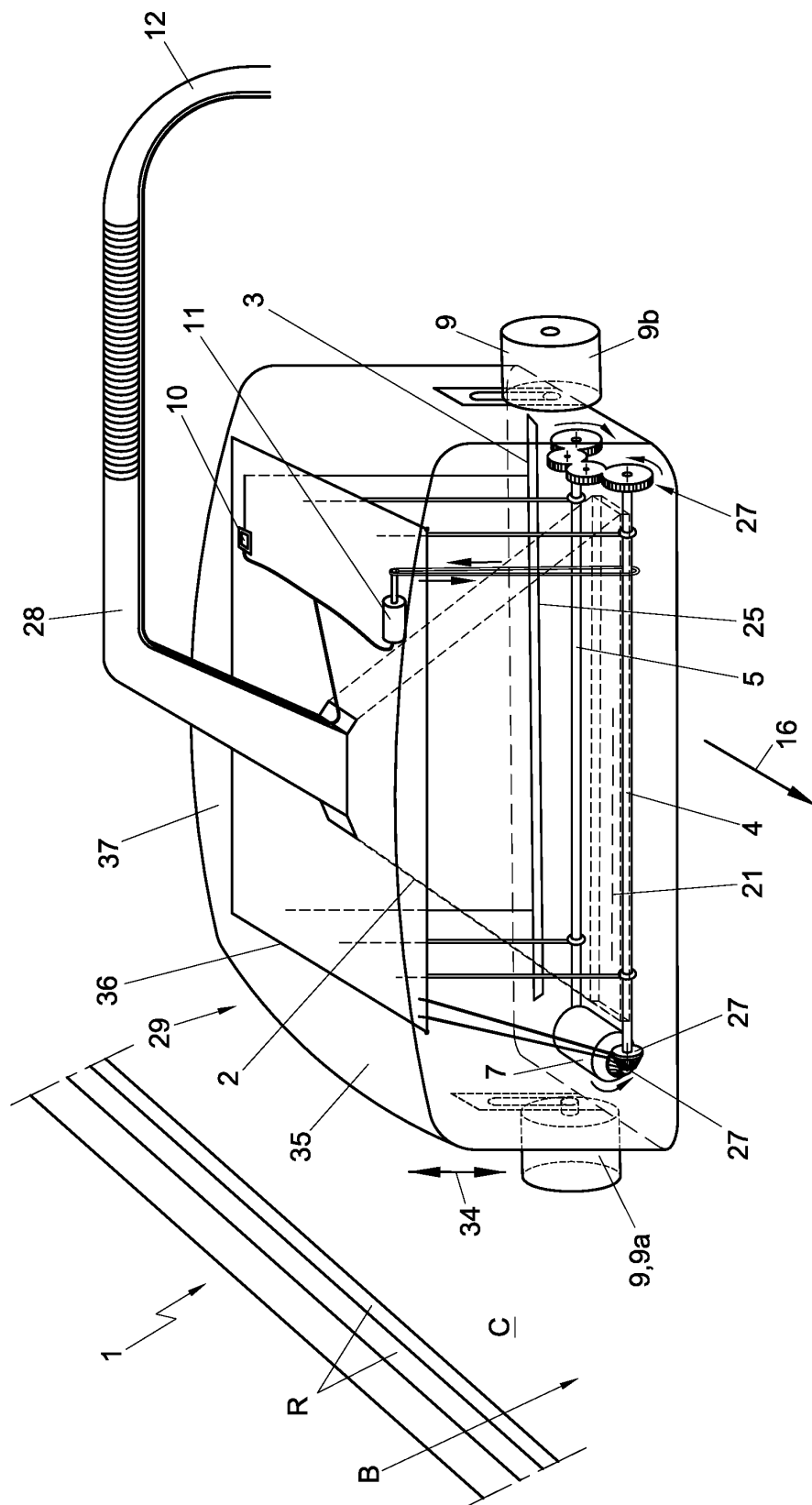


Fig. 3

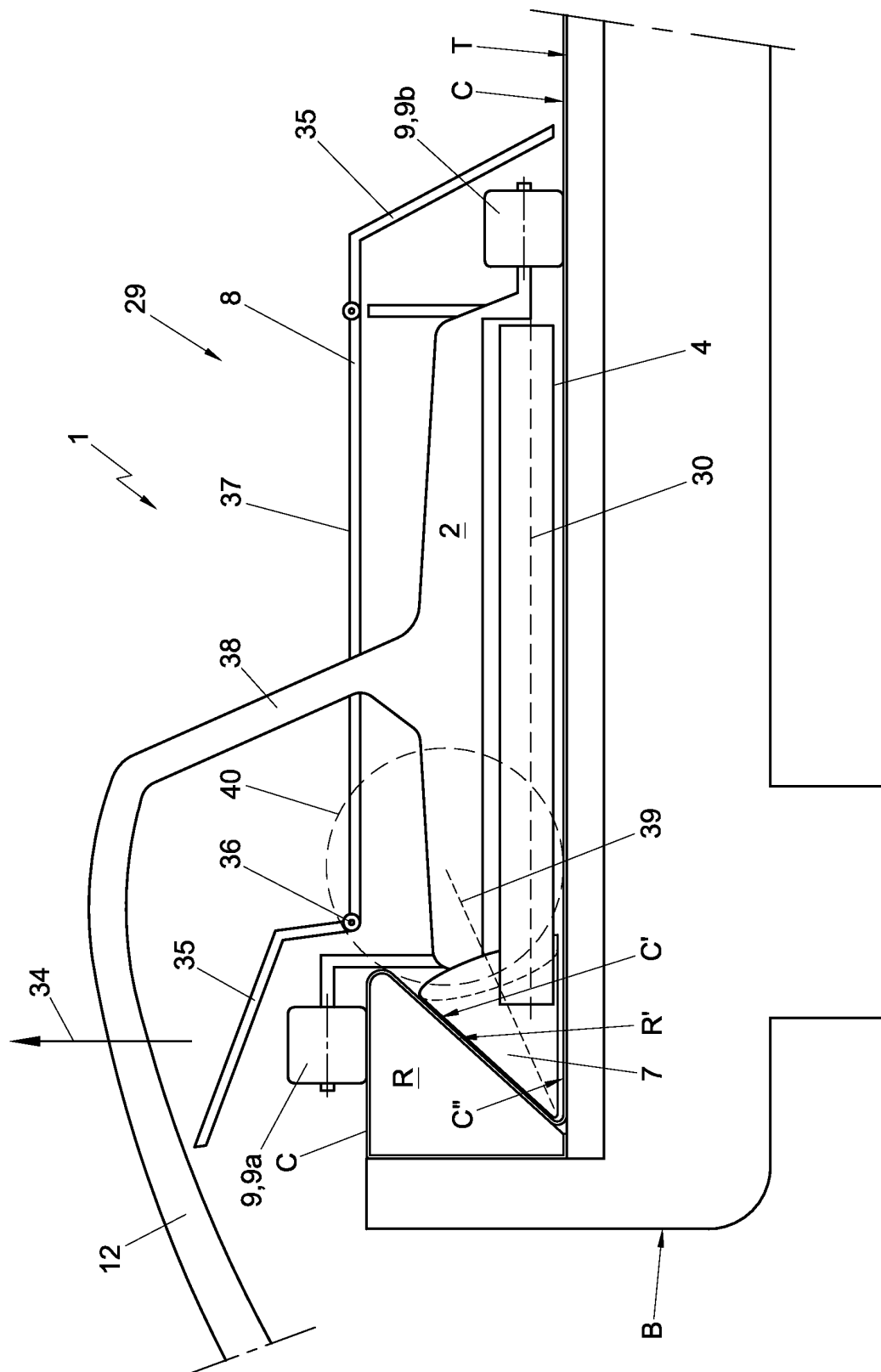


Fig. 4



EUROPEAN SEARCH REPORT

Application Number
EP 12 17 7822

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 January 2013	Examiner Lucas, Peter
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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