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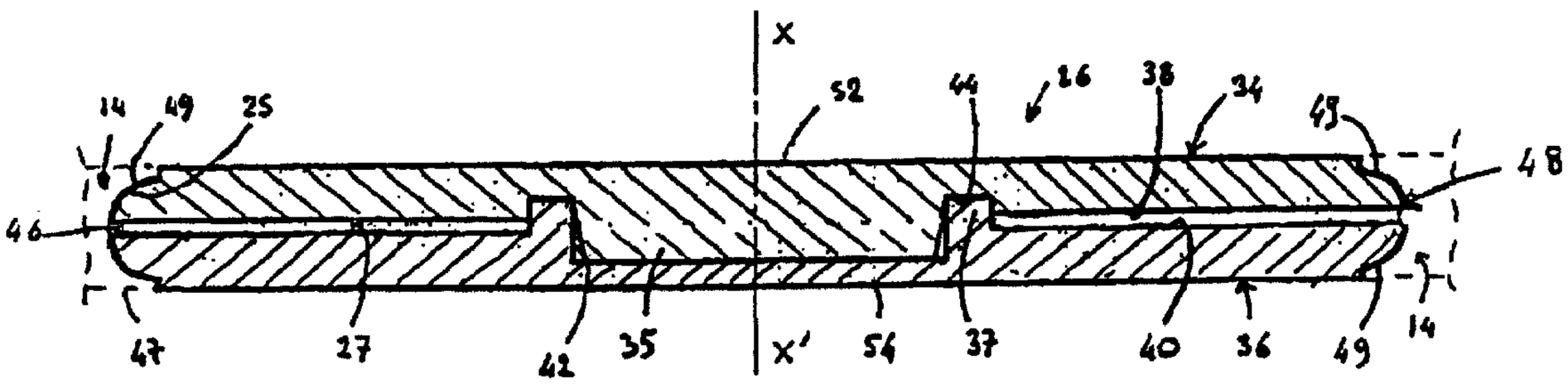



(57) Abrégé/Abstract:
Token in the general form of disc having a body (12) having a central opening (25, 25', 25b, 25c) containing an insert (26, 26', 26") having an identification device (27) (28). The insert (26, 26', 26") has two rigid plates (34, 36, 34', 36') each having at least a central projection on the inner face of the corresponding plate, secured or fitted at the central projection so that the central projection of one of the plates is attached or fitted to the inner face of the other plate to define between them a peripheral annular zone in which is disposed the identification device (27).

# ABSTRACT

Token in the general form of disc having a body (12) having a central opening (25, 25', 25b, 25c) containing an insert (26, 26', 26") having an identification device (27) (28). The insert (26, 26', 26") has two rigid plates (34, 36, 34', 36') each having at least a central projection on the inner face of the corresponding plate, secured or fitted at the central projection so that the central projection of one of the plates is attached or fitted to the inner face of the other plate to define between them a peripheral annular zone in which is disposed the identification device (27).

# CHIP WITH INSERT INCLUDING AN ELECTRONIC MICROCHIP

## FIELD OF THE INVENTION

The present invention relates to chips in the general shape of a disk and incorporating contactless electronic microchip identification devices, in particular gaming chips or casino chips.

## BACKGROUND

Gaming chips are generally fabricated from a scratch-resistant rigid plastics material to obtain a robust overall structure. Gaming chips carry varied patterns of lines or colors to form a more or less complex decoration and to reduce the risk of counterfeiting and/or fraudulent reproduction. The use of colors and colored patterns associated with the value of the chips, especially on the edge of the chips, enables croupiers and other users quickly to identify and/or sort chips at a glance, even when they are stacked up.

To fight fraud and to facilitate the counting and tracking of chips, especially in a gaming room or casino, chips have been proposed that integrate memory electronic circuit modules in which is stored information associated with the chip, for example its identification code or number and/or its numerical value. Communication between the electronic circuit module integrated into the chip and its external read/write station is usually effected without contact, in which case a contactless electronic microchip identification device is used including an electronic circuit microchip associated with an antenna, generally a circular loop antenna, in order to be able to communicate contactlessly with the read/write station using the radio-frequency identification (RFID) technique, the microchip then combining a transceiver circuit portion with a memory circuit portion having the function of storing information.

U.S. Pat. No. 4,969,549 describes a payment token that can be used in public telephone installations and in which the electronic circuit and its antenna are encapsulated in a plastics material disk of small diameter (from 20 to 30 mm) and a conductive axial core passes through the center of the token, although the fabrication process is not specified.

U.S. Pat. No. 5,166,502 describes a casino chip in which the antenna and the electronic circuit are disposed inside a metal ballast that is in turn placed between two facial labels at the center of an injection molded plastics material ring, everything being held in place by epoxy resin and by a second injection molding operation that covers the ring and the edge of the labels. This chip, of complex structure and costly to fabricate, does not offer all of the desired security in that it is possible to access the electronic circuit, without completely destroying the structure of the chip and rendering it unusable, simply by cuffing a facial label.

The Applicant's patent EP 0694872 describes a casino chip the body whereof includes an insert in the form of a central disk consisting of a rigid plastics material shell charged with metallic particles and carrying an electronic identification device and an annular plastics material ring injection molded around the disk, the central disk also serving as a ballast by virtue of the chosen material and the quantity of the metallic charge so that the chip has the total weight that the casino requires. In a first variant, the one-piece shell is injection molded around a protective casing into which the electronic device has previously been integrated. In a second variant the shell is obtained by fastening together a cover and a hollow injection molded plastics material disk after installing the electronic identification device. Although giving good results, this fabrication technique for chips with electronic identification has its limitations, in particular with regard to the maximum diameter of the loop of the antenna to be integrated into the central disk, given the dimensions of the chips generally used in casinos and gaming rooms. Casino chips with a diameter that is generally from 39 to 50 mm use electronic microchips

operating at a frequency of around 125 kHz and have an antenna diameter of the order of 21 mm. However, the Applicant has noted the benefit of using antennas with a larger active area, in particular of greater diameter, with electronic microchips operating at a frequency of around 13.56 MHz, for example loop antennas with a minimum diameter of 25 mm, at least in applications to casino chips.

US patent 2002/0006829 describes chips in which an electronic identification device using a microchip with an operating frequency of 13.56 MHz is stuck to the back of a decorative plastics material label disposed in a cavity provided on the lateral face of the chip. Like the chip that is the subject matter of U.S. Pat. No. 5,166,502, this structure does not offer all the desired security in that it is possible to access the electronic circuit without completely destroying the structure of the chip and rendering it unusable simply by cutting the facial label. What is more, being cut out from a thin sheet of plastics material, the label does not provide sufficient protection against light or analogous radiation (in particular UV radiation), to which some 13.56 MHz microchips seem relatively sensitive.

**SUMMARY OF THE INVENTION**

An object of the invention is to propose a token in the general form of disc having a body (12) having a central opening (25, 25', 25b, 25c) containing an insert (26, 26', 26") having an identification device (27) (28), characterized in that the insert (26, 26', 26") comprises two rigid plates (34, 36, 34', 36') each having at least a central projection on the inner face of the corresponding plate, secured or fitted at the central projection so that said central projection of one of the plates is attached or fitted to the inner face of the other plate to define between them a peripheral annular zone in which is disposed said identification device (27), wherein the two rigid plates further comprises a first rigid plate (34, 34') having a first central projection (35) (60, 62) and a first central cavity (42) on its inner face (38, 38') and a second rigid plate (36, 36') having a second central projection (37) (61, 63) and a

first groove (64, 66) on its inner face (40, 40'), wherein the first central cavity is configured to receive the second projection of the second rigid plate and the first groove is configured to receive the first central projection of the first rigid plate, and wherein the first central projection and the first groove are annular in shape and wherein the first central cavity is sized to receive the second central projection such that at least a portion of an interior wall of the first central projection substantially abuts at least a portion of a corresponding facing wall of the second central projection.

## DESCRIPTION OF THE DRAWINGS

Other objects, features and advantages of the present invention will become apparent on reading the following description of various preferred embodiments of chips of the invention given by way of nonlimiting example and with reference to the appended drawings, in which:

FIGS. 1*a* and 1*b* are respectively a diagrammatic front view and a side view showing the edge of a preferred embodiment of a gaming chip of the invention, the plastics material body whereof is obtained by two injection molding operations;

FIG. 2 is a diagrammatic front view of the core of the chip shown in FIGS. 1*a* and 1*b*, as obtained by the first injection molding operation;

FIG. 3 is a diagrammatic view in diametral section of a first variant of an insert used in the chip shown in FIGS. 1*a* and 1*b*;

FIG. 4 is a diagrammatic exploded perspective view of a second variant of an insert used in another chip of the type shown in FIGS. 1*a* and 1*b*;

FIG. 5 is a diagrammatic view in diametral section of the second variant of the insert, shown in FIG. 4, after assembly;

FIG. 6 is a diagrammatic exploded perspective view of another embodiment of the second variant of the insert, shown in FIGS. 4 and 5; and

FIGS. 7*a*, 7*b* and 7*c* each represent a partial view in diametral section of chips of the invention with a body produced by two successive injection molding operations and incorporating the second variant of the insert.

## DESCRIPTION OF A PREFERRED EMBODIMENT

In a first embodiment of the invention the multiple-injection-molded gaming chip 10 in the shape of a disk of colored plastics material, shown in FIGS. 1*a* and 1*b*, has a body 12 consisting of a core 14 carrying an insert 26 including a contactless electronic microchip identification device 27 (see FIGS. 3 and 6 in particular) and obtained by a first operation of injection molding a plastics material of a first color (represented diagrammatically in dashed outline to make FIGS. 1*a*-1*b* easier to understand) and covered at its periphery by a covering layer 16 obtained by a second operation of injecting molding a plastics material of a different color, the core 14 carrying at its periphery radially and/or laterally extending projections 18 flush with the surface of the covering layer 16 on the faces 11 and 13 and on the edge 20 of the chip. In the present example the three projections 18 are parallel to the axis of the chip 10 (perpendicular to the edge 20 to form a two-color pattern of five colored bars). It is therefore possible to produce colored face and/or edge decorations in the mass of the body of the chip, adapted in particular to be distinguished visually, to combat counterfeiting. These patterns are conventionally repeated on the edge 20 (for example six times) and equi-angularly distributed in the circumferential direction, in particular to enable visual or optical identification of the chip regardless of its orientation.

The chip is completed by fixing into the shallow central cavity 15 on each face 11 and 13 a plastics material label 22 carrying a decoration, for example a printed or screen-printed decoration (represented diagrammatically in FIG. 1 by the symbol DCR), and/or a mark (for example that of the casino) and/or a hologram.

The invention is not limited to two-color chips, of course, but relates equally to single-color chips made in one injection molding operation (the core 14 and the layer 16 being combined) and chips involving three, four or more injection molding operations in which at least one additional plastics material of a different color to

that of the preceding injection molding operations is injection-molded directly into the housings 19 defined by the hollow spaces between the projections 18 (these are visible in FIG. 2).

As shown in FIGS. 2 and 3, the core 14 of the body 12 has a generally annular shape the central aperture 25 whereof receives the circular insert 26 carrying the contactless electronic microchip identification device 27 (or electronic identifier) shown in section in FIG. 3 and consisting primarily of an electronic circuit 28 with a radio-frequency identification (RFID) transmitter-receiver fixed to a thin film 31 and a circular antenna 30 obtained by depositing conductive material onto the thin film 31 (for example electrolytic deposition followed by partial chemical etching). FIGS. 4 and 6 are perspective views of the RFID device 27 in which the antenna 30 is represented purely diagrammatically by a series of concentric circles to show the position of the antenna 30 at the periphery of the thin film disk 31. By way of nonlimiting example the film 31, which is a flexible thin film in the present example, is a polyethylene terephthalate (PET) polyester film 40 microns thick. Although this is not shown in the figures, the thin film 31 is covered on one or both faces, preferably the face carrying the antenna deposit, with an adhesive film for sticking the identification device 27 to the inside face of one of the two plates 34 and 36 of the insert 26 and additionally having the function of protecting the antenna, in particular against crushing. Moreover, the thin film 31 has a central aperture 32 for positioning the identification device 27 relative to the insert 26 in the manner explained hereinafter. The RFID device 27 as a whole takes the form of a flexible thin film with a maximum thickness of the order of 0.2 mm and a diameter of the order of 26.5 mm for an effective diameter of the antenna 30 of 25 mm and an aperture 32 of approximately 10 mm diameter.

The electronic identification device 27 generally includes an electronic circuit 28 incorporating a PROM containing information relating to the chip and/or the associated person or object, for example a fixed numerical or alphanumerical

identification code of 64 bits (including one or more fields such as: serial number, product identification, batch or location, a numerical value associated with the chip, etc.), and an RFID transmitter-receiver 28 with a peripheral circular antenna adapted to be fed by inductive coupling with modulated waves from a reading station (not shown). In practice, the transmitter-receiver is adapted to exchange data contactlessly by means of modulated waves with a reading station at a distance from it (for example a distance from 15 cm to 2 m), the operating frequency being from 10 kHz to 5 GHz, to cover in particular the 125 kHz, 13.56 MHz and 2.45 GHz bands. The electronic identification device 27 with memory combats theft and/or facilitates management and inventory of a batch of objects in a defined space (storage areas, warehouses, stores), for example. The electronic identification device 27 with non-reprogrammable (read-only) memory can of course be replaced by a reprogrammable device with changeable coding, with the facility for reading and writing memory without departing from the scope of the invention. For example, the microchip 28 is of the Magellan type from INFINEON (Germany) operating at a frequency of 13.56 MHz.

The insert 26, shown diagrammatically in FIG. 3 (which is not to scale to facilitate understanding of the diagram), is formed of two rigid disk-shaped plates 34, 36 fastened to or fitted in the central portion by means of facing central projections 35, 37 carried by the corresponding inside faces 38, 40 of the plates 34 and 36, respectively. As shown in FIG. 3, and in a particular embodiment described here by way of nonlimiting example, the projection 37 on the plate 36 includes a central cavity 42 receiving the projection 35 on the plate 34, the annular projection 37 being received in an annular groove 44 on the inside face 38 of the plate 34, the whole being positioned coaxially with the axis XX' of the insert 26 (and consequently of the body of the chip 12). The relative axial dimensions (the heights of the projections 35 and 37 and the depths of the cavity 42 and the groove 44) are such that, once assembled or fitted, the two plates 34 and 36 define between them

a peripheral annular area 46 defining a small spacing in which the identification device 27 is accommodated, with the annular projection 37 projecting through the aperture 32. For example, the insert 26 has a diameter of 27 mm, a thickness of 2.5 mm and a spacing of 0.2 mm between the plates in the annular area 46, although it should be noted that it is possible instead to provide a variant (not shown) with a small housing for the microchip 28 on the inside face of one of the plates to prevent all risk of crushing the latter.

FIG. 2 shows the body of the chip 12 at the end of the first injection molding operation, i.e. the core 14 before it is covered by the layer 16 whose contours 50 and 51 are shown in dashed line in FIG. 2. The inside contours 51 define on each face of the chip the shallow central circular cavity 15 (of the order of 0.5 mm deep) serving as a housing for the decorated plastics material label 22 fixed to the chip (as shown in dashed line in FIG. 1*b*). Inside the cavities 15, the injection molded core 14 (shown partly in section and in dashed line in FIG. 3) is flush with the outside faces 52 and 54 of the plates 34 and 36 (which include peripheral shoulders 49 in the manner shown in FIG. 3) to define on either side of the insert 26 a covering flange 47, the circular edge 48 of the insert 26 being also shown in dashed line in FIG. 2.

Of course, the invention is not limited to the circular shape of the insert, the RFID device and a corresponding antenna, but covers any appropriate variant, in particular with polygonal shapes, preferably with an axis of axial symmetry to facilitate the injection molding of the body of the chip, in this example the core 14, around the insert 26.

Without limitations, chips of the invention take the form of a disk, generally with a diameter from 39 to 50 mm and a thickness of the order of 3.3 mm, for example. The edge of the chip may be chamfered, have rounded edges or simply have a straight profile, in particular if it is required to be able to read the edge of the

chips optically. If necessary the chamfered or straight profile is completed by trimming on a grinding machine or lathe.

The plastics materials used for injection molding chips fabricated using the invention, in particular the gaming chip 10, are obtained from a basic polymer that is appropriately charged (in particular with weighting and colored materials) selected from:

polymethyl methacrylate (PMMA);

acrylonitrile-butadiene-styrene (ABS);

polyamides and copolymers thereof;

polyacetal and acetal copolymers (POM/polyoxymethylene);

polyphenylene sulfide (PPS);

polyalkylene terephthalates, in particular polybutylene terephthalate (PBT);

thermoplastic polyurethanes (PUR);

vinyl polymers, polyvinyl chloride (PVC);

polyolefins, in particular polyethylenes (PE) and polypropylenes.

There is used for the body of the chip a 6 or 6,6 polyamide charged with up to approximately 70% by weight of barium sulfate or barite powder to weight it, as a nonlimiting example. Each injection molding operation is carried out at a pressure from 800 to 1400 bar, an injection temperature of 280/300°C. and a mold temperature of approximately 50°C. This composition can also be used for the inserts 26 intended for lightweight chips (9 to 10 g).

The compositions may vary, of course, in particular in terms of the charges incorporated into the materials used for the diverse injection molding operations: for example in weighting charges (barite, metal powders, zinc oxide, etc.) and in coloring agent charges (zinc oxide, etc.) to obtain the color required for each injection molding operation, noting that the charges used for the inserts are chosen to be compatible with contactless RFID transmission. With particular regard to the

inserts 26 intended for the heaviest chips (13 to 14 g), a 6 polyamide charged with tungsten and/or copper powder (up to approximately 80% by weight) or with small bronze balls is used.

The invention also relates to a method of fabricating the body 12 of a chip of the invention defined in all its variants described herein and including at least the following operations:

injection-molding from an optionally charged plastics material two insert plates 34, 36 with at least one central projection;

placing the contactless electronic microchip identification device 27 on the inside face of one of the two plates and fixing the thin film 31 carrying the microchip and the antenna of the identification device 27 to the corresponding plate by means of an adhesive;

assembling the two plates 34, 36 around the identification device to produce the insert 26;

placing the insert in a first injection molding mold, the two half-shells whereof define a first imprint corresponding to the core 14 of the body of the chip around the insert 26 at the center of the first imprint;

injection-molding the core 14 of the chip;

placing the core 14 of the chip (with the insert 26) in a second injection molding mold, the two half-shells whereof define a second imprint corresponding to the whole of the body 12 of the chip or virtually the whole of the body 12 of the chip;

injection-molding the covering layer 16;

injection-molding any edge inclusions necessary to complete the body of the chip; and

optionally trimming the chip body 12 to perfect the edge 20 of the chip.

The chip is optionally terminated by placing the two decorative labels 22 in the cavities 15.

Without departing from the scope of the invention, the insert 26 may be assembled in various ways, in particular, by way of nonlimiting example, by directly fastening the central portions of the two plates together (for example by gluing them together, in particular using epoxy resin, ultrasound welding, etc.), by forcible fitting, fitting with clipping of the central projections, or fitting and fixing the plates by double-sided adhesive disposed on the two faces of the film 31 so as to cooperate with each of the internal faces of the plates 34 and 36.

As can be seen in FIG. 3, the edge of the insert 26 is rounded (or beveled on the outside) and the injection molded core 14 covers the rounded portions (the shoulders 49) so that it is flush with the outside faces of the plates 34 and 36. Without departing from the scope of the invention, however, the edge may be straight, beveled or rounded and the core 14 injection molded with a covering material with an increased thickness or shoulder relative to the external faces of the plates to form a continuous or discontinuous ring around the periphery of the insert 26. Moreover, if necessary, at least one of the plates 34, 36 may have at the periphery of its inside face an annular abutment (not shown) to prevent ingress of injected material into the peripheral annular area 46 or crushing of the identification device 27.

FIGS. 4 and 6 relate to a second variant of the insert used in chips of the invention, in particular in a chip of the type shown in FIGS. 1*a* and 1*b* and described hereinabove. This insert 26' is very similar to the insert 26 and will not be described in detail again (likewise the corresponding chips), given that identical or quasi-identical elements of the inserts and the corresponding chips carry the same reference numbers and that analogous elements carry the same reference numbers primed (').

As shown in FIG. 4, the insert 26' consists of two injection-molded rigid plastics material plates 34' and 36', where applicable charged to weight them, as

referred to hereinabove, between which is disposed and adhesively fixed the contactless electronic microchip identification device 27 described hereinabove with the microchip 28 and its antenna 30 associated with the thin film 31. Compared to the insert 26, the insert 26' is characterized by the following points:

i) The two plates 34' and 36' are identical and interchangeable to reduce fabrication costs, in particular thanks to the use of a single injection molding mold for the insert 26', rather than two molds.

ii) The central projections 60, 61, 62 and 63, adapted to project through the aperture 32 in the film 31, are arranged on each inside face 38' (and 40') in two concentric and angularly offset crenelated rings, alternating with groove portions 64, 65, 66 and 67 on the inside faces of the plates 34' and 36' and intended to receive the corresponding projections of the other face, the heights of the projections 60-63 and the depths of the grooves 64-67 being chosen to produce, once the two plates have been assembled together, the peripheral annular area 46, with a slight spacing, receiving the identification device 27. As shown in detail in FIGS. 4 and 5 (the first of which shows the inside face 40' of the plate 36'), each external crenelated ring, the diameter whereof is made slightly less than that of the aperture 32, includes three equi-angularly distributed projections 60, 61 having an axis XX' of ternary symmetry and spaced by three groove portions 64 and 65 subtending an angle at the center slightly greater than that of the projections 60, 61. Similarly, each crenelated internal ring, adjacent the crenelated external ring but offset relative thereto by an angle at the center of 60°, includes three equi-angularly distributed projections 62, 63 having an axis XX' of ternary symmetry and spaced by three groove portions 66 and 67 subtending an angle at the center slightly greater than that of the projections 62, 63. Accordingly, once the insert 26' has been assembled by fitting the grooves and projections, the central external projections 60 and 61 respectively project into the external grooves 65 and 64 and the central internal projections 62 and 63 respectively project into the internal grooves 67 and 66. As shown by way of nonlimiting example in FIG. 5, the fitting is

effected forcibly by bearing down on bearing areas 71 between the cylindrical internal walls 70 of the central external projections 60 (and 61) and the cylindrical external walls 72 of the central internal projections 63 (and 64), small clearances 73 being further provided opposite these bearing areas 71 to allow slight deformation of the central projections during this forcible fitting, if necessary. Of course, the two plates 34' and 36' may be fastened together in any other manner, in particular by gluing or welding them together.

iii) The edge 48' of the insert 26' is re-entrant at its center to allow the outside edge of the film 31 to project slightly. To this end, the peripheries 74 and 76 of the plates 34' and 36' are beveled on the inside and the external faces 52' and 54' of the plates 34' and 36' have small shoulders 49' designed to be covered by the injection-molded plastics material of the body of the chip during fastening together of the insert 26' and the body of the chip in the manner described hereinafter with reference to FIGS. 7*a*, 7*b* and 7*c*.

FIG. 6 is an exploded view of an insert 26" that is an alternative to the insert 26' and in which two oriented detectable-film patches 80, 82 of an active material or alloy sensitive to electromagnetic radiation are disposed on either side of the identification device 27, the orientations of the two detectable films of the patches crossing at substantially 90°. The patches 80 and 82 also have one or both faces covered with adhesive to facilitate assembly of the insert 26", as the distance between the inside faces of the plates 34' and 36' can be increased slightly to allow for the thickness of the two patches and prevent crushing of the identification device 27.

FIGS. 7*a*, 7*b* and 7*c* show the fastening of the insert 26' into the central opening 25', 25*b*, 25*c* of an annular chip body made by double injection molding with a core (first injection molding operation) and a covering layer (second injection molding operation).

FIG. 7*a* shows a chip structure substantially identical to that of the chip 10, and in particular in which the body 12' includes a core 14' injection-molded around the edge 48' of the insert 26' that covers the shoulders 49' of the insert 26' flush with the outside faces 52', 54' of the insert. The body/insert fastening is effected at the level of the central aperture 25' of the core 14' (coinciding with the central aperture of the body 12'), which core 14' is partially covered by the layer 16' during the second injection molding operation.

FIG. 7*b* shows a chip structure similar to that of the chip 10, but in which the body/insert fastening, again effected in the central aperture 25*b* of the body 12*b* of the chip, is effected at the level of the central aperture of the core 14*b* and the central aperture of the layer 16*b*. In particular the body 12*b* includes a core 14*b* injection-molded around the central portion of the edge of the insert 26' (beveled edges 74, 76 and projecting edge of the film of the identification device 27 so as to be flush with the shoulders 49'). During the second injection molding operation the core 14*b* is covered by the layer 16*b*, which covers the shoulders 49' of the insert 26' flush with the outside faces 52', 54' of the insert.

FIG. 7*c* corresponds to another chip structure similar to that of the chip 10, but in which body/insert fastening is effected, again in the central aperture of the body 12*c* of the chip, at the level of a central aperture of the covering layer 16*c*. In particular, the body 12*c* includes an injection-molded annular core 14*c* of greater diameter than the insert 26'. During the second injection molding operation, the covering layer 16*c* envelops the core 14*c* until it covers all of the edge 48' of the insert 26', including the shoulders 49' of the insert 26', until it is flush with the outside faces 52', 54' of the insert.

Of course, the invention is not limited to gaming chips or casino chips but relates equally to all types of chip in the form of a disk with an injection-molded plastics material body integrating an electronic identifier, such as, by way of

nonlimiting example, parking tokens, payment tokens and vouchers and identification badges for goods or persons.

**WHAT IS CLAIMED IS:**

1. Token in the general form of disc having a body (12) having a central opening (25, 25', 25b, 25c) containing an insert (26, 26', 26") having an identification device (27) (28), characterized in that the insert (26, 26', 26") comprises two rigid plates (34, 36, 34', 36') each having at least a central projection on the inner face of the corresponding plate, secured or fitted at the central projection so that said central projection of one of the plates is attached or fitted to the inner face of the other plate to define between them a peripheral annular zone in which is disposed said identification device (27), wherein the two rigid plates further comprises a first rigid plate (34, 34') having a first central projection (35) (60, 62) and a first central cavity (42) on an inner face (38, 38') of the first rigid plate (34, 34') and a second rigid plate (36, 36') having a second central projection (37) (61, 63) and a first groove (64, 66) on an inner face (40, 40') of the second rigid plate (36, 36'), wherein the first central cavity is configured to receive the second projection of the second rigid plate and the first groove is configured to receive the first central projection of the first rigid plate, and wherein the first central projection and the first groove are annular in shape and wherein the first central cavity is sized to receive the second central projection such that at least a portion of an interior wall of the first central projection substantially abuts at least a portion of a corresponding facing wall of the second central projection.

2. Token according to claim 1, characterized in that said identification device is an electronic device having a contactless chip and an antenna (30).

3. Token according to claim 1, characterized in that a bearing area (71) is formed where the first projection substantially abuts at least a portion of the corresponding facing wall of the second projection and a small clearance (73) is formed opposite the bearing area between the inner faces (38, 40, 38', 40') of the two rigid plates.

4. Token according to claim 2, characterized in that said antenna (30) is carried by a thin insulating film (31) disposed between the two plates (34, 36, 34', 36') having at least a central hole (32) through which each of the central projections crosses.

5. Token according to claim 4, characterized in that said thin insulating film (31) is attached with an adhesive on the inner face (38, 40, 38', 40') of at least one of the two rigid plates (34, 36, 34', 36').

6. Token according to claim 4 or 5, characterized in that all or part of the antenna (30) is obtained by depositing conductive material on the thin insulating film (31).

7. Token according to claim 2, characterized in that said first central projection is concentric and angularly offset alternately with the first groove.

8. Token according to claim 7, characterized in that the height of the first central projection and the depth of the first groove are selected so as to produce, once the two plates (34', 36') are assembled, the peripheral annular zone for receiving the identification device (27).

9. Token according to claim 2, characterized in that at least one of the two rigid plates has, on a periphery of the inner face of the at least one of the two rigid plates, an annular stop for protecting the identification device against a crash and/or entry of material into the peripheral annular zone.

10. Token according to claim 2, characterized in that said contactless chip (28) operates in a frequency range of between 10 and 17 MHz.

11. Token according to claim 2, characterized in that said contactless chip operates in a frequency range between 2 and 5 GHz.

12. Token according to claim 2, characterized in that the insert (26, 26', 26") has a generally disc-shape and the antenna is a loop antenna formed with a diameter between 25 and 30 mm.

13. Token according to claim 1, characterized in that the insert (26") comprises two detectable-film patches (80, 82) of an active material or an alloy sensitive to electromagnetic radiation, wherein each detectable-film patch is placed on the inner face of the rigid plate and the central projection on each inner face is formed by increasing a thickness of each patch within a central area.

14. Token according to claim 13, characterized in that the two detectable-film patches have a detectable crossed orientation.

15. Token according to claim 14, characterized in that the two detectable-film patches are oriented at 90°.

16. Token according to claim 1, characterized in that the two rigid plates (34, 36, 34', 36') are made of a plastic material.

17. Token according to claim 16, characterized in that the plastic material comprises adjustable loads compatible with RFID contactless transmission.

18. Token according claim 1, characterized in that the body (12, 12', 12b, 12c) is made of injected plastic material around said insert (26, 26') with overlap of a periphery of the insert and/or introduction of material into a portion (48, 48') of the insert.

19. Token according to claim 18, characterized in that the insert (26, 26') has a beveled periphery, with rounded edges or a portion (48, 48') formed in a groove.

20. Token according to claim 1, characterized in that the body (12) has on each outer face a cavity (15) in which is fixed a tab (22) carrying a decoration, a brand or a hologram.

21. Token according to claim 1, wherein the token is a gaming token or a *casino chip*.

Fig. 1a

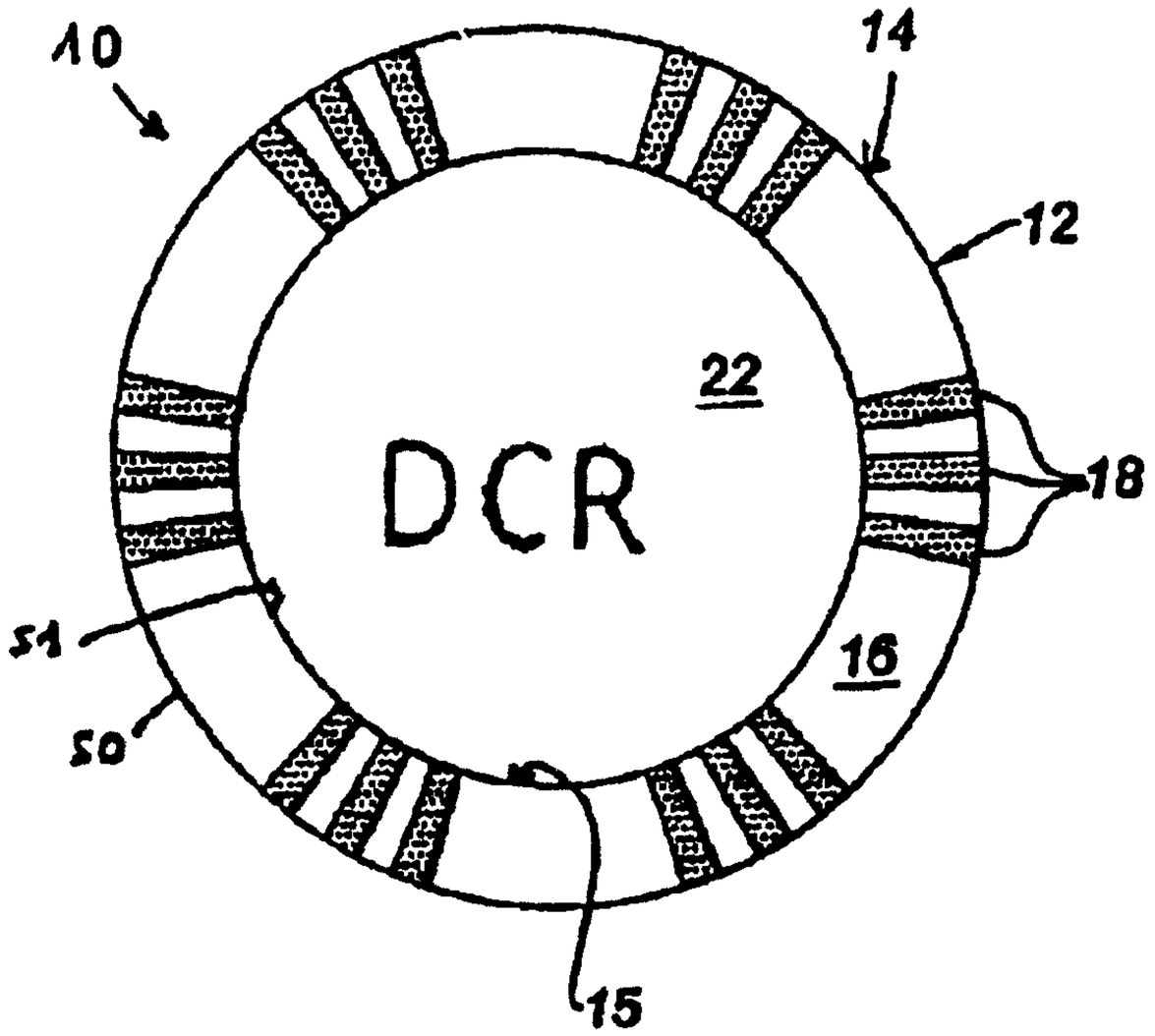



Fig. 1b

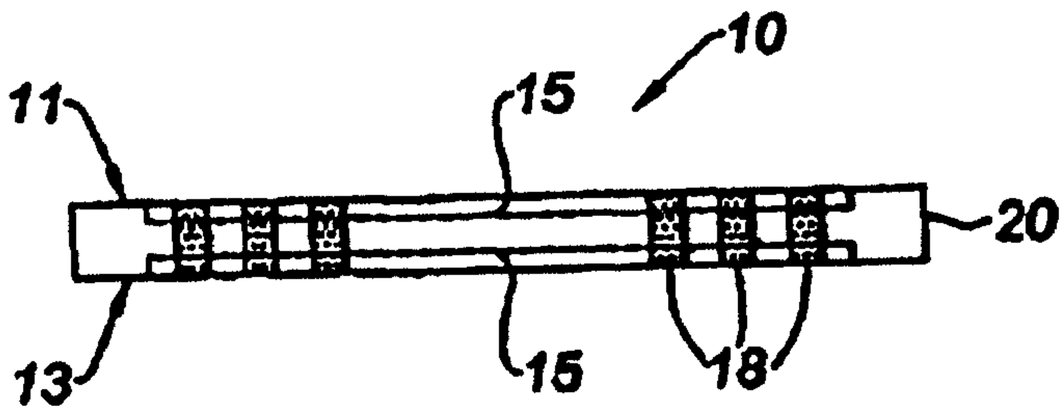
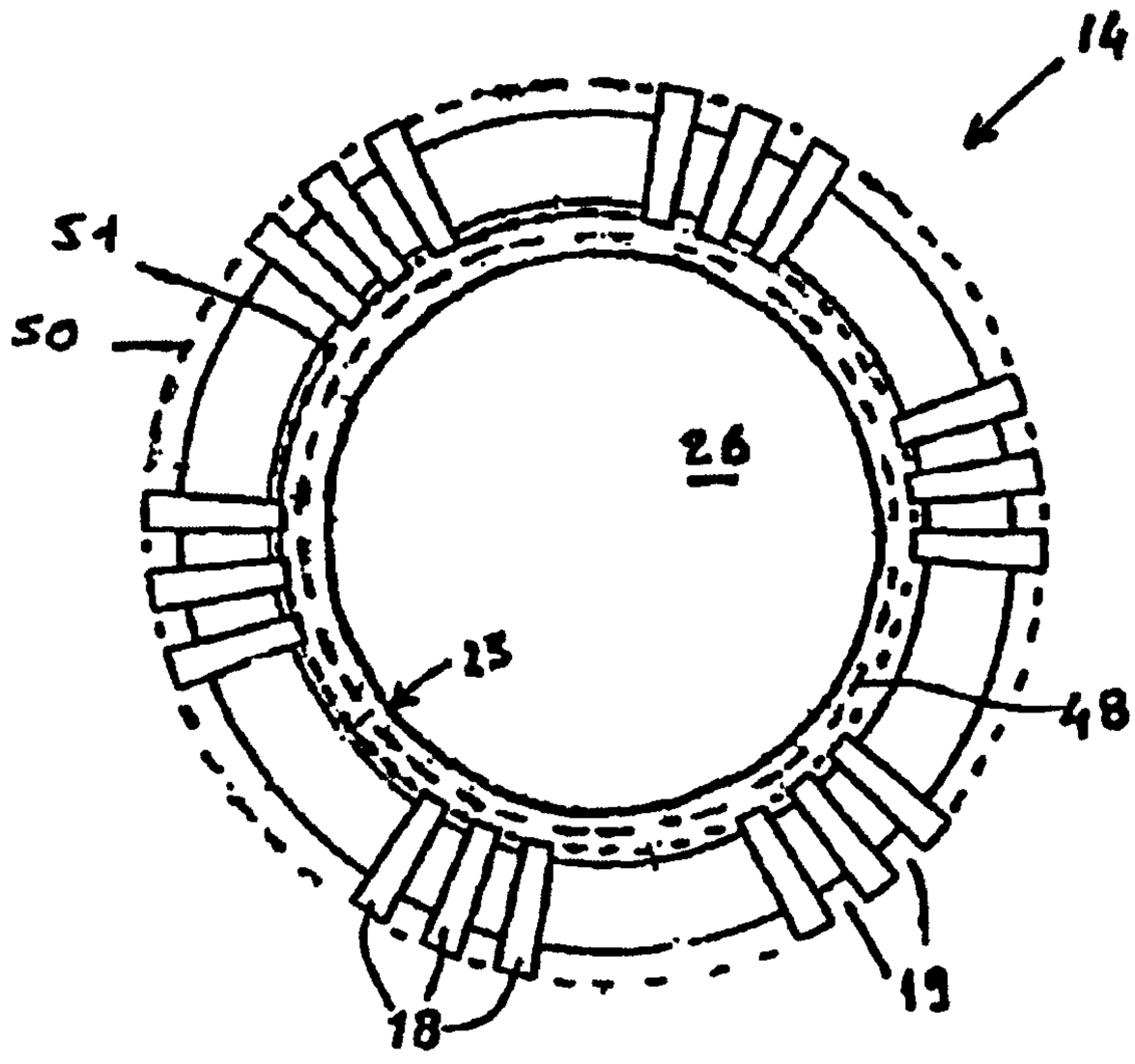



Fig. 2



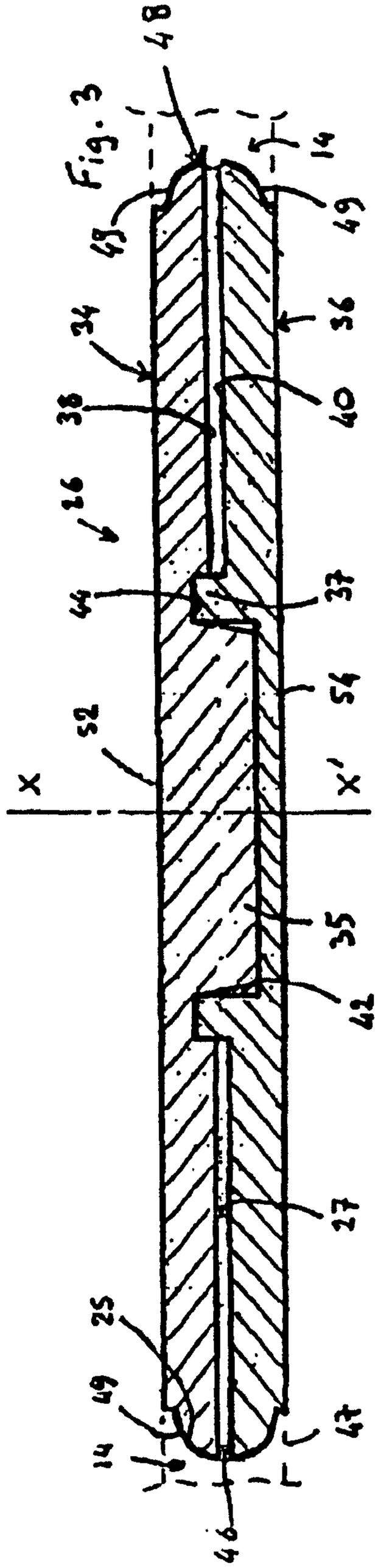


Fig. 3
48
49
14
34
36
38
40
16
44
37
54
52
X
X'
35
42
27
25
49
14
47
46

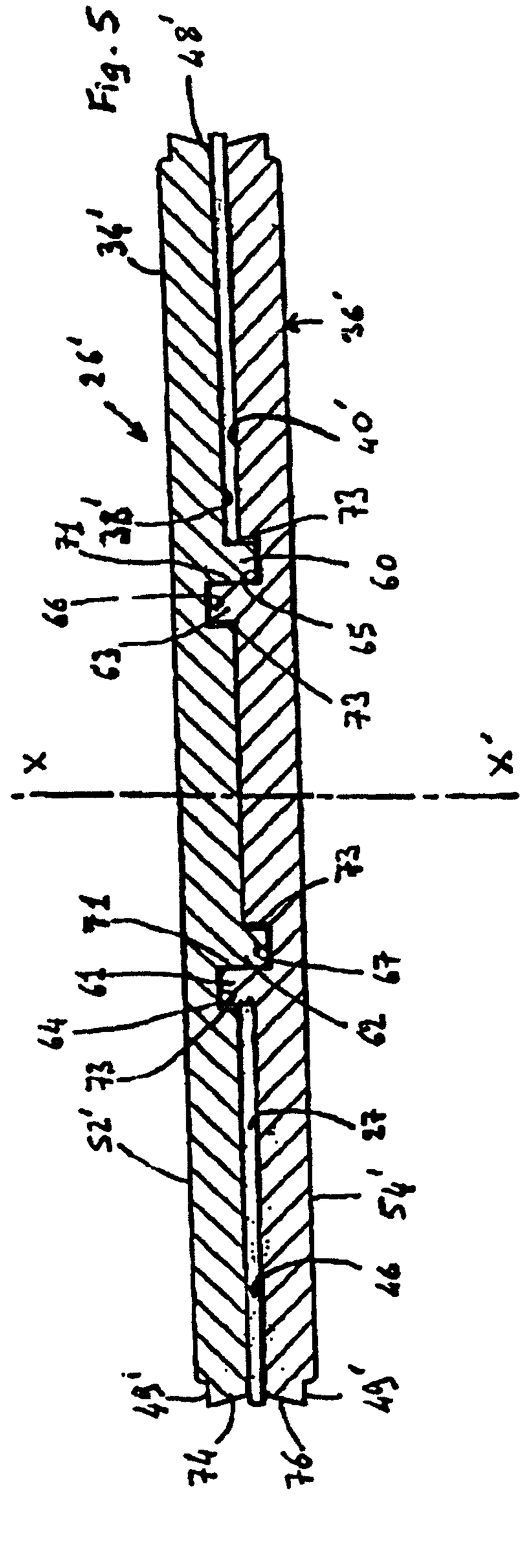


Fig. 5
48'
36'
16'
40'
38'
71'
73
60
66
63
65
X
X'
73
74
67
64
62
52'
54'
46
49'
74
76

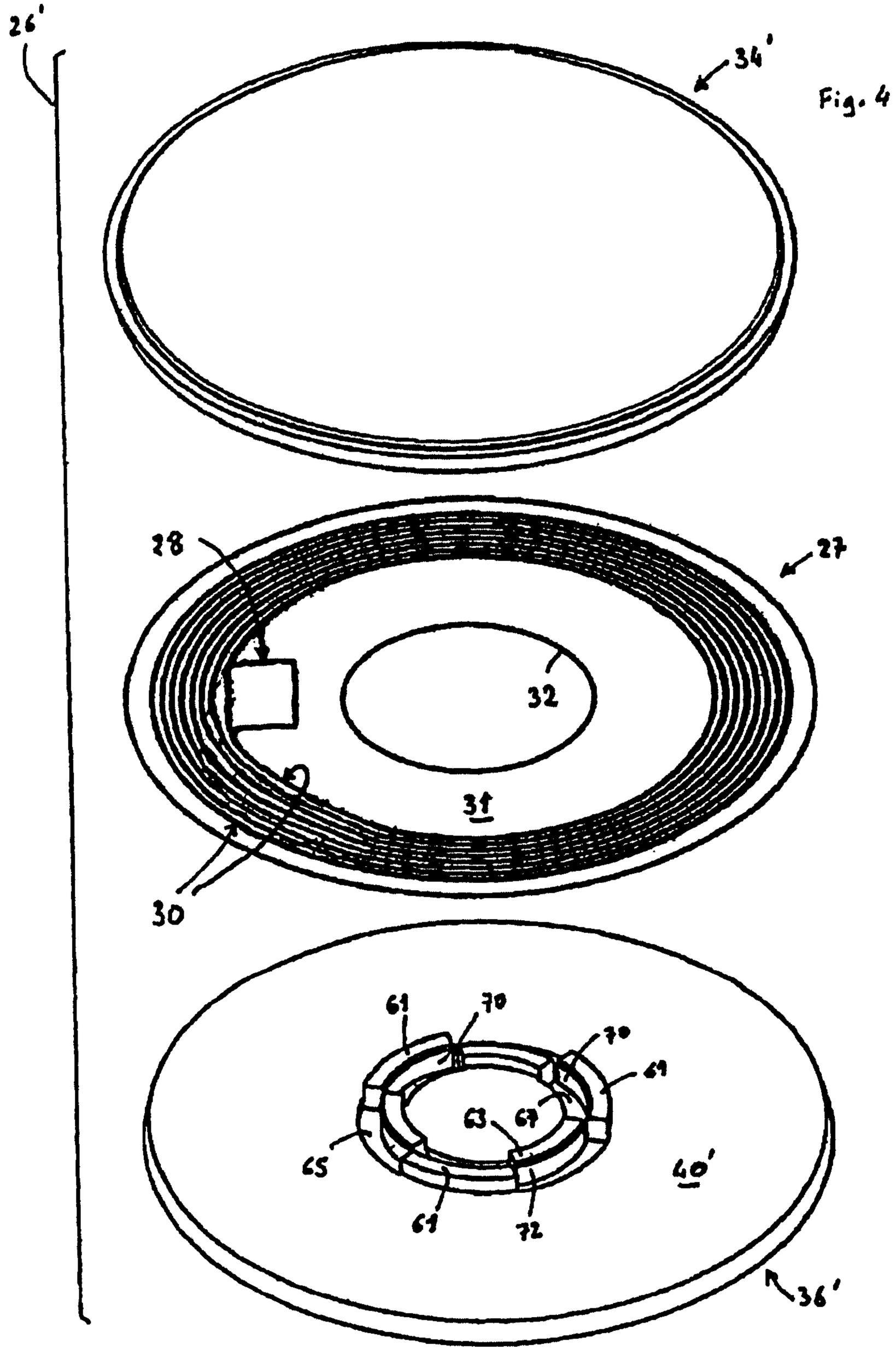



Fig. 4

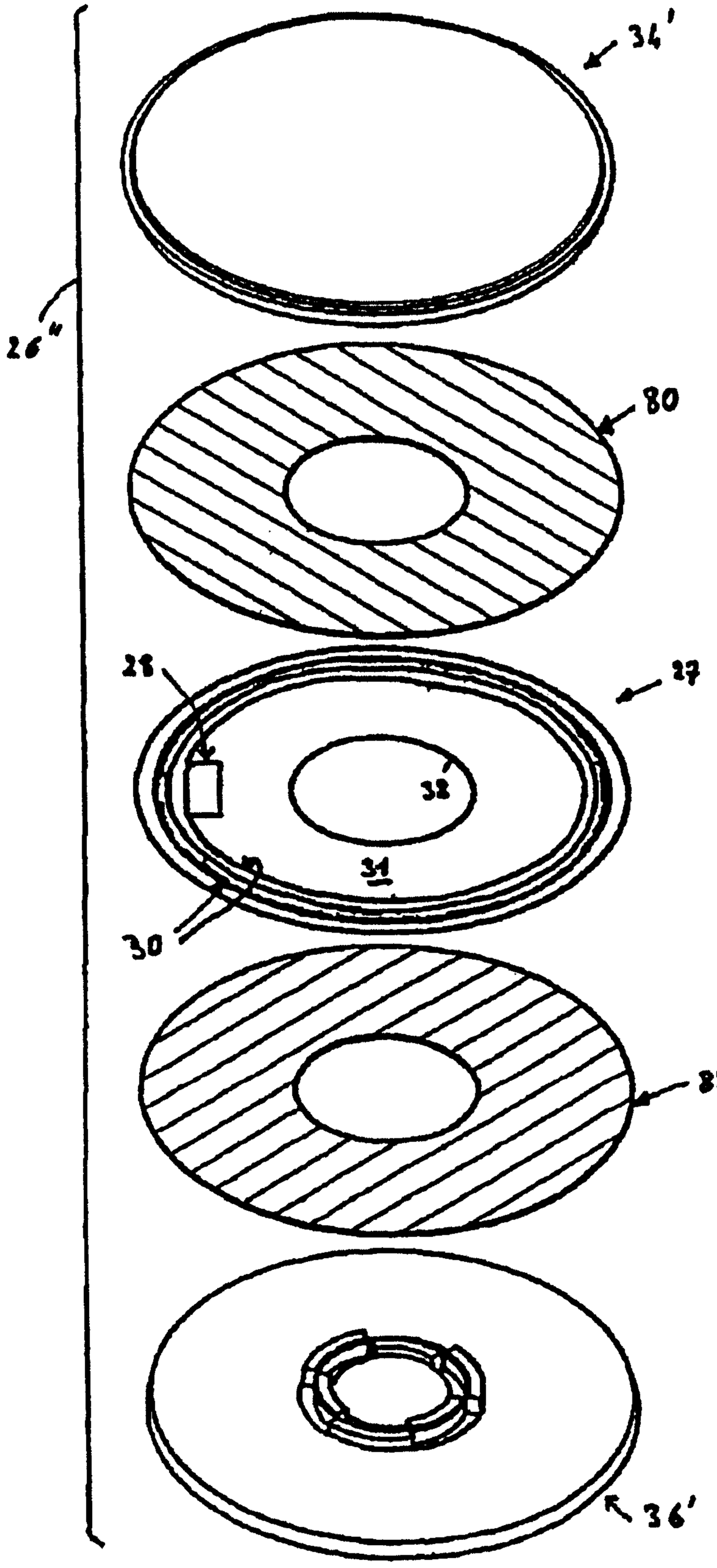



Fig. 6

Fig. 7a

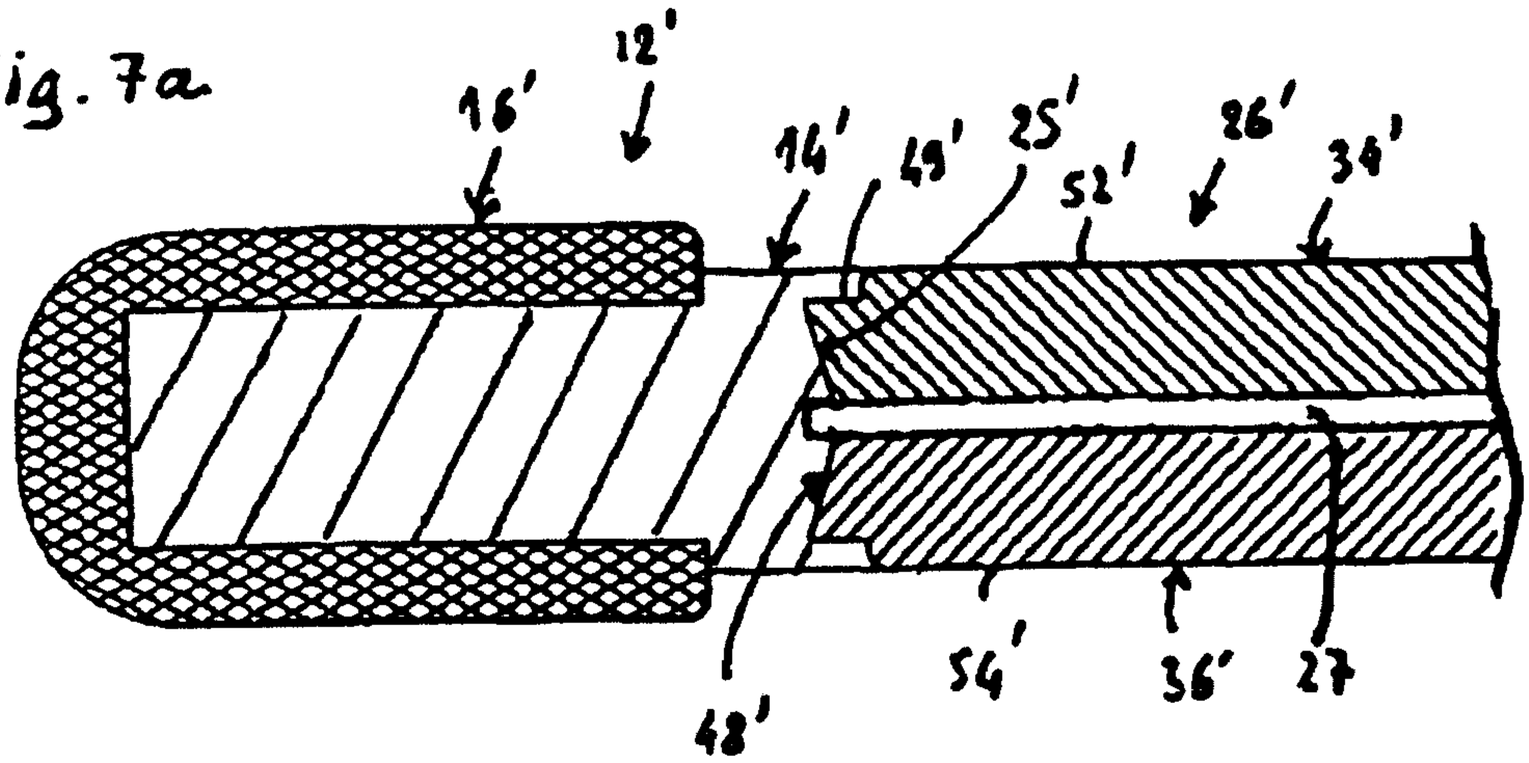



Fig. 7b

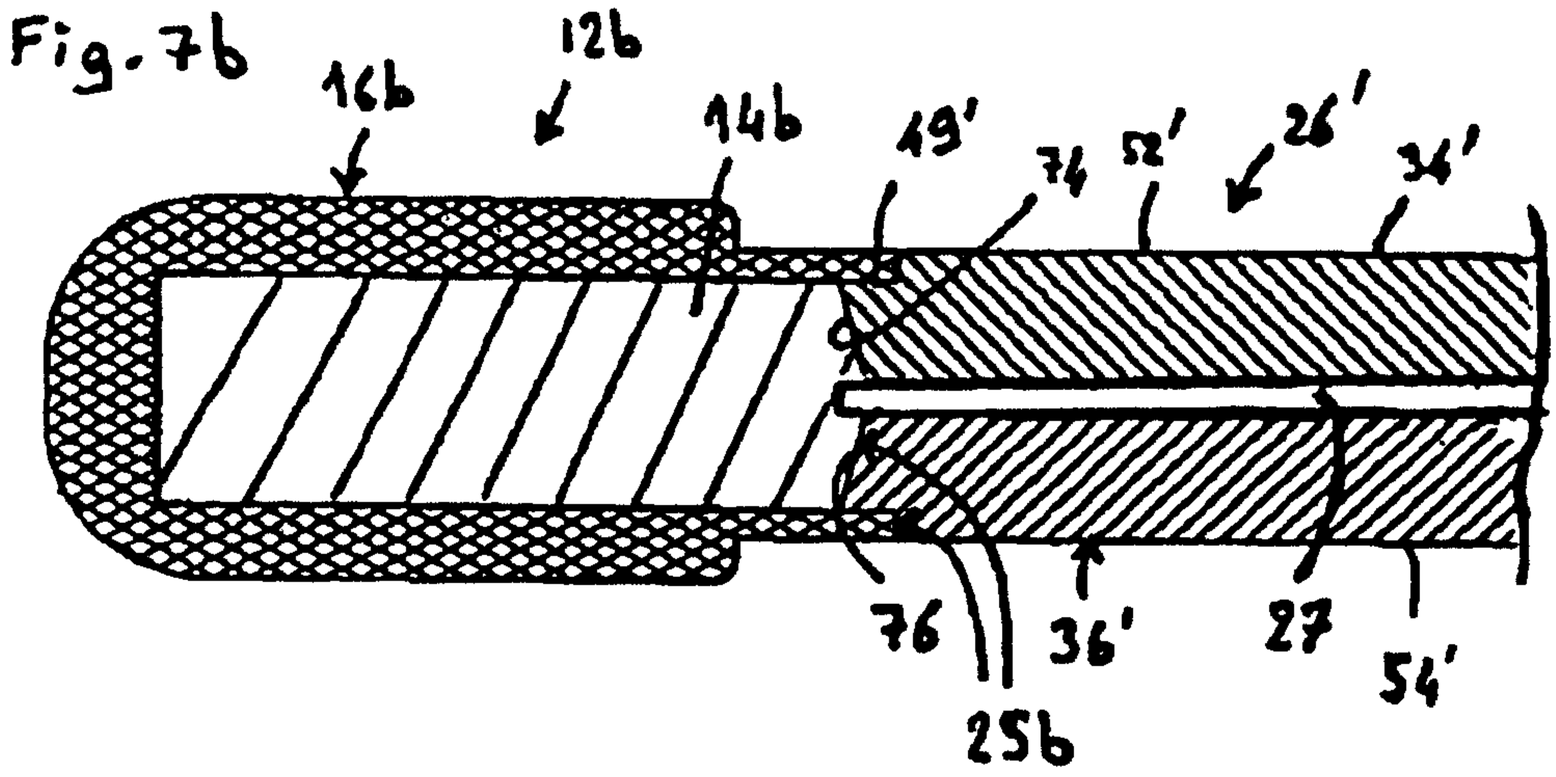
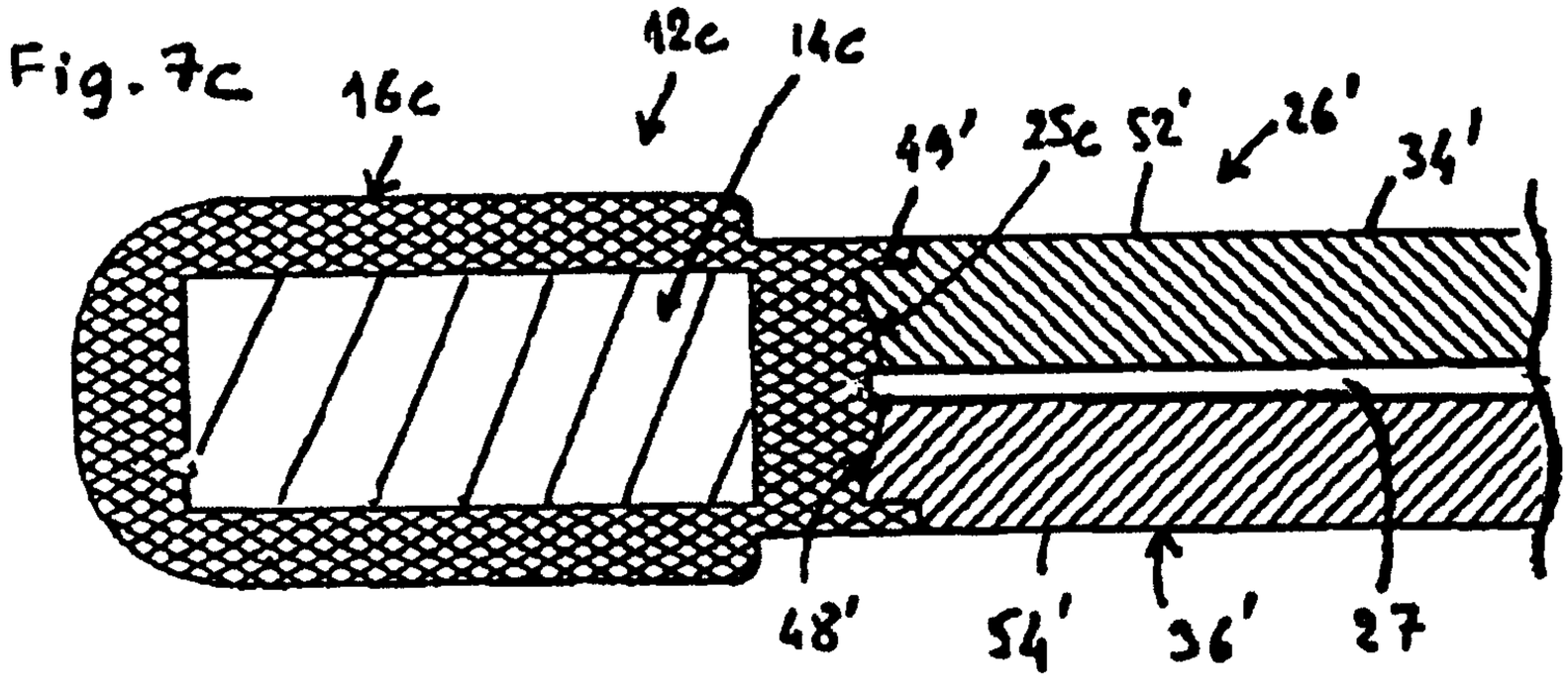
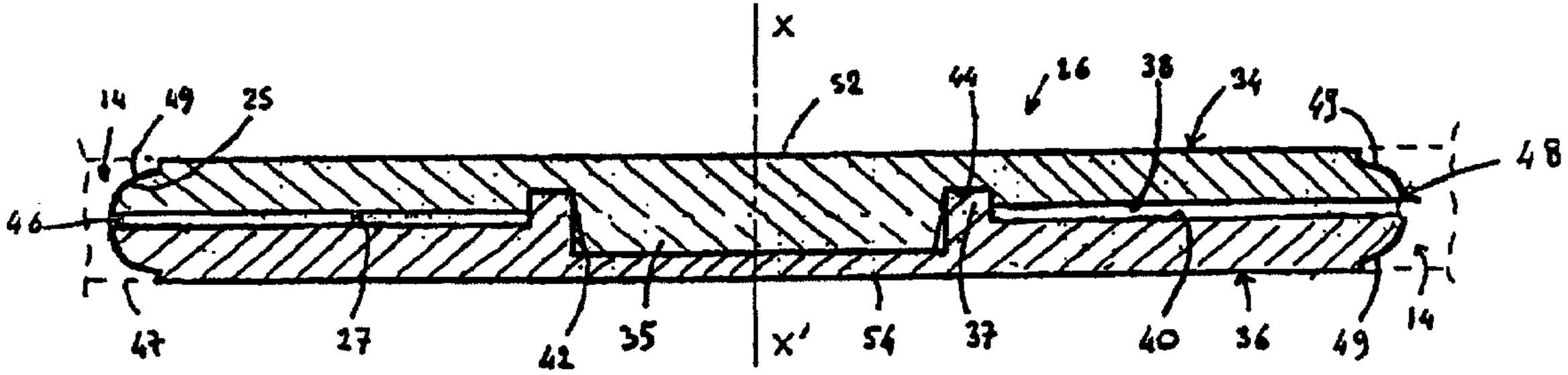



Fig. 7c




X
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