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FIXING ADHESIVETechnical field

5 The present invention relates to a fastening tie, in particular a Blitzbinder fastening tie, for providing fastening loops.

Prior art

Fastening ties are known from the prior art. They find application in many fields as a connecting element which is rapid to use and economical, in particular for the
10 permanent joining of cables and entire cable harnesses to one another or to other objects.

A common variant of such fastening ties are known by the term “cable ties”. These have a head part with a passage opening and a strap extending from the head part. The strap has a region in which a serration is introduced into the strap. In the passage opening is arranged a locking tongue which has a serration formed in a complementary manner to
15 the serration. If the strap is pushed in a designated passing or threading direction through the passage opening, the serration of the strap locks with that of the tongue, such that a non-detachable connection results between strap and head against the threading direction.

Furthermore, it is known to equip such cable ties with moulded-on fastening
20 elements such as adhesive base, plug-in anchor or bar feet, in order to fasten them for example to a frame structure, such as a vehicle frame.

Alternatively to this, it is known that the head of such cable ties has two passage openings, the range next to one another, formed identically or analogously, with a locking tongue, in order by guiding the strap first through the first passage opening and
25 subsequently through the second passage opening to be able to create two loops, and thus for example by means of a first loop to fasten the cable tie to a frame structure and in addition to be able to provide an additional loop for holding cables. A cable tie of this sort is shown for example in WO 9958890 A1. Here, in addition, one of the locking tongues is equipped with a lever element, in order to be able to lift the locking tongue from the
30 strap and thus release the latching.

By reason of the provision of the serration and the locking tongue in the head, cable ties are relatively complicated in construction, which increases the manufacturing costs. This is particularly relevant when a lever element is provided additionally to the locking tongue. In addition, the releasing of the locking is relatively difficult since the lever

element generally has to be small in design. A repeated actuation of the lever element can in addition weaken the locking tongue, such that there is no longer any safe connection.

5 As an alternative to the previously described cable ties which are based on the principle of the latching of serrations formed complementarily to one another, so-called Blitzbinders are known, which can be learned for example from AT 209245 B. In contrast to cable ties, these have a strap with a multiplicity of retaining projections extending from the strap radially to the outside.

10 The head part of Blitzbinders of this sort can have two identically formed eyelets for the passing of the strap provided with the retaining projections. Here, the eyelets have a passage opening and a strap receiving opening connected therewith, wherein the passage opening includes dimensions greater than the dimensions of a retaining projection perpendicular to a longitudinal extension of the strap, and the strap receiving opening has dimensions which substantially correspond to the dimensions of the strap
15 perpendicular to its longitudinal extension, such that the strap can be releasably held in the strap receiving opening.

These Blitzbinders have the advantages that, unlike in the case of cable ties, less complex tools are necessary for the production. For reason of the simpler construction, in particular of the heads, correspondingly the manufacturing costs are reduced. In
20 addition, by means of this geometry which is different from that of cable ties with locking tongues, a rapid and also repeated shutting and opening of the loops is provided in a simple manner. However, Blitzbinders have the disadvantage that the connection between the head and loops can release when the strap is subjected to a movement. For this reason, they are suitable only to a limited extent for applications in which a
25 permanent connection is supposed to be provided by a first loop, but on the other hand the second loop is supposed to be repeatedly opened and closed, for example when cables are to be attached one after another to the frame in several manufacturing steps of a vehicle.

US 2003/0159254 A1 shows a releasable tie, DE 20 12 300 A1 shows a Blitzbinder,
30 AT 209 245 B shows a binding organ which can be joined releasably to form a ring, and DE 90 01 391 U1 shows a tie-like securing device.

Presentation of the invention

Starting from the known prior art, it is a task of the present invention to provide an improved fastening tie, which takes into consideration the aforementioned disadvantages.

5 The task is solved by a fastening tie, in particular Blitzbinder, having the characteristics of claim 1. Advantageous further developments result from the sub-claims, the description and the figures.

Accordingly, a fastening tie, in particular Blitzbinder, is proposed for providing fastening loops, comprising a head part and a strap which is formed in one piece with the head part and which extends from the head part having a multiplicity of retaining
10 projections extending radially outwardly from the strap, wherein the head part comprises a first eyelet and a second eyelet for passing the strap provided with the retaining projections, wherein the second eyelet is formed of a passage opening and a strap-receiving opening connected thereto, wherein the passage opening has dimensions greater than the dimensions of a retaining projection perpendicular to a longitudinal
15 extension of the strap, and the strap receiving opening has dimensions substantially corresponding to the dimensions of the strap perpendicular to the longitudinal extension thereof, such that the strap can be detachably retained in the strap-receiving opening.

According to the invention, the first eyelet has a base opening, wherein the base opening has dimensions which are larger than the dimensions of the retaining projections
20 perpendicular to the longitudinal extension of the strap, and a cage element for providing non-detachable retention of a retaining projection extends radially inwardly from an outer contour of the base opening.

In that the first eyelet has a base opening wherein the base opening has dimensions which are greater than the dimensions of the retaining projections perpendicular to the longitudinal extension of the strap, and a cage element for providing a non-detachable
25 retention of a retaining projection extends radially inwardly from an outer contour of the base opening, on the one hand a first loop can be provided by the strap and the first eye, which by reason of the retaining of the strap via the cage element in cooperation with the retaining projection abutting on the cage element is not detachable, and furthermore a
30 second loop can be provided which results by means of the strap extending from the first eyelet to the second eyelet. In this regard, this second loop is detachable by reason of the detachable connection between strap and second eyelet.

In other words, by means of the design according to the invention of the fastening tie, the advantages of a Blitzbinder are combined with the provision of a non-detachable first loop. To this end, the first eyelet and the second eyelet have different acting principles. By means of the formation of the first eyelet with a first acting principle for holding the strap in the eyelet against the pass-through direction and the formation of the second eyelet with a second working principle different from the first working principle, it is achieved that in the first eyelet is facilitated a secure and permanent locking of a retraction of the strap through the first eyelet against pass-through direction beyond a retaining projection, and in contrast in the second eyelet is achieved a rapid and simple latching and releasing of the strap in the second eyelet, and hence a rapid and simple closing and opening of the second loop.

The cage element is in this regard arranged in the base opening in such a way that it reduces the cross-section of the base opening such that the cross-section of the retaining projections, viewed perpendicular to the longitudinal extension of the strap, is greater than the remaining cross-section of the base opening.

The cage element is furthermore elastically deformable in such a way that when a retaining projection is guided through in a pass-through direction the cage element can be displaced and elastically deformed by the retaining projection. As a result, the retaining projection can be pushed or drawn through the first eyelet. After the retaining projection has passed the cage element, the cage element experiences an elastic re-deformation into its start condition, such that the retaining projection guided through the first eyelet cannot pass through the first eyelet against the pass-through direction. Preferably, the elastic deformability of the cage element is provided across a wall thickness and a length of the cage element.

Since the cage element extends radially inwardly, there is no need for an axially extending pipe with substantially axially extending blocking elements, such as are provided in the case of common cable ties with blocking function. In other words, on the head part, a pipe element, through which the strap is to be passed, extending from the head part perpendicularly in a thickness direction of the head part, is not necessary. In contrast to such generic ties, the proposed fastening tie has also a lower material requirement. In addition, a tool mould for manufacturing the fastening tie, in particular an injection moulding tool mould, can be more simply constructed.

Preferably, the cage element extends in a thickness direction of the head, in which the base opening extends, viewed within the base opening.

According to a preferred further embodiment, the retaining projections each have an undercut surface which interacts with the cage element in such a way that a self-locking form fit connection is provided between the cage element and a retaining projection counter to a predetermined direction in which the strap is passed through the first eyelet. Thus, it can be ensured in a simple manner that the retaining projection which enters upon the non-detachable connection with the cage element, cannot be drawn back through the first eyelet against the pass-through direction.

If, according to a further preferred embodiment, strap is a tape or a wire, wherein the tape or the wire has preferably a circular cross-section or a polygonal profile, preferably a square profile, the fastening tie can have an especially simple construction. Particularly when the strap has a circular cross-section it is not necessary for the strap to be guided in a predetermined alignment through the eyelets; on the contrary, the strap can be pushed through the eyelets independently of alignment.

Preferably, the retaining projections have a substantially circular cross-section viewed perpendicularly to the longitudinal extension of the strap. In this way, the strap can be held in the respective eyelet in a manner which is equally independent of the alignment of the strap or retaining projection to the respective eyelet.

In order to be able to provide an especially simple and economical fastening tie, the fastening tie can be made of a plastic, preferably a thermoplastic, wherein the fastening tie preferably consists thereof.

A particularly secure holding of the strap in the eyelets can be achieved when the strap has a strap diameter and the retaining projections have, perpendicularly to the longitudinal extension of the strap, a projection diameter which is greater than the strap diameter. A fastening tie constructed in such a way has in addition an especially simple construction and is especially simple to manufacture.

In order to achieve an especially simple passing of the strap through the second eyelet, according to a further preferred embodiment, the passage opening has a passage diameter which is greater than the projection diameter.

If the strap receiving opening has a receiving diameter which is approximately equal to the strap diameter, the strap can be securely accommodated in the strap receiving opening. Preferably, the strap receiving opening has a receiving diameter which is slightly

smaller than the stem diameter, such that the strap can be held in the strap receiving opening by means of a press-fit of predetermined size.

Alternatively or additionally, the second eyelet can have between the passage opening and the strap receiving opening a connecting region which has a width which is less than the strap diameter. As a result, in the strap receiving opening, the strap can be prevented from returning again out of the strap receiving opening into the passage opening, unless a predetermined force is applied to the strap which has the effect that the strap displaces the connecting region.

If the base opening of the first eyelet, according to a further preferred embodiment, has an opening diameter which is greater than the projection diameter and if the cage element defines an inner diameter of the first eyelet which is smaller than the projection diameter, thus the cage element can achieve an especially simple passing of the strap through the first eyelet and in addition a secure holding of the strap on its retaining projection.

According to a further preferred embodiment, the cage element has a conical ring, preferably a segmented conical ring, which provides a radially tapering opening in a predetermined pass-through direction of the first eyelet, wherein the dimension of the opening at the end of the conical ring, viewed in the pass-through direction, has an inner diameter which is preferably smaller than the diameter of the retaining projections perpendicular to the longitudinal extension of the strap and is larger than the dimension of the strap perpendicular to the longitudinal extension of the strap.

According to a further preferred artistic form, the cage element is elastically deformable in such a way that a retaining projection can be passed through the cage element by means of an elastic deformation of the cage element in pass-through direction.

An especially simple construction of the first eyelet and in addition a particularly high blocking effect in against a passing of the strap through the first eyelet against the pass-through direction can be facilitated when the first eyelet has a base opening with an opening diameter which is greater than the dimensions of the retaining projections perpendicular to the longitudinal extension of the strap and when the cage element extends radially inwards from the base opening.

Preferably, the cage element extends radially inwards from the base opening substantially perpendicular to a direction of extension of the first eyelet and/or

perpendicular to a thickness direction of the head. The extension or extension direction of the base opening is preferably aligned in a depth direction or thickness direction of the head part. Thus, the strap can be pushed in from both sides out through the first eyelet and a non-detachable retention can be obtained.

5 According to a preferred embodiment, the head part is substantially plate-shaped in construction. In other words, the head part has a width and a length which are significantly greater than a thickness or, in other words, depth of the head part. Preferably, the width and the length of the head part are at least two times, three times, four times or five times as great as the thickness of the head part.

10 The first and the second eyelet extend preferably in the direction of the thickness or depth of the head part.

Short description of the figures

Preferred further embodiments of the invention are described in more detail by
15 means of the following description of the figures. Here:

- figure 1 shows schematically a perspective view of a fastening tie;
- figure 2 shows schematically a detailed cut-view through the first eyelet of the fastening tie from figure 1;
- figure 3 shows schematically a detailed cut-view through a second eyelet of the fastening tie from figure 1;
- 20 figure 4 shows schematically a further detailed cut-view of the second eyelet from figure 3;
- figure 5 shows schematically a detailed view of a head of a fastening tie according to a further embodiment;
- 25 figure 6 shows schematically a detailed view of a head of a fastening tie according to a further embodiment, and
- figure 7 shows schematically a detailed cut-view through a first eyelet of a fastening tie according to a further embodiment.

Detailed description of preferred embodiment examples

30 Hereinafter, preferred embodiment examples are described with reference to the figures. Here, identical, similar or identically acting elements are labelled with identical

reference signs in the various figures, and sometimes a duplicate description of these elements is omitted in order to avoid redundancies.

In figure 1 is shown schematically a perspective view of a fastening tie 1 according to a first embodiment. The Blitzbinder has a head 2 and an elongated strap 3 extending therefrom from a first end 32, which strap extends as far as a free second end 34. The strap 3 has a multiplicity of retaining projections 4 which extend radially outwards from the strap 3 in a circumferential direction.

The fastening tie 1 has on its head a first eyelet 5 for providing a non-detachable connection of the head 2 with the strap 3. By passing the strap 3 with its free end 34 through the first eyelet 5, correspondingly a first loop 8 is formed which is not detachable by reason of the non-detachable connection provided, via the first eyelet 5, with the strap 3.

Furthermore, by means of a subsequent passing of the strap 3 with its free end 34 through the second eyelet 6, a second loop 9 can be provided which is detachable by reason of the detachable connection to the second eyelet 6.

The fastening tie 1, or Blitzbinder, is in the present case integrally formed and made of a plastic. Alternatively, the fastening tie 1 can also be manufactured from another material, for example a metal or a metal alloy, preferably steel.

Figure 2 shows schematically a detailed cut-view through the first eyelet 5 of the fastening tie 1 from figure 1. The first eyelet 5 has a base opening 50 which has an opening diameter 58. In the base opening 50, a cage element 52 in the form of a conical ring extends radially inwards with respect to the base opening 50. The cage element 52 provides against the pass-through direction 7 a non-detachable retention of the strap 3 by means of a retention of the last retaining projection 4 which was passed through in pass-through direction 7. To this end, the retaining projection 4 has an undercut surface 40 which interacts with the cage element 52 in such a way that a self-explanatory form fit is provided between the cage element 52 and the retaining projection 4 against the predetermined pass-through direction 7 of the strap 3 through the first eyelet 5. In other words, an undercut against the pass-through direction 7 is provided by means of the end of the cage element 52 and the undercut surface 40.

The cage element 52 has on its free end an inner diameter 59 which is smaller than a projection diameter 42 possessed by the retaining projections 4 perpendicular to the longitudinal extension of the strap 3. The cage element 52 has a wall thickness 56 and a

length 54, designed in such a way that the cage element 52 has an elastic deformability. When the strap 3 is passed through the first eyelet 5 in pass-through direction 7, the retaining projection 4 gradually displaces the cage element 52 radially outwards. After the retaining projection 4 has passed the cage element 52, said cage element moves back into its start position. This results in the previously described undercut.

The retention of the retaining projection 4 on the part of the cage element 52 against the pass-through direction 7 is therefore provided in that the undercut surface 40 abuts on the end of the cage element 52. By reason of the previously described geometry of cage element 52 and retaining projection 4, it is not possible for the retaining projection 4 to widen the cage element 52, when the retaining projection 4 presses on the cage element 52 by reason of a force on the strap 3 against the pass-through direction 7.

As can be seen from the comparison of figures 1 and 2, the head 2 is substantially plate-shaped. In other words, the head 2 forms a substantially flat plate which is formed with thin walls. The head 2 thus has a length and a width, as can be seen from figure 1, which is many times greater than a depth or thickness of the head, wherein the depth in figure 2 extends from left to right, in other words, the pass-through direction 7 is parallel to the thickness direction of the head 2.

Figure 3 shows schematically a detailed cut-view through a second eyelet 5 of the fastening tie 1 from figure 1. The second eyelet 6 has a passage opening 60 through which the strap 3 together with retaining projection 4 can be passed in both directions. The passage opening 60 is connected with a strap receiving opening 62. Shown in figure 3, the strap 3 is received in the strap receiving opening 62.

In figure 4, a further detailed cut-view of the second eyelet 6 from figure 3 is shown schematically. The view from figure 4 is a cut view which has been rotated by 90° in relation to figure 3. It can be clearly seen that the passage opening 60 has a passage diameter 64 which is greater than the projection diameter 42 of the retaining projection 4. The strap receiving opening 62 connected with the passage opening 60 has a receiving diameter six which is approximately equal to the strap diameter 30. Thus, the strap 3 can be guided or plugged through the passage opening 60 together with retaining projection 4. In order to achieve a detachable latching between the strap 3 or a retaining projection 4 and the second eyelet 6 against the pass-through direction 7 of the strap 3, the strap 3 needs only to be moved downwards, in respect to the orientation of the head 2 in figure 4, into the strap receiving opening 62. This results in a form-fit between the rear side of

the retaining projection 4 and the material of the head 2 around the strap receiving opening 62 against the pass-through direction 7 of the strap 3. For detaching this latching, the strap 3 needs only to be moved out of the strap receiving opening 62 upwards, in relation to the orientation of the head 2 in figure, into the passage opening 60, such that the strap 3 together with its retaining projections 4 can also be moved again against the pass-through direction 7 through the second eyelet 6.

In figure 5 is shown schematically a detailed view of a head 2 of a fastening tie 1 according to a further embodiment. The fastening tie 1 corresponds substantially to that from figure 4. The first eyelet 5, however, has a segmented cage element 52. For forming the cage element 52, four segments 53 are provided which extend radially inwards from the base opening 50 in the manner of a web.

Alternatively, also another number of segments can be provided and/or the cage element can be only partially segmented.

The second eyelet 6 is formed substantially corresponding to the second eyelet 6 shown in figure 4. In addition to this, the second eyelet 6 shown in figure 5 has, between the passage opening 60 and the strap receiving opening 62, a connecting region 68 which has a width 69 which is less than the strap diameter 30. For closing the connection between the strap 3 and the second eyelet 6, as described with regard to figure 4, the strap is to be pushed between the connection region 68, wherein the connection region 68, for reasons of the material properties of the head 2, can be elastically deformed or displaced when a predetermined force is applied to the strap 3 in the direction of the strap receiving opening 62. Thus, the strap 3 can be moved from the passage opening 60 into the strap receiving opening 62. After the strap 3 has passed the connecting region, said connecting region then deforms elastically back into its starting position. Thus, a form-fit is created between the strap 3 and the connecting region 68 which prevents the strap 3 being able to leave the strap receiving opening 62 in the direction of the passage opening 60. The strap receiving opening 62 can therefore have a receiving diameter 66 which is slightly larger than the strap diameter 30. In other words, a predetermined play can be present between the strap 3 and the strap receiving opening 62. The manufacturing tolerances for a head 2 formed in this manner can therefore be less precisely designed.

The retaining projections 4 in this embodiment are formed in the manner of a truncated cone, which increase in size in the direction of the connection between head 2

and strap 3, therefore in the direction towards the first end 32. In this regard, they have undercut surfaces 40 oriented to the rear, which enter in each case upon a form-fit with the segments 53 against the pass-through direction through the first eyelet 5 and also with material of the head 2 about the strap receiving opening 62 against the pass-through direction 2 through the second eyelet 6, and thereby prevent the strap 3 being able to be moved back against the pass-through direction 7 in through the first eyelet 5 or second eyelet 6.

Figure 6 shows schematically a detailed view of a head 2 of a fastening tie 1 according to a further embodiment, which corresponds substantially to that of figure 5, wherein the strap 3 is arranged on the opposite side of the head 2 with regard to the embodiment from figure 5.

Figure 7 shows schematically a detailed cut-view through a first eyelet 5 of a fastening tie 1 according to a further embodiment. The fastening tie 1 corresponds substantially to that from figures 1 and 2, wherein the cage elements 52 in this embodiment extend perpendicular to the extension of the first eyelet 5 through the head 2, thus radially inwards perpendicular to the pass-through direction 7. In other words, the cage elements 52 extends exclusively radially inwards and have substantially no axial components of their extension. Thus, the strap 3 can be guided from both sides through the first eyelet 5, as shown by the double arrow of the pass-through direction 7.

In as much as they can be used, all individual characteristics which are shown in the embodiment examples can be combined with one another and/or exchanged with one another, without straying beyond the bounds of the invention.

List of reference signs

	1	fastening tie
5	2	head part
	3	strap
	30	strap diameter
	32	first end
10	34	second end
	4	retaining projection
	40	undercut surface
	42	projection diameter
15	5	first eyelet
	50	base opening
	52	cage element
	53	segment
20	54	length
	56	wall thickness
	58	opening diameter
	59	inner diameter
25	6	second eyelet
	60	passage opening
	62	strap receiving opening
	64	passage diameter
	66	receiving diameter
30	68	connecting region
	69	width
	7	pass-through direction

8 first loop

9 second loop

Patentkrav

1. Fastgørelsesbånd (1), især Blitzbinder, til tilvejebringelse af fastgørelsesløkker (8, 9), omfattende en hoveddel (2) og en strop (3), som er udformet i ét stykke med hoveddelen (2), og strækkende sig fra hoveddelen (2), idet stroppen (3) har
5 en flerhed af holdefremspring (4), som strækker sig radialt udad fra stroppen, hvor hoveddelen (2) omfatter et første øje (5) og et andet øje (6) til gennemføring af stroppen (3) forsynet med holdefremspringene (4), hvor det andet øje (6) er dannet af en gennemføringsåbning (60) og en stropmodtagelsesåbning (62) forbundet dermed, hvor gennemføringsåbningen
10 (60) har dimensioner, som er større end dimensionerne af et holdefremspring (4) vinkelret på længdeudstrækningen af stroppen (3), og stropmodtagelsesåbningen (62) har dimensioner, som i alt væsentligt svarer til dimensionerne af stroppen (3) vinkelret på længdeudstrækningen deraf, således at stroppen (3) kan holdes aftageligt i stropmodtagelsesåbningen (62),

15 kendetegnet ved, at

det første øje (5) har en bundåbning (50), hvor bundåbningen (50) har dimensioner, som er større end dimensionerne af holdefremspringene (4) vinkelret på længdeudstrækningen af stroppen (3), og et burelement (52) til at tilvejebringe en ikke-aftagelig fastholdelse af et holdefremspring (4), som
20 strækker sig radialt indad fra en udvendig kontur af bundåbningen (50).

2. Fastgørelsesbånd (1) ifølge krav 1, **kendetegnet ved, at** holdefremspringene (4) hver har en underskåret overflade (40), som interagerer med burelementet (52) således, at en selvspærrende formlutning er tilvejebragt mellem
25 burelementet (52) og et holdefremspring (4) mod en forudbestemt gennemføringsretning (7) af stroppen (3) gennem det første øje (5).

3. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at** stroppen (3) er en strimmel eller en tråd, hvor strimlen eller tråden fortrinsvis har
30 et cirkelformet tværsnit eller en polygonprofil, fortrinsvis en firkantprofil.

4. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at** fastgørelsesbåndet (1) er fremstillet af et kunststof, fortrinsvis et termoplastisk

kunststof, fortrinsvis består af dette.

5. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at** stroppen (3) har en stropdiameter (30), og holdefremspringene (4) vinkelret på
5 længdeudstrækningen af stroppen (3) har en fremspringsdiameter (42), som er større end stropdiameteren (30).

6. Fastgørelsesbånd (1) ifølge krav 5, **kendetegnet ved, at** passageåbningen (60) har en passagediameter (64), som er større end fremspringsdiameteren
10 (42), og/eller stropmodtagelsesåbningen (62) har en modtagelsesdiameter (66), som svarer omtrent til stropdiameteren (30).

7. Fastgørelsesbånd (1) ifølge krav 5 eller 6, **kendetegnet ved, at** bundåbningen (50) af det første øje (5) har en åbningsdiameter (58), som er større end
15 fremspringsdiameteren (42), og burelementet (52) definerer en indvendig diameter (59) af det første øje (5), som er mindre end fremspringsdiameteren (42).

8. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at**
20 burelementet (52) har en keglering, fortrinsvis en segmenteret keglering, som giver en radialt tilspidset åbning i en forudbestemt gennemføringsretning (7) af det første øje (5), hvor dimensionen af åbningen ved enden af kegleringen, set i gennemføringsretningen (7), har en indvendig diameter (59), som fortrinsvis er mindre end dimensionen af holdefremspringene (4) vinkelret på
25 længdeudstrækningen af stroppen (3) og større end dimensionen af stroppen (3) vinkelret på længdeudstrækningen af stroppen (3).

9. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at** burelementet (52) er elastisk deformerbart således, at et holdefremspring (4) kan
30 føres gennem burelementet (52) via en elastisk deformation af burelementet (52) i en gennemføringsretning (7).

10. Fastgørelsesbånd (1) ifølge et af de foregående krav, **kendetegnet ved, at** burelementet (52) strækker sig radialt indad fra bundåbningen (50) i alt

væsentligt vinkelret på en udstrækningsretning af det første øje (5) og/eller vinkelret på en tykkelsesretning af hoveddelen (2).

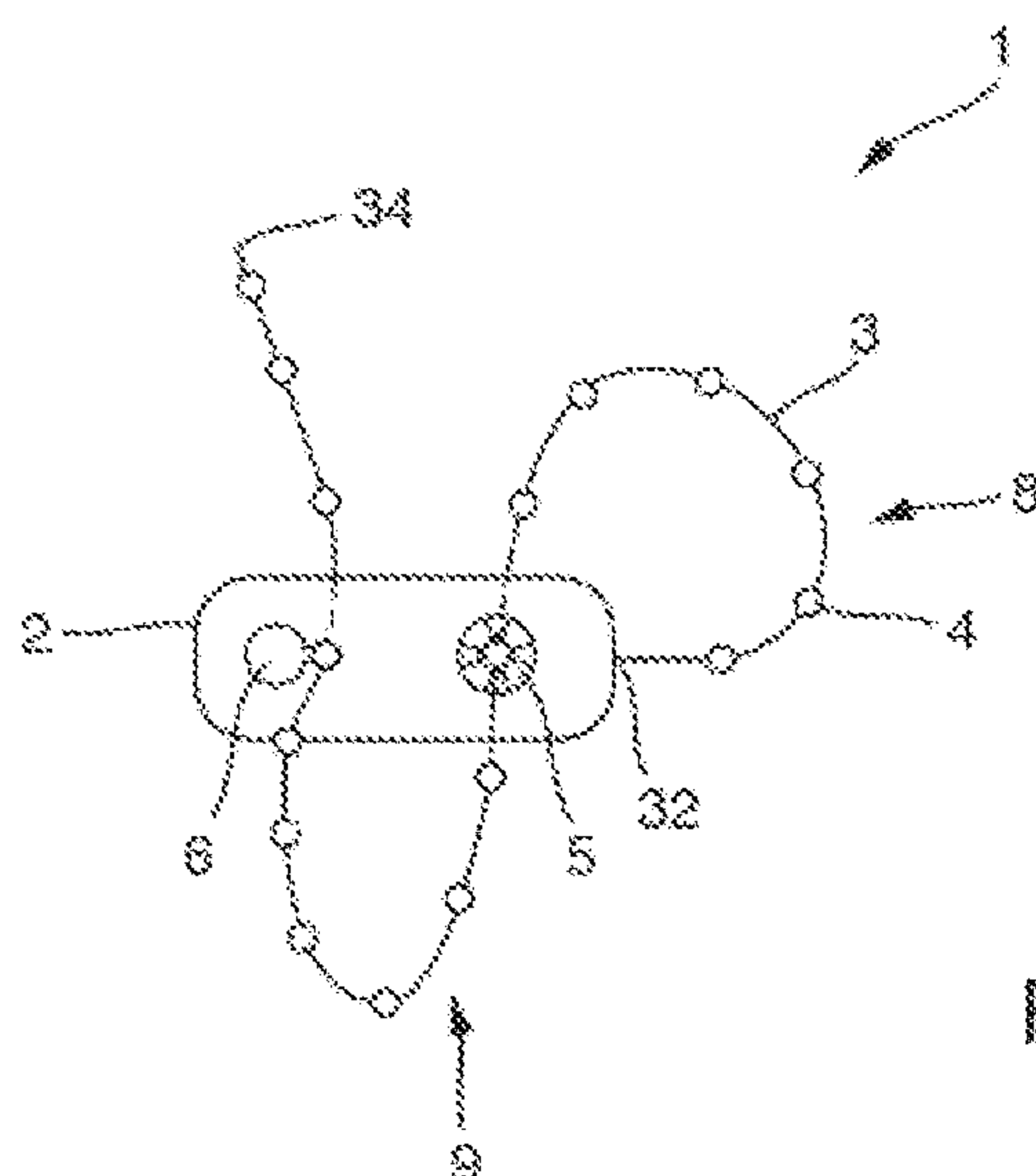
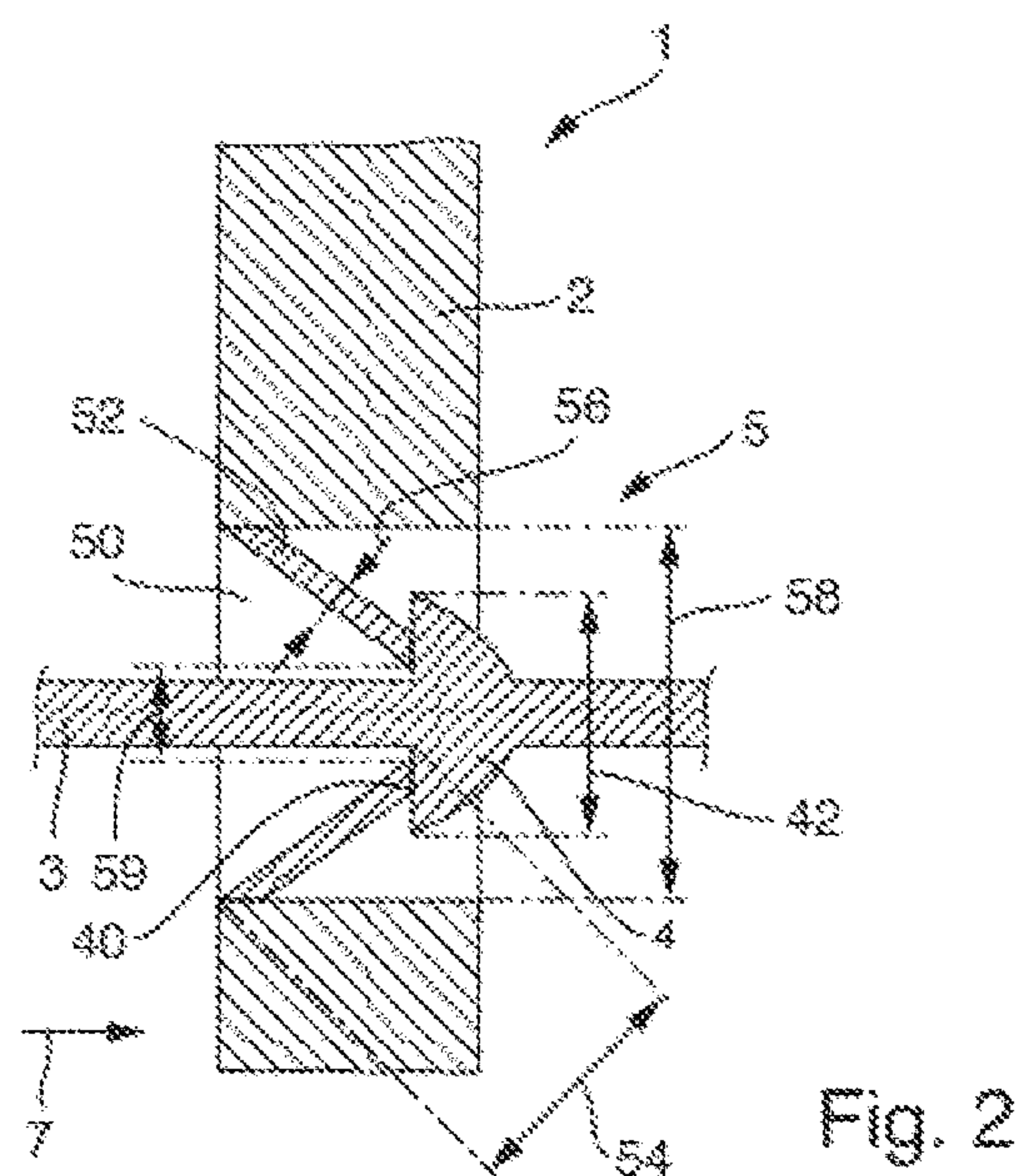


Fig. 1



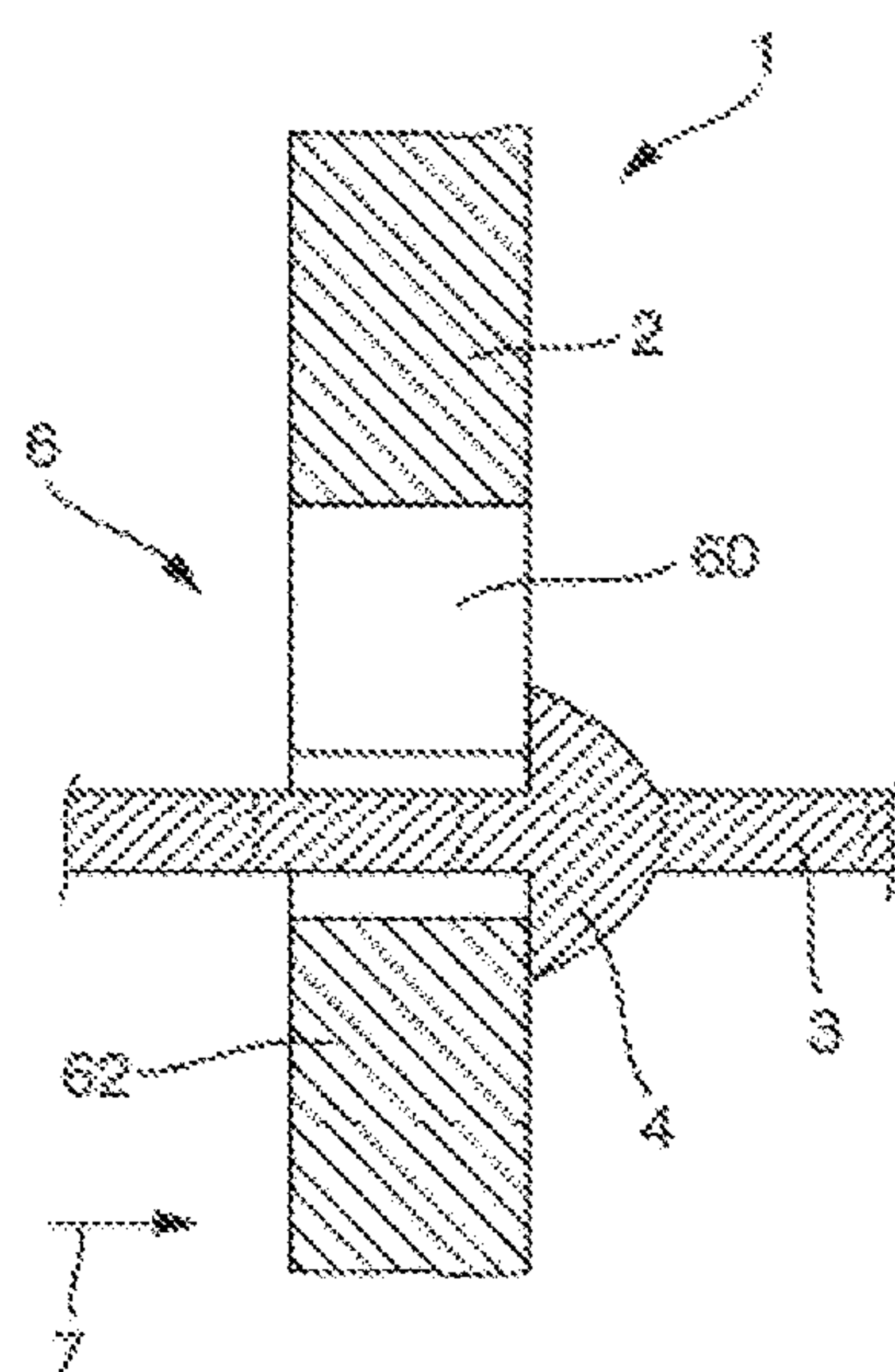
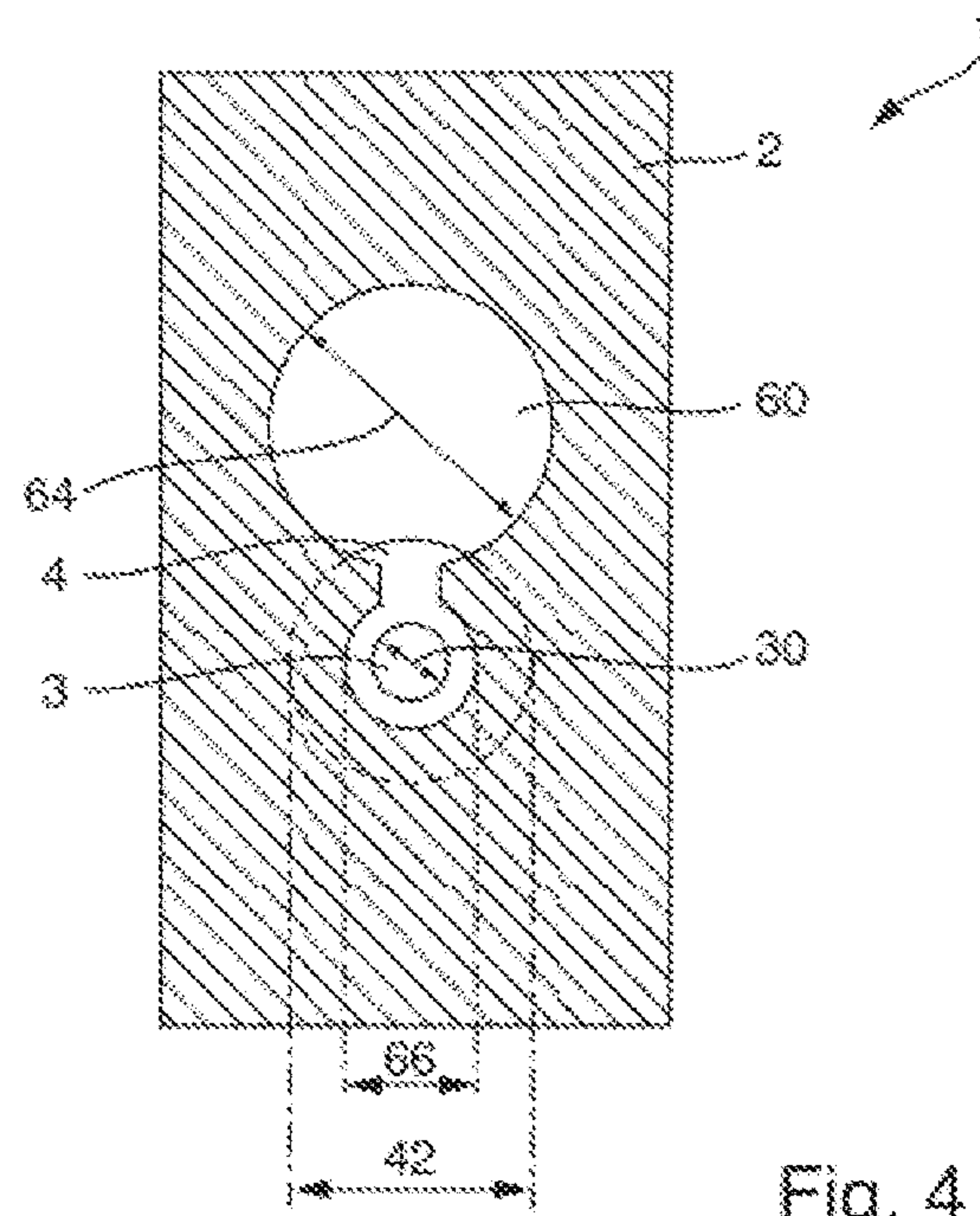
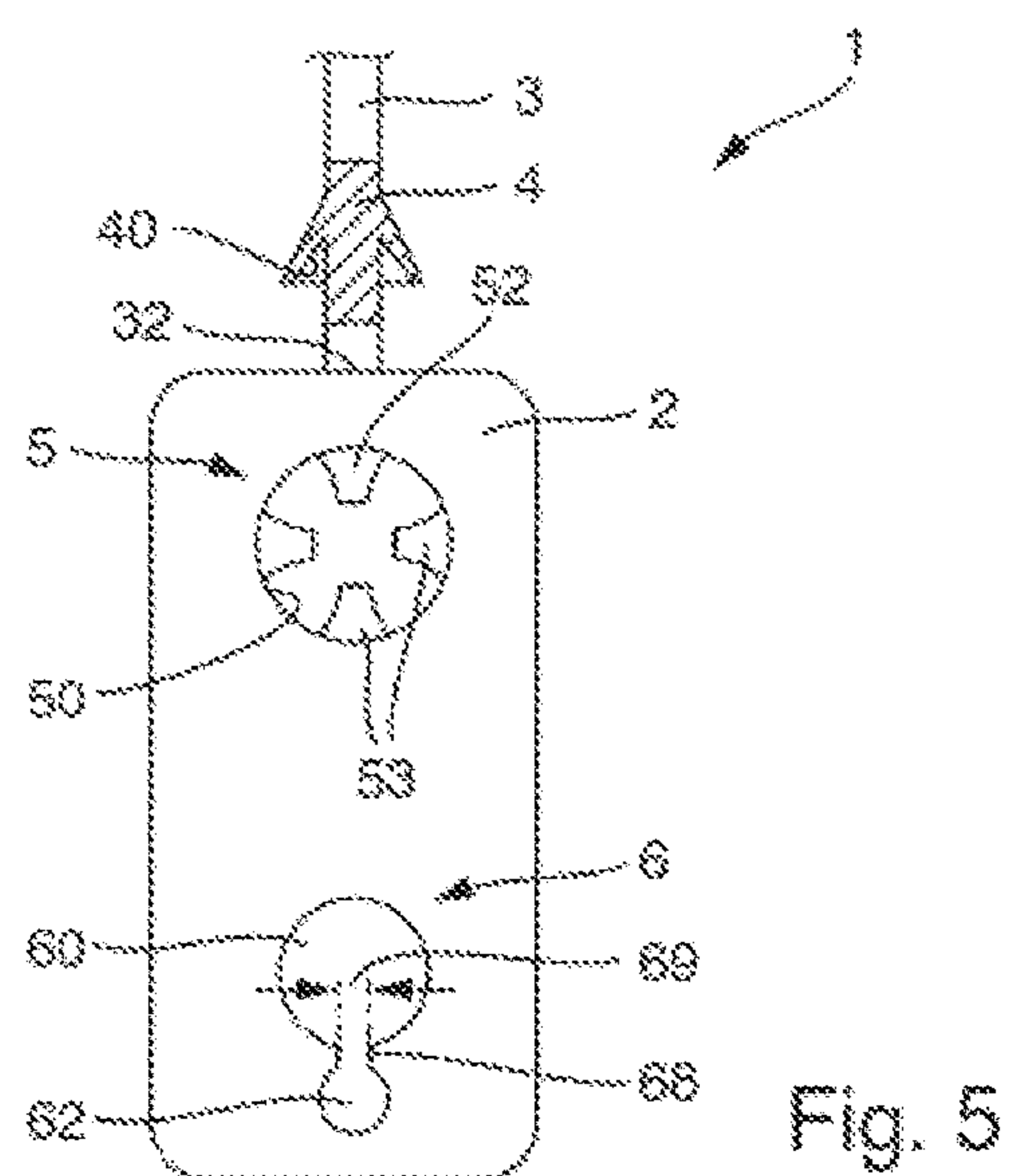


Fig. 3





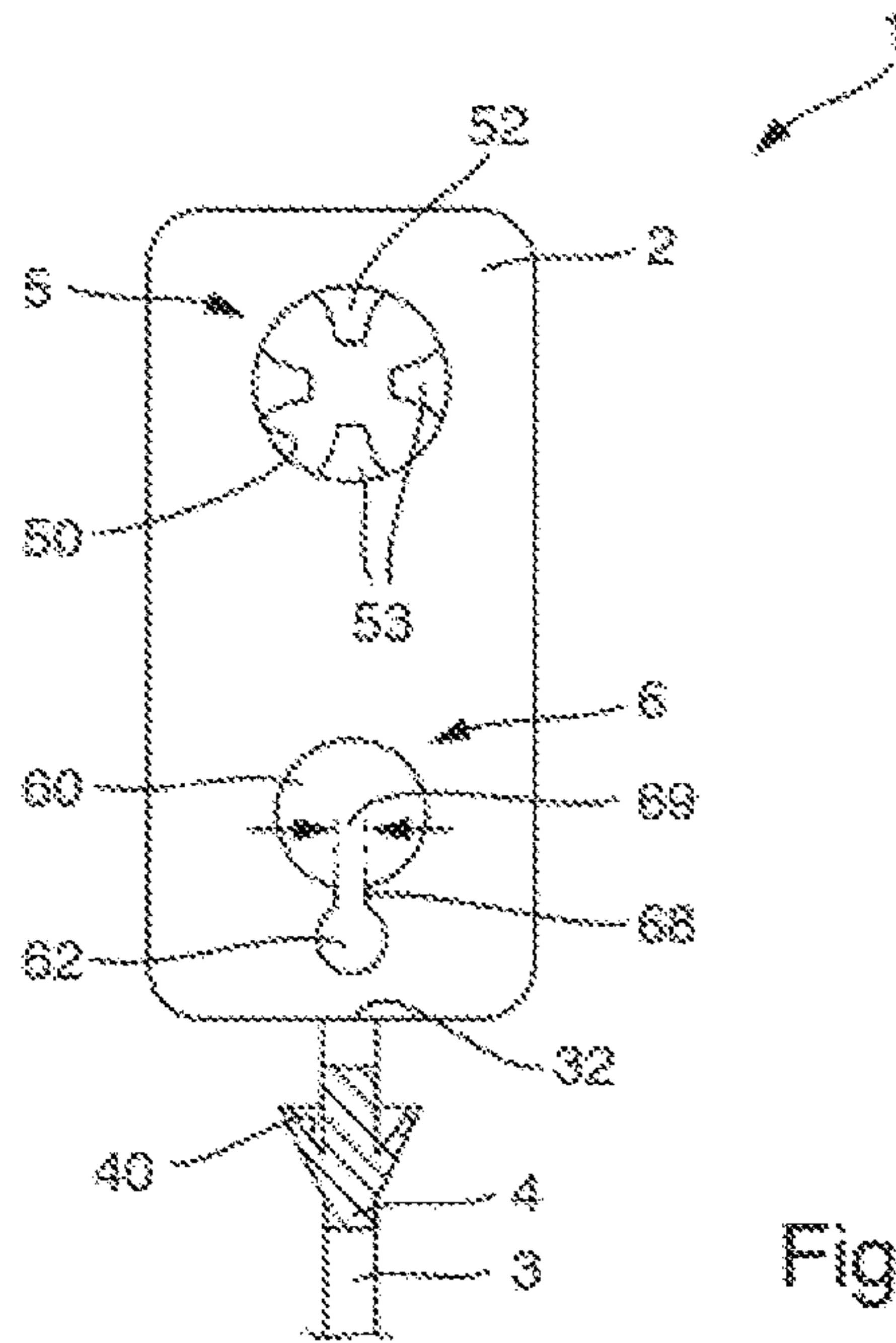


Fig. 6

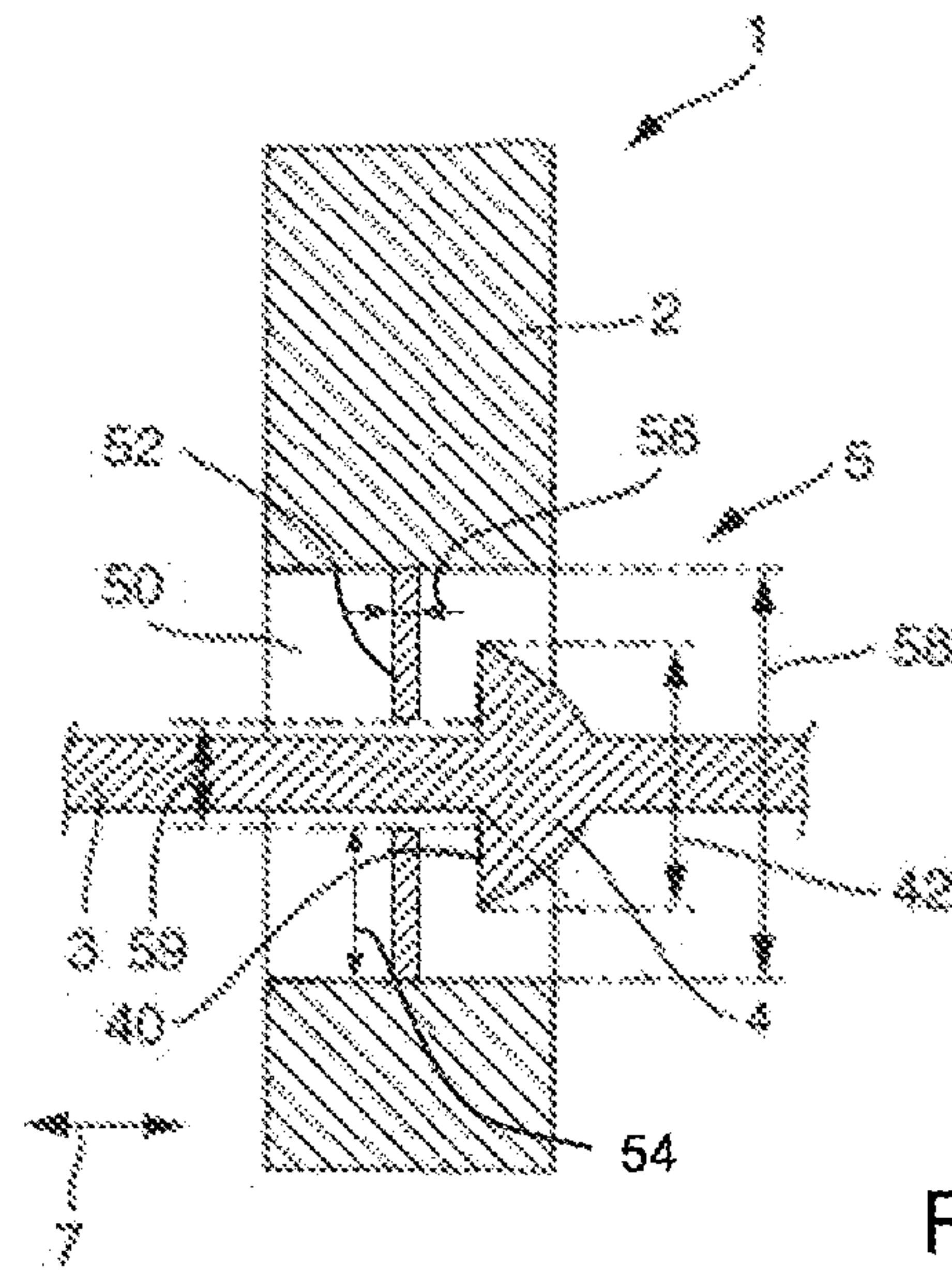


Fig. 7