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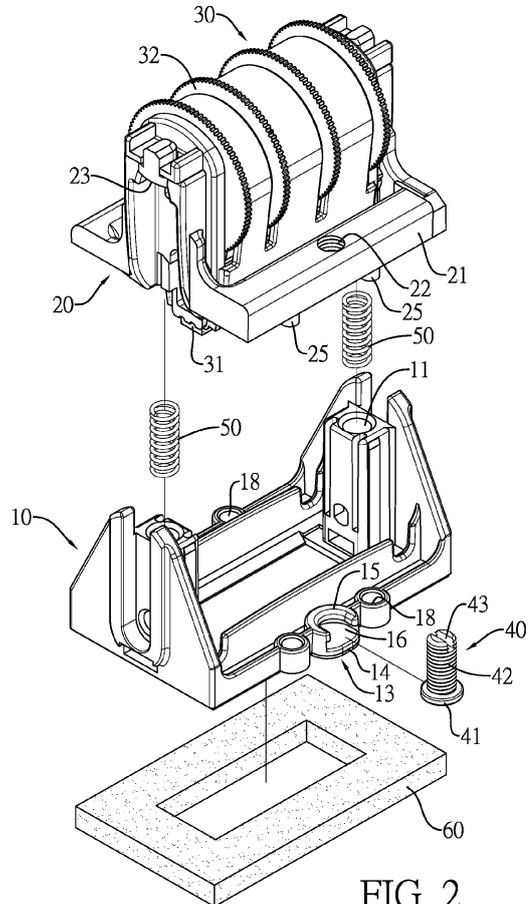
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(54) **ROTATING SEAT FOR A STAMP**

(57) A rotating seat has a first supporting frame (10) having an assembling member (13), a second supporting frame (20) having a threaded hole (22), a printing assembly (30), an adjusting member (40), and two auxiliary members (50). The second supporting frame (20) is moveably mounted on the first supporting frame (10). The printing assembly (30) is mounted on the second supporting frame (20). The adjusting member (40) is disposed on the assembling member (13) and engages with the threaded hole (22). Each auxiliary member (50) has two ends respectively abutting the first supporting frame (10) and the second supporting frame (20). The height of the printing assembly (30) relative to the first supporting frame (10) is adjusted by the adjusting member (40) to make a type band (31) of the printing assembly (30) flush with a pad (60).



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Description

[0001] This application claims the benefit of Taiwan patent application No. 107118952, filed on June 1, 2018, the entire contents of which are incorporated herein by reference.

1. Field of the Invention

[0002] The present invention relates to a rotating seat for a stamp, and more particularly to a rotating seat that improves the adjusting convenience of making the type band flush with a pad, the evenness of ink stained on the pad, and the clearness of a stamped pattern.

2. Description of Related Art

[0003] With reference to Fig. 11, a conventional rotating seat of a stamp has a first supporting frame 90, a second supporting frame 91, a printing assembly 92, and two screws 93. The second supporting frame 91 is mounted on the first supporting frame 90. The printing assembly 92 is mounted on the second supporting frame 91. A type band of the printing assembly 92 extends out of a bottom surface of the first supporting frame 90. The two screws 93 are respectively mounted on two ends of the second supporting frame 91. Each screw 93 is inserted through the second supporting frame 91, and is screwed into the first supporting frame 90 for fixing the second supporting frame 91 on the first supporting frame 90.

[0004] The conventional rotating seat of the stamp is rotatably mounted in a shell. The shell has a fixing seat and a moving seat. The moving seat is mounted on the fixing seat and may move upwardly and downwardly for driving the conventional rotating seat to rotate and move upwardly and downwardly. A pad 94 is mounted on the bottom surface of the first supporting frame 90. The two screws 93 may be adjusted by users for moving the second supporting frame 91 relative to the first supporting frame 90. The printing assembly 92 is moved with the second supporting frame 91 for making the type band of the printing assembly 92 flush with a printing surface of the pad 94.

[0005] However, the second supporting frame 91 is fixed on the first supporting frame 90 by the two screws 93. The printing assembly 92 can be printed on a sheet of paper to form a pattern on the paper. If the type band of the printing assembly 92 is not adjusted well, the stamped pattern is not clear. The type band of the printing assembly 92 is adjusted by the two screws 93. It is hard to judge whether the type band of the printing assembly 92 is flush with the printing surface of the pad 94 or not. It is hard to judge whether adjusting degrees of the two screws 93 are same or not. If the type band of the printing assembly 92 is not flush with the printing surface of the pad 94, the stamped pattern is not clear. If the adjusting degrees of the two screws 93 are different, the type band of the printing assembly 92 may be slanted, and then ink

stained on the type band is not distributed evenly, which also makes the stamped pattern unclear.

[0006] To overcome the shortcomings, the present invention provides a rotating seat to mitigate or obviate the aforementioned problems.

[0007] The objective of the invention is to provide a rotating seat to resolve the problems that the adjustment of the type band is not convenient and the type band is slanted easily after adjustment.

[0008] The rotating seat has a first supporting frame, a second supporting frame, a printing assembly, an adjusting member, and two auxiliary members. The first supporting frame has a side, two ends, a bottom surface, an assembling member, two recesses, and two first retaining surfaces. The assembling member is formed on the side of the first supporting frame and has a carrier board, a flange, and an insertion slot. The carrier board is formed on the side of the first supporting frame. The flange is formed on the side of the first supporting frame and is located above the carrier board. The insertion slot is formed between the carrier board and the flange. The two recesses are respectively formed on the two ends of the first supporting frame. The two first retaining surfaces are respectively formed in the two ends of the first supporting frame and are respectively connected to the two recesses of the first supporting frame.

[0009] The second supporting frame is moveably mounted on the first supporting frame and has a side, two ends, a main rod, a threaded hole, and two second retaining surfaces. The main rod is mounted on the side of the second supporting frame. The threaded hole is formed through the main rod and faces the insertion slot of the assembling member. The two second retaining surfaces are respectively formed in the two ends of the second supporting frame, and respectively face the two first retaining surfaces of the first supporting frame.

[0010] The printing assembly is mounted on the second supporting frame and has a type band extending out of the bottom surface of the first supporting frame.

[0011] The adjusting member is disposed on the assembling member of the first supporting frame and is inserted into the threaded hole of the second supporting frame. The adjusting member has a bottom plate, a threaded shank, and a working slot. The bottom plate is inserted into the insertion slot of the assembling member and has a top surface. The threaded shank is formed on the top surface of the bottom plate, is inserted into and engaging with the threaded hole of the second supporting frame, and has a top surface. The working slot is formed on the top surface of the threaded shank.

[0012] The two auxiliary members are respectively inserted into the two recesses of the first supporting frame. Each auxiliary member has two ends respectively abutting a corresponding one of the first retaining surfaces and a corresponding one of the second retaining surfaces.

[0013] Furthermore, the rotating seat has a pad mounted on the bottom surface of the first supporting frame.

The second supporting frame has an auxiliary rod mounted on another side of the second supporting frame and being opposite the main rod. The two auxiliary members are both springs and are both mounted uprightly between the first supporting frame and the second supporting frame. In addition, the working slot of the adjusting member is 1-shaped.

[0014] The rotating seat is rotatably mounted on a shell for moving upwardly and downwardly relative to the stamp. The adjusting member can be rotated for adjusting the second supporting frame to move upwardly and downwardly. The printing assembly is mounted on and is coated with the second supporting frame. The printing assembly can be adjusted by the movement of the second supporting frame. The outstanding height of the type band relative to the first supporting frame is easily adjusted to make the type band flush with the pad. Furthermore, the auxiliary members could help cushion for eliminating a flushed error between the type band and the pad.

[0015] In use, a base surface is formed by three points with the adjusting member and the two auxiliary members. The two auxiliary members could be suitably deformed for eliminating the slanted error. The type band and the pad are inked simultaneously and evenly, and then the type band and the pad accurately abut a sheet of paper to stamp and form a pattern on the paper. The stability of the rotating seat, the uniformity of the stamped force, the clearness of the stamped pattern, and the quality of the stamped pattern are increased

IN THE DRAWINGS:

[0016]

Fig. 1 is an exploded bottom perspective view of a rotating seat for a stamp in accordance with the present invention;

Fig. 2 is an exploded top perspective view of the rotating seat in Fig. 1;

Fig. 3 is a perspective view of the rotating seat for a stamp in Fig. 1;

Fig. 4 is a top side view of the rotating seat in Fig. 1;

Fig. 5 is a cross sectional side view of the rotating seat along line 5-5 in Fig. 4;

Fig. 6 is a cross sectional side view of the rotating seat along line 6-6 in Fig. 4;

Fig. 7 is an operational top side view of the rotating seat in Fig. 1, showing a main adjusting member in the rotating seat rotated;

Fig. 8 is an operational side view in partial section of the rotating seat in Fig. 1, showing a main rod in the rotating seat moving upwardly and downwardly;

Fig. 9 is an operational side view of the rotating seat in Fig. 1, showing the rotating seat assembled on a shell;

Fig. 10 is an enlarged and operational side view in partial section of the rotating seat in Fig. 9; and

Fig. 11 is a perspective view of a rotating seat of a stamp in accordance with the prior art.

[0017] With reference to Figs. 1 to 3, a rotating seat for a stamp in accordance with the present invention comprises a first supporting frame 10, a second supporting frame 20, a printing assembly 30, an adjusting member 40, and two auxiliary members 50.

[0018] With reference to Figs. 2 and 5, the first supporting frame 10 has a side, two ends, a bottom surface, an assembling member 13, two recesses 11, and two first retaining surfaces 12. The assembling member 13 is formed on the side of the first supporting frame 10 and has a carrier board 14, a flange 15, and an insertion slot 16. The carrier board 14 is formed on the side of the first supporting frame 10. The flange 15 is formed on the side of the first supporting frame 10 and is located above the carrier board 14. The insertion slot 16 is formed between the carrier board 14 and the flange 15. The two recesses 11 are respectively formed on the two ends of the first supporting frame 10. The two first retaining surfaces 12 are respectively formed in the two ends of the first supporting frame 10 and are respectively connected to the two recesses 11 of the first supporting frame 10. The first supporting frame 10 has an opening 17 formed on the bottom surface of the first supporting frame 10. With reference to Figs. 1 to 3, the first supporting frame 10 has multiple retaining recesses 18 formed on the first supporting frame 10. The retaining recesses 18 are respectively located at two sides of the assembling member 13, or are respectively located at two sides of the first supporting frame 10.

[0019] With reference to Figs. 1, 2, and 5, the second supporting frame 20 is moveably mounted on the first supporting frame 10 and has a side, two ends, a main rod 21, a threaded hole 22, and two second retaining surfaces 23. The main rod 21 is mounted on the side of the second supporting frame 20. The threaded hole 22 is formed through the main rod 21 and faces the insertion slot 16 of the assembling member 13. The second retaining surfaces 23 are respectively formed in the two ends of the second supporting frame 20, and respectively face the two first retaining surfaces 12 of the first supporting frame 10. The main rod 21 is mounted on the side of the second supporting frame 20. The threaded hole 22 is formed through the main rod 21 and faces the insertion slot 16 of the assembling member 13. The second supporting frame 20 has an auxiliary rod 24 mounted on another side of the second supporting frame 20 and being opposite to the main rod 21.

[0020] With reference to Figs. 1 to 3, the second supporting frame 20 has multiple retaining rods 25 mounted on the second supporting frame 20. The retaining rods 25 are respectively inserted into the retaining recesses 18 of the first supporting frame 10. The retaining rods 25 are respectively located at the main rod 21, or are respectively located at the main rod 21 or the auxiliary rod 24.

[0021] With reference to Figs. 1, 5, and 6, the printing assembly 30 is coaxially mounted on the second supporting frame 20 and has a type band 31. The type band 31 extends out of the opening 17 of the first supporting frame 10. The printing assembly 30 has multiple discs 32 disposed at spaced intervals. Each disc 32 is rotatably mounted on the second supporting frame 20.

[0022] With reference to Figs. 2, 4, and 6, the adjusting member 40 is disposed on the assembling member 13 of the first supporting frame 10 and is inserted into the threaded hole 22 of the second supporting frame 20. The adjusting member 40 has a bottom plate 41, a threaded shank 42, and a working slot 43. The bottom plate 41 is inserted into the insertion slot 16 of the assembling member 13 and has a top surface. The threaded shank 42 is formed on the top surface of the bottom plate 41, is inserted into and engages with the threaded hole 22 of the second supporting frame 20, and has a top surface. The working slot 43 is formed on the top surface of the threaded shank 42. The working slot 43 of the adjusting member 40 is 1-shaped.

[0023] With reference to Figs. 2 and 5, the two auxiliary members 50 are respectively inserted into the two recesses 11 of the first supporting frame 10. Each auxiliary member 50 has two ends respectively abutting a corresponding one of the first retaining surfaces 12 and a corresponding one of the second retaining surfaces 23. The two auxiliary members 50 are both springs and are both mounted uprightly between the first supporting frame 10 and the second supporting frame 20. An axis of each one of the two auxiliary members 50 parallels an axis of the adjusting member 40.

[0024] With reference to Figs. 1, 3, and 5, the rotating seat has a pad 60. The pad 60 is mounted on the bottom surface of the first supporting frame 10 around the opening 17.

[0025] With reference to Figs. 7 and 8, in the flushing adjustment, a hand tool could be inserted into the working slot 43 of the adjusting member 40. The hand tool could be rotated for driving the threaded shank 42 to rotate. The adjusting member 40 is rotated in the insertion slot 16 for adjusting the second supporting frame 20 to move upwardly and downwardly relative to the first supporting frame 10. The printing assembly 30 is coated with the second supporting frame 20. The height of the printing assembly 30 could be adjusted by the adjusting member 40 for making the type band 31 of the printing assembly 30 flush with the pad 60.

[0026] With reference to Fig. 9, the rotating seat is rotatably mounted on a shell 70. The shell 70 has a fixing seat 71 and a moving seat 72. The moving seat 72 is mounted on the fixing seat 71 and moves upwardly and downwardly relative to the fixing seat 71. The moving seat 72 drives the rotating seat to move upwardly and downwardly and rotate relative to the moving seat 72.

[0027] With reference to Fig. 10, in use, the two auxiliary members 50 could be suitably deformed for eliminating the slanting error of the type band 31 and a flushing

error between the type band 31 and the pad 60. The type band 31 is not slanted and is flush with the pad 60. The type band 31 and the pad 60 are inked simultaneously and evenly, and then the type band 31 and the pad 60 accurately about a sheet of paper 80 to stamp and form a pattern on the paper 80.

[0028] In addition, the second supporting frame 20 is disposed on the first supporting frame 10. The retaining rods 25 of the second supporting frame 20 are respectively inserted into the retaining recesses 18 of the first supporting frame 10 for increasing the alignment convenience.

[0029] Accordingly, the bottom plate 41 of the adjusting member 40 is inserted into the insertion slot 16 of the assembling member 13 in the first supporting frame 10. The adjusting member 40 is supported by the carrier board 14. The bottom plate 41 is retained in the assembling member 13 by the flange 15. The threaded shank 42 of the adjusting member 40 protrudes out of the assembling member 13 and engages with the threaded hole 22 of the second supporting frame 20. The working slot 43 is disposed on the top surface of the threaded shank 42. It is convenient to insert the hand tool into the working slot 43 for rotating the threaded shank 42. The type band 31 could be adjusted by rotating the adjusting member 40 to be flush with the pad 60. The auxiliary members 50 may be suitably deformed. The slanting error and the flushing error may be eliminated by the adjusting member 40 and the auxiliary members 50. The outstanding height of the type band 31 relative to the first supporting frame 10 is easily adjusted to make the type band 31 flush with the pad 60. Therefore, the adjusting member 40 and the auxiliary members 50 improve the convenience of the flushing adjustment, the evenness of ink stained on the type pad, and the clearness of the stamped pattern.

[0030] In addition, a base surface is formed by three points with the adjusting member 40 and the two auxiliary members 50. The uniformity of the pressure pressed by the rotating seat and the stability of the rotating seat in the stamping process are both increased. The quality of the stamped pattern is improved. The auxiliary rod 24 may improve the structural strength and the stability of the rotating seat.

Claims

1. A rotating seat for a stamp, and **characterized in that** the rotating seat comprises:

a first supporting frame (10) having

a side;

two ends;

a bottom surface;

an assembling member (13) formed on the side of the first supporting frame (10) and having

a carrier board (14) formed on the side of the first supporting frame (10);
 a flange (15) formed on the side of the first supporting frame (10) and located above the carrier board (14); and
 an insertion slot (16) formed between the carrier board (14) and the flange (15);

two recesses (11) respectively formed on the two ends of the first supporting frame (10); and
 two first retaining surfaces (12) respectively formed in the two ends of the first supporting frame (10) and respectively connected to the two recesses (11) of the first supporting frame (10);

a second supporting frame (20) moveably mounted on the first supporting frame (10) and having

a side;

two ends;

a main rod (21) mounted on the side of the second supporting frame (20);

a threaded hole (22) formed through the main rod (21) and facing the insertion slot (16) of the assembling member (13); and
 two second retaining surfaces (23) respectively formed in the two ends of the second supporting frame (20), and respectively facing the two first retaining surfaces (12) of the first supporting frame (10);

a printing assembly (30) mounted on the second supporting frame (20) and having a type band (31) extending out of the bottom surface of the first supporting frame (10);

an adjusting member (40) disposed on the assembling member (13) of the first supporting frame (10), inserted into the threaded hole (22) of the second supporting frame (20), and having

a bottom plate (41) inserted into the insertion slot (16) of the assembling member (13) and having a top surface;

a threaded shank (42) formed on the top surface of the bottom plate (41), inserted into and engaging with the threaded hole (22) of the second supporting frame (20), and having a top surface;

a working slot (43) formed on the top surface of the threaded shank (42); and

two auxiliary members (50) respectively inserted into the two recesses (11) of the first supporting frame (10), and each auxiliary member (50)

having two ends respectively abutting a corresponding one of the first retaining surfaces (12) and a corresponding one of the second retaining surfaces (23).

2. The rotating seat as claimed in claim 1, wherein the second supporting frame (20) has an auxiliary rod (24) mounted on another side of the second supporting frame (20) and opposite the main rod (21).

3. The rotating seat as claimed in claim 1 or 2, wherein the two auxiliary members (50) are both springs and are both mounted upright between the first supporting frame (10) and the second supporting frame (20).

4. The rotating seat as claimed in any one of claims 1 to 3, wherein the working slot (43) of the adjusting member (40) is 1-shaped.

5. The rotating seat as claimed in any one of claims 1 to 4, wherein the rotating seat has a pad (60) mounted on the bottom surface of the first supporting frame (10).

6. The rotating seat as claimed in any one of claims 1 to 5, wherein the first supporting frame (10) has multiple retaining recesses (18) formed on the first supporting frame (10), the second supporting frame (20) has multiple retaining rods (25) mounted on the second supporting frame (20), and the retaining rods (25) are respectively inserted into the retaining recesses (18) of the first supporting frame (10).

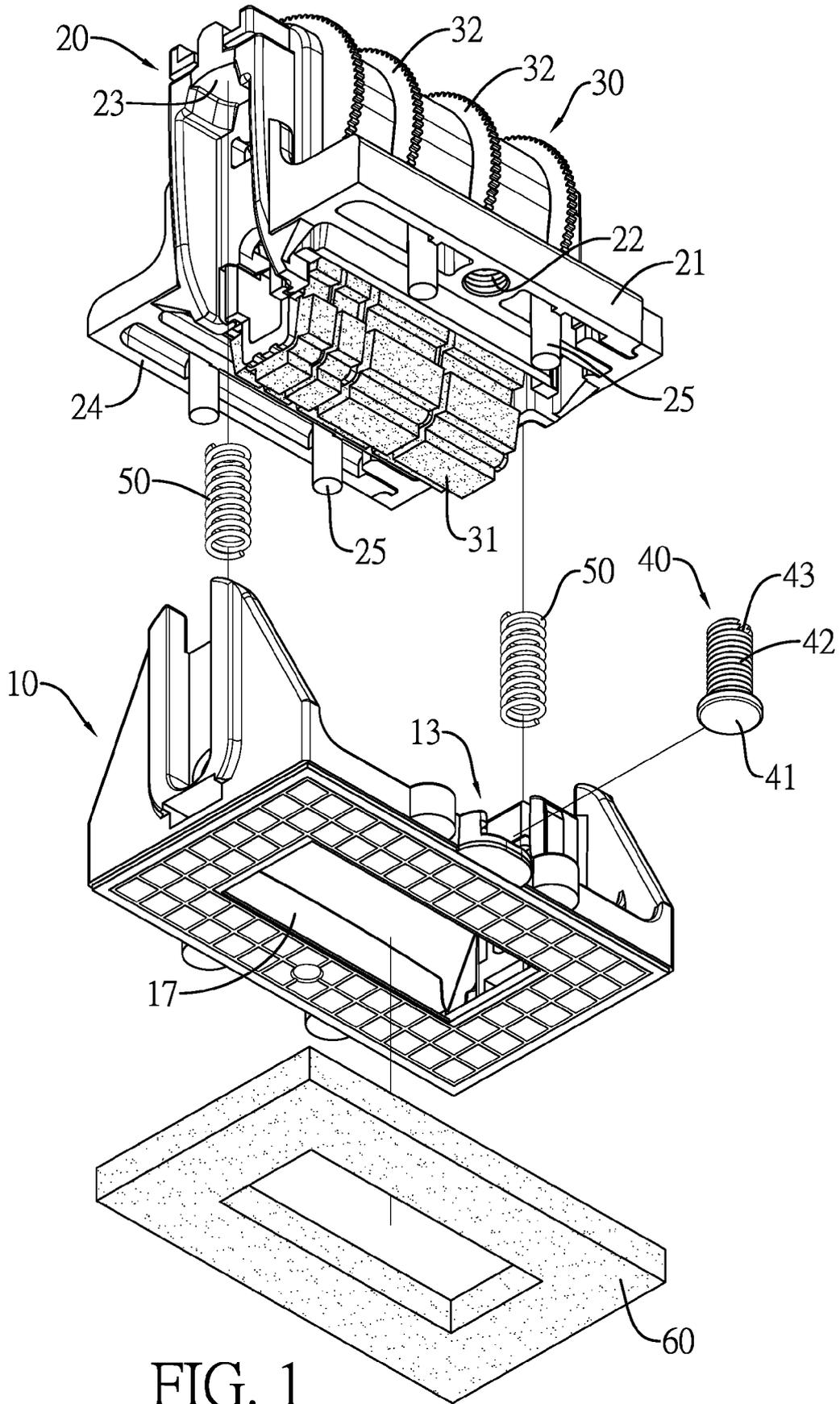
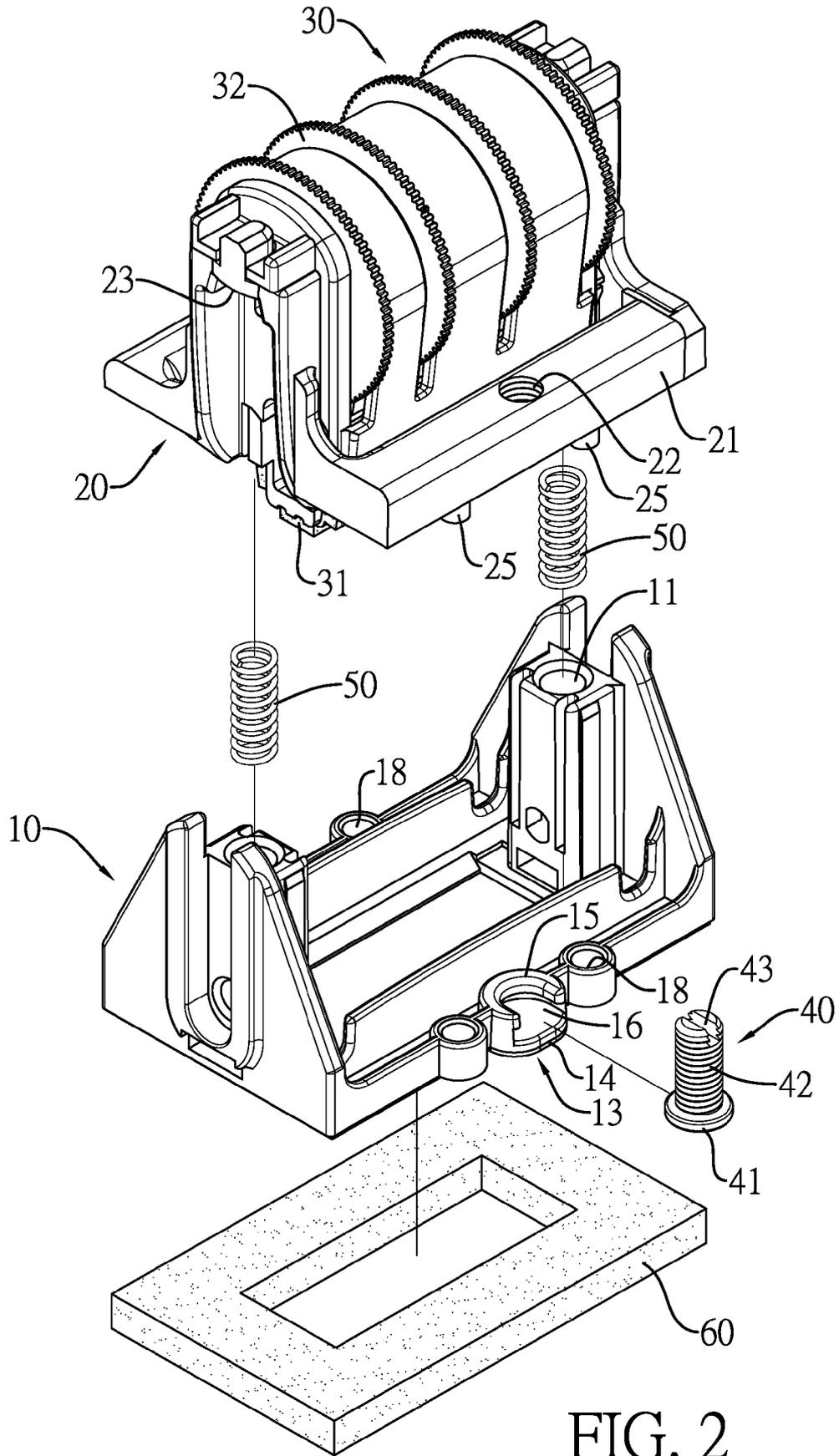


FIG. 1



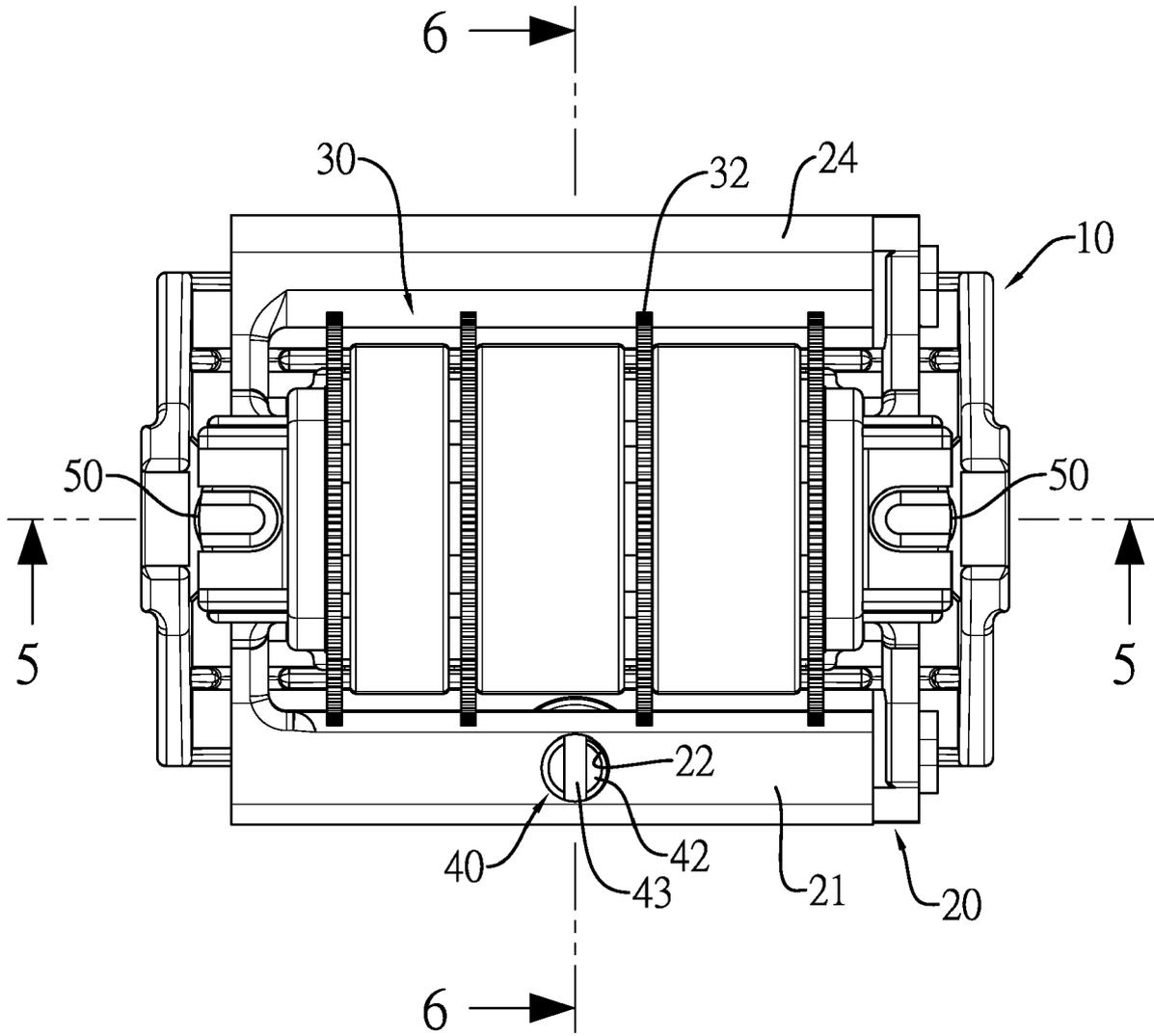


FIG. 4

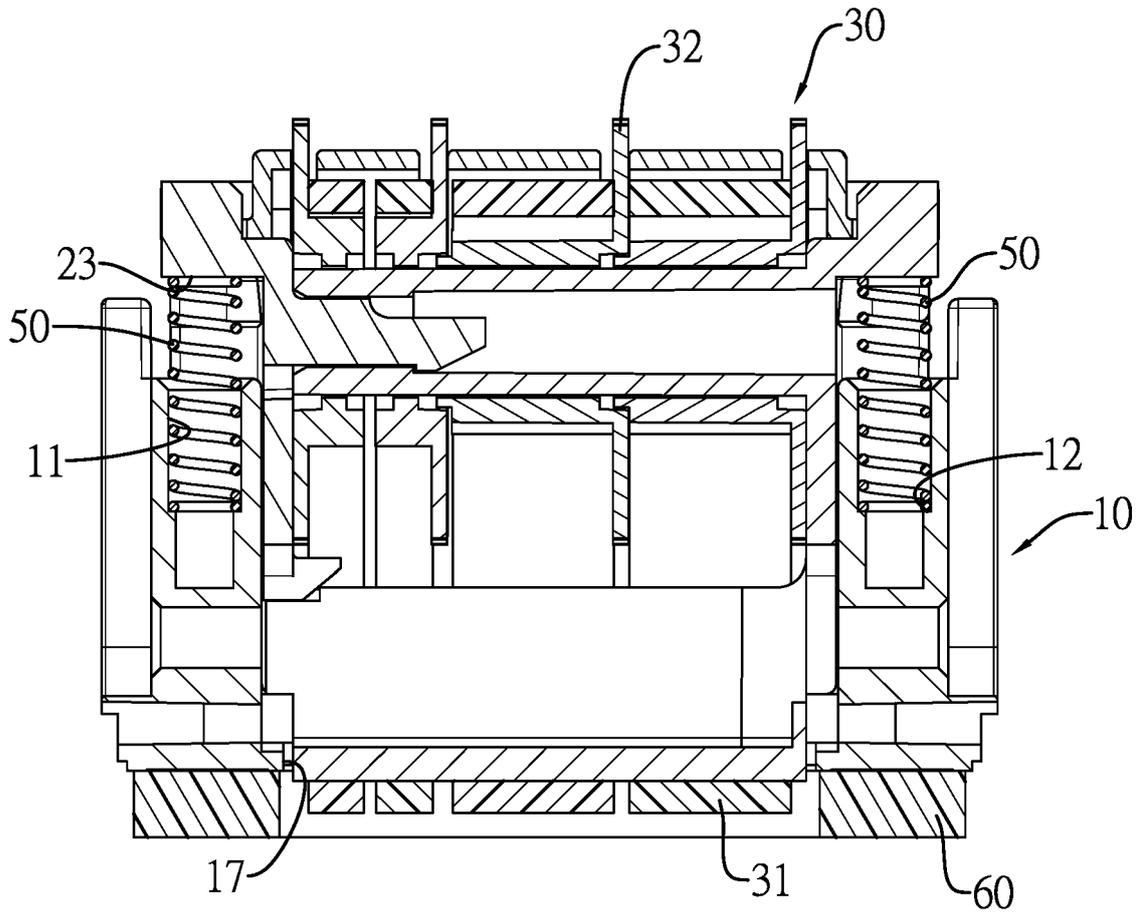


FIG. 5

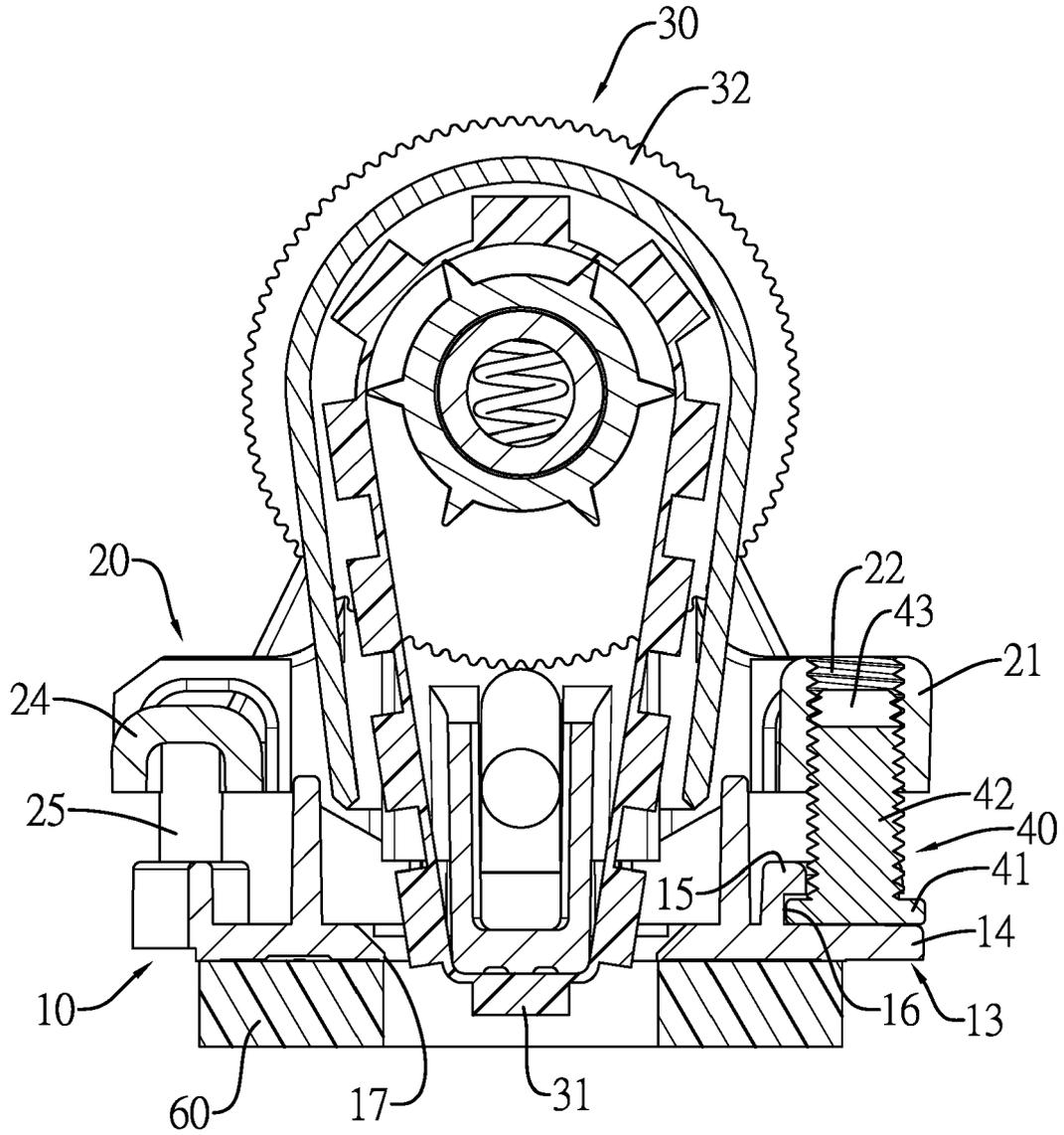


FIG. 6

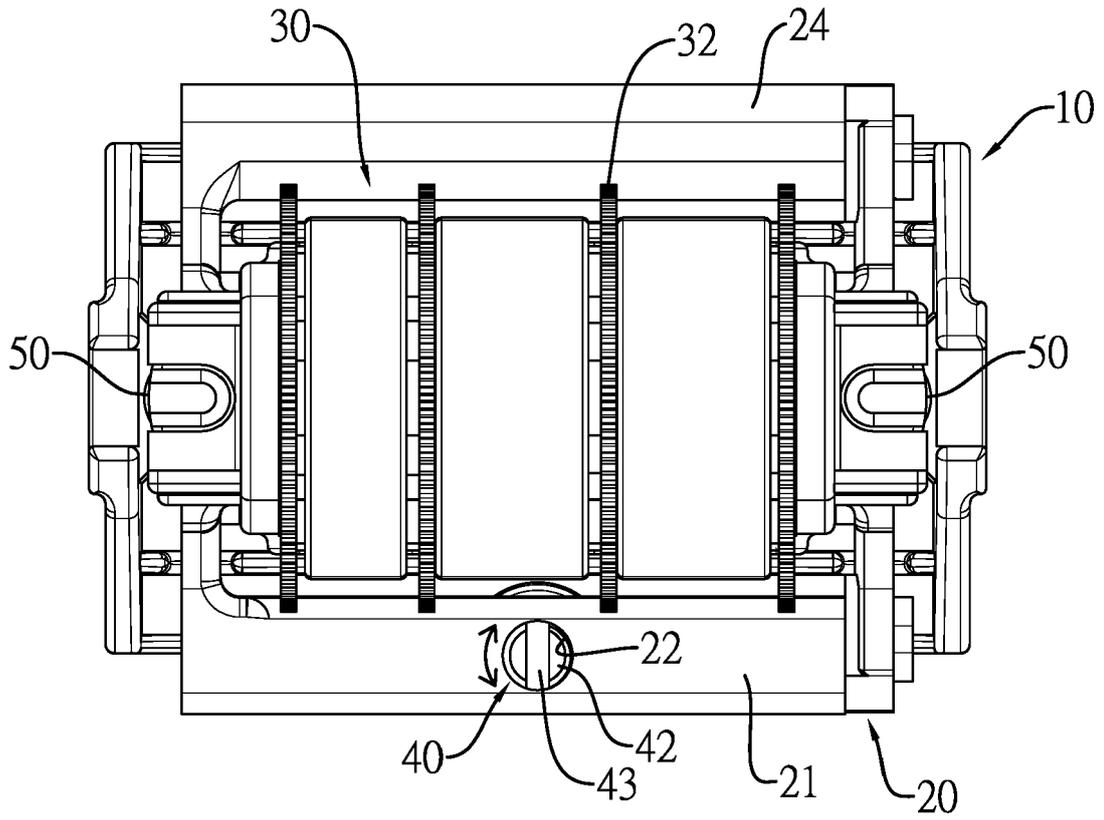


FIG. 7

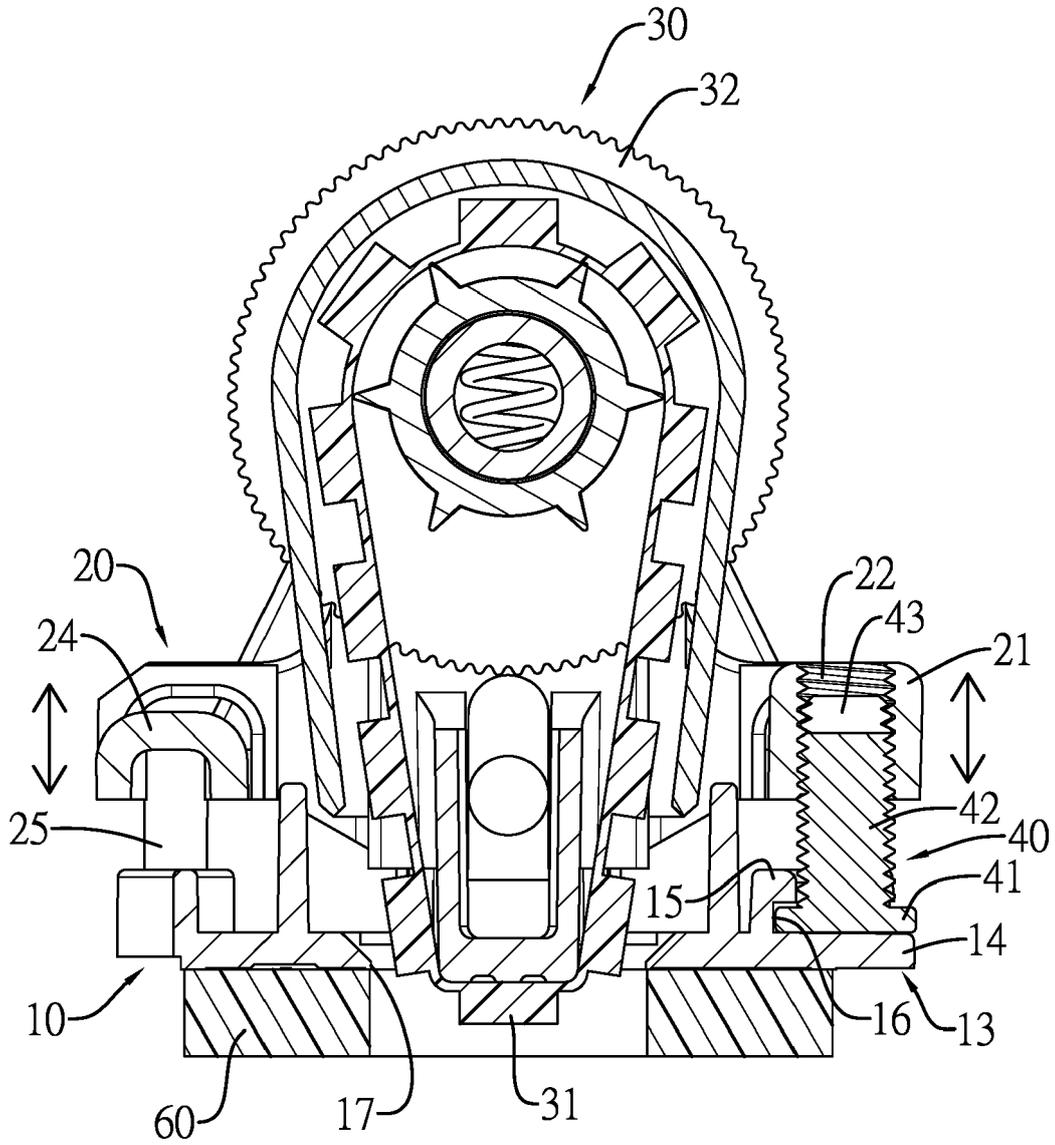


FIG. 8

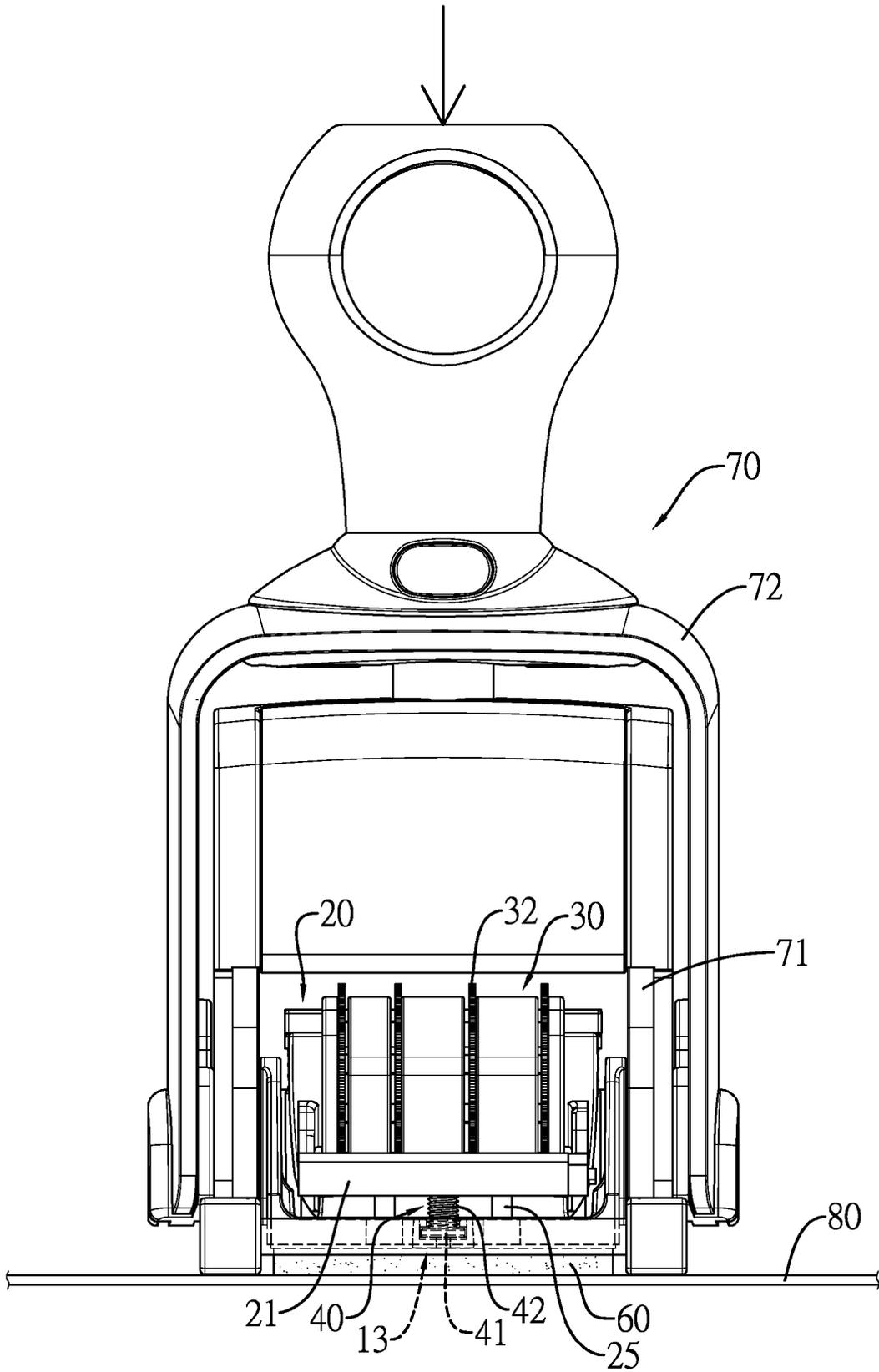


FIG. 9

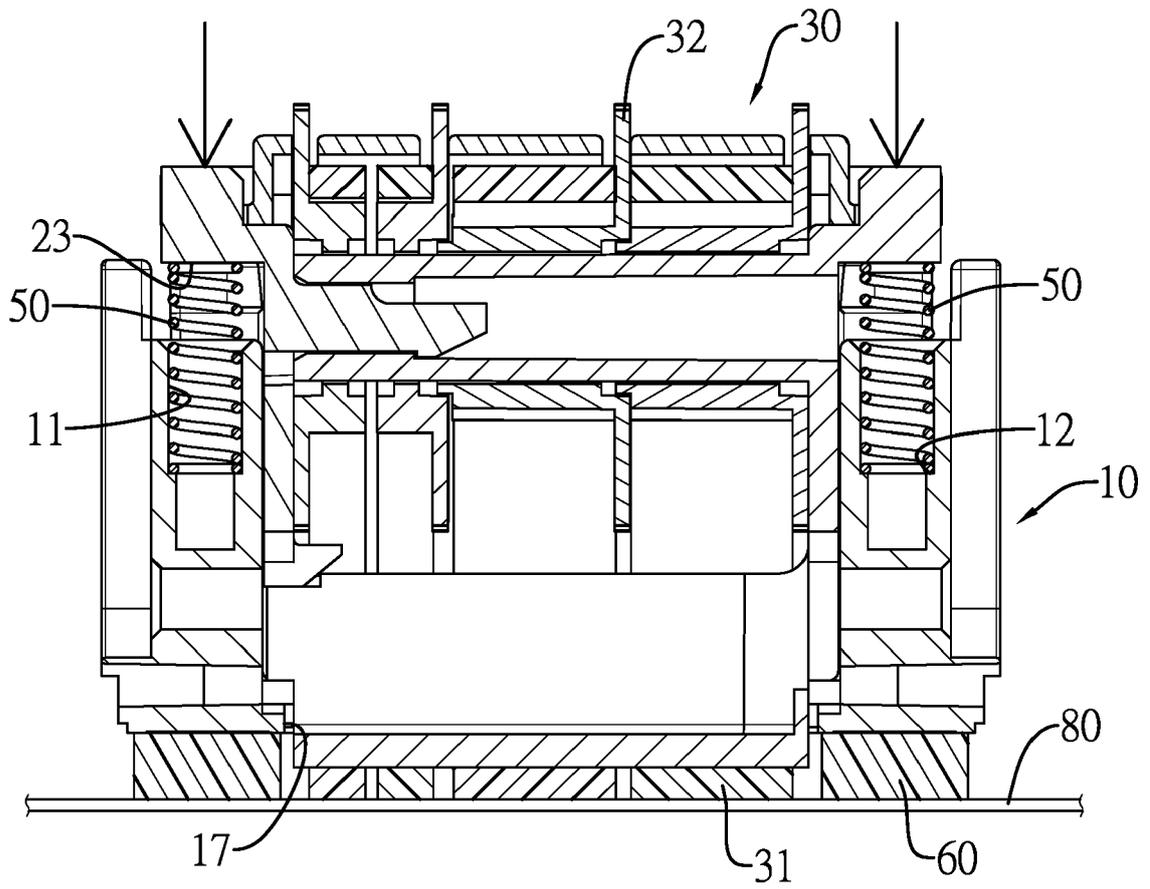


FIG. 10

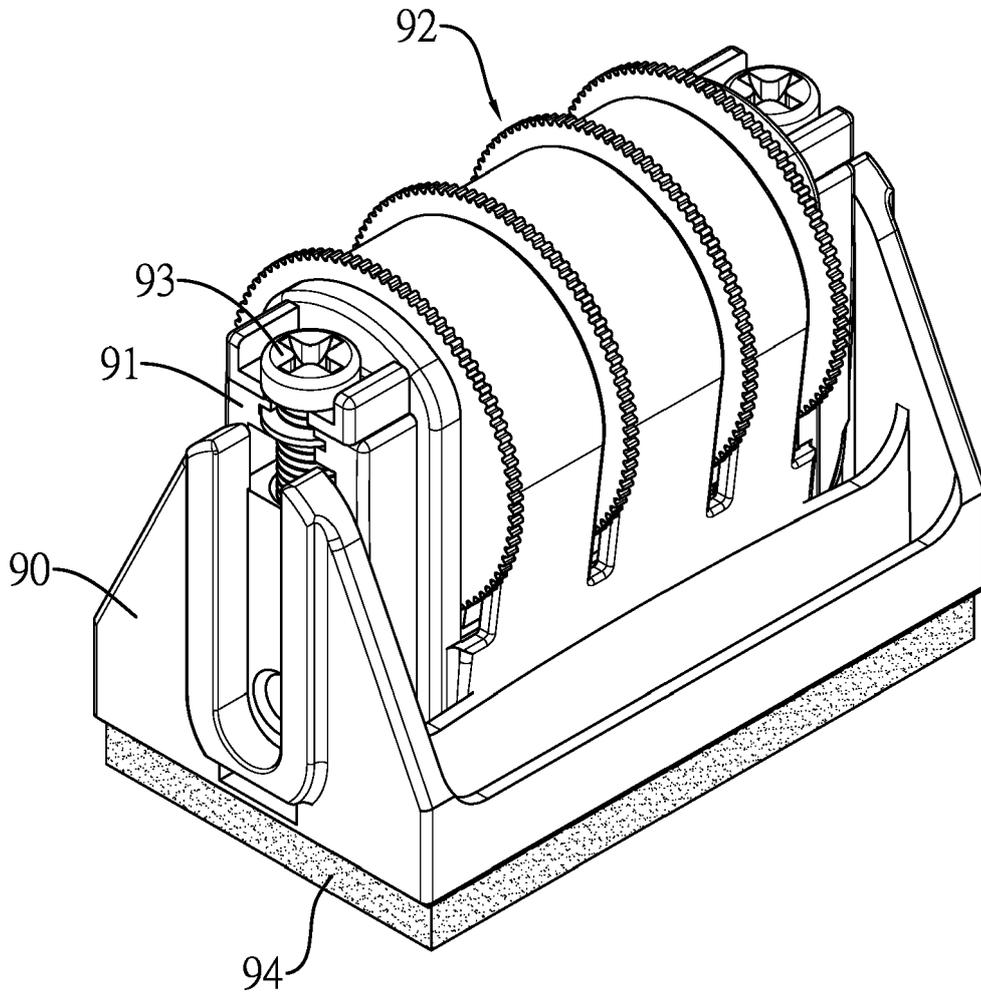


FIG. 11



EUROPEAN SEARCH REPORT

Application Number
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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 December 2018	Examiner Hajji, Mohamed-Karim
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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

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

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