July 2, 1968 T. GASSINO 3,390,929

SOUNDPROOF COVER FOR AN OFFICE MACHINE

Filed March 31, 1967 2 Sheets-Sheet 1

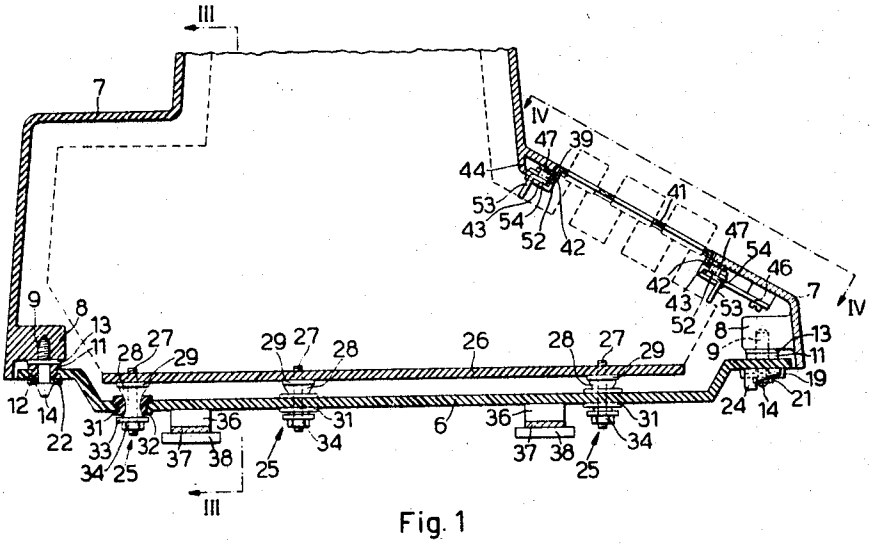


Fig. 1

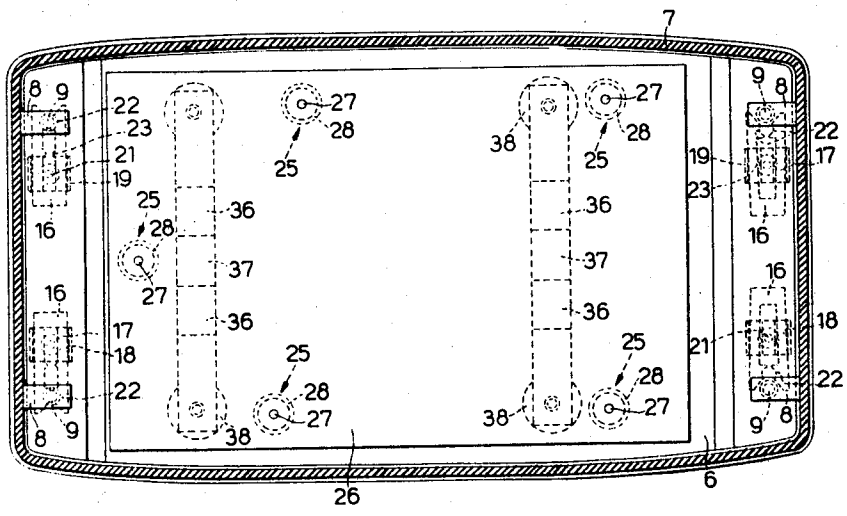


Fig. 2

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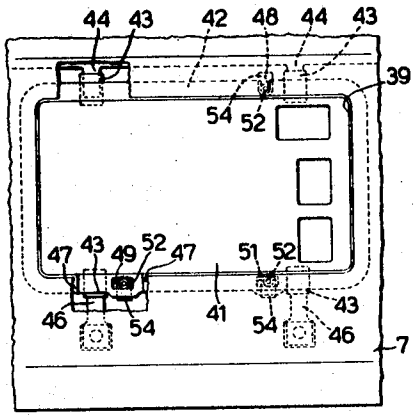


Fig. 4

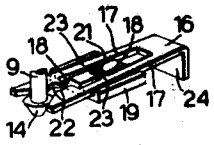


Fig. 5

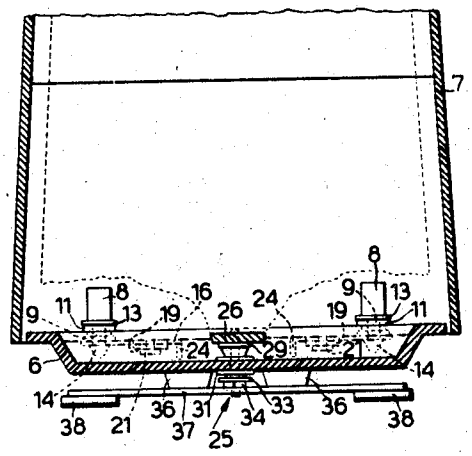


Fig. 3

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3,390,929

SOUNDPROOF COVER FOR AN OFFICE MACHINE

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Claims priority, application Italy, Apr. 7, 1966, 8,497/66
3 Claims. (Cl. 312—208)

ABSTRACT OF THE DISCLOSURE

A soundproof cover for an office machine comprises a base frame plate which is connected to a bottom plate of the soundproof cover through a predetermined number of connecting members, said bottom plate being supported upon at least one pair of elements each consisting of a transverse bar having feet thereon. The connecting members, the elements and the feet on the transverse bars are as groups disposed in vertically offset relation.

BACKGROUND OF THE INVENTION

This invention relates to a soundproof cover for an office machine having a base frame plate connected to a bottom plate of the cover through a predetermined number of supports.

In the known covers each yieldable foot of the machine is normally secured to the bottom plate of the cover and to the base plate of the machine by a same pin or screw. Consequently the noise originated by the movement of mechanical members is directly transmitted to the outside and particularly to the table supporting the machine.

SUMMARY OF THE INVENTION

This and other disadvantages are obviated by the cover according to the invention, which is characterized in that said bottom plate bears through at least one pair of connecting elements on a corresponding transverse bar, which is provided at its ends with a pair of yieldable feet, said members, said elements and said feet being so arranged as to lie in different positions each one vertically offset with respect to the others.

This and other characteristics of the invention will become apparent from the following description of a preferred embodiment thereof, and from the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a left hand longitudinal sectional view of a soundproof cover according to the invention;

FIGURE 2 is a plan view of the cover of FIGURE 1;

FIGURE 3 is a partial transverse sectional view according to the line III—III of FIGURE 1;

FIGURE 4 is a view of a detail of the cover taken according to the line IV—IV of FIGURE 1;

FIGURE 5 is a perspective view of another detail of the cover.

DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

With reference to the FIG. 1, the cover comprises a bottom plate **6** and a top shell **7**. The shell **7** is inside provided with four projections **8**, each one provided with a threaded hole. Two projections **8** are located on the fore side, the other two projections are located on the rear side of the shell **7**. The plate **6** and the shell **7** are connected by connecting members each one comprising a metallic spindle **9** and a ring **11** made with a yieldable material as rubber or the like. More particularly, a threaded portion of the spindle **9** is screwed in the hole of each projection **8**. The spindle **9** is inserted in the ring **11** in turn inserted in a hole **12** of the bottom plate **6**. The spindle **9** is integral with a washer **13** located between the ring **11** and the projection **8**.

Furthermore, the spindle **9** is provided with a frusto-conical head **14** adapted to be engaged by a fork **16** (FIG. 5). This latter comprises a pair of flexible arms **17** slidably mounted in two grooves **18** provided on a block **19**, which is secured to the bottom plate **6** of the cover by means of a screw **21**.

Each arm **17** is provided with a ring-shaped edge **22** adapted to engage the spindle **9**. Furthermore, each arm **17** is provided with a triangular projection **23** normally bearing against the flank of the corresponding groove **18**, which holds the arm **17** slightly outwardly flexed. The fork **16** may be manually displaced leftward in FIG. 5 by acting with a finger on a lug **24** bent from the fork **16**. The distance between the hole **12** (FIG. 2) and the block **19** is such as to cause the edges **22** to engage the spindle **9** when the projections **23** of the arms **17** leave the groove **18**. In FIG. 2 the edges **22** of the two rear forks **16** have already engaged the spindle **9**, whereas those of two fore forks have not yet been engaged.

The machine frame comprises a base frame plate **26** (FIGS. 1 and 2), which bears against the bottom plate **6** of the cover through a predetermined number of connecting members each one generically indicated by the numeral **25**. Each member **25** comprises a substantially hyperboloid-shaped rigid metallic roller **28**, and a yieldable ring **31** made with a yieldable material as rubber or the like. The roller **28** is inserted into a spindle **27** screwed on a hole of the plate **26**. The upper base of the roller **28** is larger than the lower base and bears against the lower surface of the base plate **26** through a washer **29**. The roller **28** is in turn inserted into the ring **31**, which is inserted into a hole **32** of the plate **6**. Another washer **33** is located between the smaller base of the roller **28** and a nut **34**.

Integral with the plate **6** are two pairs of supporting elements each one formed of a block **36** (FIG. 3) vertically offset with respect to the members **25**. Each pair of blocks **36** is secured to a metallic bar **37** provided at the two ends with a conventional rubber foot **38**, which is vertically offset with respect to the members **25** and to the blocks **36**.

The plates **6** and **26** (FIG. 1) may be mutually connected as follows. The machine is firstly laid sidewise to screw the spindles **27** into the holes of the plate **26**. Then the washer **29** and the hyperboloid-shaped roller **28** are inserted on each spindle **27**. Then the cover plate **6** is approached to the plate **26** and is forced so as to cause each roller **28** to enter the corresponding ring **31** provided in each hole **32**.

Thereafter the washer **33** is located on each spindle **27** and by screwing the nut **34** on the spindle **27**, the plates **6** and **26** are mutually connected and locked. Finally the machine is returned to the initial vertical position as in FIG. 1.

The shell **7** is provided on the front side with a rectangular opening **39** (FIG. 4) adapted to house a keyboard covering plate **41** (FIG. 1). This latter is provided with a peripheral bent edge **42**, which bears against four C-shaped cushion support members **43** (FIG. 4) made with rubber or like material. Two rearward members **43** are inserted on two projections **44** of the shell **7**, and the two forward members **43** are inserted on the free end of two arms **46** screwed on the shell **7** to facilitate the assemblage of the keyboard covering plate **41**, as it will be described hereinafter. Secured to the edge **42** is a cushion strip **47** made with rubber or like material, the shell **7** bearing against the strip **47**. The edges **42** are also provided

with three slots 48, 49 and 51 engaged by three rollers 52 each one carried by a bent lug 54 of a corresponding bracket 53 secured to the machine frame in a manner known per se.

To assemble the keyboard covering plate 41 with the shell 7, this latter is firstly overturned to unscrew the arms 46 therefrom. Then the upper portion of the edge 42 of the plate 41 is inserted between the projections 44 and the shell 7, with the slots 48, 49 and 51 entered by the corresponding rollers 52 so as to be always centered with respect to the frame of the machine. The arms 46 are finally screwed again on the shell 7, which is now returned to the vertical position shown in FIG. 1, ready to be assembled with the bottom plate as previously described. It is thus clar that the keyboard covering plate 41 and the shell 7 are mutually cushioned through the strip 47 and the support members 43, thus cooperating to render soundproof the cover.

It is intended that many changes, improvements and addition of parts may be made to the described cover, without departing from the scope of the invention, as defined in the appended claims.

What is claimed is:

1. In a soundproof cover for an office machine having a base frame plate connected to a bottom plate of the cover through a predetermined number of connecting members, the improvement comprising at least one pair

of support elements bearing said bottom plate, a transverse bar carrying said support elements, and a pair of yieldable feet secured to the two ends of said bar, said members, said elements and said feet being so arranged as to lie in different positions each one vertically offset with respect to the others.

2. A cover according to claim 1, wherein each one of said members comprises a yieldable ring secured to a hole of one of said plates, and a substantially hyperboloid-shaped rigid element secured to the other plate and inserted in said ring.

3. A cover according to claim 1, comprising a top shell, and additional connecting members connecting said shell to said bottom plate, the rigid element of each one of said additional members being secured to said shell, a frusto-conical head on each element of said additional members, and a yieldable fork movably mounted on said bottom plate for engaging said frusto-conical head.

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