

[54] DICTATION MASK

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[58] Field of Search 178/188, 187, 180; 181/34

[56] References Cited

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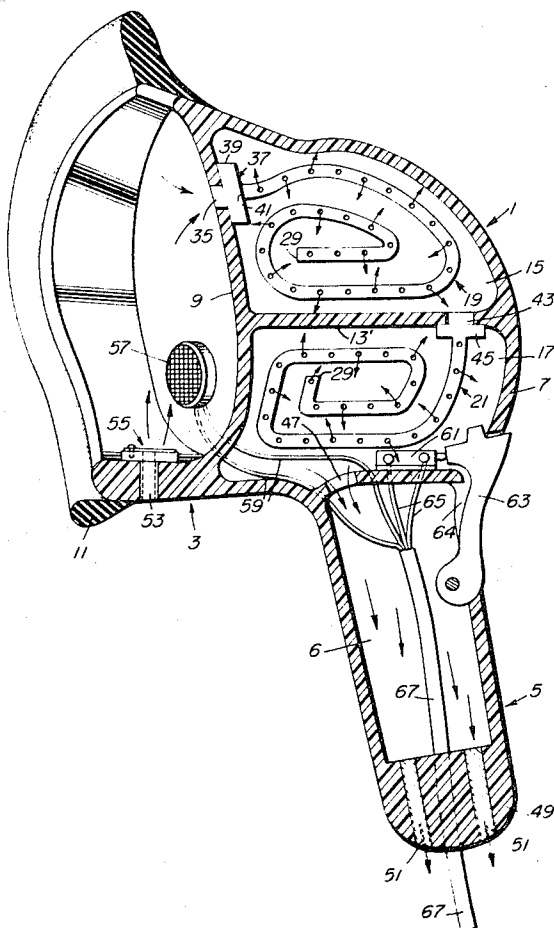
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[57] ABSTRACT

A dictation mask adaptable for use by a court reporter, or the like, which is electrically connected to a recording apparatus for recording the voice of the dictator. A generally spherically-shaped member providing an area for fitting on the face of the dictator and including a plurality of chambers serially in communication by means of sole apertures, and certain of the chambers having muffling coils mounted therein for receiving the breath and voice of the dictator and muffling the sound therefrom, and each such muffling coil provided with a plurality of spaced-apart breath exhaust passages, said spherically-shaped member being provided with a handle and said handle providing one of said plurality of chambers, and said dictation mask including moisture-absorbing means.

5 Claims, 5 Drawing Figures



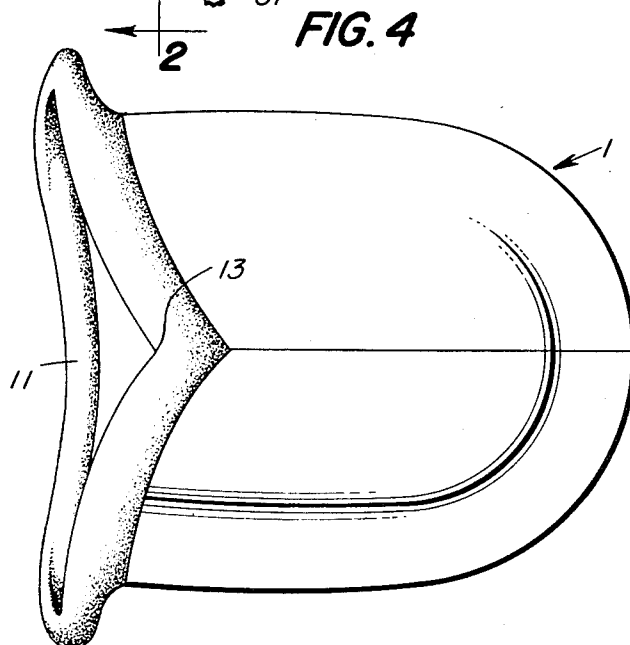
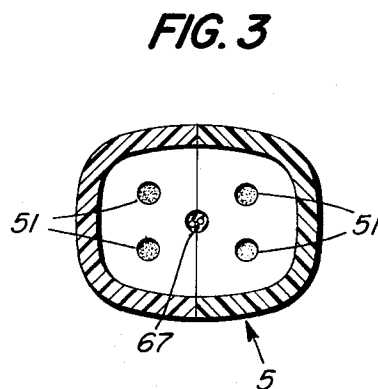
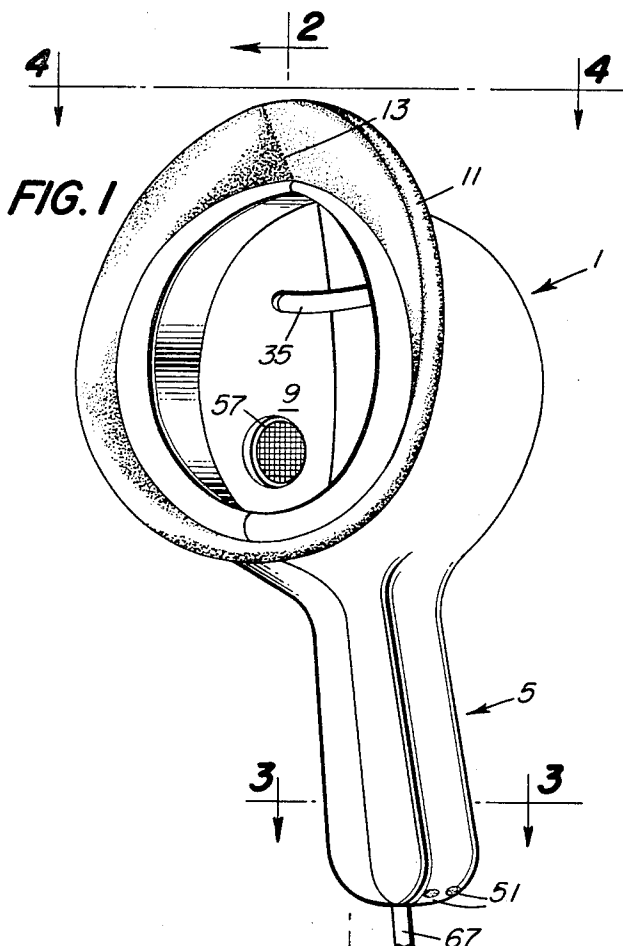


FIG. 2

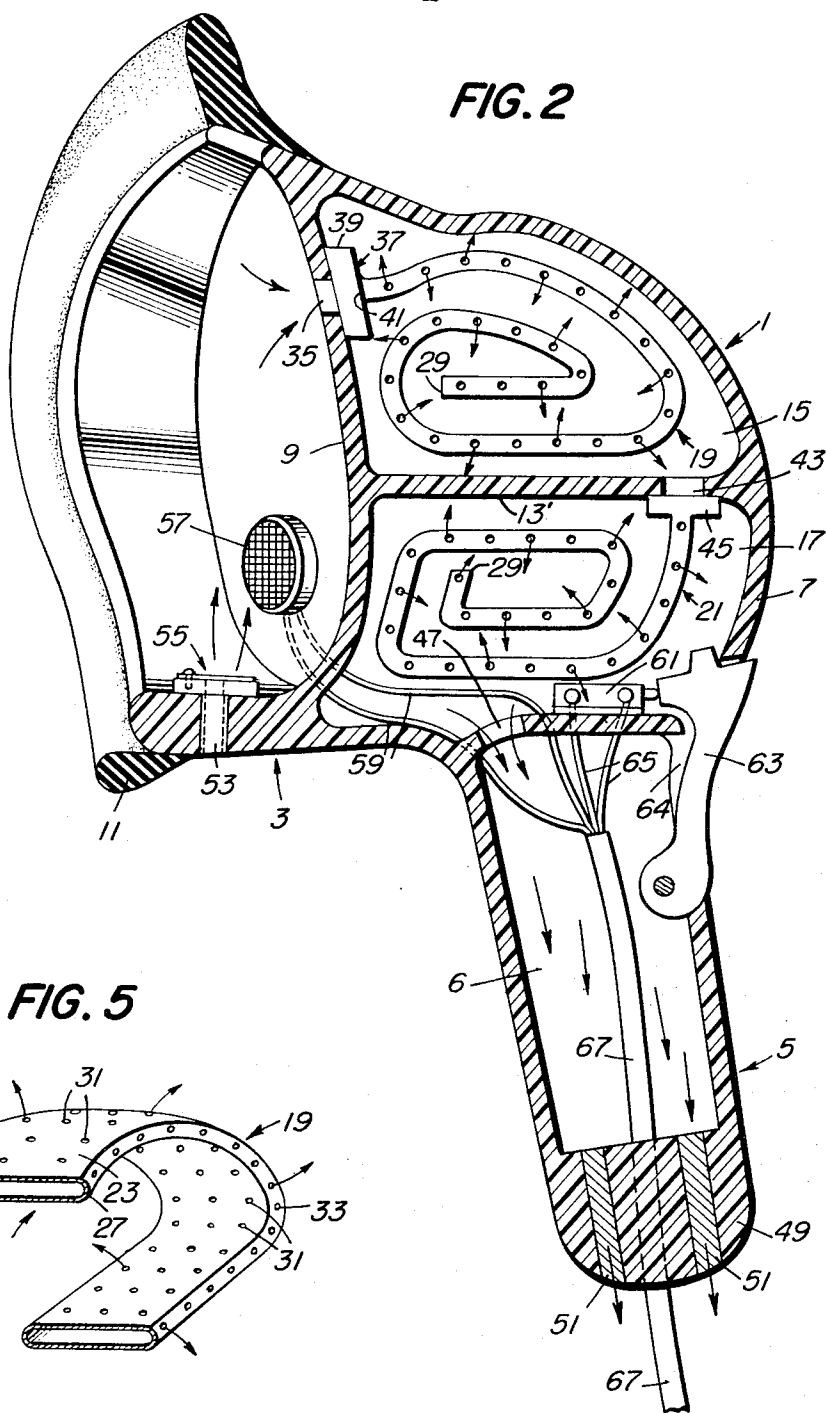
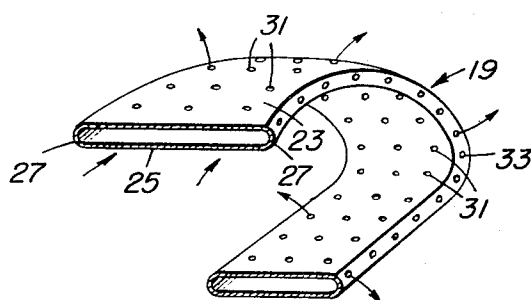


FIG. 5



DICTATION MASK

BACKGROUND OF THE INVENTION

It is now conventional practice in many courts and in the taking of depositions, and the like, for the court reporter to use a recording apparatus in combination with what is generally known in the art as a dictation mask. The dictation mask which is used is held by the court reporter over part of his face, including his mouth, and the dictation mask includes a microphone fixed therein in proximity to the dictator's mouth and the microphone is electrically connected to the recording apparatus for recording the words of the dictator.

It will be evident that such a system of recording court, and the like, proceedings must include certain inherent characteristics in order to be adapted for these particular uses. For instance, it is a requisite of such a system that means be provided therein for muffling the voice of the dictator so that the sounds of the dictator's voice will not be exteriorly audible so as to disturb the proceedings which are taking place. It is also highly desirable that the dictation mask include means facilitating the normal breathing of the dictator as he dictates into the mask. Thus, an arrangement must be provided in the mask to permit the dictator to inhale and exhale without removing the mask from its operative position over the face and mouth of the dictator.

If such means were not included in the mask the user thereof would be forced to slightly remove the mask from its operative position for receiving the voice from the dictator's mouth, and such words would be audible and disturbing to the normal proceedings.

A further desirable feature of such dictation masks resides in the provision therein of some means for absorbing the moisture, which is normal and occurs when a person is talking, and would otherwise accumulate within the mask.

It is desirable that a dictation mask of the character of that involved in this invention be relatively lightweight, not bulky and easily handled by the user thereof in order to expedite the application thereof to and from position over the mouth of the dictator. In order to muffle the sound of the voice of the dictator, various arrangements have been devised within the mask for accomplishing this purpose. It will be appreciated that since the muffling areas are entirely disposed within the mask, the space for these areas is limited, and the size of the muffling means is thereby limited.

SUMMARY OF THE INVENTION

One of the significant objects of this invention is to provide a dictation mask which muffles substantially all of the sound emitted by the dictator's voice, while maintaining the mask within desired dimensions.

A further characteristic of this invention resides in the provision of a dictation mask of this character which includes a handle for grasping by the user to facilitate the manipulation and use of the mask. The muffling arrangement which I have devised not only makes use of the generally spherically shaped body of the mask but also incorporates the handle thereof as a part of the muffling means.

The novel structural arrangement of this mask provides muffling means within the mask body itself and the handle which are serially in communication for the

travel and muffling of the sounds therethrough, and provides restrictive and expansive inlets and outlets in the muffling means which are provided in certain of the chambers.

This dictation mask incorporates means therein for facilitating the inhalation and exhalation of the dictator while the mask is maintained in operative position against the dictator's face, and further means is combined in the structural arrangement of the mask and its handle for absorbing the moisture which is emitted by the dictator while dictating.

The muffling means which I have devised is relatively inexpensive to produce and to structurally combine within the mask and its handle.

A novel and ingenious muffling coil is mounted within certain of the serially connected chambers, and functions in an effective manner to muffle the voice sounds of the dictator.

With the foregoing general objects, features and results in view, as well as certain others which will be apparent from the following explanation, the invention consists of certain novel features in design, construction, mounting and combination of elements, as will be more fully and particularly referred to and specified hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a view in perspective of the dictation mask. FIG. 2 is a view taken on the Line 2—2 of FIG. 1. FIG. 3 is a view taken on the Line 3—3 of FIG. 1. FIG. 4 is a view taken on the Line 4—4 of FIG. 1. FIG. 5 is a detailed view of a muffling coil with parts thereof broken away.

DESCRIPTION OF THE INVENTION

In the accompanying drawings I have used the numeral 1 to designate, in its entirety, the hollow, generally spherical body of the dictation mask, the numeral 3 to designate, in its entirety, an annular flange extending forwardly from said body and the numeral 5 to designate, in its entirety, the hollow handle for the mask which depends from the body adjacent the rear edge 7 thereof at an angle slightly inclined rearwardly with respect to the vertical and provides the means by which the mask may be held in proper dictating position by the dictator. The various components 1, 3 and 5 may be made of plastic or any other suitable material which is preferably of lightweight and sturdy construction. The body 1 of the dictation mask is provided with a front wall or partition 9, enclosing the hollow interior thereof.

The annular flange 3 extends forwardly from the front partition 9 and the body 1, and mounts on the outer rim thereof a face-conforming member 11 which may be formed of solid foam latex, or of any other suitable pliant material, which when the dictation mask is in use abuts the face of the dictator and more or less conforms to the surface thereof. Consideration of FIG. 4 will indicate that the annular flange 3 is formed with an indentation, or the like, 13 therein which is provided so that the mask when applied to the face of the dictator will receive the dictator's nose. The cushioning and sound muffling means 11 is fixed to the outer rim of the flange 3 by any suitable and convenient means.

The generally spherical hollow body portion 1 of the dictation mask is divided into two chambers by means of a partition 13' extending from the front wall 9 to the

rear wall 7. This partition 13 provides the body 1 of the dictation mask with a first chamber 15 and second chamber 17.

I provide a muffling coil designated generally by the numeral 19, this muffling coil being mounted in the chamber 15, in a manner which will hereinafter be disclosed. I provide a further muffling coil, designated generally by the numeral, 21 which is mounted in the chamber 17 in a manner which will hereinafter be disclosed. Each of the muffling coils 19 and 21 are of sinusoidal construction, and may be made of plastic or other suitable material, and each of said muffling coils is shaped to conform to the dimensional characteristics of the chamber in which it is mounted.

Each muffling coil is of hollow construction having a wall-forming surface 23 and a further wall-forming surface 25 which is spaced from said first-mentioned wall-forming surface and is connected thereto by means of edge walls 27 thereby providing a duct extending through each muffling coil. It is preferable, though not necessary, that the muffling coils are of substantially greater width than depth and each muffling coil is closed at its inner end as at 29, the other end of each muffling coil being open and generally structured as will be described. The walls 23 and 25 of each muffling coil are each provided with a multiplicity of breath exhaust apertures 31, and the edge-forming walls 27 are likewise formed with a multiplicity of breath exhausting apertures 33.

The front partition 9 of the body 1 of the dictation mask is imperforate with the exception of a breath inlet opening 35 which is formed therein in position to receive the inlet end, designated generally by the numeral 37, of the muffling coil 19. The breath inlet opening 35 is preferably of elongated shape, and the muffling coil 19 is provided at its inlet end 37 with an elongated manifold 39 which is fixed in any suitable manner to the inner surface of the partition 9 extending over the elongated breath inlet opening 35. The interior of the manifold 39 is in communication with the interior of the muffling coil 19 as at 41. The partition 13 which divides the body portion 1 of the mask into the chambers 15 and 17 is imperforate with the exception of an opening 43 which is formed therein, the muffling coil 21 which is mounted in the chamber 17 is provided with a manifold or the like inlet end 45 which is disposed over the opening 43 in the partition 13. Muffling coils 19 and 21 are fixed over the openings 35 and 43, respectively, by any suitable means. They may be cemented to their respective partitions or fixed thereto by means of screws or the like, or in any other desirable manner.

The handle 5 is of hollow construction, forming an elongated chamber 6, and is provided with an opening 47 in the upper end thereof which places the hollow interior of the handle in communication with the interior of the chamber 17. The handle 5 is of elongated shape and is closed at its lower end as at 49, the closure 49 having openings extending therethrough in which are positioned moisture-absorbing crystalline filters 51, the purpose of which will be described hereinafter.

The annular flange 3 is provided with a duct 53 extending through. A one-way inlet flipper valve is provided and is designated generally by the numeral 55. The valve 55 extends over the inner end of said duct 53, and the operation and position of the valve will be explained.

Mounted, in any suitable manner on the front face of the partition 9 is a microphone 57 which is in connection with a recording apparatus (not shown) by means of conductors 59. I provide a controlling switch 61 which is mounted on the inner surface of the upper end of the handle 5, the switch being controlled by means of a trigger element 63 which is pivotally mounted in any suitable manner on the handle and operatively extends outwardly therefrom through opening 64 in desirable position for operation by the dictator who is holding the mask by means of the handle 5. Leads 65 extend from the switch to the recording apparatus, and along with the conductors 59 are enclosed within a sheath 67 which extends through the handle and out through the lower closure means of the handle. The electrical controlling system which I have provided will be readily understood by anyone skilled in this art.

In use the dictator grasps the handle 5 and positions the mask with the foam latex rim 11 in position against his face so that as he dictates into the mask sounds will be muffled. In the process of dictating it is essential, of course, that the dictator inhale and exhale in a normal manner, and if means is not provided for supplying additional air for inhalation by the dictator it will be necessary for the dictator to slightly remove the mask from the face-applied position. This inhalation process is facilitated by means of the one-way inlet valve 55 which, due to the flipper action thereof, supplies additional air under the suction created upon inhalation by the dictator. As the dictator talks into the mask, his exhaled breath and certain sounds of his voice are received in, and pass through the inlet opening 35 in the partition 9 and then into the manifold 39 of the muffling coil 19. From this manifold coil the exhaled breath and any sounds thereof or of the voice move into the muffling coil 19 and are exhausted therefrom through the multiplicity of exhaust apertures 31 and 33, being exhausted through these apertures into the first chamber 15, from this first chamber the breath exhausts through the opening 43 in the partition 13 and into the manifold 45 of the muffling coil 21. The breath is exhausted through the multiplicity of wall and side-wall apertures 31 and 33 into the chamber 17 from whence such breath passes through the aperture 47 into the hollow handle 5 and is exhausted from the whole device through the moisture-absorbing crystalline filters 51. It is well known that in a device of this character into which a person speaks, there will be some moisture and this moisture is absorbed by the removable filters 51.

It will now be apparent that I have provided in a dictation mask a series of chambers, and that these chambers are serially in communication with each other. There is a sole inlet, which is the opening 35, for the exhaled breath to pass into the muffling coil 19, and there is only one exhaust for breath from the chamber 15 to the muffling coil 21, and there is only one communicating aperture 47 between the chamber 17 and the hollow interior of the handle 5.

The arrangement of the serially connected chambers, the sole inlets and outlets and the muffling coils all function in combination to exclude sounds from reaching the exterior of the dictation mask.

I claim:

1. A dictation mask including, in combination, a generally spherical hollow body providing a chamber, a face-engaging and conforming rim extending forwardly from said hollow body and adapted to engage a portion

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of the face of the dictator when the dictation mask is in operation, a partition extending across the forward end of said hollow body and rearwardly of said rim and between the dictator's mouth and the chamber formed by the body, said partition having a single breath inlet opening therein and said chamber being provided with a single breath outlet opening and an elongated hollow sinuously configured muffling means mounted in the chamber in said body in position over said breath inlet opening to receive breath therefrom, and said hollow sinuously configured muffling means having a multiplicity of breath outlet openings throughout the length thereof and in all walls forming the hollow sinuously configured muffling means for exhausting breath therefrom, and all of said openings in the hollow sinuously configured muffling means being spaced from said single breath outlet opening, and a microphone positioned on said body in proximity to the mouth of the dictator.

2. A dictation mask in accordance with claim 1, wherein a partition extends through said chamber from said first-named partition to the rear end of said hollow body, and said last-named partition providing a first chamber and a second chamber in said hollow body and said last-named partition being provided with a single breath inlet opening for the passage of breath from said first chamber to said second chamber and being provided with a single breath outlet opening disposed remotely with respect to said single breath inlet opening in said last-named partition.

3. A dictation mask in accordance with claim 2, wherein a hollow sinuously configured muffling means is mounted in said second chamber in position over said breath inlet opening in said last-named partition to receive breath therefrom, and said sinuously configured muffling means having breath outlet openings therein for exhausting breath therefrom, and said openings in said sinuously configured means which is mounted in said second chamber being spaced from said single breath outlet opening in said second chamber.

4. A dictation mask including, in combination, a generally spherical hollow body, a face-engaging and con-

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forming rim extending forwardly from said hollow body and adapted to engage a portion of the face of the dictator when the dictation mask is in operation, a partition extending across the forward end of said hollow body and rearwardly of said rim and between the dictator's mouth and the hollow body, said partition having a single breath inlet opening therein, a further partition extending through said hollow body from said first named partition to the rear end of said hollow body, and said last named partition providing a first chamber and a second chamber in said hollow body and said last named partition being provided with a single breath inlet opening for the passage of breath from said first chamber to said second chamber and being provided with a single breath outlet opening disposed remotely with respect to said single breath inlet in said last named partition, and a hollow sinuously configured muffling means mounted in said first chamber and having one end open and positioned over said breath inlet opening to receive breath therefrom, and said sinuously configured muffling means having a multiplicity of breath outlet openings therein for exhausting breath therefrom, and all of said openings in the hollow, sinuously configured muffling means being spaced from said single breath outlet opening, and a further hollow sinuously configured muffling means mounted in said second chamber and having one end open and positioned over said breath inlet opening in said last named partition to receive breath therefrom, and said hollow sinuously configured muffling means having a multiplicity of breath outlet openings therein for exhausting breath therefrom, and said openings in said hollow sinuously configured muffling means which is mounted in said second chamber being spaced from single breath outlet opening in said second chamber, and a microphone positioned on said body in proximity to the mouth of the dictator.

5. A dictation mask in accordance with claim 4 wherein each of said hollow sinuously configured muffling means is closed at the other end thereof.

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