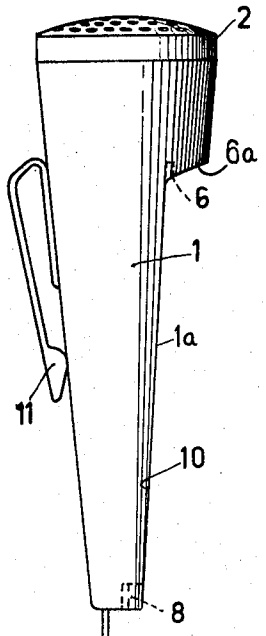
June 28, 1966 J. I. DE HAAN 3,258,544

MICROPHONE FOR MAGNETIC RECORDING DEVICE HAVING A DETACHABLE REMOTE CONTROL SWITCH

Filed Feb. 4, 1965



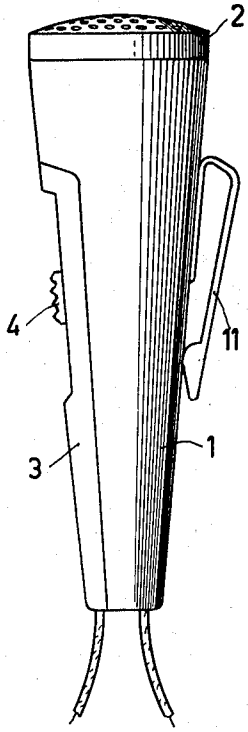


FIG.1

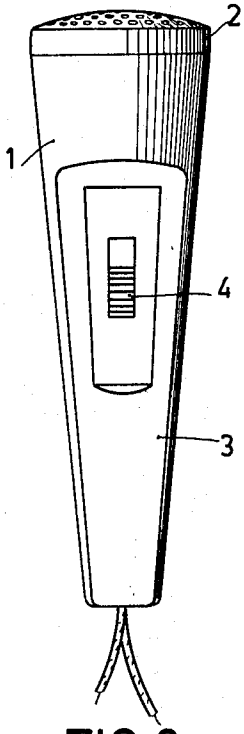


FIG.2

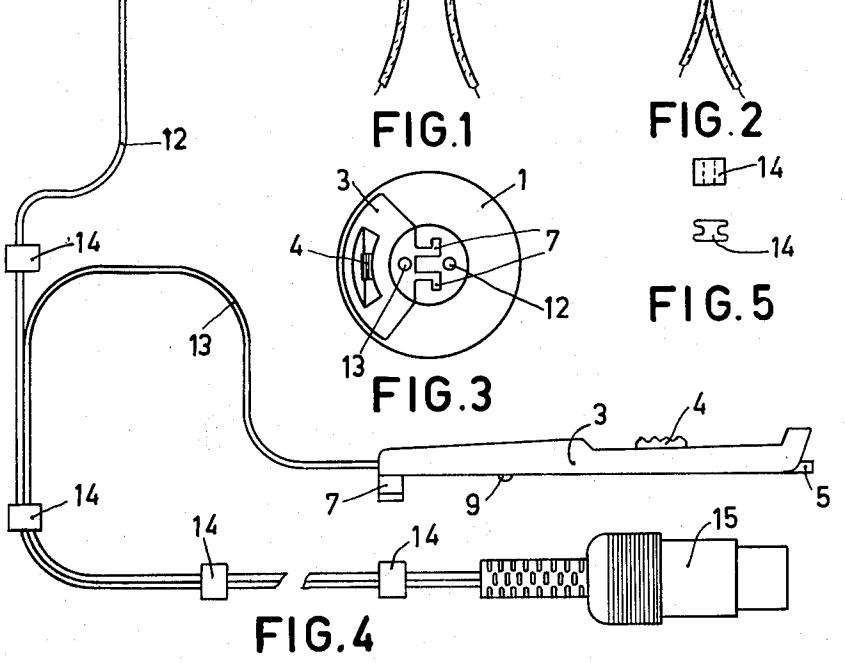


FIG.4

FIG.3

FIG.5

INVENTOR.
JACOB I. DE HAAN

BY

Frank R. [illegible]

AGENT

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MICROPHONE FOR MAGNETIC RECORDING DEVICE HAVING A DETACHABLE REMOTE CONTROL SWITCH

Jacob Izaak de Haan, Emmasingel, Eindhoven, Netherlands, assignor to North American Philips Company, Inc., New York, N.Y., a corporation of Delaware

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4 Claims. (Cl. 179—179)

The invention relates to a microphone-remote control switch combination for a portable magnetic recording device.

When such a magnetic recording device is used for reporting purposes, it is preferable that the microphone can be placed in the reporter's breast pocket, where it is held by a clamping member secured thereto. For the operation of the magnetic recording device, a switch is required which is held in the reporter's hand. A microphone provided with a detachable switch is required since the switch in the breast pocket is not accessible.

According to the invention, a microphone remote control switch combination for a portable magnetic recording device is constructed so that the switch is secured in a manner so as to be readily detachable to the microphone housing. This switch is provided with a cable having a pair of conductors connecting it with the magnetic recording device. The switch cable is separable from the microphone cable. Consequently, when the switch is connected with the microphone, the combination may be utilized in the usual manner. If, however, the magnetic recording device should be used for reporting purposes, the switch is detached from the microphone by a simple manipulation and the two cables are separated so that it is possible to accommodate the microphone in the reporter's breast pocket and the switch in his hand or coat pocket.

In a microphone remote control switch combination according to the invention, the microphone and the switch cables are bound together by means of several clamping devices distributed throughout their lengths so as to be readily separable.

The invention will now be described more fully with reference to the accompanying drawing, in which:

FIG. 1 is a side elevation of the microphone switch combination according to the invention,

FIG. 2 is a front elevation of the same combination,

FIG. 3 is a plan view of the combination viewed from below,

FIG. 4 shows the combination in the operating position in which the switch is detached from the microphone, and

FIG. 5 shows in side elevation and in plan view a clamping device which serves to secure the two conductors to each other so as to be readily detachable.

As appears from the drawing, the microphone housing **1** has an elongated, conical form which is truncated at its lower end, the microphone grid **2** is located at the upper end thereof. A relief **1***a* is provided in the microphone housing which receives a switch housing **3** constituted by an approximately axis-parallel longitudinal section taken from a part of the microphone housing, i.e., the section does not extend the length of the housing. The relief **1***a* defines a shoulder **6***a* against which switch the housing abuts. The switch housing **3** accommodates the switch button **4** for controlling normal forward movement of the

tape recorder (not shown). In order to secure the switch housing **3** to the microphone housing **1**, the upper end of the switch housing is provided with a projecting plug **5** (FIG. 4) which may be passed into a niche **6** in the shoulder **6***a* of the microphone housing; moreover, the other end of the switch housing **3** is provided with a locking device consisting of a pair of L shaped fingers **7** which fit into corresponding slots **8** in the microphone housing. Thus when housing **3** is moved in a longitudinal direction, fingers **7** fit into grooves **8** provided at the lower end of the microphone housing **1**. In order to reduce the risk of unintentional detachment, the switch housing **3** has a protuberance **9** which snaps into a recess **10** of the microphone housing **1**. The microphone housing **1** is provided with a clamping device **11** for accommodation in a breast pocket.

A cable **12** connects the microphone **2** with the magnetic recording device (not shown), while a corresponding cable **13** connects the switch with the recorder. These two cables (containing suitable conductors and insulation as is well known) are connected with each other by means of several clamping devices **14** distributed throughout the length of each cable so as to be readily separable. The shape of the clamping devices is shown in FIG. 5 which also illustrates that the two cables may be laterally passed into the clamping devices until they are held by the spring force of these clamping devices which are made of resilient synthetic substance. In the embodiment shown, the two cables **12** and **13** terminate in a known plug **15**, but of course it is also possible to use another kind of known connection.

What is claimed is:

1. A microphone for a tape recorder comprising a discrete microphone housing member, a first cable connected with said microphone housing member and operatively coupled with said microphone, a discrete switch housing member having a switch means integral therewith, a second cable connected with said switch housing member and operatively coupled with

said switch means, said microphone housing having an exterior closed relief portion integral therewith for receiving said switch housing, and quick release latching means having slideably cooperable parts connected with both said housing members including said relief portion for removably attaching said switch housing on said microphone housing in said relief whereby said switch is operable both when connected with and separated from said microphone housing member and plug connecting means connected with both said cables for coupling said cables with a tape recorder.

2. A recording microphone comprising a microphone housing, said housing having a generally frusto-conical configuration, a microphone at the base end of said configuration, an elongated closed relief in said housing extending from the apex end of said configuration in a longitudinal direction and terminating in spaced relation relative to said base end, a shoulder in said housing defined by the terminal end of said relief, a switch housing member removably receivable in said relief, said switch housing having a configuration fairing into said relief and the configuration of said microphone housing and quick release latching means having slideably cooperable parts connected with each said housing member for removably

attaching said switch housing in said relief, and a pair of discrete cables one of which extends from said switch housing and the other from said microphone housing.

3. A recording microphone according to claim 2 wherein said latching means comprises a niche in said shoulder, a projection at one end of said switch housing receivable in said niche, a pair of shaped slots in the apex end of said microphone housing, and correspondingly shaped fingers projecting from said switch housing for slideably fitting into said slots.

4. A recording microphone according to claim 2 with the addition of means for removably clamping said conductors together.

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KATHLEEN H. CLAFFY, *Primary Examiner.*

IRVING L. SRAGOW, ROBERT H. ROSE, *Examiners.*

L. A. WRIGHT, *Assistant Examiner.*