

August 5, 1957

Subject: Dictating Machine

In the following is described an invention which relates to a dictating machine and makes it possible, having made a magnetic recording (on a grooved plastic sheet, for instance, a flat plastic disk) to re dictate on the same disk a revised version of what has been previously recorded by alternately listening to what has been recorded, on the first try, and dictating the revised version. On one of the magnetic type ^{dictating machines} machines, which is on the market in the United States, a grooved plastic flat disk is used which is placed on a turntable. A magnetic pickup, ^{"nibble"} which is ~~both~~ used ^{both} in dictating to magnetize the disk and as a pickup in listening to what has been previously recorded, is carried on an arm. We shall refer to this pickup as Pickup No. 1, and to the arm which carries it as Arm No. 1. A one-piece microphone ^{and} speaker, which carries two buttons or levers, is attached to the dictating machine. One of these buttons or levers, A, actuates a switch so that when A is pressed down the motor turning the turntable is switched on ^{and also} the current flowing through the microphone magnetizes the pickup ^{and} and the speech is recorded. At the same time the record is demagnetized just ahead of the ^{pickup No. 1.} magnetic imprint made by the microphone. Another button or lever, B, when pressed down actuates the switch which switches on the motor ^{which} turns the turntable and ^{also} switches the pickup in such a manner as to have the recorded speech amplified and sent through the speaker. **P** According to the invention, ^a and dictating machine of this type ~~may~~ carry a second arm, ^{arm} No. 2, holding a second pickup, ^{"nibble"} No. 2. There is an additional switch, C. When C is shifted to the rediate position

2
shall be 0
4

This switch has two positions which we ~~may~~ call the zero position and the redictate position. When the switch, C, is in zero position, a relay is actuated which lifts Arm No. 2, which carries Pickup No. 2, off the record, and the levers or buttons, A and B, actuate the switches mentioned above ~~and~~ the dictating machine ~~then~~ functions in exactly the same manner as the present commercially available type machine described above.

When the switch, C, is thrown into the redictate position, ~~it actu-~~
~~ates the relay which lifts Arm No. 1 off the record. With the switch in the~~
~~redictate position, when the button or lever, A, is pressed down, it~~ ^{now} actuates
~~the~~ switch that will do the following:

It will switch on the motor turning the turntable, ~~and the current~~
~~flowing through the microphone magnetizes the pickup, No. 2, and the speech~~
is ^{now} recorded at the point touched by pickup, No. 2. At the same time the
record is demagnetized just ahead of pickup, No. 2. Further when C is in
the redictate position and button or lever, B, is pressed down, the motor
turning the turntable is switched on, and the speech previously recorded is
~~picked up by the~~ amplified and is sent through the speaker. ~~and also relay~~
~~number 1 is actuated and Pickup No 2 is lifted~~
~~off the record.~~ it

the pickup
No 1 off the
record. also

with the switch C in the redictate position
button A when button A is pressed

August 7, 1957

Dictating Machine

In the following is described an invention which relates to a dictating machine. The invention makes it possible to dictate into a machine -- constructed according to this invention -- and thus obtain a record. It is further possible, while playing back the record, alternately to listen to the play-back and to dictate a revised version onto the same record. According to choice, the revised version will appear spatially separate from the original version or it will replace the original version. The class of dictating machine to which this invention is applicable is defined by the circumstance that the recording needle -- which may be a magnetic needle -- is guided through a pre-formed groove on the plastic, flat disk or cylindrical sheet. One dictating machine which falls into this class, and which makes a magnetic recording on a pre-formed, flat, plastic disk, is at present on the market in the United States under the name of "Voice Writer," and is manufactured by _____.

On this dictating machine the magnetic needle, which we shall call needle 1, is ~~guided~~ carried on an arm, that we shall call arm 1, and is guided by a spiral, pre-formed groove on the flat disk. A one-piece microphone speaker, which carries two buttons or levers, is attached to the dictating machine. One of these buttons or levers, A, actuates the switch so that when A is pressed down, the motor which rotates the turntable is switched on, the current carrying the speech is switched on to needle 1 so that the speech is recorded and also any previous recording is magnetically erased just ahead of needle 1. Another button or lever, B, when pressed down actuates the switch which energizes the motor that rotates the turntable and connects the pick-up through an amplifier to the speaker.

The dictating machine, constructed according to the invention, operates as follows:

There is a second arm 2 carrying a second magnetic needle 2.

There is a switch, C, which may have two position; i.e. "zero" position and the redictating position. When switch, C, is in the zero position, arm No. 2, which carries the needle, is lifted so that the needle is lifted off the record. With switch, C, in the zero position, the machine operates exactly as do the present commercial models of the Voice Writer in the manner described above.

When switch, C, is in the redictate position, the machine is ready for alternate listening and redictating. In this case when the button or lever, B, is pressed down, needle, 1, touches the record and arm, 2, carrying needle, 2, is lifted so that needle, 2, is lifted off the record. One may then listen to a portion of what has been dictated before. If button, A, is pressed down, arm, 1, is lifted up so that needle, 1, is lifted off the record and needle, 2, rests on the record. If one then speaks into the microphone, speech is recorded at the location of needle, 2. The dictating machine can be used for redictation in either of two ways:

If we use it the first way, we retain the first recording while we make the second recording. One way of accomplishing this is to start out with the first needle at the radius, R-1, and record until this needle reaches radius, R-2, whereas in redictating, the second needle starts out at the radius, R-3, which is larger than R-1, and redictation is stopped when the second needle reaches radius, R-1. Or alternately, if we do not mind erasing the first text and replacing it by the redictated text, the first needle may start out at radius, R-1, and the first recording may stop when this needle reaches radius, R-2, whereas in redictating, the second needle starts out at radius,

R-3, which is larger than R-1, and we may redictate until the second needle reaches radius, R-2. Because the redictated version may be longer than the original version -- depending on our advance estimate, how much longer the second version will be -- the difference, $R-3 - R-1$, may be chosen large enough to make certain that the record can accommodate the redictated version of the original version. A hinged plate, which can be turned down from an approximately vertical position to the horizontal so as to be approximately parallel with the plane of the turntable, may have two grooves, and in the horizontal position these two grooves accommodate each a short rod which is attached to arm, 1, and arm, 2, respectively. When either of these arms is lifted up by

As mentioned above, during dictation needle, 2, is lifted off the record, and during redictation in the listening phase needle, 2, is lifted off the record, whereas during the redictating phase needle, 1, is lifted off the record. In order to accomplish this there may be arranged two auxiliary arms, auxiliary arm, 1, and auxiliary arm, 2, which are located below a platform and which are carried by that platform. When the machine is in use, arm, 1, and arm, 2, are located between the horizontal platform and the auxiliary arms, 1 and 2. Auxiliary arm, 1, is moved by a magnet, 1, when this magnet is energized and it lifts arm, 1, in the proximity of the needle-carrying end of arm, 1, rather than in the proximity of the pivotal end of arm, 1. Similarly arm, 2, is lifted when magnet, 2, is energized and it lifts arm, 2, ~~when~~^{near} the needle-carrying end of arm, 2. These two auxiliary arms can also be lifted simultaneously by pressing on the lever or button which energizes both magnets simultaneously. The above mentioned platform may have two grooves cut into it to permit a verticle rod, which is attached to arm, 1, near its needle-carrying end, to emerge above the platform and ~~near~~^{when} this arm is lifted up by auxiliary arm, 1, the other groove permits the same function with respect to a rod carried on arm, 2. When the machine operates, the platform is horizontal and parallel to the plane of the turntable. When the disk is to be changed the platform, which is hinged, can be lifted from the horizontal position into an approximately vertical position. with the platform are then also removed the auxiliary arms so that one has free access to the flat disk and this can now be changed. Before the platform can be lifted in this manner arm, 1, and arm, 2, have to be pushed out to the side of the rectangular chassis on which these two arms are pivoted. Arms 1 and 2 are preferably pivoted not ~~to~~^{key} on/~~but~~^{to} adjacent corners of the rectangular chassis but on to opposite corners.

SoundScriber®



DICTATING  EQUIPMENT

R. D. LESTER



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DELAWARE 7-5341

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The Quadrangle Club

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19 $\frac{50}{100}$ / month rental

3 months w. option for buy

{only}

Sales Price

17000
8

total 308 $\frac{67}{100}$

60 cycle x 110:

service 24 / year

1/5 adapter

5 3/4 lbs

50 cycle adapter

(15)