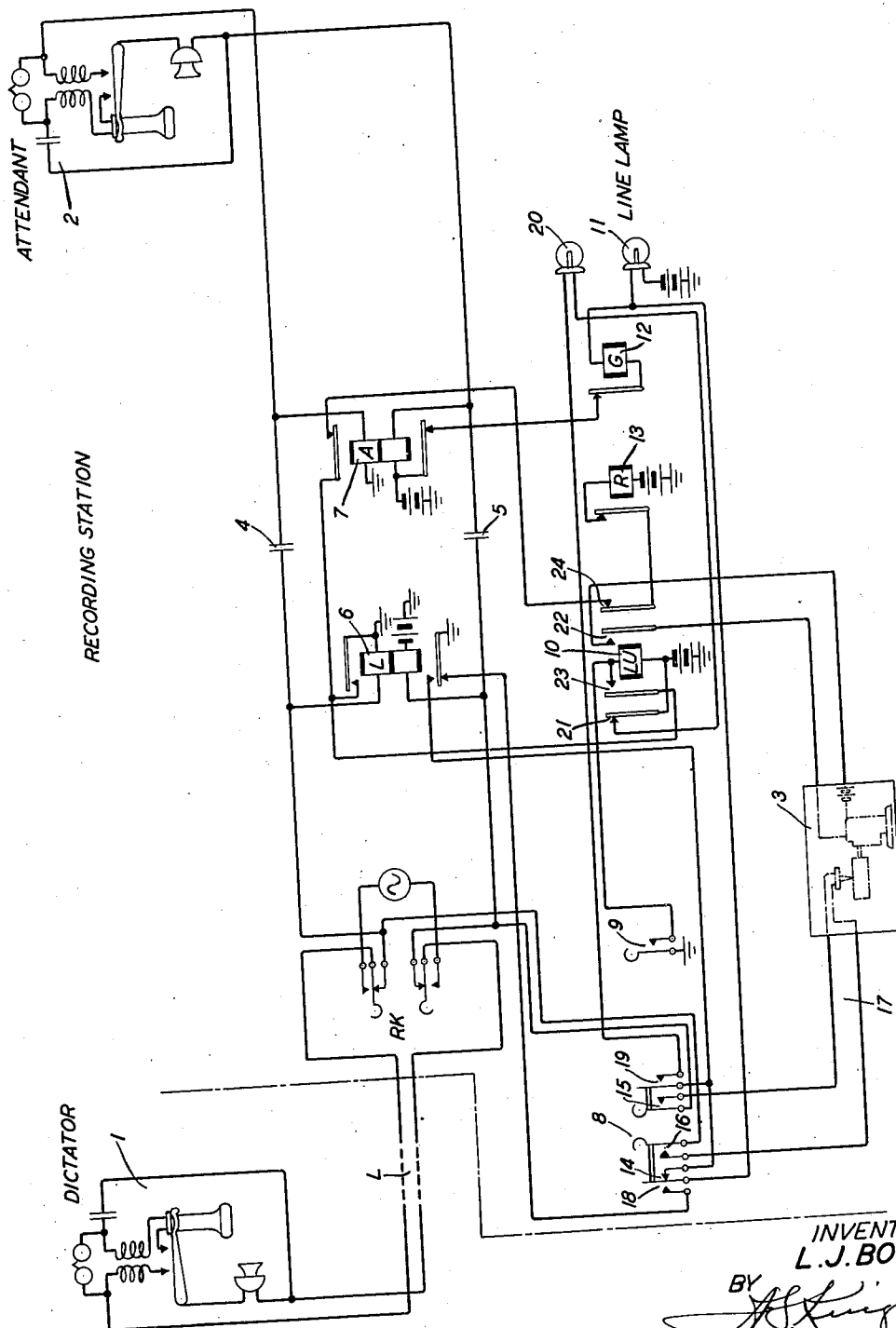


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DICTATION RECORDING SYSTEM
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DICTATION RECORDING SYSTEM

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1 Claim. (Cl. 179—6)

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This invention relates to telephone dictating systems, and more particularly to systems for the recording of dictation transmitted over a telephone line from a dictating station.

A feature of the invention resides in a telephone line circuit arrangement connecting a telephone at a dictator's desk with an attended station at which switching means, under control of an attendant are provided for starting a phonographic recording machine comprising an electromagnetic recorder for impressing sound waves on a record member and for connecting said line to said recorder, said inventive feature comprising other means for maintaining said machine in operation under sole control of the dictator's telephone switchhook.

The invention will be understood from the following description and accompanying drawing which shows a dictator's telephone, of the conventional common battery type, connected to a line L extending a recording station at which station is located, an attendant's telephone 2, and a dictating machine 3 which may be of any well-known type employing an impressible cylinder, disc or magnetizable wire.

Direct current blocking condensers 4 and 5 are introduced in the line at the recording station and battery supply relays 6 and 7 are bridged across the line on each side of the condensers thus providing battery supply to the dictator's telephone and also to the attendant's telephone.

A key RK is introduced in the line to enable the attendant to ring the dictator's station if desired and a key 8 is provided for connecting the recorder of the machine 3 to the line. A start key 9 is also provided to initiate operation of the recording machine by closing an energizing circuit for relay 10 which in operating closes a circuit for any desired driving means, such as a motor.

A lamp 11 and buzzer 12 are controlled by relay 6 and when energized act as audible and visual line signals when the dictating station receiver is removed from the switchhook. When the attendant answers, the audible signal 12 is silenced. A second buzzer 13 is also energized over contacts of relay 7 by the operation of relay 6 which is also silenced when the attendant answers.

The operation of the system will be understood from the following description. Assuming that the dictator desires to be connected to a recording machine, the removal of his telephone receiver operates relay 6 thereby closing its lower front contact to light the line lamp 11 and sound the buzzer 12, the circuit for which can be traced

from ground, lower front contact of relay 6, contact 14 of key 8, and lamp 11 to battery, and also through buzzer 12 and its self-interrupting contacts and lower back contact of relay 7 to battery.

Relay 6 also closes at its upper contact a circuit to energize the second audible signal or buzzer 13 which includes upper contacts of relay 7, outermost right contacts 24 of relay 10 and self-interrupting contacts and winding of buzzer 13.

The attendant observing the calling signals removes the receiver of telephone 2 from the switchhook thereby operating relay 7 which opens its upper and lower contacts thereby silencing buzzers 12 and 13 and upon being informed by the dictator that he wishes to be connected to a machine for dictation, operates key 8 and momentarily depresses key 9.

Key 8 opens its contacts 14 thereby opening the circuit for the line lamp 11 which is thereby extinguished and closes its contacts 15, 16, 18 and 19. Closure of contact 18 prepares a circuit for relighting lamp 11 when relay 6 releases due to the dictator replacing his receiver on the hook and closure of contacts 19 completes a circuit to light a second lamp 20 which can be traced from ground, lower front contact of relay 6, contacts 19 of key 8, lamp 20, contacts 21 of relay 10 to battery. Closure of contacts 15 and 16 of key 8 connects the two line conductors over conductors 17 to the recorder mechanism of the dictating machine 3.

Operation of key 9 initiates operation of the recording machine by operating relay 10 which closes its contact 22 thus completing a circuit to energize the driving mechanism of the recording machine.

Closure of contact 23 of relay 10 completes a locking circuit for itself from ground at the upper contacts of relay 6. Further, when contact 21 opens, the circuit for lamp 20 is opened which was closed when key 8 was operated, thus extinguishing this lamp.

The dictator now proceeds with his dictation and the attendant "hangs up" thereby releasing relay 7 which closes its upper and lower contact. Lamps 11 and 20 are extinguished and buzzers 12 and 13 are silent.

In case the dictator desires to pause in his dictation and call in the attendant to give her any instructions, he will momentarily depress (flash) his switchhook thereby momentarily releasing relay 6 which opens its upper contacts thereby breaking the previously mentioned locking circuit for relay 10 which thereupon releases there-

by opening its contact 22 to stop the recording machine. Contacts 23 of relay 10 also opens thus preventing the relay from reoperating when relay 6 again operates due to the reclosure of the line circuit when the switchhook contact of the dictator's telephone again closed.

Release of relay 10 also closes its contacts 21 and 24. Closure of contact 21 prepares a circuit to light lamp 20 which is closed when relay 6 reoperates which can be traced from ground, lower front contact of relay 6, contacts 19 of key 8 which remains operated, lamp 20 and contacts 21 of relay 10 to battery.

Closure of contact 24 of relay 10 completes a circuit to reenergize buzzer 13 when relay 6 reoperates. Lamp 20 and buzzer 13 serves to indicate that the dictator has flashed his switchhook to stop operation of the recording machine but has not finished dictating.

The attendant noting the lighted lamp 20 and operation of buzzer 13 removes her receiver and talks to the dictator thereby reoperating relay 7 which opens its upper contacts to silence buzzer 13.

If the dictator desires any portion of the recorded dictation to be "played back," the attendant makes the necessary adjustment of the machine and restarts it by again operating the start key 9 whereupon relay 10 reoperates and locks as before thereby opening its contacts 21 and 30 extinguishing lamp 20.

When the dictator is ready to continue dictating he will again flash his switchhook to stop the recording machine by releasing relay 10. Lamp 20 will relight and if the attendant has disconnected in the meantime, buzzer 13 will again operate, thus calling in the attendant. The dictator thereupon instructs the attendant to adjust the machine for recording which she does and once more actuates key 9 thus operating relay 10 which locks up to again start the machine, extinguish the lamp 20 and open the circuit of buzzer 13.

When the dictator finishes he replaces the receiver on the hook which releases relay 6 followed by relay 10 which lights lamp 11. Buzzer 12 is also operated in case the attendant has disconnected and released relay 7.

The attendant thereupon releases key 8 and hangs up whereupon the circuit is restored to

normal after which any desired disposition can be made of the recorded dictation.

From the foregoing it will be observed that as soon as the dictator is connected to the machine by operation of key 8 and its operation initiated by operation of key 9, it will continue to operate as long as his receiver is off the hook independent of any control exercised by the attendant.

What is claimed is:

10 In a telephone dictation recording system, a dictator's telephone, an attendant's station, an intercommunicating line therebetween, a line relay at the attendant's station responsive to removal of the receiver at the dictator's telephone, 15 signal means at the attendant's station responsive to operation of said line relay, a phonographic sound recording machine at the attendant's station comprising an impressionable record member, an electromagnetic recorder for impressing 20 sound waves thereon and motive means for progressively moving said record member with respect to said recorder, switching means manually controlled by the attendant for connecting said line to the said electromagnetic recorder 25 member, a second relay adapted when operated to initiate operation of said motive means, a start key manually controlled by the attendant for operating said second relay, locking circuit means responsive to the operation of said second relay for holding it operated under control of said line relay independent of said start key, and a 30 reproducer arm responsive to the impressions on said recording member for playing back to the dictator any desired portion of the sound recorded thereon, said reproducer arm being manually 35 controlled by the attendant.

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