

PUBLISHED
MAY 18, 1943.
BY A. P. G.

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TELEGRAPHY TRANSMITTER
Filed Nov. 15, 1940

Serial No.
365,744

Fig. 1

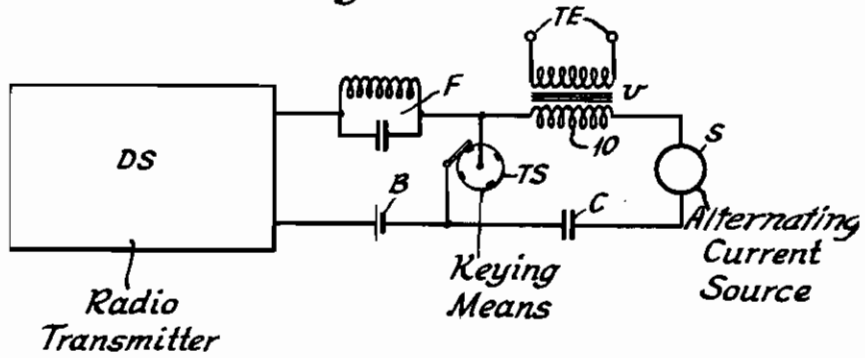
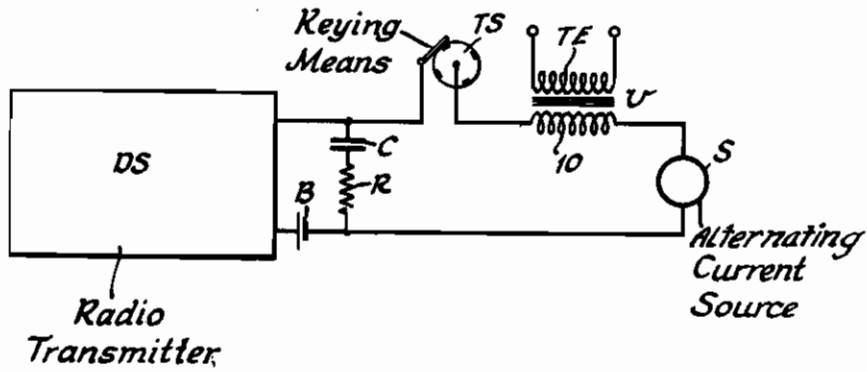


Fig. 2



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ALIEN PROPERTY CUSTODIAN

TELEGRAPHY TRANSMITTER

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Application filed November 15, 1940

In keying radio transmitters with telegraph devices check-up reception by radio is not always feasible. This, in the first place, is impossible when no receiver apparatus is available. Also, where the transmitter and the receiver are quite close together so that, for instance, they have a joint antenna and ground, or a joint source of current supply, a coupling may arise between transmitter and receiver of such a nature that the telegraphic signals will be vitiated or obliterated. The monitor record will become unclear or illegible. In all of these instances the check-up message must be made locally, in other words, the circuitous way through radio transmitter and receiver is not feasible.

The keying circuit of radio telegraphic transmitters is often designed for direct current and is so operated, for instance, that the keying contact of the telegraphic transmitter opens the closed circuit. Reception, however, is mostly by way of a tonal-frequency circuit.

Now, according to the invention, operation of these different circuits is made feasible in a simple way by causing a single telegraphic transmitter to key simultaneously several circuits in which currents of different kind are flowing.

In instances as hereinbefore mentioned, the various circuits are preferably connected in parallel in relation to the telegraphic transmitter, while the alternating current of one of the circuits is excluded by suitable stopper circuit means in the other circuit. The direct current is kept out of the alternating current circuit by a condenser included therein.

For the sake of simplification, under certain operating conditions, which shall be explained more fully further below, it is possible also to resort to a pure series arrangement of all circuit elements. The radio transmitter is then blocked off by means of a condenser for the tonal-frequency signals, the said condenser being connected in parallel relation to the output terminals.

Figs. 1 and 2 of the appended drawing illustrate exemplified embodiments of the invention which show further details of the scheme.

The keying circuit of the radio transmitter starts from battery B and runs through the telegraphic signal transmitter or keying means TS, stopper circuit F to the radio transmitter DS. This stopper circuit may be as shown a parallel circuit parallel resonant to the tonal frequency. The telegraphic device TS may consist, for instance, of a picture point scanner and transmitter drum. The tonal-frequency circuit starts at the source of tone current supply S and runs through condenser C, telegraphic transmitter TS, primary winding 10 of transformer U and back to the said source of supply S. When sending through the telegraphic instrument TS both circuits are keyed. The entrance of direct current into the tonal-frequency circuit is precluded by condenser C, while stopper or rejector circuit F precludes tonal frequency from the direct-current circuit. The telegraphic receiver is united with terminals TE.

In the case of the embodiment shown in Fig. 2, the assumption is made that the direct-current resistance of the primary 10 of transformer U and of the source of tonal frequency S is very low. In this case, both may be looped in the keying circuit of the radio transmitter without any appreciable drop or loss of direct current being incidentally occasioned. The direct-current impulses in the primary winding 10 of transformer U will not affect the monitor record. Condenser C short-circuits the input end of the radio transmitter DS for impulses of tonal frequency. A resistance R is provided for insuring current limitation. Also, in this circuit arrangement mutual disturbance or interference of the direct-current and tonal-frequency impulses is avoided.

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