

Jan. 22, 1957

M. J. PIFER

2,779,010

TERMINAL BOARD FOR ANTENNA LEAD

Filed June 10, 1953

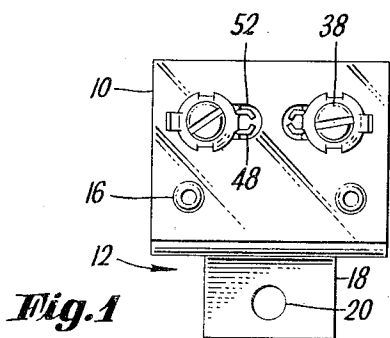


Fig. 1

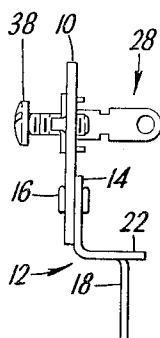


Fig. 2

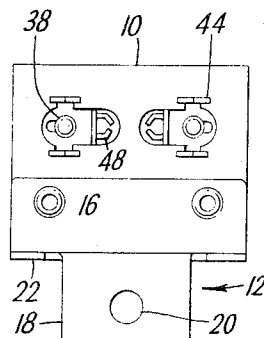


Fig. 3

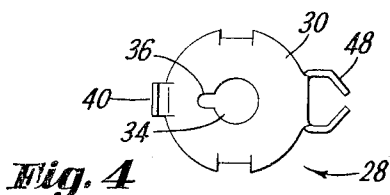


Fig. 4

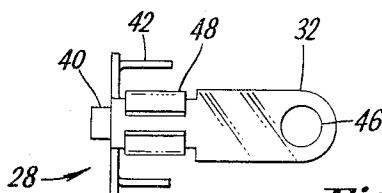


Fig. 5

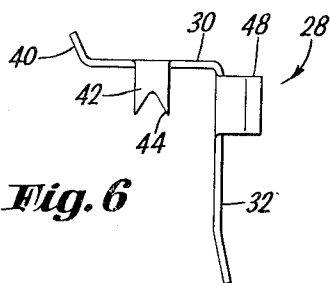


Fig. 6

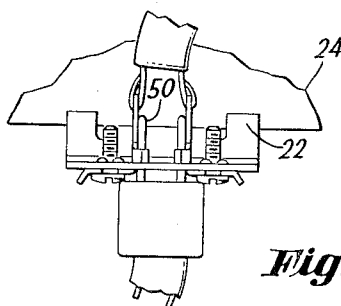


Fig. 7

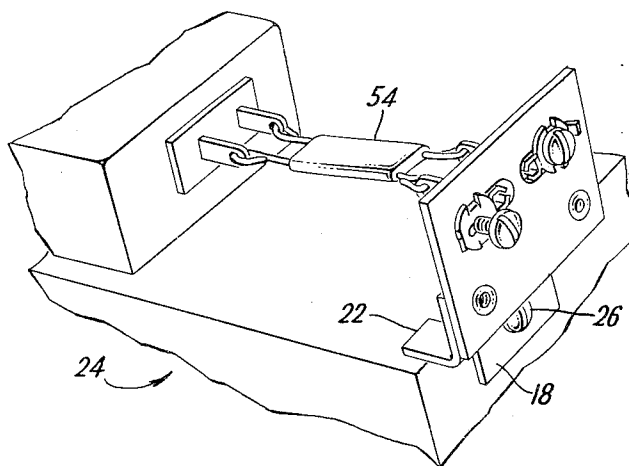


Fig. 8

INVENTOR
MARION J. PIFER

BY *Michael Hertz*
ATTORNEY

1

2,779,010

TERMINAL BOARD FOR ANTENNA LEAD

Marion J. Pifer, Williamsville, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts

Application June 10, 1953, Serial No. 360,746

7 Claims. (Cl. 339—198)

This invention relates to terminal boards.

In particular it relates to a board on the back of a radio or TV receiver to which an antenna lead may be attached.

It is an object of this invention to provide a simple terminal strip on which are arranged in juxtaposed relation two combined wire receiving terminals so that either an antenna lead with bared wire may be attached thereto or an antenna lead furnished with terminal pins may be plugged thereinto.

It is a still further object of the invention to provide for better transmission of signal from the antenna to the tuner of a receiver by spacing the plug-in connections on the terminal strip as well as other connections from the strip to the tuner such as to maintain the characteristic impedance of the incoming antenna lead-in, which may, for example, be a 300 ohm line.

These and other objects will be apparent after reading the following specification and claims in conjunction with the accompanying drawing in which:

Fig. 1 is a plan view of the terminal board.

Fig. 2 is a side elevation thereof, with a wire fastening screw partially withdrawn.

Fig. 3 is a bottom plan view of the terminal board.

Fig. 4 is a top plan view of one of my combined terminals without the screw.

Fig. 5 is a side view of the combined terminal without the screw.

Fig. 6 is a view similar to Fig. 5 but at right angles thereto.

Fig. 7 shows in fragmentary plan view how a plug equipped antenna may be plugged into the terminal board and

Fig. 8 is a perspective view showing how the terminal board of my invention may be associated with the chassis of a TV set.

Referring to the drawings in greater detail, 10 represents a wafer of any suitable insulating material, the wafer being mounted on a bracket such as a metal plate 12 having a portion 14 secured to the wafer by rivets 16 and an offset portion 18 centrally perforated at 20. The metal plate also has a pair of ears 22. In use the bracket may be applied to a chassis, as 24 in Figs. 7 and 8 with the ears 22 resting on the top of the chassis and the offset portion 18 clamped to a vertical wall of the chassis by means of a screw 26 passing through the hole 20 and threaded into the chassis wall. The ears together with the offset portion 18 afford a means to firmly locate the bracket in position relative to the chassis.

Mounted in the insulating wafer is a pair of terminals 28. Each terminal is made up of a bent sheet metal strip and comprises both screw thread fastening means and socket means for receiving wire terminals.

In general each terminal comprises two right angularly related portions 30 and 32. The plate portion 30 is generally circular in plan and has a central perforation 34 with keyhole slot 36 for the reception of a flat headed screw 38. Opposite sides of the perforation may either be bent up and down to form a screw thread

2

or the plate may be left flat, the sides of the perforation bending as required to form a screw thread upon threading a screw through the opening. The plate portion also has a lug 40 extending diagonally upward from the plate to assist in confining a wire around the shank of the screw when the screw is turned down to confine the wire against the plate. The plate also has two downwardly turned tangs 42 with tines 44 adapted to be passed through the wafer 10 and clinched against the back thereof as illustrated in Fig. 3.

The socket portion 32 comprises an elongated flat member with a perforation 46 at the free end of the flat member for receiving a wire and a pair of bent in side wings 48 which together with the flat portion of the member form the socket. Preferably the terminals 28 are made of resilient material so that when a terminal pin 50 of an antenna transmission line is inserted between the wings 48, the pin would be grasped firmly.

The wafer 10 is preformed with recesses 52 to receive the terminals, space being provided between the wings 48 and the walls of the recesses to enable expansion of the socket to take place on insertion of the antenna pins.

The spacing between the pin sockets of the terminal board is made to be that of the spacing of the leads in a transmission line so that no appreciable change in impedance of the transmission line from antenna to tuner would take place because of the interposition of the terminal board. So, too, the connection 54 between the terminal board and the tuner also comprises a transmission line having the same character as that leading to the terminal board.

Having thus described the invention, what is claimed as new is:

1. A terminal comprising two right angularly related metallic portions, one of the portions having a screw-receiving opening therethrough, the other of said portions on the side thereof which is outside of the angle formed between the two portions having a pin receiving socket, the axis of the socket being parallel to the axis of the opening in the first portion, and a prolongation on the portion having a pin receiving socket, said prolongation extending in the direction of the axis of the pin receiving socket and beyond the socket to form a terminal.

2. A terminal comprising two right angularly related metallic portions, one of the portions having a screw-receiving opening therethrough, the other of the portions, on the side thereof facing away from the angle formed between the two portions having a pair of wing members extending along the said other portion, the wing members being bent toward each other to form a pin receiving socket, the other of the portions extending beyond the wing members in the direction of the pin receiving socket, to form a terminal.

3. A terminal comprising two right angularly related metallic portions, one of the portions having a screw-receiving opening therethrough, and a pair of tangs extending at right angles to the plane of the portion for engagement with a supporting wafer, the other of the portions, on the side thereof facing away from the angle formed between the two portions, having a pair of wing members extending along the said other portion, the wing members being bent toward each other to form a pin receiving socket, the other of the portions continuing beyond the socket, in the direction of the axis of the socket, to provide a terminal.

4. A terminal comprising two right angularly related metallic portions, one of the portions having a screw-receiving opening therethrough, a lug adjacent to the wall of the opening extending angularly away from the plane of the said portion to assist in maintaining a wire in position around the screw, and a pair of tangs extending at right angles to the plane of the portion for en-

3

gement with a supporting wafer, the other of the portions, on the side thereof facing away from the angle formed between the two portions, having a pair of wing members extending along the said other portion, the wing members being bent toward each other to form a pin receiving socket, the other of the portions continuing beyond the socket, in the direction of the axis of the socket, to provide a terminal.

5. A terminal board comprising a wafer, a pair of terminals mounted on the wafer, each terminal comprising two right angularly related portions, with one of the portions lying flat on the wafer and the other extending downwardly therethrough at right angles to the wafer, a screw fastening means on the flat lying portion of the terminal immediately adjacent the bend of the right angle and a pin receiving socket on the downwardly extending portion of the terminal, the terminals being arranged on the wafer with the sockets closer to each other than the screw fastening means to enable the spacing of the sockets and the screw fastening means to closely approximate the spacing of the leads in an antenna lead-in line, the other of the portions extending beyond the socket in the direction of the axis of the socket to form a wire attaching means.

6. A terminal assembly comprising a wafer with at least one terminal mounted thereon, a bracket fastened to said wafer, said bracket having two parallel offset portions providing a web therebetween, one of them supporting the wafer and the other provided with means for securing the bracket to a chassis, the web portion hav-

4

ing an ear extending beyond the portion which is adapted to be secured to a chassis and said ear lying in the plane of the web portion.

7. A terminal assembly comprising a wafer with at least one terminal mounted thereon, a bracket fastened to said wafer, said bracket having two parallel offset portions providing a web therebetween, one of them supporting the wafer and the other provided with means for securing the bracket to a chassis, each of the ends of the web having an ear, thereby providing spaced apart ears, said ears extending beyond the portion which is adapted to be secured to a chassis and said ears lying in the plane of the web.

References Cited in the file of this patent

UNITED STATES PATENTS

1,536,149	Schmid	May 5, 1925
2,188,530	Del Camp	Jan. 30, 1940
2,293,596	Del Camp	Aug. 18, 1942
2,301,288	Knauf	Nov. 10, 1942
2,432,966	Del Camp	Dec. 16, 1947
2,453,826	Adams	Nov. 16, 1948
2,551,423	De Vito	May 1, 1951
2,566,425	Paine et al.	Sept. 4, 1951
2,614,471	Markowitz	Oct. 21, 1952
2,677,116	Ritter	Apr. 27, 1954
2,701,870	Obszarny	Feb. 8, 1955
2,745,080	Offerman	May 8, 1956