

SPECIFICATION

A device for improving the image on a television screen

- 5 This invention relates to a device for improving the image on a television screen. 5
- A device for improving the image on a television screen, which comprises a plurality of plastics tubes interconnected by electrical conductors, each of the tubes containing thorium nitrate, titanium dioxide, germanium oxide and borax and each being surrounded by a composition comprising sodium chloride and sugar, wherein the electrical conductors contact the contents of the tubes and wherein the plurality of tubes is capable of being connected to an aerial socket of a television set. 10
- An embodiment of the invention is shown in the accompanying drawings, in which:
- Figure 1* is a perspective view of the device according to the invention;
- Figure 2* is a plan view showing the upper portion of the device of Fig. 1;
- 15 *Figure 3* is an underplan view showing the lower portion of the device of Fig. 1; 15
- Figure 4* is a circuit diagram of the device; and
- Figure 5* shows one of the tubes forming part of the device shown in the preceding Figures.
- The illustrated device comprises a box 1 made of a rigid plastics material. The box is divided internally into two substantially equal portions by a plate 2. The upper portion 3 has a pair of terminals 4 at one end thereof and another pair of terminals 5 at the opposite end thereof. The lower portion 6 has at one end a pair of terminals 7 to which electrical conductors from the interior of the device extend to the exterior thereof. The purpose of the terminals 4, 5 and 7 is discussed further below. 20
- The upper portion of the device contains five tubes 8, 9, 10, 11 and 12. The tubes 8, 9 and 10 are larger than the tubes 11 and 12. The lower portion of the device contains tubes 13, 14, 15, 16, 17, 18 and 19, the tubes 13, 14 and 15 being larger than the tubes 16 to 19. Tube 12 is not visible in Fig. 2, being concealed behind tube 11, and similarly tube 17 in the lower portion of the device is not visible in Fig. 3, being concealed by tube 16. 25
- The various tubes are interconnected by electrical conductors, except for tube 19 which is not so connected. Thus, a first pair of conductors 20 extend from the terminals 5 into the tube 8. The conductors terminate in material which is contained in the tube 8. The nature of that material is discussed further below. The conductors 20 are not connected to one another within the tube 8. Conductors 21 and 22 extend from within the tube 8 to the tubes 12 and 9 respectively. These conductors also terminate within the tube 8 where they are not connected to one another, nor are they connected to the conductor 20. The conductor 21 extends to the outside of the tube 12, and coils around the outside of that tube before entering the tube through the side wall thereof and terminating within the tube. The conductor 22 enters the end of the tube 9 and terminates within that tube. In a similar fashion, the tubes 10, 11 and 12 are interconnected by conductors 23, 24 and 25, each of these conductors having one end which enters an end of one of the tubes and an opposite end which enters a side wall of a tube after coiling therearound. In addition, the tubes 10 and 11 are interconnected by a conductor 26. The interconnection of the terminal 7 and the tubes 13 to 18 is effected in a manner similar to that described above, and is shown in the right-hand portion of Fig. 4. That figure is believed to be self-explanatory. The interconnections are made by conductors 27 to 33. 30
- Fig. 5 shows one of the tubes, all of the tubes being of the same general construction and differing only in their precise shape and their size. The tube comprises an outer plastics casing 40 and an inner plastics casing 41 which is spaced from the casing 40. Within the inner tube 40 at each end thereof is a region 43 which contains a composition A set out below. The remaining region 44 is occupied by a material having a composition C within which are provided thin graphite rods 45. These graphite rods may conveniently be of the kind used in propelling pencils. The region between the tubes 40 and 41 is filled with a material having a composition B. 35
- Fig. 5 also shows the conductors which enter the tube. By way of illustration, the conductors of Fig. 5 have been given the reference numerals which apply when the tube concerned is the tube 10. 40
- If desired the outer tube 40 may be omitted. The compositions referred to above are as follows (all percentages being by weight): 45
- 55 50

	Composition A	Thorium nitrate	30%	
		Titanium dioxide	23%	
		Germanium oxide	40%	
5		Borax	5%	5
		Kaolin	2%	
	Composition B	Sodium chloride	50%	
		Sugar	20%	
		Borax	30%	
10	Composition C	Sodium chloride	5%	10
		Borax	10%	
		Sugar	10%	
		Coconut "coal"	20%	
		Graphite powder	30%	
15		Silicic acid	5%	15
		Iron dust	20%	

The coconut "coal" referred to above is obtained by subjecting coconut shells to a high temperature.

20 The space within the box 1 outside the tubes is filled with material having the composition B. 20

The device described above is used in the following manner. The terminal 7 is connected to the aerial socket of a television, the lead used for this purpose being as short as possible, and either the terminal 4 or the terminal 5 is connected to an external or internal aerial. In fact, where the signal being received is a VHF signal, as opposed to a UHF signal, the connection to 25 the external aerial may be omitted altogether. Using the device in the manner just described has 25 the result that the picture on the television set is improved in regards to its clarity and its vividness.

- CLAIMS
- 30 1. A device for improving the image on a television screen, which comprises a plurality of 30 plastics tubes interconnected by electrical conductors, each of the tubes containing thorium nitrate, titanium dioxide, germanium oxide and borax and each being surrounded by a composition comprising sodium chloride and sugar, wherein the electrical conductors contact the contents of the tubes and wherein the plurality of the tubes is capable of being connected to 35 an aerial socket of a television set. 35
2. A device according to claim 1, wherein each tube further contains kaolin and iron dust.
3. A device according to claim 2, wherein each tube further contains sodium chloride, sugar, coconut coal, graphite powder and silicic acid.
4. A device according to claim 3, wherein the contents of each tube are segregated such 40 that each tube has a region at each of its ends containing a first mixture comprising thorium 40 nitrate, titanium dioxide, germanium oxide, borax and kaolin and has a central region containing a second mixture comprising sodium chloride, borax, sugar, coconut coal, graphite powder, silicic acid and iron dust.
5. A device according to claim 4, wherein the said first mixture comprises 30% thorium 45 nitrate, 23% titanium dioxide, 40% germanium oxide, 5% borax and 2% kaolin, all per- 45 centages being by weight.
6. A device according to claim 4 or 5, wherein the second mixture comprises 5% sodium chloride, 10% borax, 10% sugar, 20% coconut coal, 30% graphite powder, 5% silicic acid, and 20% iron dust, all percentages being by weight.
- 50 7. A device according to any preceding claims, wherein the said composition further 50 comprises borax.
8. A device according to claim 7, wherein the said composition comprises 50% sodium chloride, 20% sugar, and 30% borax, all percentages being by weight.
9. A device according to any preceding claim, wherein each plastics tube has an inner 55 casing and an outer casing spaced from one another. 55
10. A device according to claim 9, wherein the space between the inner and outer casings is filled with the said composition.
11. A device according to any preceding claim which is further capable of being connected to an external aerial.
- 60 12. A device for improving the image on a television screen, substantially as herein 60 described with reference to the accompanying drawings.

5	Composition A	Thorium nitrate	30%	5
		Titanium dioxide	23%	
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- 20 The space within the box 1 outside the tubes is filled with material having the composition B. 20
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