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SOUND RECORD MATERIAL
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Fig. 1

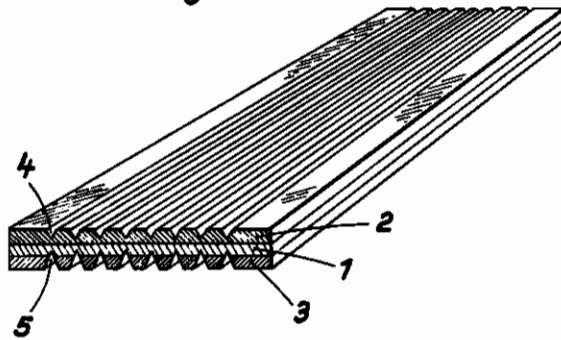
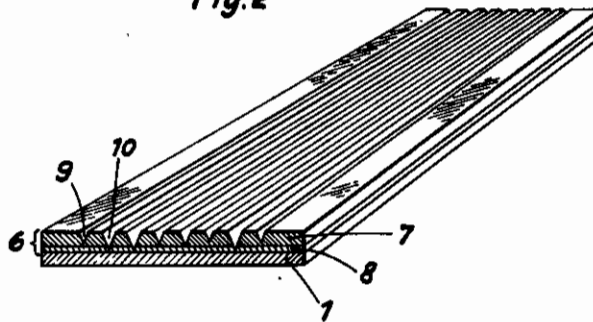


Fig. 2



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SOUND RECORD MATERIAL

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The invention relates to a material serving for the mechanical recording of sounds and consisting of a carrier layer provided on one or both sides with a sound recording layer.

The known bands for mechanical sound recordings consist of a colorless carrier layer for example of normal film material which is provided on one or both sides with a sound recording layer, also colorless and consisting for example of gelatine or the like. On cutting the sound grooves in such a sound recording material, the depth of the cut is very difficult to observe and it can easily happen that in consequence of an erroneous adjustment of the recording needle or for some other reason the sound grooves are cut not only in the sound recording layer but also in the carrier layer underneath, which is undesirable for numerous reasons.

One of the principal purposes of the invention is to obviate this defect. This is attained by the carrier layer and the sound recording layer or layers being colored differently. By the color of the shaving produced in the cutting of the sound grooves, it is then easy to see whether the sound track cut is of the regulation depth or whether this depth is too great, which can be recognized by the shaving showing the color of the carrier layer. Experience has shown that even the slightest penetration of the needle in the carrier layer is sufficient to materially alter the color of the shaving.

The sound recording material can for example be made by the sound record layer consisting of gelatine or the like being colorless in the usual way, whilst the carrier layer underneath is colored blue, red, green or otherwise. If the sound grooves are cut to regulation depth, then there is produced an entirely colorless shaving, whilst if the depth of cutting is too great so that the sound groove is also cut in the carrier layer, the shaving becomes at once colored according to the color of the carrier layer.

In certain cases, it is advisable to color adjacent layers with complementary colors so that when the depth of cutting of the sound groove is too great, the shaving is given two diametrically opposite colors. Using miscible colours for the adjacent layers, the depth of cut at the time can be easily seen from the mixed color seen in transparency.

The invention furthermore provides for subdividing the individual sound recording layer into differently colored layers. This has the advantage that the shaving even before reaching a depth of cut at which the carrier layer is made to suffer, assumes a different color, thus giving a warning against cutting the sound groove still deeper.

A sound recording material according to the

invention is shown by two examples in the annexed drawings.

Figure 1 shows a sound record band of a central carrier layer 1 on both sides of which is applied a sound recording layer 2 or 3. The carrier layer 1 is of a different color to the sound recording layers 2 and 3. The sound recording layers 2 and 3 can be, for example, colorless, whilst the carrier layer is colored for example blue, green or red. All three layers can, however, be made colored and a different color is given to the separate layers thus, for example, the color red to the layer 1, and the color green to the layers 2 and 3; naturally, the color of the layers 2 and 3 may also differ with each.

If in such a sound record band sound grooves or tracks 4 are cut to the prescribed depth, that is, in such manner that the sound grooves are entirely in the sound recording layer, then the shaving taken out has only the color of the sound recording layer. If the cutting of the sound tracks is, on the contrary, too deep, as is shown by way of example at 5, so that the sound track lies not only in the sound recording layer but also extends into the carrier layer, then the shaving taken off assumes the color of the carrier layer and consequently indicates automatically the faulty adjustment of the depth of cut.

In particular with bands with a sound recording layer applied on one side of the carrier layer, on coloring the two layers with miscible colors, for example a blue and a yellow which together give green, by viewing the mixed color the depth of cut of the sound tracks may be easily found.

With the sound record band of Figure 2, the sound recording layer applied on to the carrier layer 1 is subdivided into two layers 7 and 8 having different colors from each other; the layer 8 is here preferably comparatively thin. If in such a band sound grooves are cut having the regulation depth, then these grooves are entirely in the layer 7, so that the shaving has only the color of this layer. If for any reasons the depth of cut increases so that there is a danger of the sound grooves reaching the carrier layer 1, the shaving assumes also the color of the layer 8 and thus shows the danger which threatens the carrier layer. A regulation sound track is shown at 9; the sound track shown at 10 is also of regulation depth as it is entirely in the sound recording layer 6. It projects, however, into the layer 8 so that the shaving is of a different color to the shaving of the groove 9. This change of color is a signal that the depth of cut must not be made deeper.

The invention is naturally not restricted to the examples described and shown but numerous modifications may be made without departing from the invention.

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