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(54) Method for composing a sound-proofing wall, partly consisting of natural growing material.

(57) A method for composing a sound-proofing wall, partly consisting of natural growing material (7), comprising stacking bags (1) on top of each other, said bags (1) being manufactured of weather resistant fibers so as from aramide, said bags (1) being filled with a mixture of material which can serve as growing medium for vegetation (7), liquid being sprayed on said bags, in which liquid spores of moss and/or seeds of other plants are present.

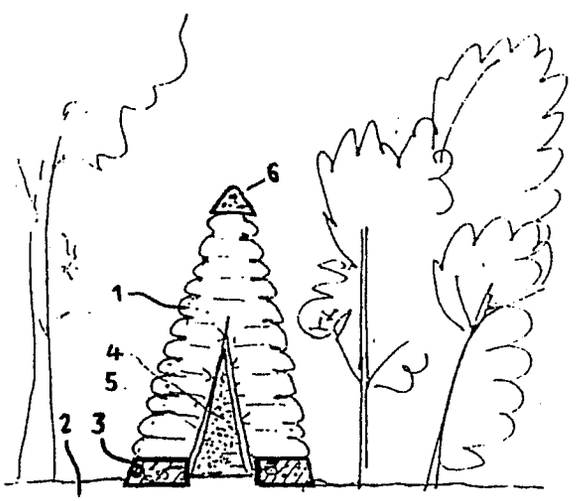

FIG. 2

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Method for composing a sound-proofing wall, partly consisting of natural growing material.

The invention relates to a method for composing a sound-proofing wall, partly consisting of natural growing material.

Such a method is known from the European patent application No. 0 128 245. In case of this known method, branches such as in particular of willows, are planted in two rows into soil and between both rows a solid panel is mounted in order to obtain a closed wall immediately.

In composing such a sound-proofing wall a groove should thus be digged into the soil, supplied branches have to be planted in it and the groove has to be filled in again, while both rows of branches have to be interconnected through holes which have to be made into the panels.

Thus many activities have to be performed at the place where the wall has to be erected. As in many cases this place is located along a motorway, the performance of all these activities often poses problems.

Though, as is known, willow branches grow particularly fast and easy, the composition of the soil may pose problems under specific conditions, so that in particular immediately after planting the branches much attention should be paid to these.

Now the invention aims to provide a method by which these disadvantages are avoided and to that end provides that the wall is composed by stacking bags on top of each other, said bags being manufactured of weather resistent fibres, being somewhat permeable and being filled with a mixture of material, which can serve as growing medium for vegetation.

In this way substantially a sound-proofing bank with a very steep slope is obtained, so that the wall occupies only very little space also in case of a considerable height of it.

When applying the method according to the invention, the fibres of the bags preferably will have a natural colour. This prevents that the wall, as long as there is no or little vegetation on it, will have an unesthetic appearance.

In order to obtain quickly some vegetation on the wall, preferably one will proceed in such a way, that on the bags a liquid is sprayed in which spores of moss and/or seeds of other plants are present.

It has appeared that in this way in a short period a vegetation can be obtained covering the complete surface of the bags.

A substantial advantage of the method according to the invention is residing in that in most cases the wall will not require a foundation, and accordingly the bags may be stacked directly on the soil. Of course use may still be made of a panel, such as a concrete slab, for a high thus heavy wall, in order to distribute the weight of the wall evenly over the soil.

In order to keep the bags well in place a strengthening may be applied to the upper bag or bags, such as in the shape of a concrete strip.

For a relatively high, thus at the base wide wall, it may be provided, that in the interior of the wall a filling body is applied consisting of sand or a similar material.

As fibres for the bags in particular use will be made of aramide fibres, as these have a very long service life.

The invention also relates to the sound-proofing wall obtained by application of the method described above, said wall being composed of bags stacked on top of each other and being filled with a mixture of material which may serve as growing medium for vegetation.

Now the invention will be elucidated further by means of an embodiment shown in the drawing, in which:

Fig. 1 shows a side-view of a wall according to the invention; and

Fig. 2 shows a cross-section over the wall of Fig. 1.

The sound-proofing wall shown in the drawing consists in particular of bags 1, which are stacked on the ground 2, with interpositioning of concrete slabs 3, if any, providing a proper distribution of the weight of the bags over the ground 2.

The wall shown in the drawings has a substantial height and thus also a substantial total width. In connection therewith the bags 1 are stacked on top of each other in such a way that from the concrete slabs 3 upwardly a triangular space 4 will remain free between the bags 1, said free space for example might be filled with sand 5. In this way a saving is made on bags, which would not have a function in the interior of the wall anyhow.

The top bag is covered with a concrete strip 6, so that the upper bags are firmly pressed and can not easily slide away, while also a direct impinging of rainwater on the surface of the upper bag is prevented.

As already stated above a liquid may be sprayed over the wall immediately after its completion, comprising spores of moss, so that already after a short period a moss vegetation 7 will be present all over the wall. In course of time also seeds of other flowers and plants may settle down in the wall so that a varied vegetation 8 will be obtained.

Claims

1. Method for composing a sound-proofing wall, partly consisting of natural growing material, characterized in
that the wall is composed by stacking bags(1) on top of each other, said bags being manufactured of weather resistent fibres, being somewhat permeable and being filled with a mixture of materials, which can serve as growing medium for vegetation (7,8).

2. Sound-proofing wall according to claim 1, characterized in
that the fibres of the bags (1) preferably will have a natural colour.

3. Sound-proofing wall according to claim 1 or 2,
characterized in
that on the bags (1) a liquid is sprayed in which spores of moss and/or seeds of other plants are present.

4. Sound-proofing wall according to one of the preceding claims,
characterized in
that a strengthening may be applied to the upper bag or bags (1), such as in the shape of a concrete strip (6).

5. Sound-proofing wall according to one of the preceding claims,
characterized in
that in the interior of the wall a filling body (5) is applied consisting of sand or a similar material.

6. Sound-proofing wall according to one of the preceding claims,
characterized in
that as fibres for the bags (1) in particular use will be made of aramide fibres.

7. Sound-proofing wall obtained by application of the method according to one of the preceding claims,
characterized in
that said wall is composed of bags (6) stacked on top of each other and being filled with a mixture of material which may serve as growing medium for vegetation (7,8).

8. Sound-proofing wall according to claim 7, characterized in
that between the bags (1) stacked upon each other and the ground (2) on which the wall is erected a foundation slab (3) is provided.

9. Sound-proofing wall according to claim 7 or 8,
characterized in
that on the upper bag or bags (1) a strengthening is applied as in the shape of a concrete strip (6).

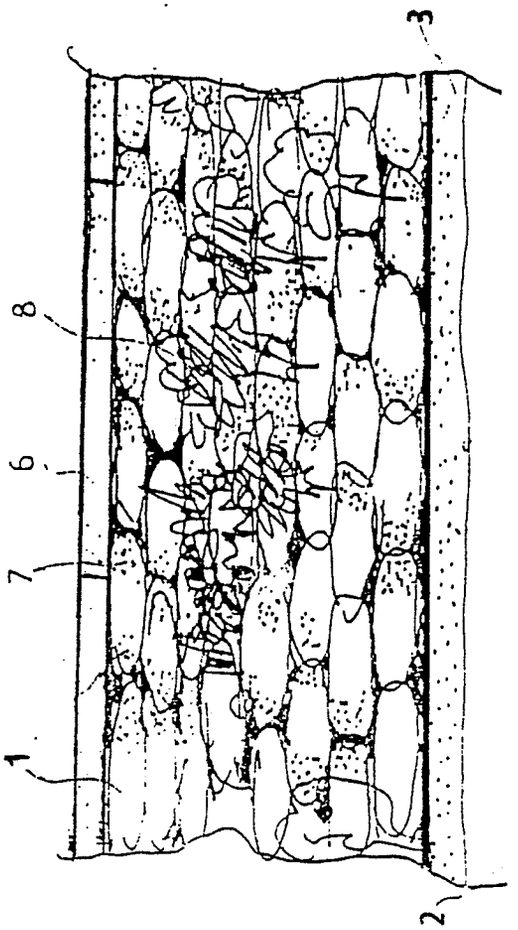

FIG. 1

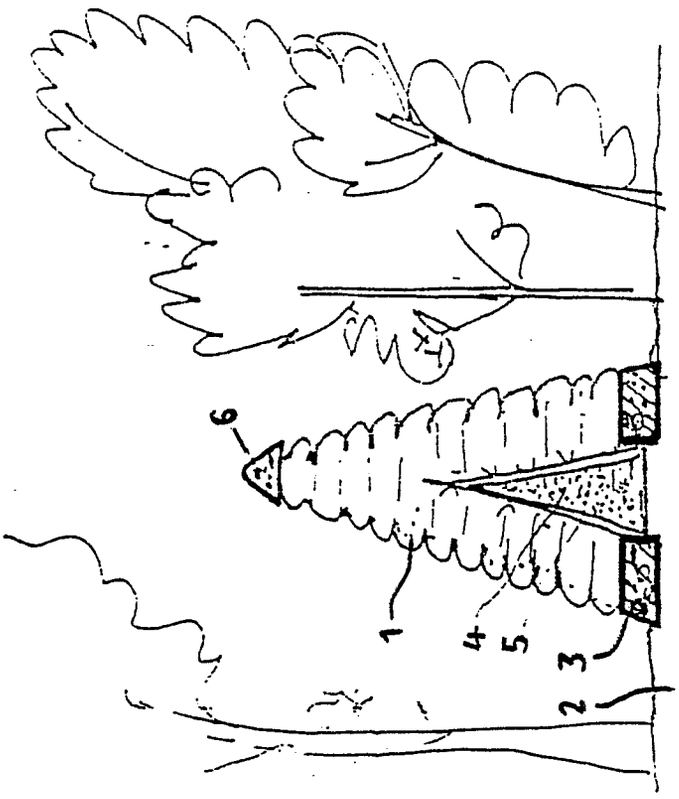

FIG. 2

BEHEERMAATSCHAPPIJ OP DE KAAI B.V., SLIEDRECHT.