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# (54) Wall protection for temporarily protecting an exterior wall

(57) The present invention relates to a wall protection for protecting a part of an exterior wall (2) being built next to an interior wall (1) during temporary interruption of the building of the exterior wall (2). The wall protection comprises a cover (4) having an upper edge (5) and attachment means (6) arranged along the upper edge (5) of the cover (4) when in use. The attachment means (6) is adapted to be removably attached to an outer surface (7) of the interior wall (1) above the exterior wall (2). The

wall protection further comprises stretching means (8) adapted to form a connection between at least a lower edge of the cover (4) and a plurality of fixed points in the vicinity of the exterior wall (2), so that the cover (4) is stretched over the part of the exterior wall (2) to be protected. In presently preferred embodiments of the invention, the attachment means (6) comprises a linear track, and the cover (4) comprises a holding member (10) adapted to be slidably inserted into the track (6).

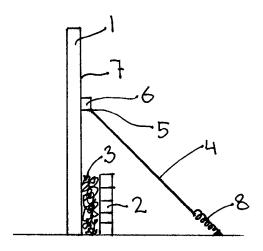


Fig. 2

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#### **FIELD OF THE INVENTION**

**[0001]** The present invention relates to wall protections for protecting a part of an exterior wall being built next to an interior wall, typically of a building, during temporary interruption of the building of the exterior wall.

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#### **BACKGROUND OF THE INVENTION**

[0002] Houses, such as large buildings, are often built by first erecting prefabricated interior walls and subsequently building exterior brick walls next thereto. Insulating material is arranged between the interior and exterior walls. The building of the exterior walls typically stretches over several days, and when the work is to be temporarily interrupted, the unfinished part of the exterior walls and the insulation is covered e.g. by a tarpaulin held in place by stones, wooden boards or the like to protect the unfinished wall from moisture, such as rain or snow. However, even when great care is taken, it is difficult to prevent moisture from penetrating into the insulation, and resulting entrapped moisture is a potential source of future hyphomycete. Furthermore, it can time consuming and difficult to arrange the tarpaulin, especially in windy weather.

**[0003]** Hence, an improved wall protection would be advantageous, and in particular a more efficient wall protection would be advantageous.

# **OBJECT OF THE INVENTION**

**[0004]** It is an object of the present invention to provide a wall protection for protecting an exterior wall as described above from moisture when the building work is temporarily interrupted, which wall protection is easier to arrange even in windy weather than what is known from prior art.

**[0005]** It is another object of the present invention to provide a wall protection that more efficiently protects a wall under construction from seeping moisture during temporary interruption of the building work.

**[0006]** It is an object of embodiments of the present invention to provide a wall protection that can easily be packed away for storage when not in use.

**[0007]** It is a further object of the present invention to provide an alternative to the prior art.

#### **SUMMARY OF THE INVENTION**

**[0008]** Thus, the above described object and several other objects are intended to be obtained in a first aspect of the invention by providing a wall protection for protecting a part of an exterior wall being built next to an interior wall during temporary interruption of the building of the exterior wall, the wall protection comprising:

- a cover having an upper edge,
- attachment means arranged along the upper edge of the cover when in use, the attachment means being adapted to be removably attached to an outer surface of the interior wall above the exterior wall,
- stretching means adapted to form a connection between at least a lower edge of the cover and a plurality of fixed points in the vicinity of the exterior wall, so that the cover is stretched over the part of the exterior wall to be protected.

[0009] The attachment means may comprise a substantially linear track so that it can be attached flush with the interior wall to which it is to be attached. Such a linear track may e.g. be made from sectional iron or an extruded plastic moulding. It should preferably have a shape that counteracts penetration of rain or snow to the underside of the cover. The linear track could e.g. have a cross section as will be shown in the figures, but any shape fulfilling the objective of the invention is intended to be covered by the scope of the present invention. The track can e.g. be temporarily fastened to the interior wall by use of screws so that it can carry the load of the cover itself as well as any wind or snow load thereon. The fastening method used as well as the geometry of the track should preferably be so that as little moisture as possible seeps into the space between the interior and the exterior walls, including into insulation material arranged there between. Hereby the risk of future problems with moisture and/or hyphomycete can be minimised.

**[0010]** The cover may comprise a holding member adapted to be slidably inserted into the track. Hereby the track can be fastened to the interior wall without having to handle the cover at the same time. It may also be found easier to fold the cover for storage if it is separate from the track. Furthermore, the track can be longer or shorter than the width of the cover so that either more covers are attached to a track or so that one cover is attached to a plurality of tracks attached to the interior wall in a line. The actual design may be a personal choice e.g. depending on the number of people being available for the fastening of the wall protection.

**[0011]** A holding member to be slidably inserted into a track may e.g. be a rod or a thickening of the cover along the upper edge.

[0012] An alternative to the above described embodiment with a track and holding means adapted to be assembled could be to have the track permanently fastened to the cover so that no assembly is necessary during use. [0013] The stretching means may be selected from: hooks, straps, flexible lines, or springs. The stretching means can also be one or more long lines that are each attached to a plurality of fixed points in the vicinity of the cover. The stretching means can e.g. be fastened to the ground by use of pegs or to scaffolding used by the builders erecting the exterior wall.

[0014] The length of the upper edge of the cover may

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be 0,5-3 m, such as 0,5-1 m, 1-2 m or 2-3 m. An actual choice of dimensions may e.g. depend on the material used for the cover and thereby how easy it is to handle. **[0015]** The cover may be a flexible plastic sheet material. Such a cover will be relatively easy to pack for storage when not in use. If desired, it may furthermore be possible to apply printing thereto, such as company name, logo or other advertising.

[0016] In an alternative embodiment, the cover may be a thin metal plate. Such a plate may be sturdier for some applications. The thin metal plate may have a thickness of less than 1 cm, such as less then 0,5 cm, such as less than 0,2 cm, such as less than 0,1 cm, such as less than 0,05 cm, such as less than 0,02 cm. An actual choice of dimensions may e.g. depend on the material used for the cover and thereby how easy it is to handle. [0017] A second aspect of the invention relates to a method of using a wall protection according to any of the preceding claims for temporarily covering a part of an exterior wall being built next to an interior wall during temporary interruption of the building of the exterior wall, the method comprising the steps of:

- attaching the attachment means to an outer surface of the interior wall above the exterior wall,
- connecting the stretching means to a plurality of fixed points in the vicinity of the exterior wall, so that the cover is stretched over the part of the exterior wall to be protected.

**[0018]** The first and second aspect of the present invention may each be combined with any of the other aspects. These and other aspects of the invention will be apparent from and elucidated with reference to the embodiments described hereinafter.

# BRIEF DESCRIPTION OF THE FIGURES

**[0019]** The wall protection according to the invention will now be described in more detail with regard to the accompanying figures. The figures show one way of implementing the present invention and is not to be construed as being limiting to other possible embodiments falling within the scope of the attached claim set.

Figure 1 shows schematically a house under construction, the house comprising interior walls and exterior walls; such a house construction is known in the art.

Figure 2 shows schematically a cross sectional side view of a wall protection according to the present invention.

Figure 3 shows schematically a front view of a wall protection according to the present invention.

Figure 4 shows schematically a three-dimensional

view of attachment means comprising a linear track with the upper edge of the cover inserted therein.

#### **DETAILED DESCRIPTION OF AN EMBODIMENT**

[0020] Houses are often built by first erecting prefabricated interior walls 1 and subsequently building exterior walls next thereto, the exterior walls 2 typically being brick walls. An example of such a house being built is shown schematically in figure 1. Insulating material 3 is arranged between the interior and exterior walls 1,2 as the building of the exterior wall 2 progresses. When the work is to be temporarily interrupted, such as during nights and weekends, the unfinished part of the exterior walls 2 and the insulation 3 is typically covered e.g. by a tarpaulin held in place by stones, wooden boards or the like to protect the unfinished wall from moisture, such as rain or snow. However, as described above such type of protection is often not efficient enough to prevent undesired seeping of moisture into the construction. It may also be difficult to handle, especially in windy weather.

[0021] Figure 2 and 3 show schematically a cross sectional side view and a front view, respectively, of a wall protection according to the present invention. The wall protection comprises a cover 4 having an upper edge 5 and attachment means 6 arranged along the upper edge 5 of the cover 4. The attachment means 6 are adapted to be removably attached to an outer surface 7 of the interior wall 1 above the exterior wall, 2 e.g. by screws (not shown). The wall protection further comprises stretching means 8 adapted to form a connection between the cover 4 and a plurality of fixed points in the vicinity of the exterior wall 2, so that the cover 4 is stretched over the part of the exterior wall 2 to be protected. The stretching means 8 may e.g. be hooks, straps, flexible lines, or springs that are either permanently or temporarily fastened to the cover 4 at least at a lower edge of the cover. The cover 4 can e.g. comprise holes 9 that are preferably reinforced, such as by metal rings, so that flexible lines or springs can be inserted thereto and fastened to e.g. the ground or to scaffolding. [0022] In the embodiment shown in figures 2 and 3, the attachment means 6 comprises a linear track that is fastened to the outer surface 7 of the interior wall 1 before the cover 4 is arranged over the part of the exterior wall 2 to be protected. Such a substantially linear track 6 may be permanently attached to an upper edge 5 of the cover 4. However, in a presently preferred embodiment of the invention, the track 6 is a separate unit, and the cover 4 comprises a holding member 10 adapted to be slidably inserted into the linear track 6 as shown schematically in figure 4. Such a holding member 10 may e.g. be a rod or a thickening of the cover 4 along the upper edge 5. The track 6 in figure 4 comprises holes so that it can be fastened to the interior wall 1 by screws (not shown). However, it could also be fastened by other means, such as by gluing; preferably provided that it could easily be removed again. Since the cover 4 is attached to the outer

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surface 7 of the interior wall 1, the marks from the temporary fastening is subsequently covered by the exterior wall 2 during a later stage in the building process.

**[0023]** The cover 4 can e.g. be a flexible plastic sheet material so that it can have printing 12 thereon, such as a logo, advertising or other types of information. If the cover 4 is with advertising type of printing thereon, it may be most appropriate to have a separate track 6 and a cover 4 with holding means 10 to be slidably attached thereto. Hereby the advertising can be varied while the same track 6 is reused.

**[0024]** The length of the exterior wall 2 to be protected may be so large that a plurality of wall protections is to be arranged next to each other. In this case, the wall protections should preferably be arranged with an overlap to prevent moisture seeping in between the different covers 4.

[0025] Although the present invention has been described in connection with the specified embodiments, it should not be construed as being in any way limited to the presented examples. The scope of the present invention is set out by the accompanying claim set. In the context of the claims, the terms "comprising" or "comprises" do not exclude other possible elements or steps. Also, the mentioning of references such as "a" or "an" etc. should not be construed as excluding a plurality. The use of reference signs in the claims with respect to elements indicated in the figures shall also not be construed as limiting the scope of the invention. Furthermore, individual features mentioned in different claims, may possibly be advantageously combined, and the mentioning of these features in different claims does not exclude that a combination of features is not possible and advantageous.

### Claims

- 1. Wall protection for protecting a part of an exterior wall (2) being built next to an interior wall (1) during temporary interruption of the building of the exterior wall (2), the wall protection comprising:
  - a cover (4) having an upper edge (5),
  - attachment means arranged along the upper edge of the cover when in use, the attachment means (6) being adapted to be removably attached to an outer surface (7) of the interior wall (1) above the exterior wall (2), and
  - stretching means (8) adapted to form a connection between at least a lower edge of the cover (4) and a plurality of fixed points in the vicinity of the exterior wall (2), so that the cover (4) is stretched over the part of the exterior wall (2) to be protected.
- 2. Wall protection according to claim 1, wherein the attachment means (6) comprises a linear track.

- 3. Wall protection according to claim 2, wherein the cover (4) comprises a holding member (10) adapted to be slidably inserted into the track (6).
- **4.** Wall protection according to claim 3, wherein the holding member (10) is a rod or a thickening of the cover (4) along the upper edge (5).
- **5.** Wall protection according to any of the preceding claims, wherein the stretching means (8) are selected from: hooks, straps, flexible lines, or springs.
- **6.** Wall protection according to any of the preceding claims, wherein the length of the upper edge (5) of the cover (4) is 0.5-3 m, such as 0.5-1 m, 1-2 m or 2-3 m.
- Wall protection according to any of the preceding claims, wherein the cover (4) is a flexible plastic sheet material.
- **8.** Wall protection according to any of claims 1-6, wherein the cover (4) is a thin metal plate.
- 9. Method of using a wall protection according to any of the preceding claims for temporarily covering a part of an exterior wall (2) being built next to an interior wall (1) during temporary interruption of the building of the exterior wall (2), the method comprising the steps of:
  - attaching the attachment means (6) to an outer surface (7) of the interior wall (1) above the exterior wall (2),
  - connecting the stretching means (8) to a plurality of fixed points in the vicinity of the exterior wall (2), so that the cover (4) is stretched over the part of the exterior wall (2) to be protected.

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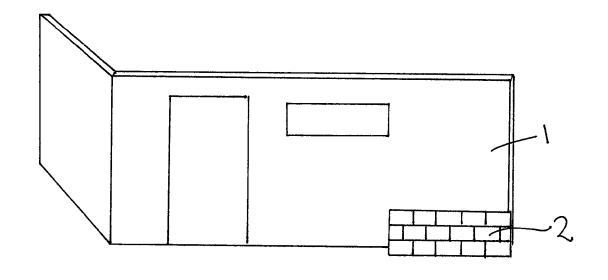
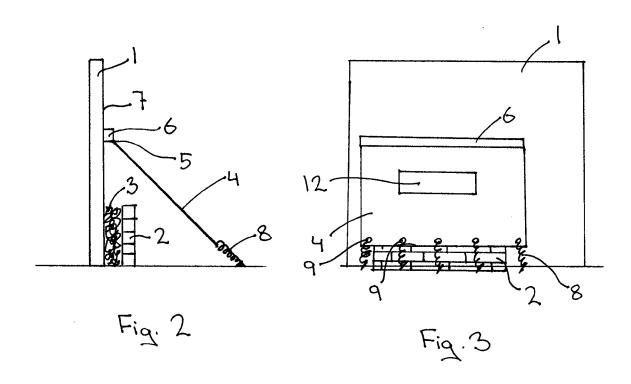


Fig. 1, known art



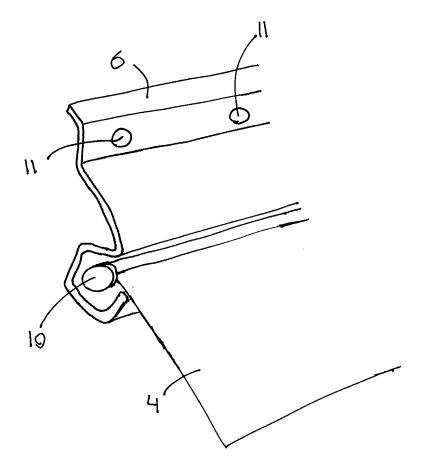


Fig. 4



# **EUROPEAN SEARCH REPORT**

Application Number

EP 11 19 1371

	DOCUMENTS CONSID	ERED TO BE	RELEVANT			
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Х	US 2002/007924 A1 ( 24 January 2002 (20		NDEE CHARLES C [US])			INV. E04G21/28
Υ	* the whole documen		1-9			
X	US 6 176 050 B1 (G0 23 January 2001 (20	WER TED [U	5])	1-9		
Y	* column 7, line 66 figures *	- column	1-9			
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Y	EP 0 215 180 A2 (ST 25 March 1987 (1987 * page 9, paragraph 2; figures *	FFENS RAINER) 03-25) 2 - page 15, paragraph		1-9		
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						E04G
	The present search report has I					
	Place of search		Date of completion of the search			Examiner
	Munich	2/	February 2012			arl, Willibald
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# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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27-02-2012

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