



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
22.10.2003 Bulletin 2003/43

(51) Int Cl.7: **E02B 3/10, E02D 29/02**

(21) Application number: **02100385.0**

(22) Date of filing: **17.04.2002**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

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(54) **Method for erecting a temporary flood wall construction**

(57) The invention relates to a method for erecting a temporary flood wall construction (3) along a water-side comprising at least one gabion cage (4), whereby the gabion cage is securely fixed to the bottom, that at least the bottom panel and the rear panel of the gabion

cage are provided with an impermeable lining (8) and that the front panel (10) of the gabion cage is provided with openings allowing the flood water entering the gabion cage when the flood water is rising and exiting the gabion cage when the flood water is subsiding.

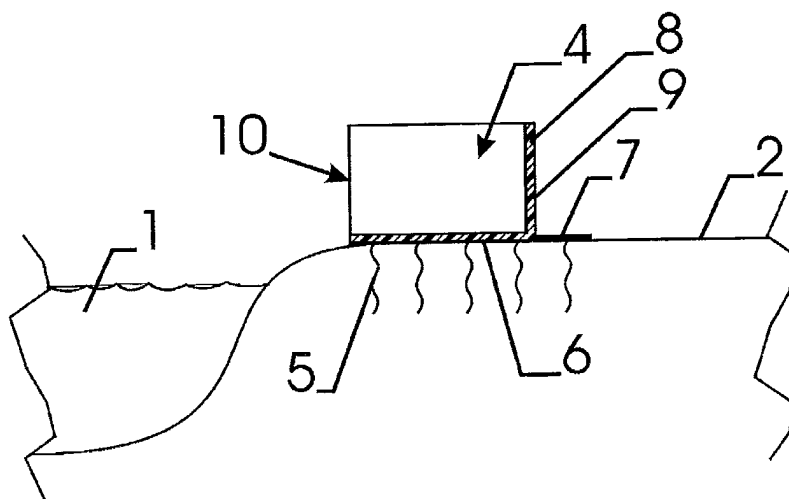


Fig. 2

Description

[0001] This invention relates to a method for erecting a temporary flood wall construction along a waterside comprising at least one gabion cage.

[0002] Gabion cages or basket-like containers are a. o. described in GB-A-726.859 ; GB-A-845.863 ; GB-A-1.567.830 ; EP-B-466.726 and many other patent documents. The use of gabions or gabion cages filled with rubble, stones, earth, sand or like material for constructing sea and river defences is generally known.

[0003] A disadvantage of these known sea and river defence constructions with gabions is that the filling operation of the gabion cages, e.g. on the building site, is a cumbersome and time-consuming operation.

[0004] In emergency cases, it is therefore not possible or very difficult to erect in a quick manner such a flood wall construction along a waterside using gabion cages which have to be filled on the site with all kinds of filling material.

[0005] It is therefore an object of the present invention to provide a new method for erecting a flood wall construction, e.g. in emergency cases, whereby it is possible to erect this flood wall construction in a quick and simple manner.

[0006] Therefore, the invention proposes for a method mentioned in the opening lines that the gabion cage is securely fixed to the bottom, that at least the bottom panel and the rear panel of the gabion cage are provided with an impermeable lining and that the front panel of the gabion cage is provided with openings allowing the flood water entering the gabion cage when the flood water is rising and exiting the gabion cage when the flood water is subsiding.

[0007] Preferably, several gabion cages are placed next to each other along the waterside.

[0008] Preferably, the side panels of some gabions are also provided with an impermeable lining.

[0009] A great advantage of the method according to the invention is that the flood water itself is used as filling material for the gabion cages during the rising of the flood water. In this way, the gabions filled with water form a natural barrier or dam.

[0010] When the side panels of the gabion cages are also provided with an impermeable lining ; this allows each of the gabion cages to form a separate cell for the collection of rising flood water.

[0011] It may be advisable to provide overlapping impermeable linings or liquid impervious plastic sheets between the adjacent sides of the gabion cages.

[0012] The invention will now be described in detail with reference to the accompanying drawing, wherein

Figure 1 shows a perspective view of a part of a flood wall construction erected according to the invention, and

Figure 2 shows a cross-section according to the line II - II' in figure 1.

[0013] Figure 1 shows a river 1 and a land-area 2. Normally, the water level in the river 1 is as shown in the figures and there is no danger of flood at the landside 2. In case of flood or storm, however, it can be necessary to erect along the waterside of the river 1 a temporary flood wall construction 3 in a quick manner to protect the land-area 2.

[0014] Figures 1 and 2 show how several gabion cages 4 are placed next to each other along the waterside. These cages 4 are fixed securely to the bottom e.g. by means of spikes 5. As can be seen from figure 2, the bottom panel 6 of the cage 4 is provided with an extension 7 for obtaining a better anchoring or fixation of the whole bottom panel to the bottom. Other means can be provided for obtaining a strong anchoring or fixation of the cages 4 to the bottom.

[0015] An impermeable lining 8 is applied against the bottom panel 6 and the rear panel 9 of each gabion cage 4. This lining 8 is only shown in figure 2 and not in figure 1 for the clarity of the drawing. Preferably, the bottom panel 6 and the rear panel 9 of each cage 4 consists of two identical superimposed welded mesh panels, whereby the impermeable lining 8 is fixed between these two welded mesh panels.

[0016] The front panel 10 of each gabion cage 4 is preferably made of welded mesh and is in this way provided with openings 11.

[0017] It is also possible to provide all the side panels of the cages 4 with the same impermeable lining material, as used for the bottom and rear panels of the cages 4.

[0018] Each cage 4 can have an upper panel 12 forming a hingable lid. In closed position of the upper panel 12 a cage with greater stability is obtained.

[0019] It is clear that the openings 11 in the front panel 10 allow the flood water of the river 1 to enter the gabion cages 4 when the flood water is rising in the river 1 and to exit or leave the gabion cages 4 when the flood water is subsiding or lowering in the river 1. In this way the flood water is filling the gabion cages and is automatically forming the filling material of the cages 4 in emergency cases.

[0020] The gabion cages 4 as well as the panels of the gabion cages 4 can have different forms than learned in the figures 1 and 2. It is e.g. possible to use gabion cages 4 as learned in the EP-B-466.726, whereby the bottom panel 6 shows a hexagonal form and whereby each rear panel 9 consists of two panels forming an obtuse angle with each other.

Claims

1. Method for erecting a temporary flood wall construction along a waterside comprising at least one gabion cage, **characterised in that** the gabion cage (4) is securely fixed to the bottom (2), that at least the bottom panel (6) and the rear panel (9) of

the gabion cage (4) are provided with an impermeable lining (8) and that the front panel (10) of the gabion cage (4) is provided with openings (11) allowing the flood water entering the gabion cage (4) when the flood water is rising and exiting the gabion cage (4) when the flood water is subsiding. 5

2. Method according to claim 1, **characterised in that** several gabion cages (4) are placed next to each other along the waterside (2). 10

3. Method according to claim 1 or claim 2, **characterised in that** the side panels of at least one gabion cage (4) are provided with an impermeable lining. 15

4. Method according to one or more of the claims 1 - 3, **characterised in that** the bottom panel (6) and the rear panel (9) of the gabion cage (4) each consist of two superimposed welded mesh panels and that the impermeable lining (8) is placed between these two superimposed welded mesh panels. 20

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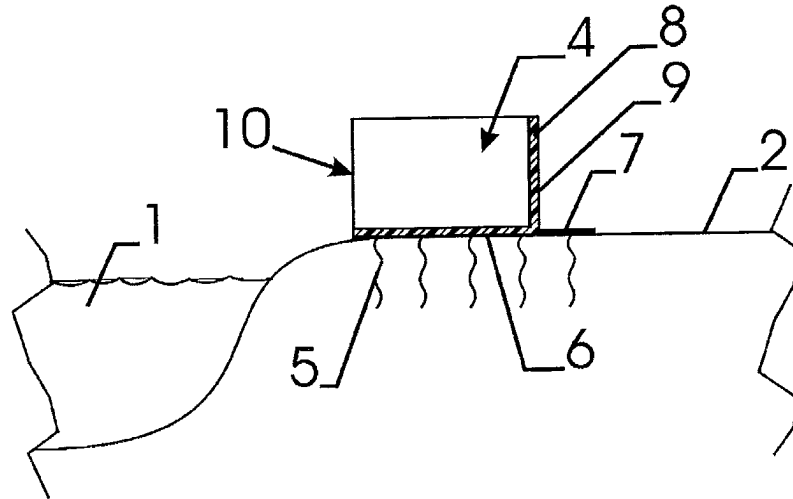
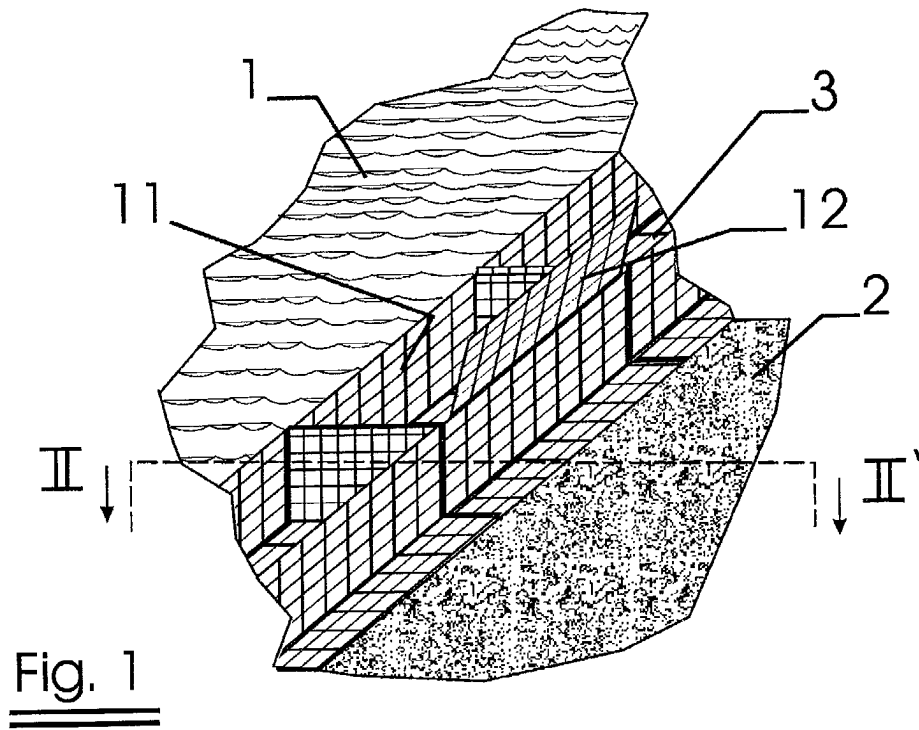
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European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 02 10 0385

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		10 September 2002	Movadat, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 02 10 0385

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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