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(54) **System of decorative artificial stone elements for facing walls and partitions**

(57) Stone strip system for facing walls and partitions, comprising a number of stone strip elements on a cement basis, with profiled fronts, of which a first number of elements has a first size with a width b and a second

number of elements has a second size with a width B and a length L , which each correspond to a plural of b and an appropriate number of joint widths v , such that:
 $B = nb + (n-1)v$; $L = mb + (m-1)v$.

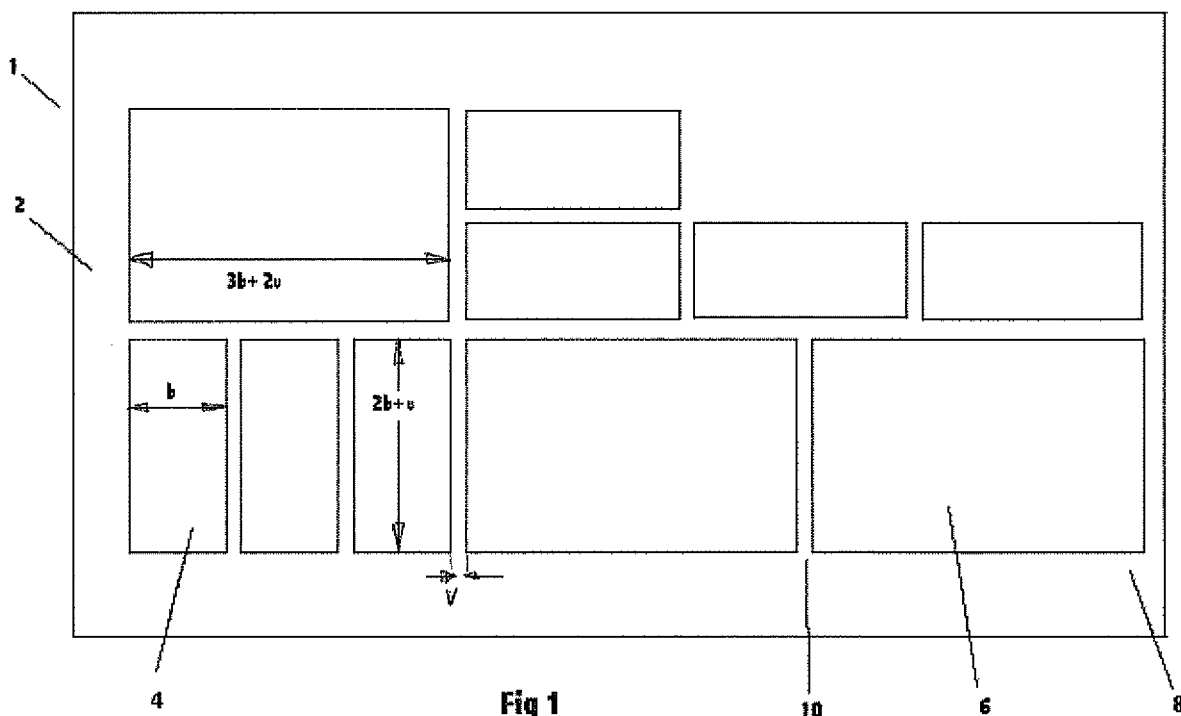


Fig 1

Description

[0001] The current invention is related to decorative stone elements. In particular, decorative stone strips for facing a wall. Moreover, the invention is also related to a system comprising a number of decorative stone elements of which the sizes have a particular proportion relative to each other.

[0002] It is known to use decorative stone elements for facing walls and partitions. In particular, natural stone-like elements are used to face houses built with bricks, concrete or gypsum blocks. In this way, a house of a simple construction may obtain the appearance of house built with natural stone. In general, these decorative stone elements are produced on the basis of a sand-cement mixture, to which natural stone, gravel or powder have been mixed. In contrast to ceramic flags, the elements are not fired. By the action of the cement, the elements dry out to a hard product with concrete-like properties.

[0003] Particularly effective decorative stone strips are of the company Decor Son with the trade names, Euroc, Tradiroc, Chiron, Elegance, etc. These strips are produced of natural materials and have therefore acquired the natural colours of stone. Also, by the use of a mould on the basis of real natural stone elements, in each stone strip the natural relief can be discerned.

[0004] To also copy the natural variation in size of natural stone, until now several sizes and forms of stone strips are produced and provided as a system. Because of this, it was possible for a mason to set several combinations of stone strips and to create a random effect. For the manufacturer, the disadvantage of these systems was the construction and the provision of several forms. For example, for each form each time a separate production line/mould had to be established. Also, for the mason and/or other users, disadvantages existed. They had to buy the correct quantities of the different forms. Setting the stone strips was also slower because each strip had to be selected to fit in the appropriate place. Without diamond saw, stone strips are difficult to cut such that cutting was no real option, except in particular cases.

[0005] It is therefore desirable to develop a decorative stone system which allows a large freedom in construction possibilities without the need to cut or break and which is easy to repair.

[0006] The present invention overcomes these objections by providing a stone strip system for facing walls and partitions. This system comprises a number of stone strip elements on a cement basis, of which a first number of elements has a first size with a width b and a second number of elements has a second size with a width B and a length L , which each correspond to a plural of b and an appropriate number of joint widths v , such that: $B = nb + (n-1)v$; $L = mb + (m-1)v$ where n and m are numbers. In particular, $n = 1, 2, 3, 4, \dots$ and $m = 2, 3, 4, 5, \dots$. By maintaining these particular proportions, a large number of combinations of configurations are possible

such that the resulting effect mimics all the more a natural stone construction. A characterizing difference of these stone strip elements on a cement basis is that they are not fired such as ceramic products. However, they may optionally be dried with the use of heat.

[0007] In a preferred embodiment, the length 1 of the first number of elements corresponds also to the width B of the elements with the second size such that $1 = B = nb + (n-1)v$. For example, in this way elements with the small size may be put upright adjacent to elements with the large size.

[0008] In a further preferred embodiment, the first size has a width b and a length $(2b + v)$, whereas the second size has a width $(2b + v)$ and a length $(3b + 2v)$. In the longitudinal direction, the length of three small elements corresponds to the length of two large elements. Also, two elements with the small size may be set above each other, adjacent to a single element with the large size.

[0009] In another preferred embodiment of the invention, the width b of the small elements is between 10 cm and 15 cm, preferably 13 cm. Also, the elements may be set at a joint distance of/between 0.8 cm and 1.5 cm, preferably 1.3 cm. By selecting these sizes, the elements have a size which corresponds particular well to natural building stones.

[0010] All elements have the same thickness d . By this is meant the thickness at the edge of an element. This thickness may vary between 0.5 cm and 1.5 cm. Hence, a sufficient strength is maintained relative to a minimum weight and production cost. This proportion between thickness and surface is also favourable for the stability of the elements when attaching them to the wall. Because the elements are provided with a relief, the thickness in the middle of an element may be much larger. In case of an element of a large size, this thickness in the middle may be between 0.8 cm and 4 cm.

[0011] To be able to set the elements also around a corner of a wall, the stone strip system may also comprise corner elements. The corner elements may both have the first size and the second size and are both provided with a perpendicular corner section. The lengths of the perpendicular corner sections preferably also correspond to b . Of course, other angles and lengths are also possible for other applications.

[0012] A number of examples of the invention are further explained by means of the following drawings, in which are shown in:

Fig. 1 a view of a number of stone strip elements such that the mutual relationship between the elements is visible; and

Fig. 2 a perspective view of a corner element with the small size.

[0013] In Figure 1 is drawn a system 1 for facing a wall 2. A number of stone strip elements with a first small size 4 (small elements) and with a second larger size 6 (large

elements) are set on the wall **2** using adhesive **8**. A joint **10** of width v is formed between adjacent elements, and is joined with a joint filler after setting the elements.

[0014] The width size b of the small elements **4** is considered the basis size for the system **1**. The large elements **6** are dimensioned to be equal to three small elements **4**. Because of this, a large element **6** must have a length equal to three times b plus twice the joint width v ($3b + 2v$). The length of the small elements **4** is also chosen such that it is equal to two widthwise placed adjacent small elements **4**. The length must be twice the width b plus a joint width v ($2b + v$). Hence, this corresponds with the width size of the large elements **6**. On the basis of these proportions, three lengthwise placed small elements **4** are as long as two large lengthwise placed elements **6**.

[0015] It should be noted that the configuration of the elements drawn here is only an example such that the mutual proportions between the sizes of the elements become visible. The configuration drawn here is not meant as a limitative or a recommended configuration.

[0016] By producing the elements according to the invention in a mould, it is also possible to produce particular forms. Figure 2 shows a corner element **12** which may also be incorporated in the system **1**. On the front **14** of the corner element **12** the natural stone profile **16** can be seen which is formed by forming the elements in a mould. The corner element **12** is provided with a corner section **18** which extends at right angles with the front **14** to the back. The corner section **18** also has the length b such that it is easy to incorporate it in every configuration. Large corner elements (not drawn) may also be part of the system.

[0017] Although a number of embodiments have been described herein, modifications thereof will also be within the scope of the invention. The scope of the patent protection is determined by the following claims.

Claims

1. Stone strip system for facing walls and partitions, comprising a number of stone strip elements on a cement basis, having profiled fronts, of which a first number of elements has a first size with a width b and a second number of elements has a second size with a width B and a length L , each corresponding to a multiple of b and an appropriate number of joint widths v , such that: $B = nb + (n-1)v$; $L = mb + (m-1)v$.
2. Stone strip system according to claim 1, wherein the first number of elements has a length 1 corresponding to the width B of the elements with the second size such that $1 = B = nb + (n-1)v$.
3. Stone strip system according to claim 2, wherein the elements with the first size have a length $(2b + v)$ and the elements with the second size have a width $(2b + v)$ and a length $(3b + 2v)$.
4. Stone strip system according to one of the preceding claims, wherein b is between 10 cm and 15 cm, preferably 13 cm.
5. Stone strip system according to one of the preceding claims, wherein v is between 0.8 cm and 1.5 cm, preferably 1.3 cm.
6. Stone strip system according to one of the preceding claims, wherein the elements have a thickness d of between 0.5 cm and 1.5 cm, preferably 1 cm.
7. Stone strip system according to one of the preceding claims, further comprising corner elements having a perpendicular corner section.
8. Stone strip system according to claim 7, wherein the corner elements are of the first size and have a perpendicular corner section of length b .
9. Stone strip system according to claim 7 or claim 8, wherein the corner elements are of the second size and have a perpendicular corner section of length b .
10. Stone strip system according to any one of the preceding claims, wherein the system consists exclusively of two sizes.
11. A wall comprising a support construction faced with a non-supporting system according to one of the preceding claims.

