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(12) # EUROPEAN PATENT APPLICATION

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(54) **A paving stone.**

(57) The invention relates to a parallelopiped paving stone wherein the ratio between the length and the width of said paving stone is at least substantially an integer. Furthermore also the ratio between the length and the thickness is at least substantially an integer, which is not the same as the integer indicating the ratio between the length and the width. In a preferred embodiment the length of said paving stone is ± 150 mm, the width of said paving stone is ± 50 mm and the thickness of said paving stone is ± 75 mm. According to an alternative embodiment the length of said paving stone is ± 200 mm, the width of said paving stone is ± 50 mm and the thickness of said paving stone is ± 66 mm. In an efficient embodiment the paving stone has bevelled edges all around.

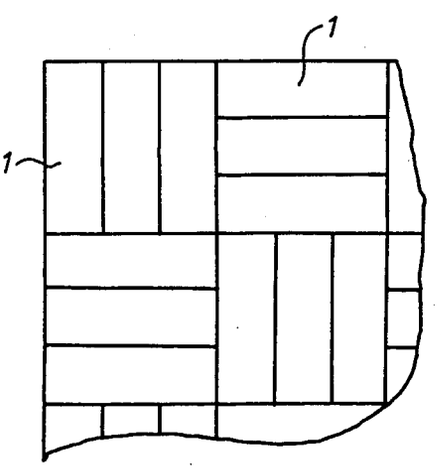

FIG.4

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The invention relates to a parallelopiped paving stone wherein the ratio between the length and the width of said paving stone is at least substantially an integer.

Such paving stones have been produced for many decades already and can be laid in several types of bond. Thus e.g. a stretching bond is known, wherein the stones are laid in rows, being in line, and wherein the stones in the one row are staggered along half the length of a stone with respect to the stones in the other row. Besides that the twilled bond is known, in which the stones are laid perpendicularly to each other, usually at an angle of 45 degrees to the longitudinal axis of the road.

A further type of bond that is often used is the so-called English bond, wherein in a first block a few stones are disposed beside each other in the same direction, and in an adjacent block the same number of stones is disposed in a direction perpendicularly to the stones of the first block.

With the known paving stones it is thus possible to provide variations in the laying pattern.

The object of the invention is to increase the number of possible variations in the laying pattern while making use of such a paving stone.

According to the invention this can be achieved in that the ratio between the length and the thickness is likewise at least substantially an integer, which is not the same as the integer indicating the ratio between the length and the width.

By using such a paving stone the number of possibilities for laying stones can be doubled, since the various bonds can be realised in a first position of the stones and in a second position of the stones, the stones in said second position being turned about their longitudinal axis through an angle of 90 degrees with respect to said first position.

The invention will be explained in more detail hereafter with reference to a few possible embodiments of a stone according to the invention diagrammatically illustrated in the accompanying Figures.

Figure 1 is a plan view of a paving stone according to the invention.

Figure 2 is a side view of Figure 1.

Figure 3 is a bottom view of Figure 1.

Figure 4 shows a first embodiment of part of a pavement formed of stones according to Figures 1 - 3, which are laid in a so-called English bond.

Figure 5 shows a second embodiment of a pavement formed of stones according to Figures 1 - 3, which are likewise laid in a so-called English bond.

Figure 6 shows a second embodiment of a stone according to the invention.

Figure 7 is a side view of Figure 6.

Figure 8 is a bottom view of Figure 6.

Figure 9 shows part of a pavement formed of stones according to Figures 6 - 8, which are laid in a so-called English bond.

Figure 10 shows a second embodiment of a pavement formed of stones according to Figures 6 - 8, which are likewise laid in a so-called English bond.

Figure 11 shows a further embodiment of a pavement formed of stones according to Figures 1 - 3.

The stone illustrated in Figures 1 - 3 is a paving stone, which is preferably made of concrete.

In this embodiment the length 1 of the paving stone 1 is 150 mm, the width b is 50 mm and the thickness d is 75 mm.

For those skilled in the art it will be apparent that these stones can be laid in the usual manner in a so-called stretching bond and in a twilled bond without any problem.

As is furthermore illustrated in Figure 4, the stones may also be laid in a so-called English bond, wherein in one block of stones three stones are disposed parallel to each other and wherein in an adjacent block likewise three stones are disposed parallel to each, whereby the stones in said second block extend perpendicularly to those in the first block, however. This arrangement can be realised because the width of the stones is equal to three times the length of a stone.

As is illustrated in Figure 5 the stones may also be laid in an English bond, however, when the stones are turned about their longitudinal axes through an angle of 90 degrees from their position shown in Figure 4, so that in that case the sides of the stones in Figure 4 will form the upper surfaces of the stones.

Since the thickness d of the stones amounts to half the length 1 of the stones it is now possible, as will be apparent from Figure 5, to lay two stones in parallel relationship in each block. Furthermore it will be apparent that in the position of the stones shown in Figure 5 said stones can also be laid in a stretching bond of in a twilled bond.

It will be apparent that in this manner, by using the dimensioning according to the invention, the number of possibilities of laying various types of bond with the stones according to the invention has been doubled compared to the number of possibilities which has been usual up to now.

Figures 6 - 8 show another embodiment of a stone according to the invention. The stone to has a length 1 of 200 mm, a width b of 50 mm and a thickness d of 66 mm.

As will be apparent from Figures 9 and 10, also in this case the stones can be laid in two types of block bond, viz. in a first block bond, wherein the sides having a width b form the upper sides of the

stones and wherein each block comprises four stones extending parallel to each other, and a second block bond, wherein the sides of the stones having a thickness d of 66 mm form the upper sides of the stones and wherein three stones extend parallel to each other in a block.

Of course the block bonds shown in Figures 4 - 5 and Figures 9 - 10 respectively can also be combined with each other in any desired manner to form a pavement, e.g. as illustrated in Figure 11 for the above-described stones 1.

As is furthermore illustrated in Figure 11 the same stones (possible cut in half) can also be used in vertical position, so as to form a course of headers or an intermediate course between the blocks.

Furthermore it will be apparent that in the two above-described positions of the stones it is also possible to lay e.g. a stretching bond of a twilled bond.

An efficient use is made in particular of stones which are made in the manner described in Dutch Patent Application 8502484, so that the stones have bevelled edges all around.

Claims

1. A parallelopiped paving stone wherein the ratio between the length and the width of said paving stone is at least substantially an integer, characterized in that the ratio between the length and the thickness is likewise at least substantially an integer, which is not the same as the integer indicating the ratio between the length and the width.

2. A paving stone according to claim 1, characterized in that the length of said paving stone is ± 150 mm, the width of said paving stone is ± 50 mm and the thickness of said paving stone is ± 75 mm.

3. A paving stone according to claim 1, characterized in that length of said paving stone is ± 200 mm, the width of said paving stone is ± 50 mm and the thickness of said paving stone is ± 66 mm.

4. A paving stone according to any one of the preceding claims, characterized in that said paving stone has bevelled edges all around.

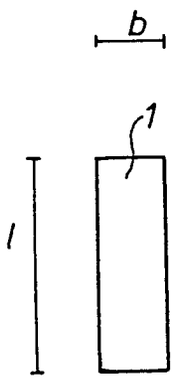

FIG.1

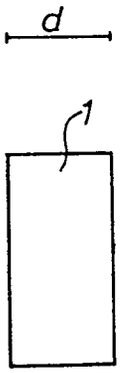

FIG.2

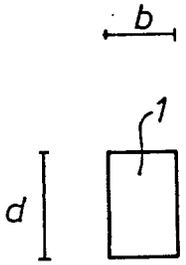

FIG.3

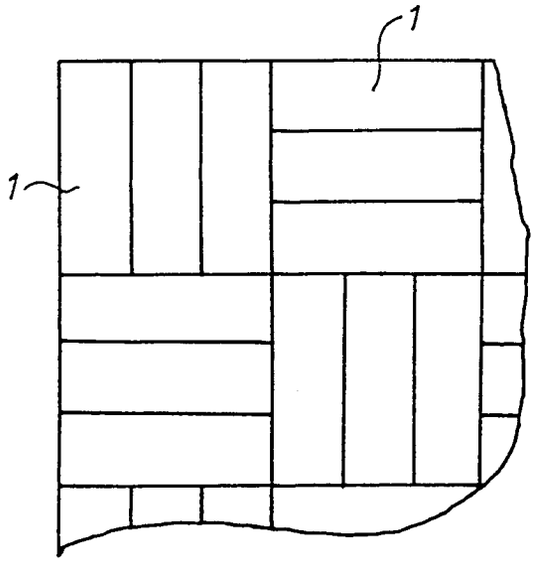

FIG.4

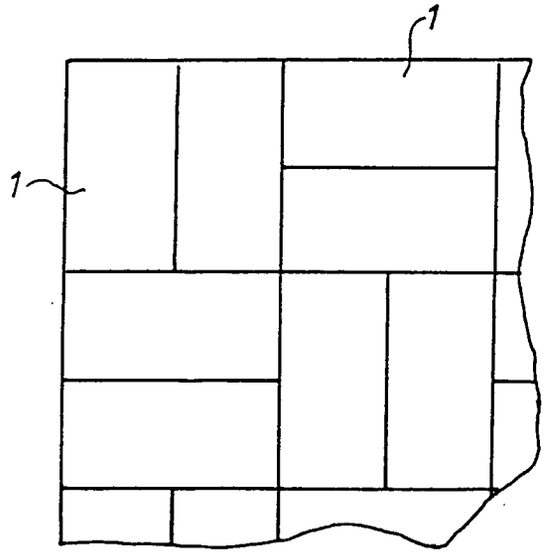

FIG.5

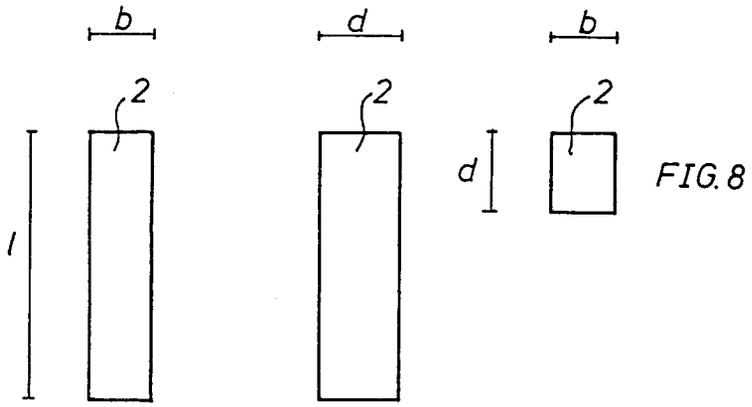

FIG.8

FIG.6

FIG.7

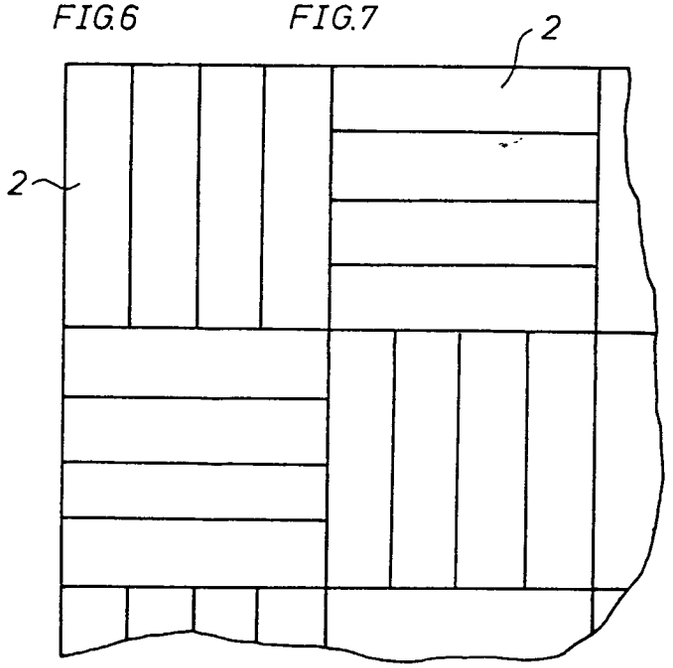

FIG.9

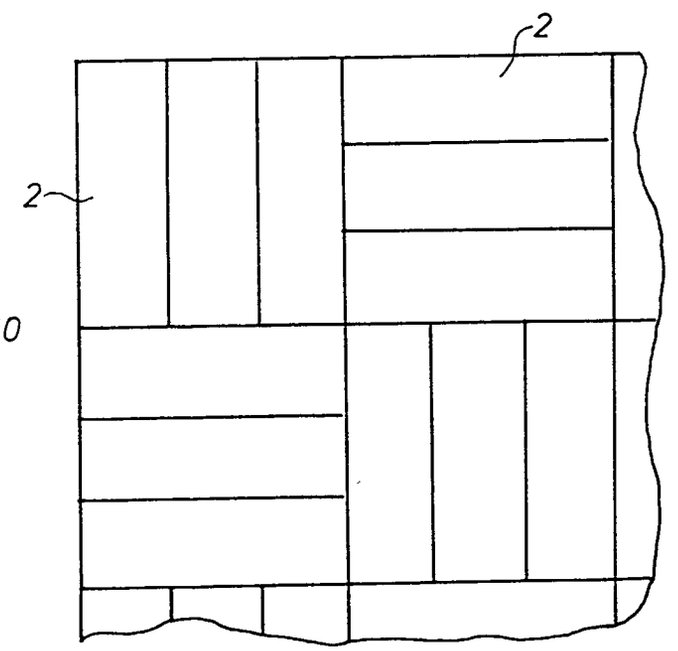

FIG.10

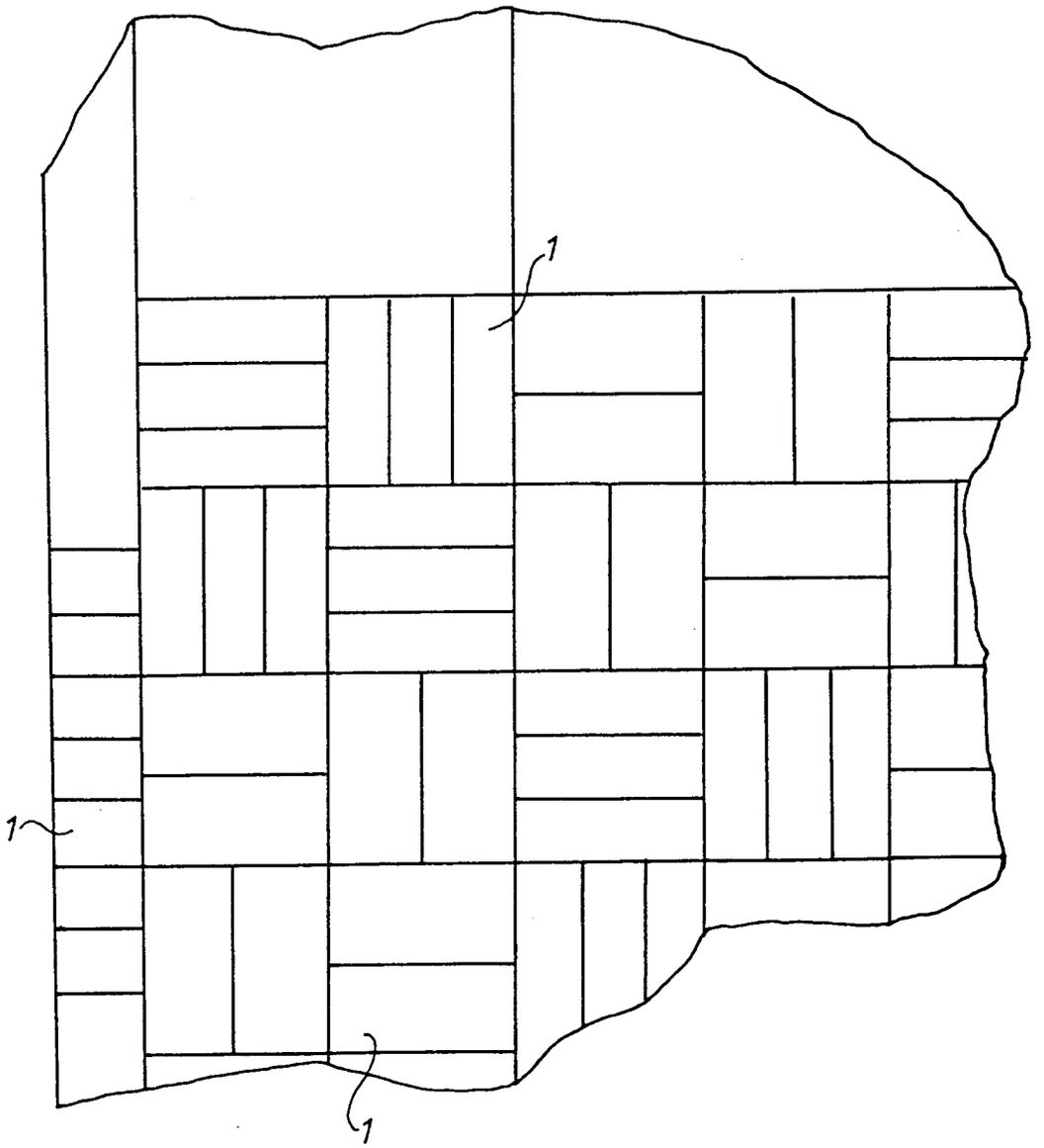

FIG.11

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EUROPEAN SEARCH REPORT

Application Number

EP 92 20 2117

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X Y	EP-A-0 185 861 (METTEN PROD) * page 1, line 1 - page 2, line 3; figures * ---	1 4	E01C5/06
Y	DE-A-2 922 393 (SF-VOLLVERBUNDSTEIN) * page 6, line 12 - line 16; figure 1 * ---	4	
A	DE-U-1 997 751 (WALTER) * figures * ---	1	
A	GB-A-1 540 520 (DELVAUX) * the whole document * ---	1,2	
A	DE-U-8 222 585 (ARNHEITER) * table 1 * -----	1,3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			E01C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	07 OCTOBER 1992	DIJKSTRA G.

CATEGORY OF CITED DOCUMENTS

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