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(12) # EUROPEAN PATENT SPECIFICATION

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(54) **A paving stone.**

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DE-U- 1 997 751
DE-U- 8 222 585
GB-A- 1 540 520

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EP 0 524 680 B1

Description

The invention relates to a parallelepiped paving stone wherein the ratio between the length and the width of said paving stone is either 3 : 1 or 4 : 1.

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 by the measures according claim 1 or claim 2.

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.

It is noted that from DE-U-1 997 751 there is known a flat tile having a length of 50 cm, a width of 25 cm and a thickness of 5 cm.

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 l 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 l 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 has a length l 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 parallelepiped paving stone wherein the ratio between the length and the width of said paving stone is 3 : 1 , characterised in that the ratio between the length and the thickness is 2 : 1.

2. A parallelepiped paving stone wherein the ratio between the length and the width of said paving stone is 4 : 1, characterised in that the ratio between the length and the thickness is 3 : 1.

3. A paving stone according to claim 1, characterised in that the length of said paving stone is 150 mm, the widt of said paving stone is 50 mm and the thickness of said paving stone is 75 mm.

4. A paving stone according to claim 2, characterised in that 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.

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

Patentansprüche

1. Parallelflacher Pflasterstein, wobei das Verhältnis zwischen der Länge und der Breite des Pflastersteins 3:1 beträgt, dadurch gekennzeichnet, daß das Verhältnis zwischen der Länge und der Dicke 2:1 beträgt.

2. Parallelflacher Pflasterstein, wobei das Verhältnis zwischen der Länge und der Breite des Pflastersteins 4:1 beträgt, dadurch gekennzeichnet, daß das Verhältnis zwischen der Länge und der Dicke 3:1 beträgt.

3. Pflasterstein nach Anspruch 1, dadurch gekennzeichnet, daß die Länge des Pflastersteins 150 mm, die Breite des Pflastersteins 50 mm und die Dicke des Pflastersteins 75 mm beträgt.

4. Pflasterstein nach Anspruch 2, dadurch gekennzeichnet, daß die Länge des Pflastersteins 200 mm, die Breite des Pflastersteins 50 mm und die Dicke des Pflastersteins 66 mm beträgt.

5. Pflasterstein nach einem der vorstehenden Ansprüche, dadurch gekennzeichnet, daß der Pflasterstein umlaufend abgeschrägte Kanten aufweist.

Revendications

1. Pavé parallélépipédique, dans lequel le rapport entre la longueur et la largeur dudit pavé est de 3 : 1, caractérisé en ce que le rapport entre la longueur et l'épaisseur est de 2 : 1.

2. Pavé parallélépipédique, dans lequel le rapport entre la longueur et la largeur dudit pavé est de 4 : 1, caractérisé en ce que le rapport entre la longueur et l'épaisseur est de 3 : 1.

3. Pavé selon la revendication 1, caractérisé en ce que la longueur dudit pavé est de 150 mm, la largeur dudit pavé est de 50 mm et l'épaisseur dudit pavé est de 75 mm.

4. Pavé selon la revendication 2, caractérisé en ce que la longueur dudit pavé est de 200 mm, la largeur dudit pavé est de 50 mm et l'épaisseur dudit pavé est de 66 mm.

5. Pavé selon l'une quelconque des revendications précédentes, caractérisé en ce que ledit pavé a des bords biseautés tout autour.



FIG.1

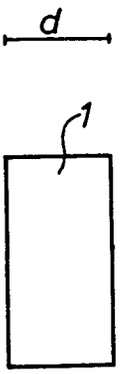


FIG.2

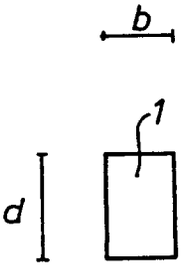


FIG.3

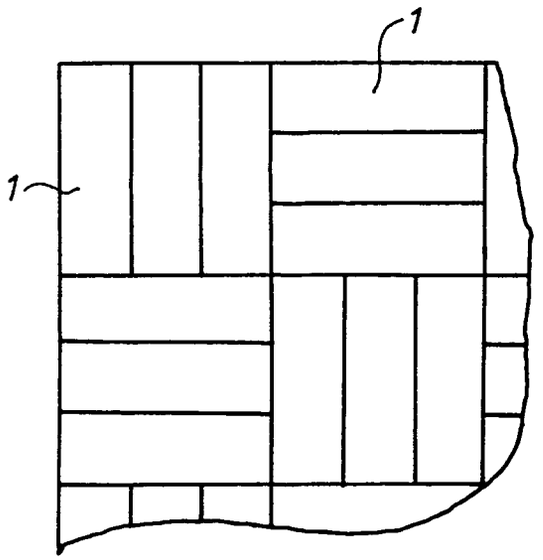


FIG.4

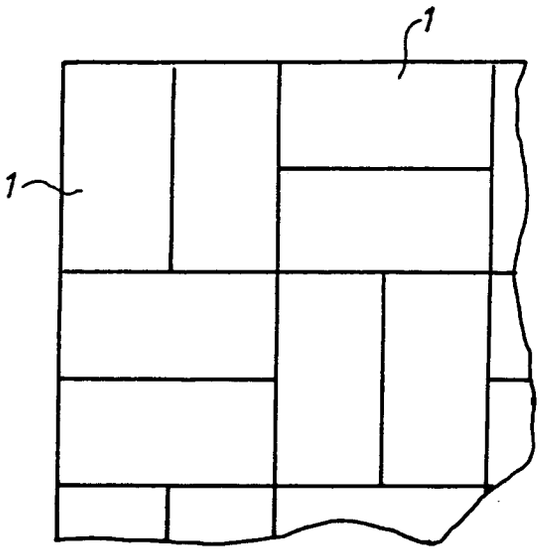


FIG.5

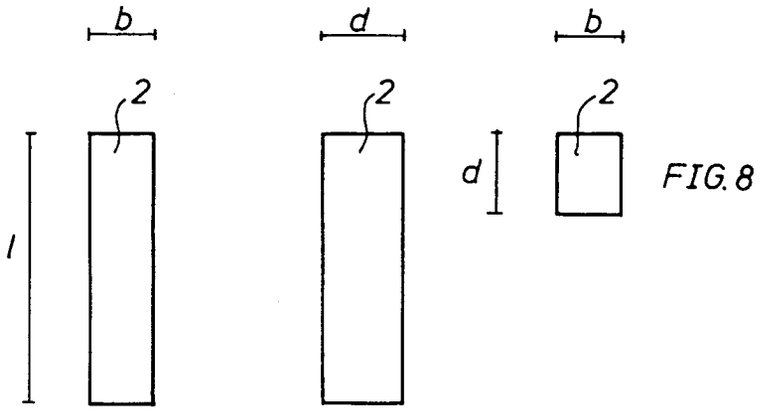


FIG.6 FIG.7 FIG.8

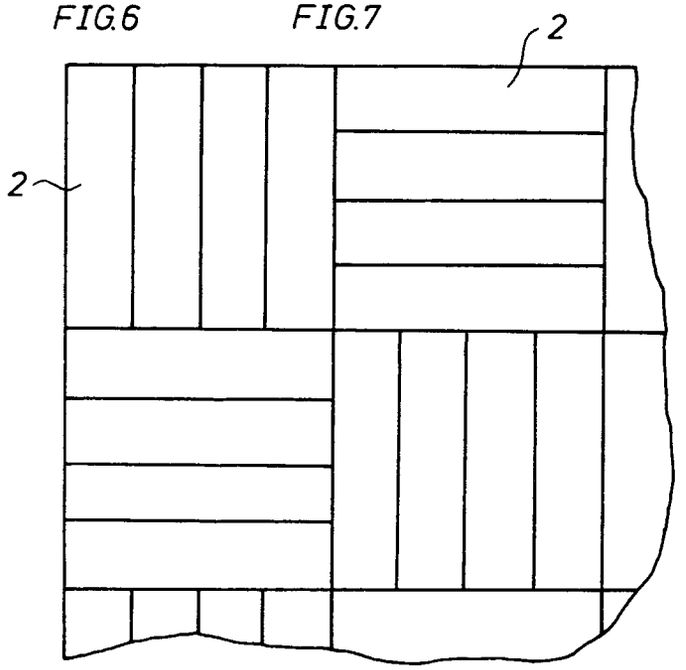


FIG.9

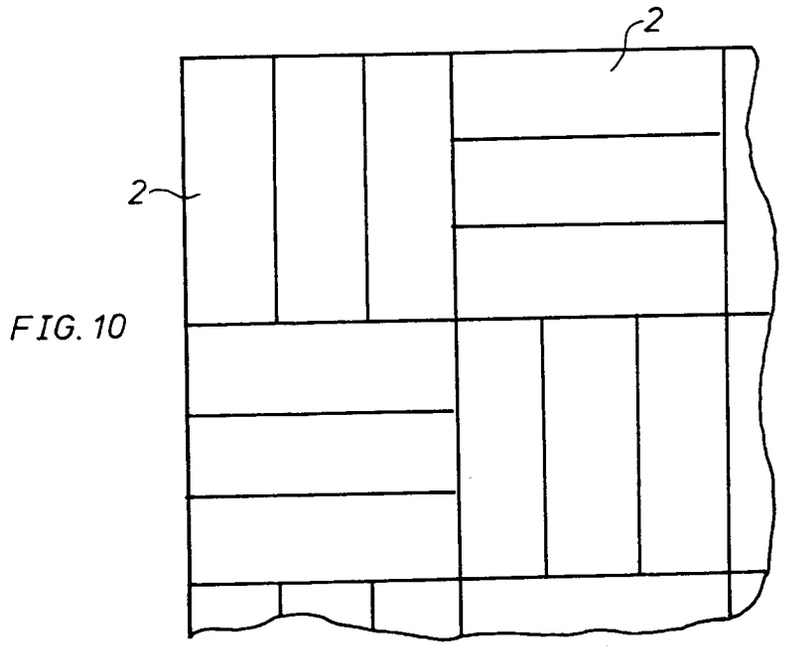


FIG.10

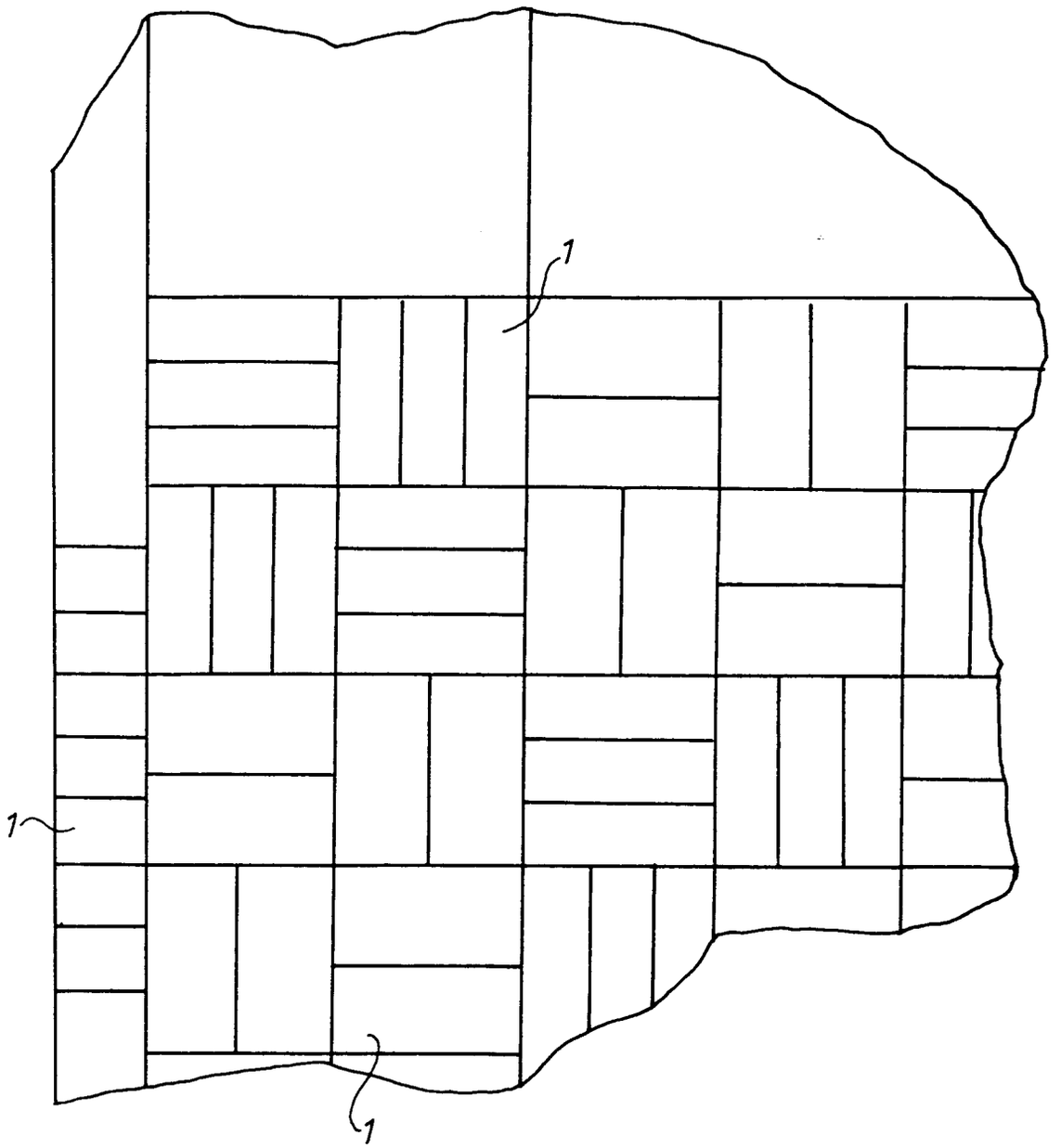


FIG.11