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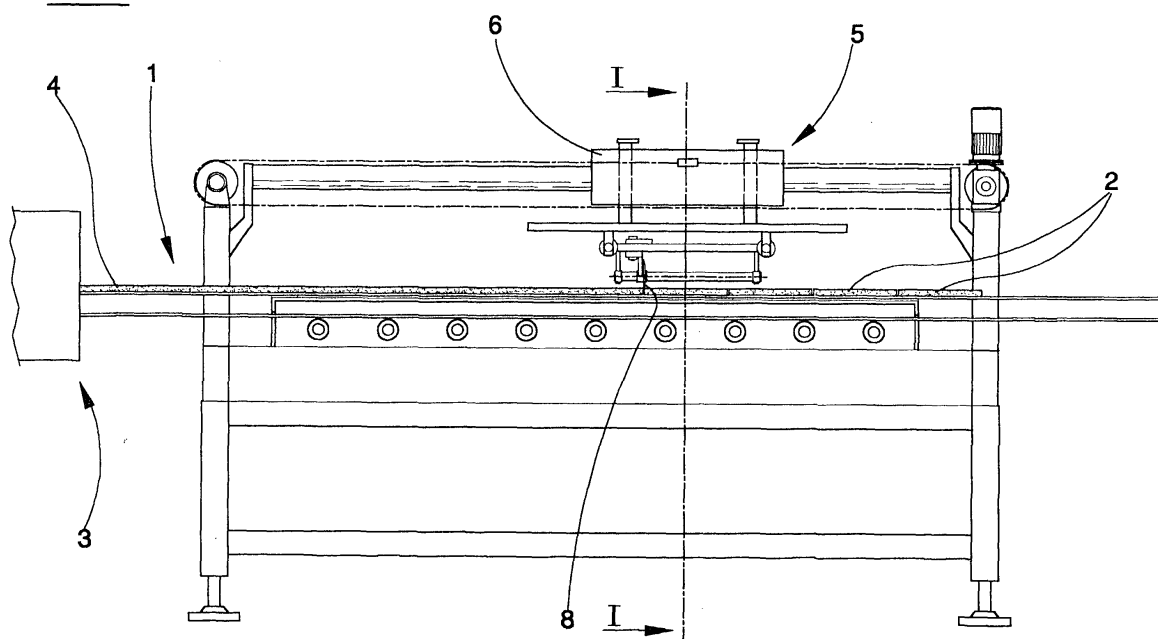
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(54) **A cutter device for extruded products**

(57) A cutter device of a type used to make an in-line transversal cut of just-formed extruded products, comprising at least one headstock (6), commanded to move in a same direction as a moving advancement line of extruded products, which headstock (6) is provided

with a device for performing a transversal cut, which device comprises a mobile organ (7) commanded to move transversally to the advancement line and comprising at least one circular blade predisposed to cut the extruded products in a plane containing a plane of motion of the mobile organ (7).

Fig.1



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Description

[0001] The invention relates to a cutter device for extruded products, i.e. a device for transversally cutting-to-measure just-formed extruded products in a manufacturing line.

[0002] Specifically, though not exclusively, the invention is usefully applied for transversally cutting extruded products just as they have been formed in a production line.

[0003] The prior art teaches in-line cutter devices for extruded products in which the transversal cut on the moving extruded product is done by usual blades or wires (for thicker products) which are predisposed on a mobile assembly having an alternating motion along the line. This motion is composed of a work run and a return run. During the work run, which is in the same direction as the advancement direction of the extruded product, the mobile assembly is accelerated until its speed is the same as that of the advancing product. Once this speed has been reached, the transversal cutting motion of the blade is commanded, and is effectively executed at zero relative speed.

[0004] The drawbacks inherent in the execution of these operations are essentially due to the undesirable sticking of bits of the material on the blade. This requires a periodic cleaning of the blades and also gives rise to cuts which are frequently burred and ill-made.

[0005] Also, this adhesion of the material to the blades, while having no consequences during the active, penetrative stage, causes problems in the detachment of the blade, with the extruded product tending to lift as the blade is withdrawn in its upwards run. This can lead to the need for means for restraining the extruded product and thus stopping it from lifting.

[0006] The main aim of the present invention is to obviate the above-described drawbacks and limitations in the prior art.

[0007] An advantage of the invention is its simplicity.

[0008] These aims and advantages and more besides are all attained by the present invention, as it is characterised in the appended claims.

[0009] Further characteristics and advantages of the present invention will better emerge from the detailed description that follows, of a preferred but not exclusive embodiment thereof, illustrated purely by way of non-limiting example in the accompanying figures, in which:

figure 1 is a schematic frontal view in vertical elevation;

figure 2 is a schematic section made according to line I-I of figure 1.

[0010] With reference to the figures of the drawings, 1 denotes in its entirety an extrusion line for manufacturing clay products 2 constituted, in the example, by tiles.

[0011] Downstream of the extruder 3 the product pro-

ceeds along a plane 4 on which there is a cutter device 5 having the task of transversally cutting the just-formed extruded product to measure.

[0012] In particular, the cutter device 5 comprises at least one headstock 6 which is commanded to move in the same direction as the advancing line of extruded product.

[0013] The headstock 6 is equipped with a device for making a transversal cut which comprises a mobile organ 7 commanded to move transversally with respect to the line of advancement of the extruded product.

[0014] The mobile organ 7 is provided with at least one blade predisposed to cut the extruded product in a plane containing the advancement direction of the mobile organ 7.

[0015] The blade can be a simple fixed cutter blade arranged more or less vertically.

[0016] In the illustrated embodiment the blade is constituted by a circular cutter 8.

[0017] In particular, the circular cutter 8 is mobile about an axis thereof.

[0018] Normally the plane containing the advancement direction of the mobile organ 7 is perpendicular to the advancement direction of the extruded product.

[0019] The cut is performed with a simple transversal run of the circular blade 8 whose cutting edge just grazes the plane 4.

Claims

1. A cutter device of a type used to make an in-line transversal cut of just-formed extruded products, **characterised in that** it comprises at least one headstock (6), commanded to move in a same direction as a moving advancement line of extruded products, which headstock (6) is provided with a device for performing a transversal cut, which device comprises a mobile organ (7) commanded to move transversally to the advancement line and comprising at least one blade predisposed to cut the extruded products in a plane containing a plane of motion of the mobile organ (7).

2. The cutter device of claim 1, **characterised in that** the at least one blade for cutting the extruded products is fixed.

3. The cutting device of claim 1, **characterised in that** the blade for cutting the extruded products is mobile in the plane containing the plane of motion of the mobile organ (7).

4. The cutting device of claim 2, **characterised in that** the blade for cutting the extruded products is a circular cutter (8).

5. The cutting device of claim 2, **characterised in that**

the circular cutter (8) is rotatingly mobile about an axis thereof.

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Fig.1

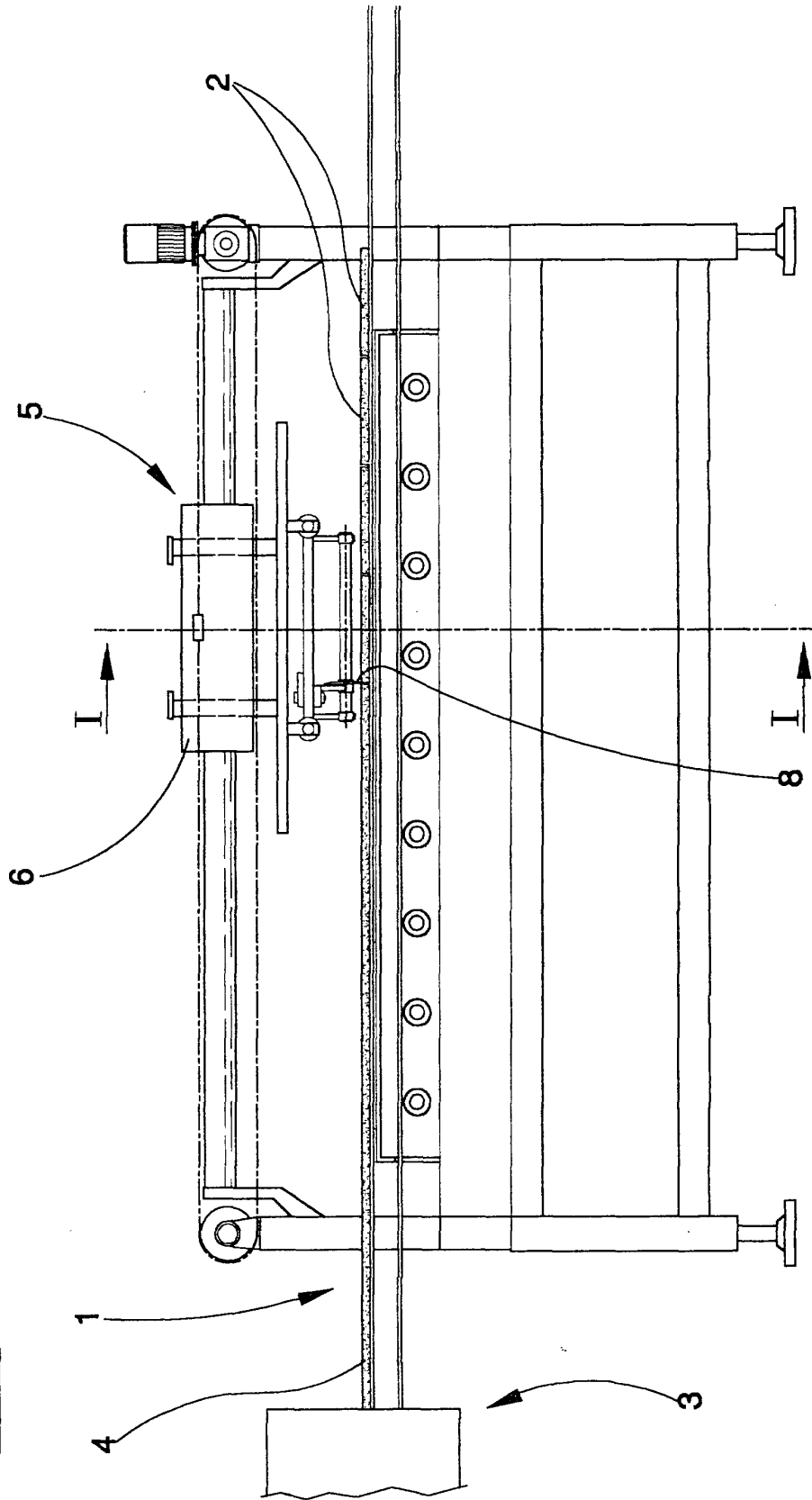


Fig. 2

