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(54) **APPARATUS FOR DRYING TILES**

TROCKNUNGSGERÄT FÜR FLIESEN

SÉCHOIR À CARREAUX

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(73) Proprietor: **Ancora S.p.A.
41049 Sassuolo (MO) (IT)**

(72) Inventor: **CORRADINI, Fabio
I-42048 San Faustino-Frazione di Rubiera (RE)
(IT)**

(74) Representative: **Modiano, Micaela Nadia et al
Modiano Gardi Patents SAS
Via Meravigli 16
20123 Milano (IT)**

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EP 2 137 476 B1

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Description

[0001] The invention relates to an apparatus for drying tiles exiting a wet processing line, such as, for example, a smoothing, a chamfering, a squaring, or other linens. Apparatuses for drying tiles are known comprising roller conveyors on which the tiles to be dried are conveyed through a drying zone in which air suction ports are provided that face one another in a direction that is perpendicular to the surface of the lower face and to the surface of the upper face of the tile and which are able to suck from such surfaces drops of water that may be present thereupon. In the drying zone there are further provided blades made of rubber positioned so as to rub on the surfaces to be dried and thus to remove a certain quantity of water therefrom.

[0002] A drawback of such apparatus is that the blades made of rubber become worn very rapidly and thus need to be replaced frequently.

[0003] A further drawback is that the blades are not effective on tiles that have irregular surfaces, because in such tiles there may be surface, irregularities that the blades are unable to penetrate.

[0004] Further, when the blades slide on irregular surfaces they tend to become worn more rapidly.

[0005] The air suction ports are supported at a fixed distance from the conveying plane defined by the rollers and are therefore at a distance from the surfaces to be dried that depends on the thickness of the tiles. The ports may consequently be positioned, for tiles of a certain thickness, at a functionally correct distance from the surfaces to be dried, whilst, for tiles of lesser thickness, this distance may be insufficient to ensure appropriate drying.

[0006] FR 1 121 791 A discloses a drying apparatus having a combination of elements as set forth in the of the appended preamble claim 1.

[0007] An object of the invention is to improve apparatuses for drying tiles.

[0008] A further object of the invention is to make more effective apparatuses that are able to dry tiles that have irregular surfaces.

[0009] A still further object of the invention is to make apparatuses that enable tiles that have different thicknesses to be dried in succession.

[0010] According to the invention, there is provided an apparatus for drying tiles as defined in claim 1.

[0011] The invention can be better understood and implemented with reference to the attached drawings, which illustrate an embodiment thereof by way of non-limiting example, in which:

Figure 1 is a schematic frontal view of the apparatus during an operating configuration;

Figure 2 is a detail of Figure 1;

Figure 3 is a detail of Figure 1 during a further operating configuration.

[0012] With reference to Figure 1, there is shown an

apparatus 1 for drying tiles 2. The apparatus 1 comprises first moving means 3 arranged for moving the tiles 2 towards a drying zone 4. The first moving means 3 comprises a first belt 5 that supports and moves, the tiles 2 to the drying zone 4 along an advance direction A1.

[0013] In an embodiment that is not shown, the first moving means 3 may comprise a roller conveyor provided with a plurality of driven rollers that enable the tiles 2 to be supported and moved to the drying zone 4.

[0014] The apparatus 1 further comprises second moving means 43 arranged for moving the tiles 2 away from the drying zone 4. The second moving means 43 comprises a second belt 45 that supports and moves the tiles 2 away from the drying zone 4 along the advance direction A1.

[0015] In an embodiment that is not shown, the second moving means 43 may comprise a roller conveyor provided with a plurality of driven rollers that enable the tiles 2 to be supported and moved to the drying zone 4.

[0016] In the drying zone 4 there is third moving means 6, which receives the tile 2 from the first moving means 3. The third moving means 6 comprises a plurality of rollers 8 rotatably supported by a frame 9 through supporting bars, which are not shown. In this way the rollers 8 enable the tiles 2 to be supported and moved through the drying zone 4.

[0017] The frame 9 further comprises a first opening 10 placed at the entrance of the drying zone 4 and a second opening 40 placed at the outlet of the drying zone 4, further downstream than the first opening 10 according to the advance direction A1.

[0018] The third moving means 6 is arranged near the first moving means 3 and the second moving means 43. In particular the third moving means 6 is interposed between the first moving means 3 and the second moving means 43 according to the advance direction A1. In this way the rollers 8 of the third moving means 6 define, together with the first belt 5 and the second belt 45, an advance plane P for the tiles 2. Initially, the tile 2 is easily transferred from the first moving means 3 to the third moving means 6, and enters the drying zone 4 through the first opening 10. Subsequently the tile 2 is transferred from the third moving means 6 to the second moving means 43 and exits the drying zone 4 through the second opening 40.

[0019] The third moving means 6 further comprises a strap 11 wound on a pair of pulleys 12. The pair of pulleys 12 supports the strap 11 and the rotation of the pair of pulleys 12 transmits motion to the strap 11. The strap 11 comprises an active part 13, which slides along a direction A2.

[0020] With reference to Figure 2, the active part 13 of the strap 11 interacts with a peripheral portion 14 of the rollers 8. In this manner rollers 8 are rotated according to a rotation direction R1 and support a lower face 16 of the tiles 2 at a loading zone 15. In this manner the tiles 2 are thus supported and moved along the advance direction A1 owing to the rollers 8.

[0021] The apparatus 1 further comprises drying means 17, positioned in the drying zone 4. The drying means 17 comprises a suction unit 18, that faces an upper face 19 of the tiles 2. The drying means 17 further comprises a blowing unit 20, that faces the upper face 19 of the tiles 2 in a position further downstream of the suction unit 18 along the advance direction A1.

[0022] The suction unit 18 extends along a direction that is transverse to the advance direction A1 by a length that is greater than the extent of the tile 2 in this direction. In this way the suction unit 18 is able to ensure suction along the entire width of the tile 2.

[0023] With reference to Figure 2, the suction unit 18 has a section converging on the advance plane P, that has a distal region 21 with a greater section, an intermediate region 22 with a variable section and a proximal region 23 with a lesser section. The proximal region 23 directly faces the upper face 19 of the tile 2 and finishes with a lower end 25.

[0024] The blowing unit 20 is structurally shaped like the suction unit 18. The blowing unit 20 thus extends along a direction that is transverse to the advance direction A1 by a length that is greater than the extent of the tile 2 in this direction. In this manner the blowing unit 20 is able to ensure blowing along the entire width of the tile 2.

[0025] The drying means 17 moves together with a positioning means 24. The positioning means 24 enables a constant distance D to be maintained between the upper face 19 of the tiles 2 and the lower end 25 of the drying means 17.

[0026] The positioning means 24 comprises roller means 26 that is rotatably supported by the drying means 17 by supporting brackets 27.

[0027] The supporting brackets 27 extend along the advance direction A1 and have a first end 28 fixed near the proximal region 23 and a second end 29 intended for rotatably supporting the roller means 26. The roller means 26 is thus at both sides of the proximal region 23, along the advance direction A1.

[0028] The roller means 26 defines an interaction zone 30 at which the roller means 26 interacts with the upper face 19 of the tile 2 in transit and is induced to roll thereupon.

[0029] The suction unit 18 is fixed to a supporting arm 31 by elastic connecting means that enables the suction means 18 to remain substantially in the same position with respect to the advance plane P when the supporting arm 31 performs rotations around an end 32 thereof, which is hinged on the frame 9 by further elastic connecting means. The elastic connecting means and the further elastic connecting means thus act as a hinge.

[0030] The supporting arm 31 rotates around an axis Cl, that is perpendicular to the advance direction A1.

[0031] The blowing unit 20 is fixed to a further supporting arm 33 through hinge means, that is not shown. The further supporting arm 33 is structurally and functionally shaped like the supporting arm 31.

[0032] The suction unit 18 is connected to a first suction conduit 37 and the blowing unit 20 is connected to a first blowing conduit 38.

[0033] The apparatus 1 further comprises further drying means 67, positioned in the drying zone 4 on the opposite side to the drying means 17 with respect to the tiles 2. The further drying means 67 comprises a further suction unit 68 that faces the lower face 16 of the tiles 2. The further suction unit 68 is arranged at the suction unit 18 in the space between consecutive rollers 8.

[0034] The further suction unit 68 is structurally and functionally shaped like the suction unit 18. The further suction unit 68 then extends along a direction that is transverse to the advance direction A1 by a length that is greater than the extent of the tile 2 in that direction. In this way the further suction unit 68 is able to ensure suction along the entire width of the tile 2.

[0035] The suction unit 68 has a section converging on the advance plane P, and comprises a further distal region 71 with a greater section, a further intermediate region 72 with a variable section and further proximal region 73 with a lesser section. The further upper region 73 faces the lower face 16 of the tile 2 directly.

[0036] The drying means 67 further comprises a further blowing unit 70, that faces the lower face 16 of the tiles 2 in a position further downstream of the further suction unit 68 along the advance direction A1.

[0037] The further blowing unit 70 is arranged at the blowing unit 20 at a lesser vertical height.

[0038] The further blowing unit 70 is structurally shaped like the blowing unit 20. The further blowing unit 70 thus extends along a direction that is transverse to the advance direction A1 by a length that is greater than the extent of the tile 2 in that direction. In this way the blowing unit 70 is able to ensure blowing along the entire width of the tile 2.

[0039] The further drying means 67 is fixed to the frame 9 through fixing means that is not shown. The further drying means 67 is arranged inside the drying zone 4 so that the further upper region 73, which directly faces the lower face 16, is positioned in the gap left between two successive rollers 8. The further suction unit 68 is connected to a second suction conduit 87 and the further blowing unit 70 is connected to a second blowing conduit 88.

[0040] The first suction conduit 37 and the second suction conduit 87 are connected to a main suction conduit, which is not shown, which is in turn connected to the inlet of the filter means 89. The filter means 89 receives from the main suction conduit the air, in which there is a small quantity of water that was removed from the upper face 19 and from the lower face 16 of the tiles 2. The filter means 89 thus separates the air from the water present, which is collected in a collecting vessel, which is not shown.

[0041] The filter means 89 is connected to fan means 90 through an inlet conduit, which is not shown.

[0042] The fan means comprised the inlet conduit that

is connected to the filter means 89 and a main blowing conduit, which is not shown.

[0043] The fan means 90 further comprises a fan wheel, which is not shown, which is interposed between the inlet conduit and the main connecting conduit.

[0044] The main blowing conduit is connected to the first blowing conduit 38 and to the second blowing conduit 88.

[0045] Through the rotation of the fan wheel the fan means 90 creates the pressure that is necessary for receiving from the filter means 89 the air purified of any trace of water. The fan means 90 further blows air to the blowing unit 20 and the further blowing unit 70. Initially, the air runs through the main blowing conduit and subsequently runs through the first blowing conduit 38 and the second blowing conduit 88.

[0046] The fan means 90 provides high-pressure air. This causes the air to heat, which promotes completion of the drying of the tiles 2 by the blowing unit 20 and by the further blowing unit 70.

[0047] The fan means 90 thus ensures both suction of the air through the suction unit 18 and the further suction unit 68 and blowing through the blowing unit 20 and the further blowing unit 70.

[0048] There can be applied a wear- and oxidation-resistant coating on the fan wheel on the fan means 90 so as to maintain the fan means 90 in a fully operational state.

[0049] Figure 3 shows an operating configuration X1 of the apparatus 1 in which the tile 2, which is in the drying zone 4, has an irregular surface on the upper face 19. In particular, the upper face 19 shows flat portions 96 arranged at different vertical heights that alternate randomly and are joined together by oblique portions 97.

[0050] The positioning means 24 is in constant contact with the upper face 19 through the roller means 26. Figure 3 shows the suction unit 18 and the blowing unit 20, that are moved independently of one another, along a further direction A3 whilst the roller means 26 rolls on the upper face 19 following the profile thereof. The suction unit 18 and the blowing unit 20 face the flat portions 96, that are arranged at different vertical heights. In this way the suction unit 18 and the blowing unit 20 ensure complete drying of the upper face 19 of the tile 2.

[0051] In another embodiment of the apparatus 1, which is not shown, the drying means 17 and the further drying means 67 comprise blades made of rubber, mounted instead of the suction means 18 and/or of the blowing means 20. These blades differ from prior-art blades to be mounted on the supporting arms 31, 33 and cooperating with the roller means 26. In this way also these blades are maintained at a constant distance from the surface of the upper face 19.

[0052] In operation, initially the wet tile 2 is supported and moved by the first moving means 3 to the drying zone 4, along the advance direction A1. When the tile 2 reaches the first opening 10 of the frame 9 is transferred from the first moving means 3 to the third moving means

6, thus entering the drying zone 4. As shown in Figure 1, the rollers 8 of the third moving means 6 thus support the tile 2 and make the tile 2 proceed along the advance direction A1. Drying starts when the most advanced edge of the tile 2 meets the first roller of the roller means 26 lifting the first roller and thus taking the suction unit 18 to the envisaged height so as to maintain the distance D between the upper face 19 and the lower end 25 of the suction unit 18 constant, whatever the flat portion 96 that the suction unit 18 faces.

[0053] In a subsequent step, when the blowing unit 20 faces the upper face 19 of the tile 2, the positioning means 24 of the blowing unit 20 forces the blowing unit 20 to be positioned at a precise vertical height. This vertical height is such as to maintain constant the distance D between the upper face 19 and the lower end 25 of the blowing unit 20, whatever the flat portion 96 that the blowing unit 20 faces. Simultaneously, the positioning means 24 of the suction unit 18 continues to maintain the suction unit 18 at a vertical height such as to maintain the distance D constant. This also occurs if the vertical height of the flat portion 96 that the suction unit 18 faces, and the vertical height of the flat portion 96 that the blowing unit 20 faces, are different from one another.

[0054] In this way, whilst the tile 2 passes through the drying zone 4, the distance D between the upper face 19 and the lower end 25 is maintained constant. Optimal drying of the upper face 19 is thus ensured, as the drying means 17 can operate at an optimal distance from the upper face 19.

[0055] In another operating configuration which is not shown the apparatus 1 is able to dry successively the tiles 2 that have different thicknesses. Also in this configuration the distance D between the upper face 19 and the lower end 25 is maintained constant as the positioning means 24 is maintained in contact with the upper face 19 whatever the value of the thickness of the tile 2.

Claims

1. Apparatus for drying tiles comprising moving means (6) suitable for supporting and moving said tiles (2) on a conveying plane (P) through a drying zone (4) provided with drying means (17), said drying means (17) being movable with respect to said conveying plane (P) so that when one of said tiles (2) to be dried is introduced into said drying zone (4), there is induced a suitable movement of said drying means (17), said drying means (17) comprising blowing means (20) constituted by a blowing unit (20) that faces an upper face (19) of the tiles (2), the apparatus being **characterized in that** said drying means (17) further comprise suction means (18) constituted by a suction unit (18) that faces the upper face (19) of the tiles (2), the blowing unit (20) being arranged in a position further downstream of the suction unit (18) along the advance direction (A1) of the tiles (2), the

- blowing unit (20) being structurally shaped like the suction unit (18), said blowing unit (20) and said suction unit (18) both having a section converging on the advance plane (P) that has a distal region (21) with a greater section, an intermediate region (22) with a variable section and a proximal region (23) with a lesser section wherein the proximal region directly faces the upper face (19) of the tiles (2) and finishes with a lower end (25).
2. Apparatus according to claim 1, wherein said drying means (17) is coupled with frame means (9) by oscillating means (31, 33).
 3. Apparatus according to claim 2, wherein said oscillating means comprises arm means (31, 33).
 4. Apparatus according to claim 3, wherein said arm means (31, 33) is coupled with said frame means (9) by hinge means.
 5. Apparatus according to claim 3, or 4, wherein said arm means (31, 33) is coupled with said drying means (17) by hinge means.
 6. Apparatus according to claim 4, or 5, wherein said hinge means is elastic hinge means.
 7. Apparatus according to any preceding claim, wherein said drying means (17) is mounted on positioning means (24) arranged for positioning said drying means (17) with respect to said tiles (2).
 8. Apparatus according to claim 7, wherein said positioning means (24) is passive and is arranged on the crossing path of said tiles (2).
 9. Apparatus according to claim 8, wherein said positioning means (24) comprises roller means (26).
 10. Apparatus according to any preceding claim, wherein said drying means (17) comprises blades made of rubber.
 11. Apparatus according to any preceding claim, and further comprising further drying means (67).
 12. Apparatus according to claim 11, wherein said further drying means (67) is fixed relative to said frame means (9) and mounted on an opposite side of said drying means (17) with respect to said advance plane (F).
 13. Apparatus according to claim 11, or 12, wherein said further drying means (67) comprises further suction means (68).
 14. Apparatus according to claim 13, wherein said further drying means (67) comprises further blowing means (70).
 15. Apparatus according to any preceding claim, and further comprising fan means (90) associated with said drying means (17) and with said further drying means (67), if present.
 16. Apparatus according to claim 15, wherein said fan means (90) comprises a fan wheel provided with an antioxidant coating.
 17. Apparatus according to claim 15, wherein said fan means (90) is common to said suction means (18) and said blowing means (20).
 18. Apparatus according to claim 15 as appended to claim 14, wherein said fan means (90) is common to said further suction means (68) and to said further blowing means (70).
 19. Apparatus according to claim 14, wherein said further suction means (68) is structurally and functionally shaped like said suction unit (18), and said further blowing means (70) is structurally shaped like said blowing unit (20).
 20. Apparatus according to any preceding claim 15-18, wherein said fan means (90) provides high-pressure air causing the air to heat for promoting completion of the drying of the tiles.

Patentansprüche

1. Trocknungsgerät für Fliesen, das Bewegungsmittel (6) umfasst, die geeignet sind, um die Fliesen (2) auf einer Förderebene (P) zu tragen und durch eine Trocknungszone (4) zu bewegen, die mit Trocknungsmitteln (17) ausgestattet ist, wobei die Trocknungsmittel (17) in Bezug zu der Förderebene (P) so bewegt werden können, dass, wenn eine der zu trocknenden Fliesen (2) in die Trocknungszone (4) eingeführt wird, eine geeignete Bewegung der Trocknungsmittel (17) induziert wird, wobei die Trocknungsmittel (17) Blasmittel (20) umfassen, die aus einer Blaseinheit (20) bestehen, die einer oberen Fläche (19) der Fliesen (2) gegenüberliegt, wobei das Gerät **dadurch gekennzeichnet ist, dass** die Trocknungsmittel (17) weiter Saugmittel (18) umfassen, die aus einer Saugeinheit (18) bestehen, welche der oberen Fläche (19) der Fliesen (2) gegenüberliegt, und die Blaseinheit (20) in einer Position weiter stromabwärts von der Saugeinheit (18) entlang der Vorschubrichtung (A1) der Fliesen (2) angeordnet ist, wobei die Blaseinheit (20) strukturell wie die Saugeinheit (18) geformt ist, wobei sowohl die Blaseinheit (20) als auch die Saugeinheit (18)

- einen Abschnitt haben, der auf die Förderebene (P) hin konvergiert, der einen distalen Bereich (21) mit einem größeren Querschnitt hat, einen intermediären Bereich (22) mit einem variablen Querschnitt und einen proximalen Bereich (23) mit einem kleineren Querschnitt, worin der proximale Bereich direkt der oberen Fläche (19) der Fliesen (2) gegenüberliegt und in einem unteren Ende (25) endet.
2. Gerät gemäß Anspruch 1, worin das Trocknungsmittel (17) durch oszillierende Mittel (31, 33) mit Rahmenmitteln (9) gekoppelt ist. 10
 3. Gerät gemäß Anspruch 2, worin das oszillierende Mittel Armmittel (31, 33) umfasst. 15
 4. Gerät gemäß Anspruch 3, worin das Armmittel (31, 33) mit den Rahmenmitteln (9) durch Scharniermittel gekoppelt ist. 20
 5. Vorrichtung gemäß Anspruch 3 oder 4, worin das Armmittel (31, 33) mit dem Trocknungsmittel (17) durch Scharniermittel gekoppelt ist.
 6. Vorrichtung gemäß Anspruch 4 oder 5, worin die Scharniermittel elastische Scharniermittel sind. 25
 7. Gerät gemäß irgendeinem obigem Anspruch, worin das Trocknungsmittel (17) auf Positioniermitteln (24) montiert ist, die zur Positionierung der Trocknungsmittel (17) in Bezug zu den Fliesen (2) angeordnet sind. 30
 8. Gerät gemäß Anspruch 7, worin das Positioniermittel (24) passiv ist und auf dem Kreuzungsweg der Fliesen (2) angeordnet ist. 35
 9. Gerät gemäß Anspruch 8, worin das Positioniermittel (24) Rollenmittel (26) umfasst. 40
 10. Gerät gemäß einem beliebigen obigen Anspruch, worin das Trocknungsmittel (17) Klingen aus Gummi umfasst.
 11. Gerät gemäß einem beliebigen obigen Anspruch, das ein weiteres Trocknungsmittel (67) umfasst. 45
 12. Gerät gemäß Anspruch 11, worin das weitere Trocknungsmittel (67) in Bezug zu den Rahmenmitteln (9) befestigt und an einer gegenüberliegenden Seite des Trocknungsmittels (17) in Bezug zu der Förderebene (P) montiert ist. 50
 13. Gerät gemäß Anspruch 11 oder 12, worin das weitere Trocknungsmittel (67) weitere Saugmittel (68) umfasst. 55
 14. Gerät gemäß Anspruch 13, worin das weitere Trocknungsmittel (67) weitere Blasmittel (70) umfasst.
 15. Gerät gemäß einem beliebigen obigen Anspruch, das weiter ein Ventilatormittel (90) umfasst, das mit dem Trocknungsmittel (17) und mit dem weiteren Trocknungsmittel (67), falls vorhanden, verbunden ist.
 16. Gerät gemäß Anspruch 15, worin das Ventilatormittel (90) ein Gebläserad umfasst, das mit einer Antioxidans-Beschichtung versehen ist.
 17. Gerät gemäß Anspruch 15, worin das Ventilatormittel (90) den Saugmitteln (18) und den Blasmitteln (20) gemeinsam ist.
 18. Gerät gemäß Anspruch 15 wie Anspruch 14 hinzugefügt, worin das Ventilatormittel (90) den weiteren Saugmitteln (68) und den weiteren Blasmitteln (70) gemeinsam ist.
 19. Gerät gemäß Anspruch 14, worin das weitere Saugmittel (68) strukturell und funktionell wie die Saugereinheit (18) geformt ist und das weitere Blasmittel (70) strukturell wie die Blaseinheit (20) geformt ist.
 20. Gerät gemäß einem beliebigen obigen Anspruch 15-18, worin das Ventilatormittel (90) Hochdruckluft bereitstellt, was die Luft veranlasst, sich aufzuheizen, um den Abschluss der Trocknung der Fliesen zu fordern.

Revendications

1. Appareil à sécher les carreaux comprenant un moyen de déplacement (6) adapté pour supporter et déplacer lesdits carreaux (2) sur un plan de transport (P) à travers une zone de séchage (4) munie d'un moyen de séchage (17), ledit moyen de séchage (17) étant déplaçable par rapport audit plan de transport (P) de sorte que l'introduction d'un desdits carreaux (2) à sécher dans ladite zone de séchage (4) cause un mouvement approprié dudit moyen de séchage (17), ledit moyen de séchage (17) comprenant un moyen de soufflage (20) constitué par une unité de soufflage (20) qui fait face à une face supérieure (19) des carreaux (2), l'appareil étant **caractérisé en ce que** ledit moyen de séchage (17) comprend en outre un moyen de succion (18) constitué par une unité de succion (18) qui fait face à la face supérieure (19) des carreaux (2), l'unité de soufflage (20) étant agencée dans une position plus en aval de l'unité de succion (18) suivant la direction d'avancement (A1) des carreaux (2), l'unité de soufflage (20) étant formée structurellement comme l'unité de succion (18), ladite unité de soufflage (20) et ladite unité de succion (18) ayant toutes deux une section

- convergeant sur le plan d'avancement (P) qui a une région distale (21) avec une section plus importante, une région intermédiaire (22) avec une section variable et une région proximale (23) avec une section moins importante, dans lequel la région proximale fait directement face à la face supérieure (19) des carreaux (2) et se termine par une extrémité inférieure (25).
2. Appareil selon la revendication 1, dans lequel ledit moyen de séchage (17) est couplé à un moyen de cadre (9) par un moyen d'oscillation (31, 33). 10
 3. Appareil selon la revendication 2, dans lequel ledit moyen d'oscillation comprend un moyen de bras (31, 33). 15
 4. Appareil selon la revendication 3, dans lequel ledit moyen de bras (31, 33) est couplé audit moyen de cadre (9) par un moyen d'articulation. 20
 5. Appareil selon la revendication 3 ou 4, dans lequel ledit moyen de bras (31, 33) est couplé audit moyen de séchage (17) par le moyen d'articulation. 25
 6. Appareil selon la revendication 4 ou 5, dans lequel ledit moyen d'articulation est un moyen d'articulation élastique.
 7. Appareil selon l'une quelconque des revendications précédentes, dans lequel ledit moyen de séchage (17) est monté sur un moyen de positionnement (24) agencé pour positionner ledit moyen de séchage (17) par rapport auxdits carreaux (2). 30
 8. Appareil selon la revendication 7, dans lequel ledit moyen de positionnement (24) est passif et est agencé sur l'itinéraire de croisement desdits carreaux (2). 35
 9. Appareil selon la revendication 8, dans lequel ledit moyen de positionnement (24) comprend un moyen de rouleau (26). 40
 10. Appareil selon l'une quelconque des revendications précédentes, dans lequel ledit moyen de séchage (17) comprend des lames en caoutchouc. 45
 11. Appareil selon l'une quelconque des revendications précédentes, et comprenant en outre un autre moyen de séchage (67). 50
 12. Appareil selon la revendication 11, dans lequel ledit autre moyen de séchage (67) est fixe par rapport audit moyen de cadre (9) et monté sur un côté opposé dudit moyen de séchage (17) par rapport audit plan d'avancement (P). 55
 13. Appareil selon la revendication 11 ou 12, dans lequel ledit autre moyen de séchage (67) comprend un autre moyen de succion (68).
 14. Appareil selon la revendication 13, dans lequel ledit autre moyen de séchage (67) comprend un autre moyen de soufflage (70).
 15. Appareil selon l'une quelconque des revendications précédentes, et comprenant en outre un moyen de ventilateur (90) associé audit moyen de séchage (17) et audit autre moyen de séchage (67), en cas de présence de ce dernier.
 16. Appareil selon la revendication 15, dans lequel ledit moyen de ventilateur (90) comprend une roue de ventilateur munie d'un revêtement antioxydant.
 17. Appareil selon la revendication 15, dans lequel ledit moyen de ventilateur (90) est commun audit moyen de succion (18) et audit moyen de soufflage (20).
 18. Appareil selon la revendication 15, telle qu'annexée à la revendication 14, dans lequel ledit moyen de ventilateur (90) est commun audit autre moyen de succion (68) et audit autre moyen de soufflage (70).
 19. Appareil selon la revendication 14, dans lequel ledit autre moyen de succion (68) est formé structurellement et fonctionnellement comme ladite unité de succion (18), et ledit autre moyen de soufflage (70) est formé structurellement comme ladite unité de soufflage (20).
 20. Appareil selon l'une quelconque des revendications précédentes 15 à 18, dans lequel ledit moyen de ventilateur (90) fournit de l'air sous haute pression causant le réchauffement de l'air pour favoriser l'achèvement du séchage des carreaux.

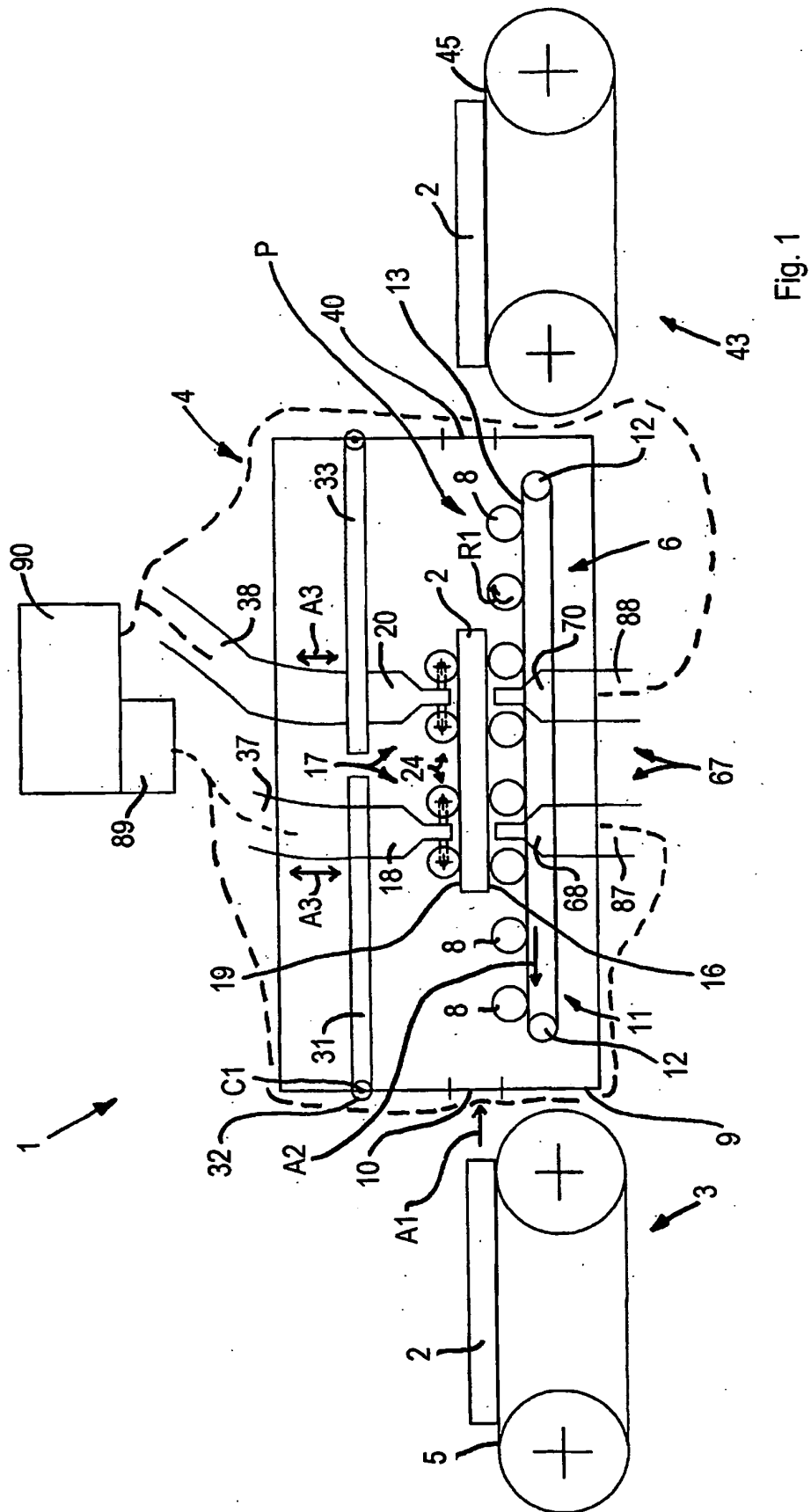
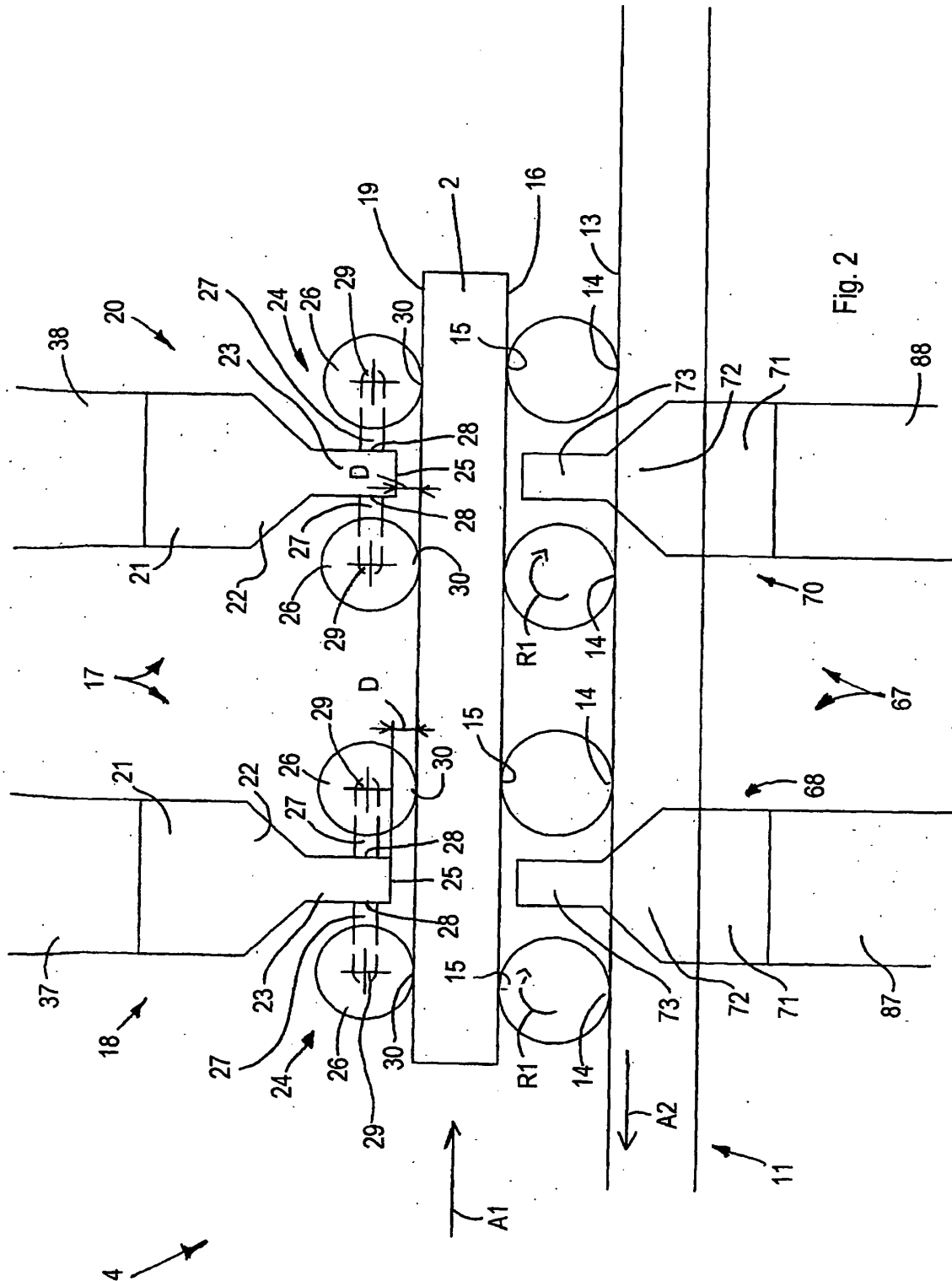
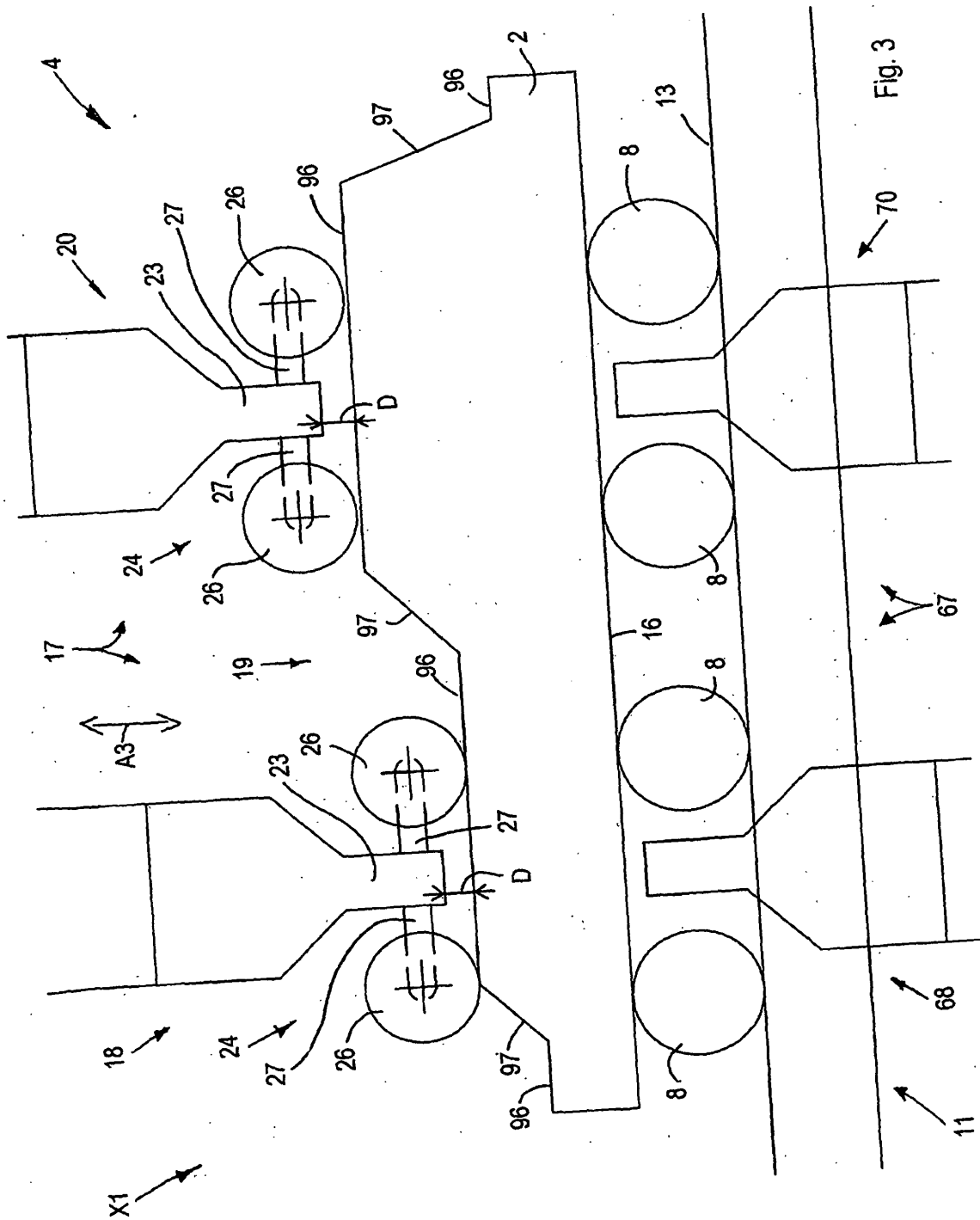


Fig. 1





REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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