

Title (en)
Twin-wire former

Title (de)
Doppelsiebformer

Title (fr)
Section de formage à deux toiles

Publication
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Application
EP 00116920 A 20000805

Priority
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Abstract (en)

The double-fourdrinier section (10) of a papermaking/cardboard prodn. machine, where the pulp is converted into a wet fiber web by water extraction, has a bar (26) within the fourdrinier loop at the pulp entry end. The bar (26) has a leading projection (28) with an outer surface (28') in a convex curvature, and a curved running surface (30) in a convex curve in the direction (L) of fourdrinier travel. The min. curve radius of the running surface (30) is larger than the radius of the projection (28) curvature. The outer fourdrinier (16) is deflected by the bar (28) by an angle of 1-30 degrees and pref. 10-20 degrees. The bar (28) has a guide surface for the outer fourdrinier (16) at the transit between the projection (28) and the running surface (30). The guide surface has a convex curvature at the junction with the running surface (30), with a min. curve radius which is larger than the radius of the running surface (30) curvature. The guide surface section and the running surface (30) are flush with each other at a curved or flat transit. The guide surface has a continuous increasing curve radius in the direction (L) of fourdrinier movement, towards the running surface. The bar projection (28) has a curve radius of 0.5-1.0 mm. The curve radius of the running surface (30) is 20-100 mm and pref. 30-50 mm. The curve radius of the guide surface section is 100-1000 mm. The running surface (30) has a length of 10-20 mm. The support for the outer fourdrinier (16) is a suction box (24), with an adjustable fluid pressure acting with the bar (28) to set the level of penetration of the suction box (24) into the upper fourdrinier (16). The suction box fluid pressure setting is controlled and/or regulated.. The running surface (30) has a continuous increasing curve radius, in the direction (L) of fourdrinier travel, rising from 30 mm to 100 mm. The bar has a flush transit between the projection (28) and the running surface (30). The bar (26) has a mounting with elastic damping at the body or frame of the suction box (24). The bar projection can have an extension, of a pliable and elastic material, held at the outer fourdrinier (16) by the flow forces.

Abstract (de)

Ein Doppelsiebformer 10 zum Bilden einer Faserstoffbahn wie insbesondere einer Papier- oder Kartonbahn umfaßt zwei umlaufende endlose Siebe 14, 16, die unter Bildung eines Stoffeinlaufspaltes 18 zusammenlaufen und eine Doppelsiebzone 20 bilden, in der die beiden Siebe 14, 16 gemeinsam insbesondere über eine mit dem inneren 14 der beiden Siebe 14, 16 in Kontakt kommende Formierwalze 22 sowie eine mit dem Außensieb 16 in Kontakt kommende Stützeinrichtung 24 geführt sind, die innerhalb der Schlaufe des Außensiebes 16 angeordnet und mit einer in Sieblaufrichtung L betrachtet vorderen Einlaufleiste 26 versehen ist, die eine vordere Nase 28 mit einer allgemein konvex gekrümmten Außenfläche 28' sowie eine sich in Sieblaufrichtung L daran anschließende Auflauffläche 30 für das Außensieb 16 umfaßt. Die sich an die Nase 28 anschließende Auflauffläche 30 der Einlaufleiste 26 ist allgemein konvex gekrümmt, wobei der minimale Krümmungsradius dieser Auflauffläche 30 größer ist als der der Nase 28. <IMAGE>

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