

Title (en)
Twin-wire former

Title (de)
Doppelsiebformer

Title (fr)
Section de formage à deux toiles

Publication
EP 0940500 A3 20001220 (DE)

Application
EP 99101196 A 19990122

Priority
DE 19809480 A 19980307

Abstract (en)

[origin: EP0940500A2] In the double fourdrinier assembly, where a fiber suspension pulp is converted into a paper or cardboard web, the lifting mechanism (23) is a single lifting system for the upper fourdrinier (20) and to grip the common carrier (22) for the water extraction box (19) and the entry roller (16). The lifting movement alters the wedge angle (k) of the entry between the fourdriniers, and separates the upper (20) and the lower (11) fourdriniers. An exit roller (17) on a swing axis (25) for the upper fourdrinier (20) also separates the fourdriniers (11,20). The additional roller swing axis (25) comes into effect after an increase in the entry wedge angle (k). When the upper fourdrinier (20) is lifted, the carrier (22) is raised clear of the bearing of the operating swing axis (24). During the conversion of the pulp into a web, the carrier (22) is clear of the additional swing axis (25). At the end of the double fourdrinier zone, a separating suction unit (15) is within the loop of the lower fourdrinier (11), with an upwards convex sieve surface. The suction unit can also be mounted to the upper fourdrinier assembly. In another form, the carrier is divided into pivoting entry and exit sections, interconnected by a linkage. During water extraction from the pulp, the entry section is supported on the operating swing axis, parallel to the direction of fourdrinier travel. The exit section is durably supported by the fixed swing axis. A gap is between the two carrier sections, which is bridged by a limit when the entry wedge angle is increased and the upper fourdrinier is lifted away from the lower fourdrinier and the carrier is lifted clear of the operating swing axis. The linkage is at least close to the bisection between the adjacent paths of the upper fourdrinier movement. The carrier can also be divided into a swing entry section and a rigid exit section, coupled together by straps which rest on supports during normal working. The entry section can swing in the straps, to alter the entry wedge angle, where the straps swing at the rigid exit section. After movement, the swing entry section can be coupled rigidly to the straps by limits, and the upper fourdrinier swings on the additional swing axis away from the lower fourdrinier. The operating swing axis (24) is located near the point where the fourdrinier moves away from the water extraction box. The operating swing axis can be at the fourdrinier running surface of the final bar (21) of the water extraction box (19). Or the operating swing axis is a single axis for the swing movement of the upper fourdrinier assembly, between the water extraction box (19) and the exit roller (17), or between the separating suction unit (15) and the exit roller (17). The double fourdrinier section can ride on slides, in relation to the machine frame, parallel to the line of fourdrinier travel and/or across it. The carrier (22) has two longitudinal carriers, linked together across the machine only by the water extraction box (19).

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D21F 9/00

IPC 8 full level
D21F 9/00 (2006.01)

CPC (source: EP US)
D21F 9/003 (2013.01 - EP US)

Citation (search report)

- [A] AT 382655 B 19870325 - ESCHER WYSS GMBH [DE]
- [A] DE 4326867 A1 19931216 - VOITH GMBH J M [DE]
- [A] US 4724047 A 19880209 - CREAGAN RICHARD W [CA], et al

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