Title (en)

Twin wire former

Title (de)

Doppelsiebformer

Title (fr)

Section de formage à deux toiles

Publication

EP 1083260 B1 20041103 (DE)

Application

EP 00116688 A 20000802

Priority

DE 19943369 A 19990910

Abstract (en)

[origin: EP1083260A2] The double fourdrinier section (10), of a papermaking or cardboard prodn. machine, has two continuous fourdriniers (14,16) which form an entry gap (18) between them for the pulp feed from the stock inlet (23) to be converted into a web (12). An applicator (26) to deliver a filling suspension is on both sides of the double-fourdrinier stretch (24), after the entry gap (18) between them, with facing suction units (28,32,34). The fourdriniers are aligned on the vertical (V) or at an angle (alpha) to the vertical of (-) 30 degrees to (+) 30 degrees and especially (-) 20 degrees to (+) 20 degrees and pref. (-) 5 degrees to (+) 5 degrees on both sides of the double fourdrinier path. The filling suspension is composed of water with a filling material of kaolin, clay, CaCO3 as ground GCC or precipitated PCC, zeolite, TiO2, bentonite and/or other mineral materials, singly or in combinations. The filling suspension additionally carries fine and fiber materials, retention agents and/or other auxiliary processing agents. At the entry gap (18) between the fourdriniers for the pulp feed, one fourdrinier (16) of the pair (14,16) passes around a web shaping suction roller (22) before they come together in a vertical double-fourdrinier stretch (24) for the web formation zone (32). The web formation zone has at least one web development shoe (32) in a number of zone sections and especially 1-4 and pref. 1-3 sections (32'.32,32'). Where the pulp is converted into a web (12), the action of the shoe (32) is augmented by facing bars (36). Further water is extracted from the wet web (12) by at least one flat suction unit (34) in the vertical double-fourdrinier stretch (24), after the shoe structure (32), followed by a suction roller (28) for additional water extraction. At least one applicator (26) for the filling suspension is on the opposite side of the double fourdrinier to the flat suction unit (34) and the opposite side to the shoe structure (32) and the opposite side to the suction roller (28). After the filling suspension has been delivered into the double-fourdrinier stretch with the wet web, the collected extracted water is separated for processing apart from the collected water before the addition of the filling suspension. The entry gap (18) for the pulp feed, between the fourdriniers, is under the vertical double-fourdrinier stretch (24).

IPC 1-7

D21F 9/00

IPC 8 full level

D21F 9/00 (2006.01)

CPC (source: EP)

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AT DE FI IT SE

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