

Title (en)
Method of and device for transferring a running web

Title (de)
Verfahren und Vorrichtung zum Überführen einer laufenden Materialbahn

Title (fr)
Méthode et dispositif pour transférer une bande en mouvement

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Application
EP 99122209 A 19991106

Priority
DE 19900986 A 19990113

Abstract (en)

[origin: DE19900986A1] To transfer a moving web and especially a paper web (10) to a target roller, moving cutters (20,21) trim a transfer leader strip (30) from the web (10) parallel to the direction (L) of web travel. To give the leader strip (30) a pointed leading end (32), at least one cutter (20,21) alignment is changed to give the cuts (40-43) on a line towards each other by a cutter width positioning towards one of the web edges (12,13). The cutters (20,21) are set so that their cuts (40-43) in the web (10) have a common start point (A), and the cut lines (40-43) intersect each other. The two parallel cuts (40,41) which define the cut leader strip (30) can diverge from a single common cut line to give the pointed leading end (32). The spaced cutters (20,21) can pivot on an axis at right angles to the web (10) by 90 deg , to cut the leading end (32) of the strip. The cut lines (40-43) formed by the cutters (20,21) are brought together at the start point (32) of the cut strip (30), to form a nominal shear point. The transfer leader strip (30) is cut generally at the center of the web (10), narrower than the web width, in a constant width along its length. The cutters (20,21) are moved towards different edges (12,13) of the web (10), at right angles to the direction (L) of web movement, after cutting their lines (40,41) in the web. The transfer leader strip (30) is cut after cutting a preceding strip (36), parallel to the direction (L) of web travel and close to an edge (12,13) of the web (10). The web (10) and especially two edge sections and two strip edges are moved on a path alongside the target area, and particularly into the machine cellar or into the pulper of a paper machine. The leading end (32) of the strip (30) is fed to the target area and/or a carrier directly after the start of the strip (30) cutting action. The cut strip (30) is moved as close to an ideal path as possible between the cutters (20,21) and the target zone. The web (10) is supported while the leader strip (30) is cut, especially by a roller and/or a fourdrinier. On an unsupported path, the web is cut during its free movement directly in front of a roller. The cutters (20,21) are jets which deliver a fluid jet stream and especially of water, on an alignment to strike the web (10) at an angle to its surface normals. An independent claim is included for a section of the papermaking machine where the strip cutters (20,21) are operated and moved independently of each other. Preferred Features: The cutters (20,21) are held at a constant gap from each other, in relation to the direction (L) of web travel, and are moved on a common axis at right angles to the direction (L) of movement on a common carrier, and rotate on an axis at right angles to the web travel direction (L). The cutters (20,21) are jets to deliver a fluid jet stream at the web (10), a rotating and circular sawtooth cutting blade, a fixed cutting blade, a needle or a laser.

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Citation (search report)

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