

Title (en)
Cleaning and/or conditioning device

Title (de)
Konditionier- und/oder Reinigungsvorrichtung

Title (fr)
Dispositif de nettoyage et/ou de conditionnement

Publication
EP 1179631 A1 20020213 (DE)

Application
EP 01109217 A 20010414

Priority
• DE 20013887 U 20000811
• DE 10044907 A 20000912

Abstract (en)
The maintenance unit (10) for a rotating roller (14) and/or continuous belt, in a papermaking machine, has at least two scrapers (16,18) in succession in the direction of roller rotation (L) or belt travel with a gap between them. The maintenance unit for a papermaking machine roller and/or belt has the scrapers in front of the point where the incoming blanket arrives at the roller in the direction of roller rotation/belt travel. The trailing scraper has a further scraper to act on the incoming blanket belt before it reaches the roller. A low pressure suction unit acts in the zone between the rotating roller and a preceding press, or at the wedge zone formed by the rotating roller and the blanket scraper at the trailing scraper. The gap between the blanket scraper and the blanket arrival point at the roller is ≤ 500 mm and preferably ≤ 400 mm and particularly ≤ 300 mm. A blanket guide roller is at the second scraper, near the preceding press, which is a roller or a long gap press system. A spray guard is between the blanket suction guide roller and the preceding press, preferably across the machine width. At least one cleaning unit (50) for the surface (60) of the roller or belt is between the scrapers, to deliver a jet or spray under pressure at the roller/belt surface. The jet or spray is a fluid under pressure, and especially water or air. The cleaning unit can be a combined blower or spray and suction system. The cleaning unit has at least one spray head (54) with a reciprocating movement across the direction of roller rotation and belt travel, with rotation around its axis to direct the jet or spray at the roller or belt surface. The spray head has at least one jet at an angle to its axis. The jet or spray is at a pressure of ≥ 20 bar and preferably ≤ 25 -30 bar. A suction unit to extract any mist is at the spray head. The cleaning unit is encapsulated in a housing (66), open towards the roller or belt surface, with the scrapers acting as seals on both sides of the housing opening at the roller or belt. One scraper, and especially a foil scraper, equalizes the water volume fed into the press nip with a grooved press roller or belt, or with a roller/belt surface fitted with blind drillings, using a hydrodynamic underpressure. The water is extracted (50) from the grooved/drilled roller/belt surfaces, to increase the dry content of the paper/cardboard web where water is extracted, using compressed air to dislodge trapped water for extraction by suction in a combined blowing/suction unit.

Abstract (de)
Die Erfindung betrifft eine Vorrichtung (10) zur Konditionierung, Reinigung und/oder Sauberhaltung einer rotierenden Walze (12, 14) und/oder eines umlaufenden Bandes einer Papiermaschine. Davon ausgehend soll eine gute Reinigung mit möglichst geringem Aufwand, insbesondere auch bei hohen Geschwindigkeiten dadurch erreicht werden, daß der rotierenden Walze (12, 14) bzw. dem umlaufenden Band wenigstens zwei in Walzen- bzw. Bandlaufrichtung (L) hintereinander angeordnete, einen Abstand voneinander aufweisende Schaber (16, 18) zugeordnet sind. <IMAGE>

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D21G 3/00; D21F 1/32

IPC 8 full level
D21F 1/32 (2006.01); **D21G 3/00** (2006.01)

CPC (source: EP US)
D21F 1/32 (2013.01 - EP US); **D21G 3/00** (2013.01 - EP US); **D21G 3/005** (2013.01 - EP US)

Citation (search report)
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