

Title (en)
Apparatus for bearing and positioning of stationary flats on carding machines

Title (de)
Vorrichtung zum Lagern und Positionieren von stationären Deckeln an Karden

Title (fr)
Appareil pour loger et positionner des chapeaux fixes sur des machines de cardages

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Application
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Abstract (en)
The apparatus to hold and position static flats has a swing frame for the flats which can move them clear of the drum for cleaning and inspection and return without setting adjustments. The apparatus to hold and position static flats (12) in a carding machine, has at least one moving frame (7,8) to secure the flats (12). When the frame (7,8) is opened, all the flats (12) are lifted clear of the carding drum. The flats (12) are held rigidly at a tangent to the carding drum, and can slide radially. In the closed position of the frame (7,8), the flats (12) lie on a supporting curve (2). The flats (12) are pressed by a spring against the supporting curve (2) which has one end at the frame (7,8) and the other end at the flats (12). The frame (7,8) swings on a shaft (6), with its rotary axis at least 200 mm to one side of the nearest flat (12) and at least 150 mm above it. Two frame sections (7,8) grip over each other crosswise, and are mounted to swing on a Y-shaped carrier (5). The frame can also slide along a linear guide. The frame (7,8) has slits (20) aligned radially to the card drum, to take a screw (21) with a fitting shoulder and the like at the flat (12). The spring is a pressure spring to support the flat (12) against tilting while the flat (12) is not in contact with the support curve (2), and the spring can be a rubber unit. The frame (7,8) is pressed away from the card drum by springs (13) and balancing weights (33). The frame (7,8) has a locking mechanism with a rotating shaft (14) with a rigidly fixed cam disk (17) and a lever (15). In the closed position, the cam disk (17) grips at a fixed bolt (18). Rotation of the locking mechanism locks and releases the frame (7,8). An initiator can be at the lever to control the locking and release actions. An elastic seal is between the static flats, in a U-shape, held in place by a U-shaped mounting clip and clamping screws at a flat (12). The seal is of rubber or foam rubber.

Abstract (de)
Die erfindungsgemäße Vorrichtung zum Lagern und Positionieren von stationären Deckeln (12) in Karden weist wenigstens einen bewegbar gelagerten Bügel (7, 8, 34, 36) auf, an dem die Deckel (12) gelagert sind. Im geöffneten Zustand des Bügels (7, 8, 34, 36) sind alle Deckel (12) vom Tambour (22) abgehoben. Die Deckel (12) sind an den Bügeln (7, 8, 34, 36) bezüglich des Tambours (22) in tangentialer Richtung starr, in radialer Richtung dagegen verschiebbar geführt und liegen im geschlossenen Zustand des Bügels (7, 8, 34, 36) auf einem Deckelbogen (2) auf. Die Deckel (12) werden von einem Federelement (24), das sich einerseits am Bügel (7, 8, 34, 36) und andererseits am Deckel (12) abstützt, gegen den Deckelbogen (2) gedrückt. Zur Überprüfung und zur Reinigung der Garnituren lassen sich die Bügel (7, 8, 34, 36) vom Bedienungspersonal rasch, einfach und ohne Zuhilfenahme von Werkzeug öffnen und schliessen sowie verriegeln. Das Schliessen der Bügel (7, 8, 34, 36) kann erfolgen, ohne dass ein neuerliches Positionieren, Richten oder dergleichen der stationären Deckel (12) erforderlich wird. <IMAGE>

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• [YA] DE 3538447 A1 19860515 - NEIDHART & CO AG WATTEFAB [CH]
• [A] CH 681546 A5 19930415 - RIETER AG MASCHF
• [YDA] US 5005260 A 19910409 - ODA TAKUMI [JP]
• [A] CH 358722 A 19611130 - RUSCA RALPH A [US]

Cited by
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