

Title (en)
Carding machine

Title (de)
Karde.

Title (fr)
Machine de cardage

Publication
EP 1031650 A2 20000830 (DE)

Application
EP 00810122 A 20000211

Priority
DE 19907288 A 19990222

Abstract (en)
The carding assembly has a drum (4) with pref. an arrangement of revolving flats (8). The drum (4), and at least one component of the side section (6) are structured so that heat is exchanged between them in operation, and the heat expands consistently so that the carding gap (s) remains constant between the revolving flat (8) and the drum (4). The heat generated at the drum (4), during carding, is directed to a component of the side section (6) to heat it. The side section (6) is open towards the drum (4), for an air exchange in the space between them. The radial sliding movement of the revolving flat (8) and the carding units are homogenous to the radial extension of the drum (4). The side section (6) gives an axial cover to the drum (4). A seal (28) is between the drum (4) and the side section (6), to extend the heat effect on the side section component. The seal (28) is a throttle. The drum (4) has passage openings towards the side section (6), and is fitted with spokes (22) for heat to escape towards the side section (6). The side section (6) radiates heat outwards, and the section (6) has internal ribs (30,31) to improve the heat reception. The materials of the drum (4) and the side section (6) are matched to give the same thermal expansion from the heat generated by the working of the card. The side section (6) and/or the drum (4) can be of different materials, but with the same thermal expansion. The side section (6) is a shield, with guide units (9), and at least one threaded rod (19) to hold the shield (6) and guides (9) together. The drum heat especially acts on the threaded rod (19). The revolving flat (8) is within a temp. controlled zone. The side section (6) is structured so that the heat from the drum acts on a part of it so that its thermal expansion, and especially its radial shift, matches the radial thermal expansion of the drum (4). The side section (6) can have a heating rod to lock the shield (6) and guides (9) together.

Abstract (de)
Die Erfindung betrifft eine Karde mit einer Trommel (4) und einem Deckel (8), insbesondere einem Wanderdeckelaggregat mit einer Vielzahl von Deckeln (8), mit beidseits der Trommel (4) angeordnetem Seitenteil (6) und mit einem Kardierspalt (s) zwischen Deckel (8) und Trommel (4). Die Trommel (4) und zumindest ein Element des Seitenteiles (6) sind derart ausgebildet, daß sie die im Betrieb entstehende Wärme gegenseitig austauschen und sich dadurch im wesentlichen homogen ausdehnen, so daß der Kardierspalt (s) im wesentlichen konstant bleibt. <IMAGE>

IPC 1-7
D01G 15/16; **D01G 15/32**

IPC 8 full level
D01G 15/16 (2006.01); **D01G 15/28** (2006.01); **D01G 15/32** (2006.01)

CPC (source: EP)
D01G 15/16 (2013.01); **D01G 15/28** (2013.01)

Cited by
AP2017A; DE10325273A1; DE102005029767A1; DE102010055290A1; GB2416546A; DE102004035771A1; GB2416546B; GB2386131A; GB2386131B; US7614122B2; US7694393B2

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