

Title (en)  
Calender rolls for fleece

Title (de)  
Vlieskalender

Title (fr)  
Rouleaux de calendrage pour feutre

Publication  
**EP 0899370 B1 20030924 (DE)**

Application  
**EP 98110606 A 19980610**

Priority  
DE 19737514 A 19970828

Abstract (en)  
[origin: EP0899370A2] The calender assembly, for carded webs, has a conveyor belt (10) which is permeable to air. At the calender rollers (4-6), the belt (10) passes round deflection rollers (14,16) to form a section (18) of the belt path between them at a tangent to the calender rollers (4-6), with at least a double belt path deflection. The speed of web (12) travel on the conveyor belt (10) is equal to the take-in speed at the gap (8) between the calender rollers (4-6). The leading section of the conveyor belt is subjected to suction where it passes between the deflection rollers (14,16) on a path matching the calender roller curvature, and the belt section (20) in front of the deflection roller (14) is under suction. The calender roller (4) which takes in the carded web (12) has a larger dia. than its facing roller (6). The second belt deflection roller (16), in the direction of belt (10) movement, has a smaller dia. than the preceding deflection roller (14). Between the deflection rollers (14,16), the path of the conveyor belt (10) is pitched downwards at an angle of 30-50 degrees to the horizontal. The first and/or second belt deflection roller (14,16) is a mesh roller, with an inner underpressure. The second mesh deflection roller (16) can be at least partially with an inner overpressure. The three calender rollers (4-6) are in a vertical stack, with the end section of the conveyor belt (10) directed at a tangent to the upper roller (4) or the center roller (6). A lateral perforated roller (25) compresses the carded web (12) on the conveyor belt (10), rotating at a speed matching the speed of belt travel. The perforated roller (25) is under suction, and has a suction hood (26) shrouding it apart from the roller surface in contact with the carded web (12).

IPC 1-7  
**D04H 1/70**; **D06C 15/02**; **B65H 20/10**; **B30B 5/04**; **D04H 1/44**

IPC 8 full level  
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CPC (source: EP)  
**D06C 15/02** (2013.01)

Cited by  
EP1223135A1; CN115012156A; CN102433792A; EP1225264A1; EP2085504A1; US6820786B2; US7690093B2; WO2006048437A3

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