

Title (en)

Process and apparatus for treating a fibrous web

Title (de)

Verfahren und Vorrichtung zum Behandeln einer Faserstoffbahn

Title (fr)

Procédé et dispositif pour le traitement d' une bande fibreuse

Publication

EP 1318233 B1 20060816 (DE)

Application

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Priority

DE 10157689 A 20011124

Abstract (en)

[origin: DE10157689C1] Assembly heats the web in a wide roller nip formed by a roller and a rotating mantle or two supported mantles. The roller/mantle are in contact with the web between them over a given peripheral section. Before the web enters the wide nip, it is treated with a fluid to moisten the fibers and the fiber structure. The fluid is applied to the web at a faster speed than the web on entering the nip. Assembly (1) heats the web in a wide roller nip (9) formed by a roller (3) and a rotating mantle (5) or two supported mantles. The roller/mantle are in contact with the web between them over a given peripheral section. Before the web enters the wide nip, it is treated with a fluid to moisten the fibers and the fiber structure. The fluid is applied to the web at a faster speed than the web on entering the nip. The molecular structure of the liquid is unchanged on passing through the nip, and it evaporates within the nip with a higher vapor pressure than steam from the water contained in the web. The liquid contains one or more components of liquid nitrogen, alcohol, ester, water with a reduced surface tension, and water at a higher temperature than the web in front of the nip.

IPC 8 full level

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