

Title (en)

High loft rebulkable non-woven fabric: tacker fiber approach

Title (de)

Voluminöser wiederaufbauschbarer Vliesstoff: Verfahren unter Verwendung thermoplastischer Fasern

Title (fr)

Etoffe non-tissée volumineuse avec grand pouvoir de gonflement: méthode utilisant des fibres thermoplastiques

Publication

EP 0538047 B1 19960828 (EN)

Application

EP 92309439 A 19921015

Priority

US 77793191 A 19911017

Abstract (en)

[origin: EP0538047A1] A method for making compressible webs of high loft nonwoven material containing bicomponent synthetic fibers having a thermoplastic component with a lower softening point component, such as a sheath-core bicomponent fiber, and converting the webs into a densified sheet of reduced thickness, and including compiling a plurality of the webs and exposing the fibers to a bonding temperature sufficiently high to soften the lower softening point component of the bicomponent fibers and to obtain a high-loft nonwoven material through inter-fiber contact points without compression of the webs, which method is characterized in that a thermoplastic tacking fiber having a softening point lower than that of all other components of the webs is incorporated within the webs before exposing the fibers to the said bonding temperature, the bonding temperature being sufficiently high to provide a low-density bonding pattern, and then heating the high-loft nonwoven material under compression at a temperature below the softening point of the lower softening point component and at or above the softening point of the tacking fiber to obtain a more densely bonded interim sheet product suitable for storage and/or transportation that can be rebulked by softening the tacking fibers without melting the lower softening point component.

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