

Title (en)

METHOD OF MAKING A PATTERN DENSIFIED FIBROUS WEB HAVING SPACED, BINDER IMPREGNATED HIGH DENSITY ZONES

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Application

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Priority

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Abstract (en)

[origin: EP0033988A2] The invention provides a soft, pattern densified fibrous web such as a paper sheet which web generally comprises a relatively low bond, high bulk, vaulted field and a patterned array of spaced zones of relatively high fibre density, at least a substantial proportion of which dense zones are at least partially impregnated with binder material. The degree of impregnating and bonding in the dense zones may be increased by applying mechanical compression to the impregnated zones subsequent to applying the binder material. A method of making such a web is also disclosed. The method generally entails forming a low bond, pattern densified fibrous web; supporting dense zones of the web on a patterned array of spaced supports; displacing the unsupported portions of the web into the spaces intermediate the spaced supports; and applying a binder material to dense supported zones of the web.

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Cited by

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