

Title (en)

METHOD OF MANUFACTURING NONWOVEN ABRASIVE ARTICLES USING DRY PARTICULATE MATERIAL

Title (de)

VERFAHREN ZUR HERSTELLUNG VON VLIESTOFFSCHLEIFARTIKELN MIT TROCKENEM KÖRNIGEM MATERIAL

Title (fr)

PROCEDE PERMETTANT DE PRODUIRE DES ARTICLES ABRASIFS EN NON-TISSE AU MOYEN D'UN MATERIAU EN PARTICULES SEC

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2004096494A1] A method of making a nonwoven abrasive article (17) includes the steps of forming a three-dimensional nonwoven fibrous web (3) contacted with dry particulate material that includes fusible binder particles (5); exposing the web to conditions that cause the binder particles to form a flowable liquid binder, and then solidifying the liquid binder to form bonds between the fibres of the web and thereby provide a pre-bonded web (11); and applying abrasive particles to the pre-bonded web, and bonding the abrasive particles to the fibres of the pre-bonded web to provide the abrasive article. The fusible binder particles (5) can be applied to the nonwoven fibrous web (3) after the latter has been formed, for example by spraying the binder particles at the web using an electrostatic powder spray gun (8). The abrasive particles may be applied to the pre-bonded web in a slurry (13) formed by mixing the particles with a make-coat binder resin that is subsequently cured to bonded the abrasive particles to the fibres of the pre-bonded web.

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