

Title (en)
METHOD AND APPARATUS FOR THE PRODUCTION OF ARTIFICIAL FIBERS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON KÜNSTLICHEN FASERN

Title (fr)
PROCEDE ET DISPOSITIF DE PRODUCTION DE FIBRES ARTIFICIELLES

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Application
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Abstract (en)
[origin: WO9705306A1] A method and apparatus for forming artificial fibers and a non-woven web therefrom includes means for generating a substantially continuous fluid stream along a primary axis, at least one extrusion die (59) located adjacent to the continuous fluid stream for extruding a liquefied resin into fibers, means for entraining the fibers in the primary fluid stream, and perturbation means (86) for selectively perturbing the flow of fluid in the fluid stream by varying the fluid pressure on either side of the primary axis to produce crimped fibers for forming non-woven web. The inventive manufacturing method finely tunes non-woven web material characteristics such as tensile strength, porosity, barrier properties, absorbance, and softness by varying the fluid stream perturbation frequency and amplitude. Finally, the inventive method and apparatus may be implemented in combination with melt-blown, spunbond and co-form techniques for producing non-woven webs. The invention also includes high sorbency non-woven fabrics and their use for sorbing oil and other applications.

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