

Title (en)
PROCESS FOR TOPOGRAPHIC AND ELECTRIC NANOSTRUCTURING OF A POLYMER ELECTRET THIN FILM AND RESULTING POLYMER ELECTRET THIN FILM

Title (de)
VERFAHREN ZUR TOPOGRAPHISCHEN UND ELEKTRISCHEN NANOSTRUKTURIERUNG EINES DÜNNEN POLYMERELEKTRETFILMS UND RESULTIERENDER DÜNNER POLYMERELEKTRETFILM

Title (fr)
PROCÉDÉ DE NANO-STRUCTURATION TOPOGRAPHIQUE ET ÉLECTRIQUE D'UN FILM MINCE DE POLYMÈRE ÉLECTRET ET FILM MINCE DE POLYMÈRE ÉLECTRET OBTENU

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Application
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Abstract (en)
[origin: WO2011138540A1] The invention relates to a method of nano-structuration of a thin film (6) of electret polymer, termed "electric nano-impression" method, in which a surface (4) of a mould (2), termed the structuration surface, comprising nanometric relief patterns (3), is placed in contact with at least one part of a free surface, termed the treated surface (5) of the thin film (6) of electret polymer, nanometric patterns are formed, corresponding to the negative of the structuration patterns of the mould, in said thin film (6) of electret polymer, by exerting a pressure of the structuration surface (4) on the surface (5) of the thin film (6) of electret polymer, an electric voltage is applied between said structuration surface (4) and the rear face (7) of the film (6) for a predetermined duration T2 suitable for inducing, after removal of the electric voltage applied, a differential distribution of electrostatic charges between the tops and the bottoms of the nanometric patterns formed in the thin electret polymer film.

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B29C 43/02 (2013.01 - KR); **B82Y 10/00** (2013.01 - EP US); **B82Y 40/00** (2013.01 - EP US); **G03F 7/00** (2013.01 - KR); **G03F 7/0002** (2013.01 - EP US); **G03F 7/16** (2013.01 - KR); **G11C 99/00** (2013.01 - US)

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