

Title (en)

PROCESS FOR JOINING MICROSTRUCTURED PLASTIC PARTS AND COMPONENT PRODUCED BY THIS PROCESS

Title (de)

VERFAHREN ZUM VERBINDEN VON MIKROSTRUKTURIERTEN WERKSTÜCKEN AUS KUNSTSTOFF SOWIE NACH DIESEM VERFAHREN ERHALTENES BAUTEIL

Title (fr)

PROCEDE PERMETTANT D'ASSEMBLER DES PIECES MICROSTRUCTUREES EN MATIERE PLASTIQUE ET COMPOSANT OBTENU SELON CE PROCEDE

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Application

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Abstract (en)

[origin: WO9925783A1] A process is disclosed for joining two parts of which at least the first has plastic microstructures on its surface to be joined, the smallest structures being less than 1 mm in size, and in which the microstructures are not exposed to increased temperatures. In a first step, one or several organic solvents capable of beginning to dissolve the plastic of the surfaces to be joined are applied between the parts to be joined. In a second step, the parts are brought into contact with one another in such a way that the majority of the regions located between the structures are in communication with the environment, that is, no cavities closed from the environment are formed. After a short dwelling time, a negative pressure is applied in a third step to quickly remove the solvent. The process is particularly suitable to produce miniaturised fluidics systems for biotechnological applications. Also disclosed are the components produced by this process.

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