

Title (en)  
METHOD OF PRODUCING A MICRO- OR NANO-MECHANICAL PART, COMPRISING A FEMTO-LASER-ASSISTED ABLATION STEP

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES MIKRO- ODER NANOMECHANISCHEN TEILS MIT EINEM FEMTO-LASERGESTÜTZTEN ABLATIONSSCHRITT

Title (fr)  
PROCEDE DE FABRICATION D'UNE PIECE MICRO- OU NANOMECHANIQUE PAR UNE ETAPE D'ABLATION LASER A L'AIDE D'UN FEMTOLASER

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Application  
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Abstract (en)  
[origin: WO2005123324A1] The invention relates to a method of producing a micro- or nano-mechanical part, such as a pulley or belt for clock making, comprising a laser ablation step which is performed with the aid of a femto-laser, i.e. a laser having a pulse with a duration of less than  $5 \times 10^{-13}$  seconds and a power of more than  $10^{12}$  watts on the beam/material interaction surface. According to the invention, the part to be machined is pre-modelled in three dimensions and said three-dimensional model is used to generate the machining programme.

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