

Title (en)  
MICRO-MACHINED VAPOR CELL

Title (de)  
MIKROGEFERTIGTE DAMPFZELLE

Title (fr)  
CELLULE DE VAPEUR MICRO-USINÉE

Publication  
**EP 2738627 B1 20210512 (EN)**

Application  
**EP 13191631 A 20131105**

Priority  
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Abstract (en)  
[origin: EP2738627A2] The invention concerns a micro-machined vapor cell (1) comprising a central silicon element (10) forming a cavity (20) containing vapor cell reactants such as alkali metal or alkali metal azide, at least a buffer gas, and/or at least an anti relaxation coating; a first (30) and a second (40) glass caps sealing the cavity (20); and a solenoid (50) arranged to provide a homogeneous magnetic field to said vapor cell (1). The solenoid (50) is coiled directly on the central silicon element (10) of the vapor cell (1). This invention is an improvement for the highly miniaturized atomic clocks developments.

IPC 8 full level  
**G04F 5/14** (2006.01)

CPC (source: EP)  
**G04F 5/145** (2013.01)

Citation (examination)  
CN 101774529 A 20100714 - UNIV BEIHANG

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