

Title (en)  
Micro-machined vapor cell

Title (de)  
Mikrobearbeitete Dampfzelle

Title (fr)  
Cellule de vapeur micro-usinée

Publication  
**EP 2738627 A3 20150218 (EN)**

Application  
**EP 13191631 A 20131105**

Priority  
US 201261722468 P 20121105

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); **H03L 7/26** (2006.01)

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

Citation (search report)

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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2738627 A2 20140604; EP 2738627 A3 20150218; EP 2738627 B1 20210512**

DOCDB simple family (application)  
**EP 13191631 A 20131105**