

Title (en)  
FERROELECTRIC FLUID FLOW CONTROL VALVE

Title (de)  
FERROELEKTRISCHES DURCHFLUSSKONTROLLVENTIL

Title (fr)  
SOUPAPE DE REGULATION FERROELECTRIQUE DE L'ECOULEMENT FLUIDE

Publication  
**EP 1137883 A1 20011004 (EN)**

Application  
**EP 98962079 A 19981211**

Priority  
US 9826380 W 19981211

Abstract (en)  
[origin: CA2354263A1] An active valve is controlled and driven by external electrical actuation of a ferroelectric actuator to provide for improved passage of the fluid during certain time periods and to provide positive closure of the valve during other time periods. The valve provides improved passage in the direction of flow and positive closure in the direction against the flow. The actuator is a dome shaped internally prestressed ferroelectric actuator having a curvature, said dome shaped actuator having a rim and an apex, and a dome height measured from a plane through said rim said apex that varies with an electric voltage applied between an inside and an outside surface of said dome shaped actuator.

IPC 1-7  
**F04B 43/04**

IPC 8 full level  
**F16K 15/14** (2006.01); **F04B 43/04** (2006.01); **F16K 31/02** (2006.01)

CPC (source: KR)  
**F04B 53/10** (2013.01); **F04B 53/16** (2013.01); **F15B 15/02** (2013.01); **F16K 31/005** (2013.01); **F05B 2210/11** (2013.01)

Citation (search report)  
See references of WO 0036301A1

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