

Title (en)
FERROELECTRIC PUMP

Title (de)
FERROELEKTRISCHE PUMPE

Title (fr)
POMPE FERROELECTRIQUE

Publication
EP 1137884 A1 20011004 (EN)

Application
EP 98965990 A 19981211

Priority
US 9826389 W 19981211

Abstract (en)
[origin: WO0036302A1] A ferroelectric pump has one or more variable volume pumping chambers internal to a housing. Each chamber has at least one wall comprising a dome shaped internally prestressed ferroelectric actuator having a curvature and a dome height that varies with an electric voltage applied between an inside and outside surface of the actuator. A pumped medium flows into and out of each pumping chamber in response to displacement of the ferroelectric actuator. The ferroelectric actuator is mounted within each wall and isolates each ferroelectric actuator from the pumped medium, supplies a path for voltage to be applied to each ferroelectric actuator, and provides for positive containment of each ferroelectric actuator while allowing displacement of the entirety of each ferroelectric actuator in response to the applied voltage.

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IPC 8 full level
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