

Title (en)

TWO CHAMBER PUMPS AND RELATED METHODS

Title (de)

ZWEIKAMMERMUMPEN UND VERWANDTE VERFAHREN

Title (fr)

POMPES À DEUX CHAMBRES ET PROCÉDÉS ASSOCIÉS

Publication

EP 2242421 A4 20130313 (EN)

Application

EP 09704892 A 20090123

Priority

- US 2009031906 W 20090123
- US 2049808 A 20080125

Abstract (en)

[origin: US2009191067A1] Two chamber pumps and related methods provide a platform for measuring flow rate in about real time without contacting the material being pumped. Pressure and optional temperature sensors disposed in a pressurized chamber allow for fluid delivery calculations after being calibrated or by knowing the initial volume of the fluid to be delivered.

IPC 8 full level

A61B 5/02 (2006.01); **A61M 1/10** (2006.01)

CPC (source: EP US)

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F04B 43/10 (2013.01 - EP US); **A61M 2205/3331** (2013.01 - EP US); **A61M 2205/3368** (2013.01 - EP US)

Citation (search report)

- [XI] US 5938636 A 19990817 - KRAMER GEORGE C [US], et al
- [I] WO 0130422 A1 20010503 - ALARIS MEDICAL SYST INC [US]
- [I] US 2007264130 A1 20071115 - MALLETT SCOTT [US]
- [A] US 5997501 A 19991207 - GROSS JOSEPH [IE], et al
- See references of WO 2009094590A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2009191067 A1 20090730; EP 2242421 A2 20101027; EP 2242421 A4 20130313; WO 2009094590 A2 20090730;
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