

Title (en)
NANOVOLUME MICROCAPILLARY CRYSTALLIZATION SYSTEM

Title (de)
NANOVOLUMIGES MIKROKAPILLARKRISTALLISATIONSSYSTEM

Title (fr)
SYSTÈME DE CRISTALLISATION MICROCAPILLAIRE DE TYPE NANOVOLUME

Publication
EP 2352591 A4 20130123 (EN)

Application
EP 09763807 A 20090615

Priority
• US 2009047414 W 20090615
• US 6153608 P 20080613

Abstract (en)
[origin: WO2009152520A2] A nanovolume microcapillary crystallization system allows nanoliter-volume screening of crystallization conditions in a crystal card that allows crystals to either be removed for traditional cryoprotection or in situ X-ray diffraction studies on protein crystals that grow within. The system integrates formulation of crystallization cocktails with preparation of the crystallization experiments. The system allows the researcher to select either gradient screening in crystallization experiments for efficient exploration of crystallization phase space or a combination of sparse matrix with gradient screening to execute one comprehensive hybrid crystallization trial.

IPC 8 full level
B01L 3/06 (2006.01); **C07K 1/30** (2006.01)

CPC (source: EP)
B01D 9/00 (2013.01); **B01F 25/23** (2022.01); **B01F 33/30** (2022.01); **B01L 3/06** (2013.01); **B01L 3/502784** (2013.01); **C07K 1/306** (2013.01); **C30B 7/00** (2013.01); **C30B 29/58** (2013.01); **B01L 2200/0673** (2013.01); **B01L 2300/0816** (2013.01); **B01L 2300/0877** (2013.01)

Citation (search report)
• [X] WO 2004104228 A1 20041202 - CALIFORNIA INST OF TECHN [US], et al
• [A] WO 2008000276 A2 20080103 - MICROLYTIC APS [DK], et al
• [I] LOUNACI ET AL: "Microfluidic device for protein crystallization under controlled humidity", MICROELECTRONIC ENGINEERING, ELSEVIER PUBLISHERS BV., AMSTERDAM, NL, vol. 84, no. 5-8, 6 May 2007 (2007-05-06), pages 1758 - 1761, XP022062111, ISSN: 0167-9317, DOI: 10.1016/J.MEE.2007.01.269
• [AP] KAOUTHAR DHOUIB ET AL: "Microfluidic chips for the crystallization of biomacromolecules by counter-diffusion and on-chip crystal X-ray analysis", LAB ON A CHIP, vol. 9, no. 10, 1 January 2009 (2009-01-01), pages 1412, XP055046156, ISSN: 1473-0197, DOI: 10.1039/b819362b
• See references of WO 2009152520A2

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
US 2009047414 W 20090615; EP 09763807 A 20090615; JP 2011513753 A 20090615; JP 2014095618 A 20140507