

Title (en)
Apparatus and platform for multiplex analysis

Title (de)
Vorrichtung und Plattform zur Multiplex-Analyse

Title (fr)
Appareil et plateforme pour analyse de multiplexage

Publication
EP 2397224 A1 20111221 (EN)

Application
EP 11169790 A 20110614

Priority
CH 9602010 A 20100615

Abstract (en)
The design and performance of an analytical apparatus and correspondingly designed microarray platform devices for facilitated multiplex analysis of analytes in liquids are disclosed. The apparatus in combination with the microarray platform devices are designed for performing bioanalytical assays and for detecting the presence of organic molecular analytes, optionally in microarray format. Several microarray platform devices, including one or several channel-type reaction chambers can be simultaneously analyzed. In preferred aspects, microarray platform devices are laminated microstructured microarray platforms, providing integrated channel-based reaction chambers having capture molecules printed and immobilized in open channel structures prior to lamination. Said microstructured microarray platforms are designed for use in conjunction with the apparatus leading to short assay times, low reagent volumes and performance at temperatures above, and differing from ambient.

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B01L 3/00 (2006.01); **B01L 9/00** (2006.01)

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Citation (applicant)
• EP 1171761 A1 20020116 - CYTOLOGIX CORP [US]
• JP 2004226068 A 20040812 - YOKOGAWA ELECTRIC CORP
• EP 1300194 A1 20030409 - CSEM CT SUISSE ELECTRONIQUE [CH]
• US 2004258571 A1 20041223 - LEE JESSAMINE [US], et al
• US 2004037739 A1 20040226 - MCNEELY MICHAEL [US], et al
• US 5797898 A 19980825 - SANTINI JOHN T JR [US], et al
• US 6123861 A 20000926 - SANTINI JR JOHN T [US], et al
• US 5252294 A 19931012 - KROY WALTER [DE], et al
• US 5948673 A 19990907 - COTTINGHAM HUGH V [US]
• "Bioconjugate Techniques", 1996, ACADEMIC PRESS INC.
• H. SIGRIST, A. COLLIOD, J.-F. CLEMENCE, H. GAO, R. LUGINBUEHL, M. SAENGER, G. SUNDARABABU: "Surface immobilization of biomolecules by light", OPTICAL ENGINEERING, vol. 34, 1995, pages 2339 - 2348, XP000518229, DOI: doi:10.1117/12.201815

Citation (search report)
• [X] WO 2005016529 A1 20050224 - THINXXS GMBH [DE], et al
• [XA] US 2005009101 A1 20050113 - BLACKBURN GARY [US]
• [XA] US 2003129671 A1 20030710 - WILDING PETER [US], et al
• [X] DE 20312088 U1 20041216 - IBIDI GMBH [DE]
• [XA] WO 03036298 A2 20030501 - EXIQON AS [DK], et al
• [A] US 2004219661 A1 20041104 - CHEN CHIEN-AN [TW], et al

Cited by
CN114950584A; CN114669338A; US2016340632A1; CN107532119A; US10207268B2; US11454629B2; US11666913B2; US9857367B2; US10969386B2; TWI712686B

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