Title (en)

PHARMACOKINETIC-BASED CULTURE SYSTEM WITH BIOLOGICAL BARRIERS

Title (de)

AUF PHARMAKOKINETIK BASIERENDES KULTURSYSTEM MIT BIOLOGISCHEN BARRIEREN

Title (fr)

SYSTEME DE CULTURE PHARMACOCINETIQUE PRESENTANT DES BARRIERES BIOLOGIQUES

Publication

EP 1891201 A4 20111109 (EN)

Application

EP 06813188 A 20060517

Priority

- US 2006018951 W 20060517
- US 68213105 P 20050518

Abstract (en)

[origin: WO2007021343A2] Systems and methods are disclosed for microscale pharmacokinetics. Various organs and their interactions with drug compounds can be simulated in vitro by use of microscale compartments (3722, 3734, 3744) that can be interconnected by microscale channels. Cells or cellular materials associated with the organs can be cultured in such compartments to allow interactions with drug compounds in one or more fluidic flows. Such fluidic systems can include, by way of examples, gastrointestinal flow, blood flow, bile flow, urinary flow, and brain fluid flow. Interactions between fluidic systems can be simulated by a microscale permeable member (3430). In one example, blood-biliary interaction can be simulated by a microscale permeable material having hepatocytes (3434) bound to a permeable substrate (3432) via a binder.

IPC 8 full level

C12M 3/06 (2006.01)

CPC (source: EP)

C12M 21/08 (2013.01); **C12M 23/16** (2013.01); **C12M 23/44** (2013.01); **C12M 29/04** (2013.01); B01L 3/5027 (2013.01)

Citation (search report)

- [XI] US 2004077075 A1 20040422 - JENSEN KLAVS F [US], et al
- [XI] US 6197575 B1 20010306 - GRIFFITH LINDA G [US], et al
- [XI] US 6001585 A 19991214 - GRAMER MICHAEL J [US]
- [I] WO 2005033263 A1 20050414 - ATHENA CAPITAL PARTNERS LLC [US]
- [XI] US 2003082795 A1 20030501 - SHULER MICHAEL [US], et al
- [XI] WO 2004018617 A1 20040304 - JAPAN SCIENCE & TECH AGENCY [JP], et al
- [X] WO 2004018618 A1 20040304 - JAPAN SCIENCE & TECH AGENCY [JP], et al
- See references of WO 2007021343A2

Cited by

CN102643742A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2007021343 A2 20070222; **WO 2007021343 A3 20070621**; CA 2607965 A1 20070222; CN 101223268 A 20080716; EP 1891201 A2 20080227; EP 1891201 A4 20111109; JP 2008539787 A 20081120

DOCDB simple family (application)

US 2006018951 W 20060517; CA 2607965 A 20060517; CN 200680025975 A 20060517; EP 06813188 A 20060517; JP 2008512445 A 20060517