

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 A2 20080227 (EN)**

Application  
**EP 06813188 A 20060517**

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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.

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