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(54) Title: CULTURE SYSTEMS

(57) Abstract: A microplate is provided herein having a plate body with at least one well formed therein, the well having a first open end, a second end, an aperture being formed in the second end, and a side wall extending between the first end and the second end. The microplate further has a permeable membrane extending at least partially across the aperture formed in the second end. A microplate is provided with a permeable membrane which allows not only for removal of certain solutes from a solution (high or low molecular weight solutes), but also allows for separation of macromolecular mixtures and degradation of the membrane. The microplate is also provided with an integrated top assembly or integrated inserts. Also provided herein are methods of culturing systems in the microplates described.

**A. CLASSIFICATION OF SUBJECT MATTER***C12M 3/00(2006.01)i, C12M 1/32(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC : C12M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility Models and applications for Utility Models

Japanese Utility Models and applications for Utility Models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) "three dimensional cell", "three dimensional tissue culture", "container", "porous matrix", "microplate well", and similar terms

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2000-0055300 A1 (YOON, J. J., et al.) See abstract, claims(1-12), and figures (1(a)-7)	21 Sep. 2000 1-41
A	US 2008-0194010 A1 (LIU, Q.) See abstract, claims (1-9), and figures (1-7)	14 Aug. 2008 1-41
A	US 2008-0233607 A1 (YU, H., et al.) See abstract, claims (1-8), and figures (1A-4)	25 Sep. 2008 1-41
A	US 2005-0060745 A1 (DOMANSKY, K., et al.) See abstract, claims (1-29), and figures (1-10)	24 Nov. 2005 1-41

 Further documents are listed in the continuation of Box C. See patent family annex.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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