



(12) **United States Design Patent**  
**Kim et al.**

(10) **Patent No.:** **US D1,013,207 S**  
(45) **Date of Patent:** **\*\* Jan. 30, 2024**

(54) **MICROENGINEERED TISSUE BARRIER DEVICE**

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EM 008569222-0003 \* 6/2021

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Seoul (KR)

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Seoul (KR)

(57) **CLAIM**

(\*\*) Term: **15 Years**

The ornamental design for a microengineered tissue barrier device, as shown and described.

(21) Appl. No.: **29/761,324**

(22) Filed: **Dec. 8, 2020**

**DESCRIPTION**

(30) **Foreign Application Priority Data**

Nov. 24, 2020 (EP) ..... 008283352-001  
Nov. 24, 2020 (EP) ..... 008283352-002  
Nov. 24, 2020 (EP) ..... 008283352-003

FIG. 1 is a front perspective view of a microengineered tissue barrier device showing our design.

FIG. 2 is a front view of the microengineered tissue barrier device shown in FIG. 1.

FIG. 3 is a rear view of the microengineered tissue barrier device shown in FIG. 1.

(51) **LOC (14) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/229**

FIG. 4 is a left view of the microengineered tissue barrier device shown in FIG. 1.

FIG. 5 is a right view of the microengineered tissue barrier device shown in FIG. 1.

(58) **Field of Classification Search**  
USPC ..... D24/169, 216, 223–227, 229, 230, 232;  
D10/81; D14/356, 432, 433, 435–439,  
D14/453

FIG. 6 is a top plan view of the microengineered tissue barrier device shown in FIG. 1.

FIG. 7 is a bottom plan view of the microengineered tissue barrier device shown in FIG. 1.

(Continued)

FIG. 8 is a bottom perspective view of the microengineered tissue barrier device shown in FIG. 1; and,

FIG. 9 is a perspective view of the microengineered tissue barrier device shown in FIG. 1, with the insert positioned within a cavity of the base shown in exploded-phantom view.

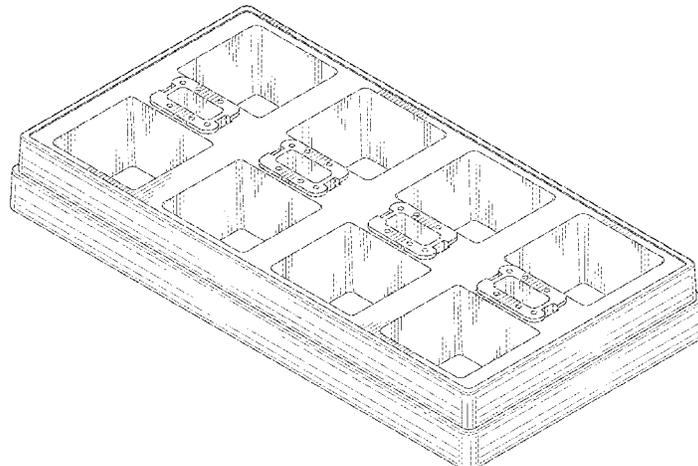
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The broken lines, the areas within them, and the areas bounded by broken lines and solid lines depict portions of the microengineered tissue barrier device that form no part of the claimed design.

**1 Claim, 9 Drawing Sheets**

(58) **Field of Classification Search**

CPC .... C12M 23/16; C12N 5/0682; C12N 5/0621;  
A01N 1/0247; B01J 19/0046; B01J  
19/0093; C12Q 1/686; C12Q 1/6837;  
G01N 15/1484

See application file for complete search history.

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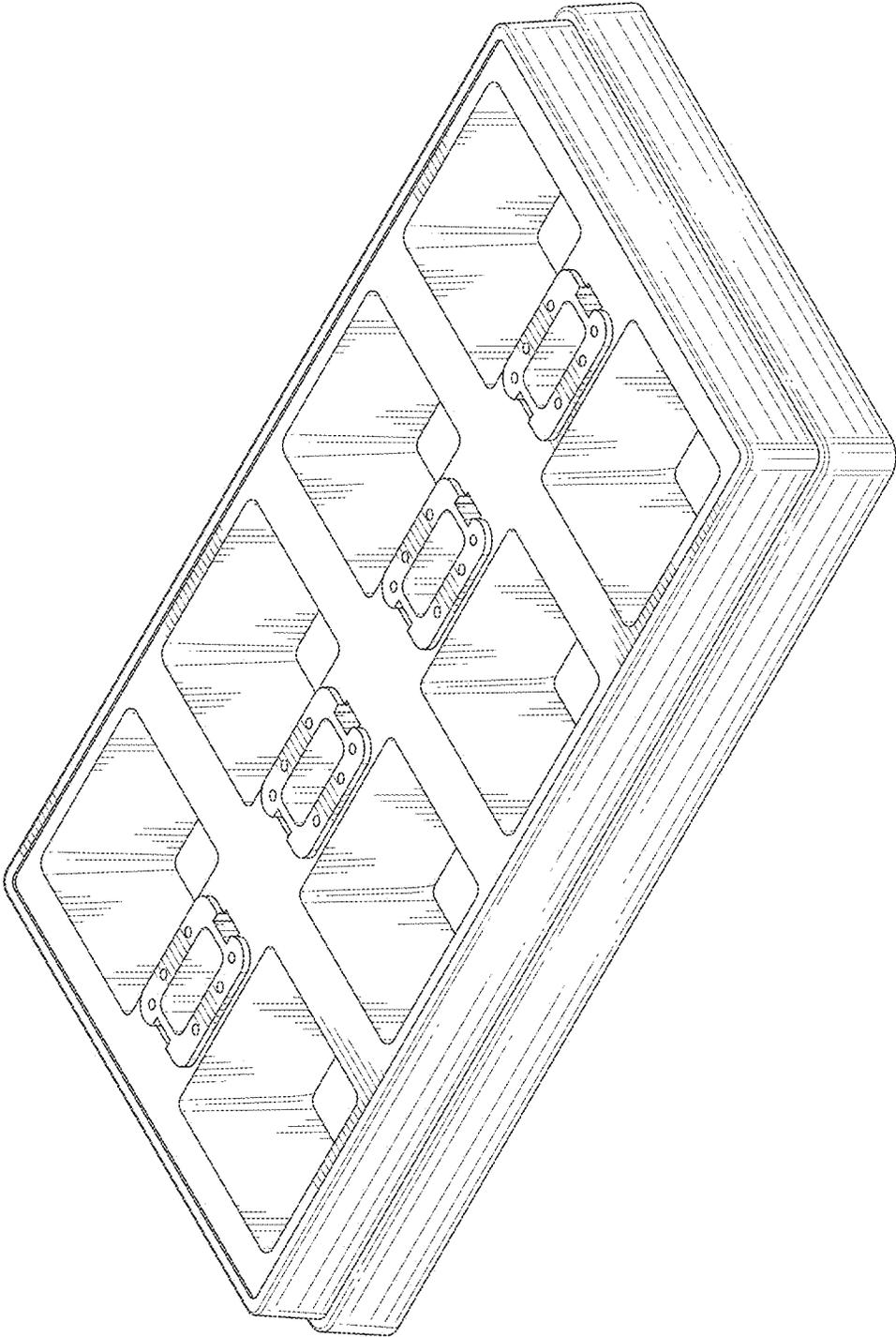


FIG.1

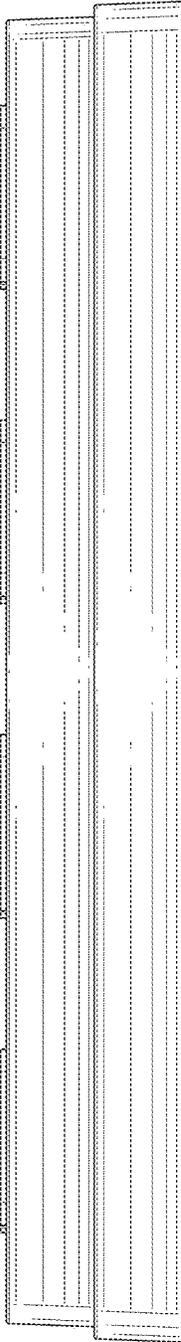


FIG.2



FIG. 3

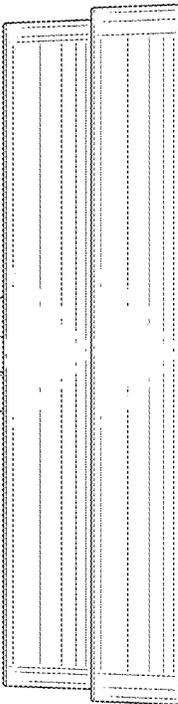


FIG. 4

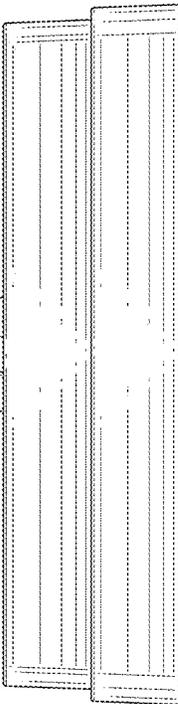


FIG. 5

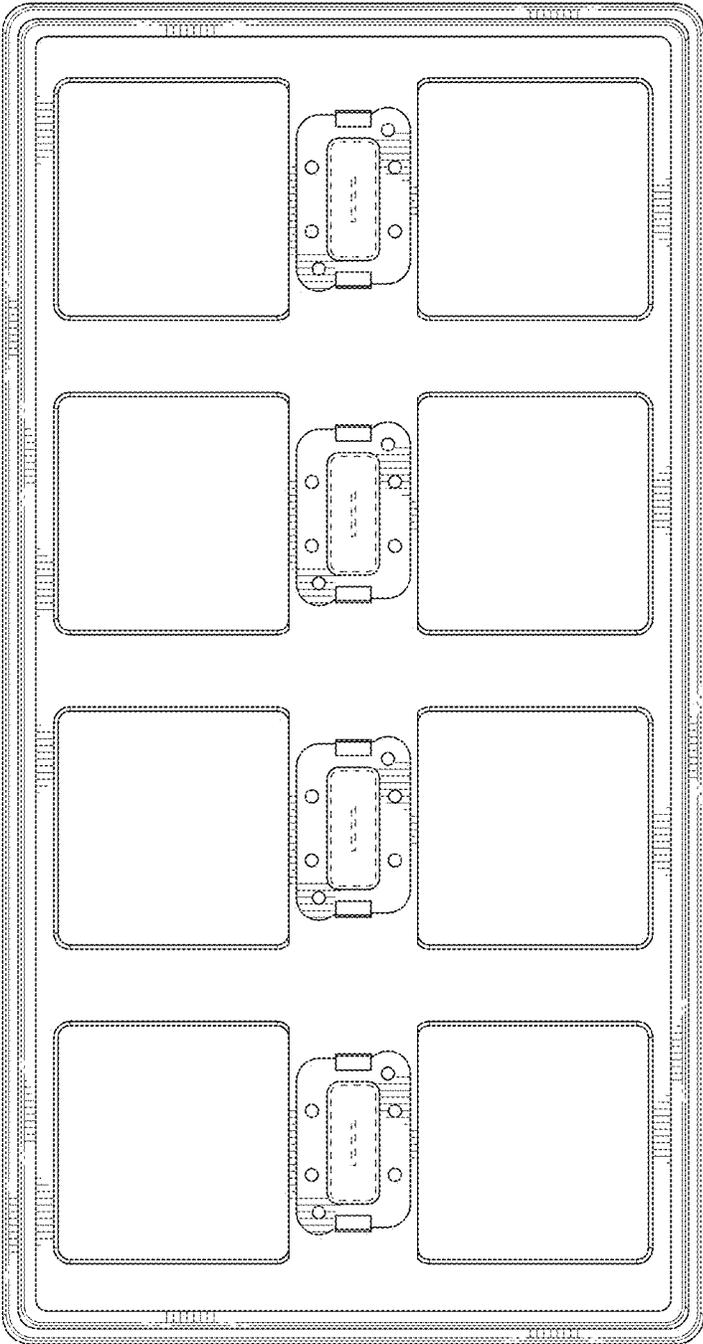


FIG. 6

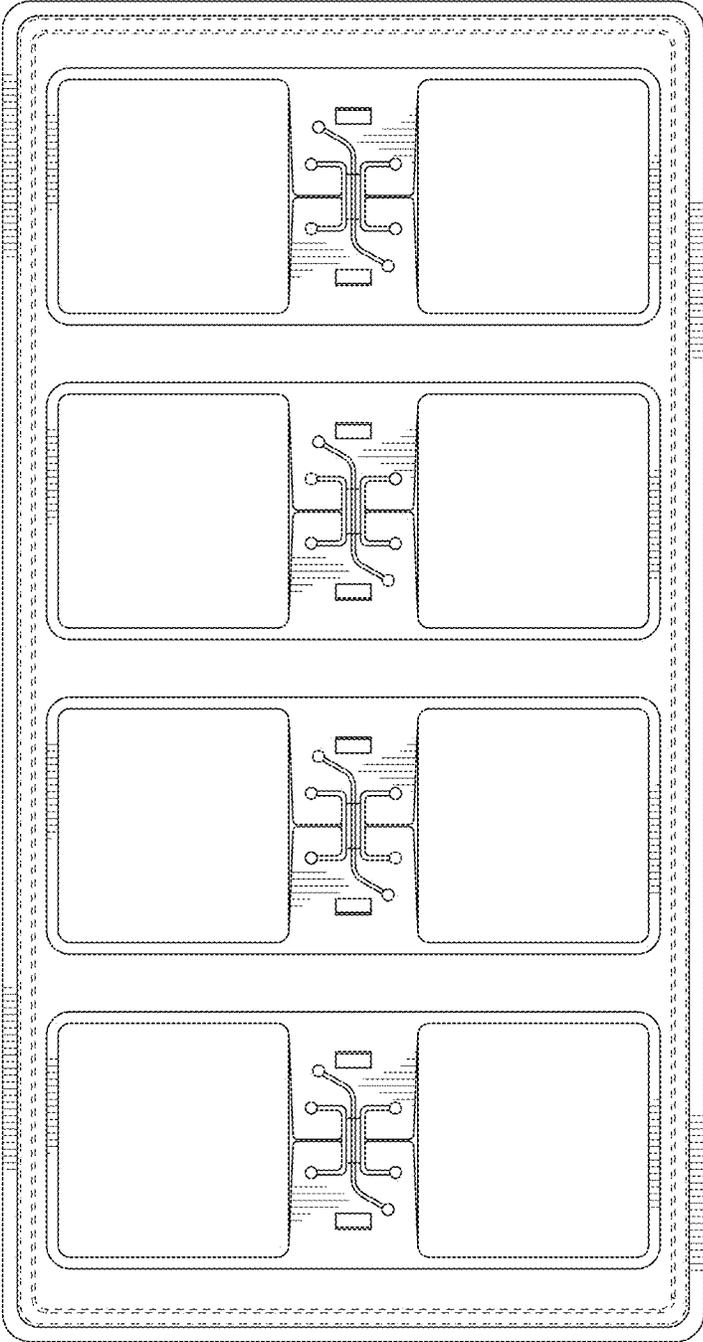


FIG. 7

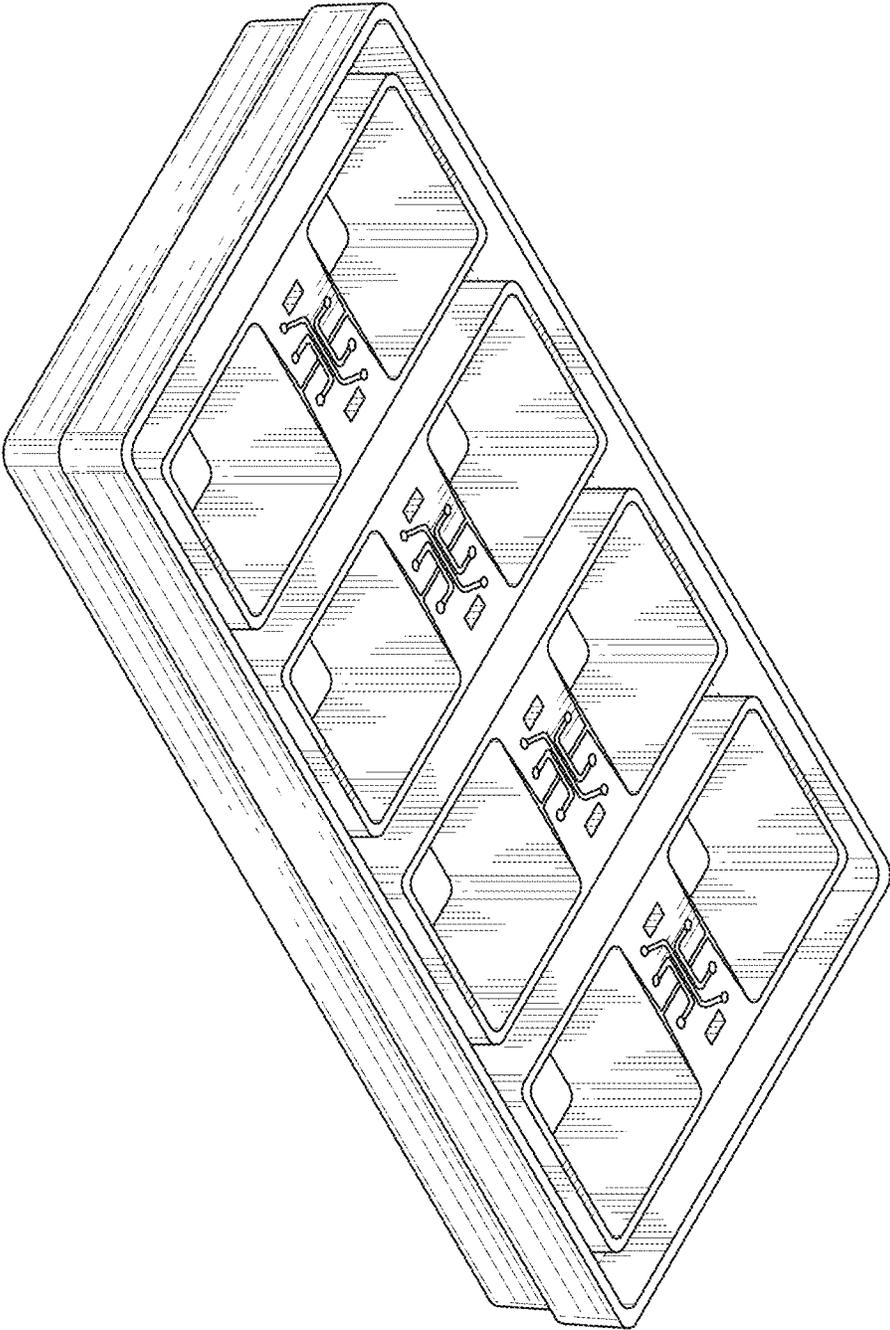


FIG. 8

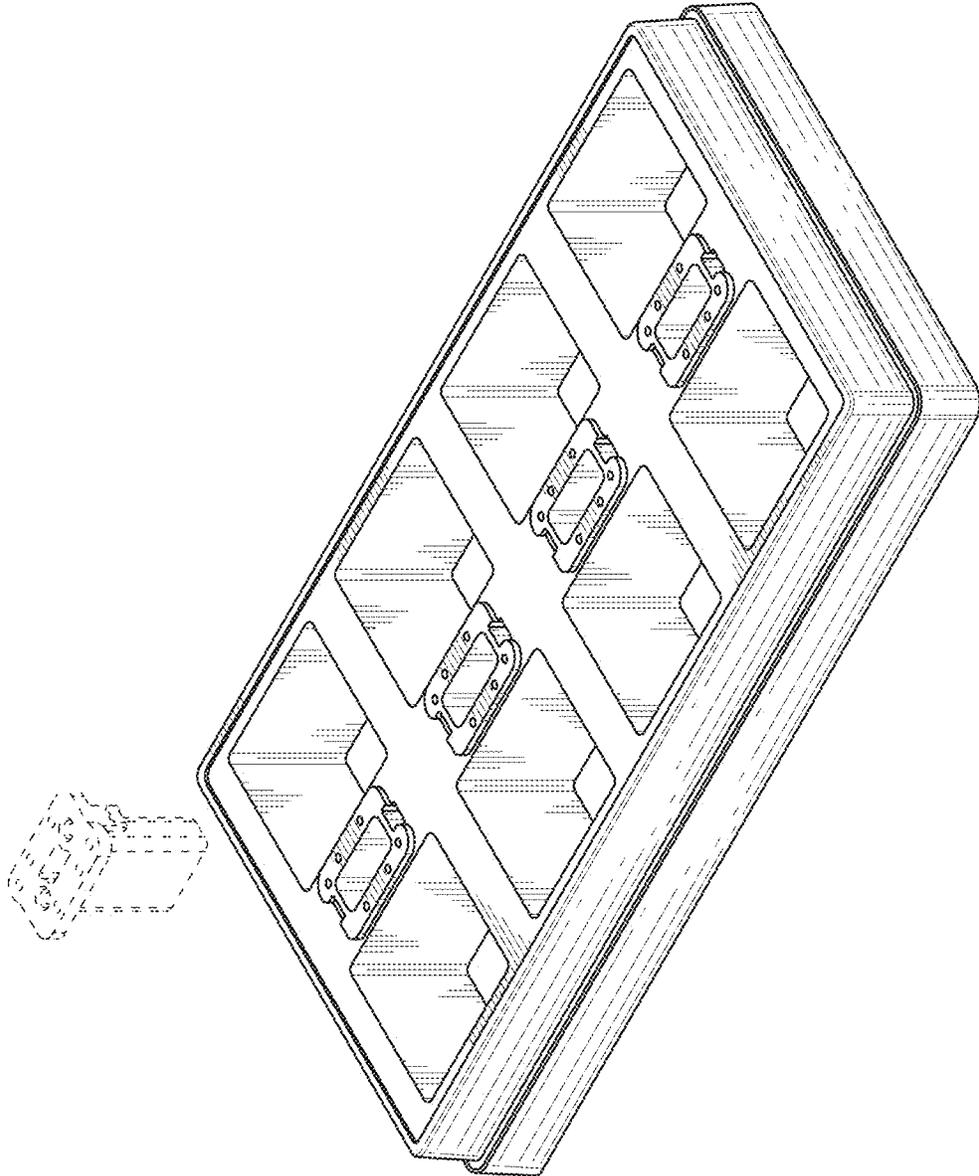


FIG. 9