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(54) **APPARATUS AND METHODS FOR IN VITRO PRECLINICAL HUMAN TRIALS**

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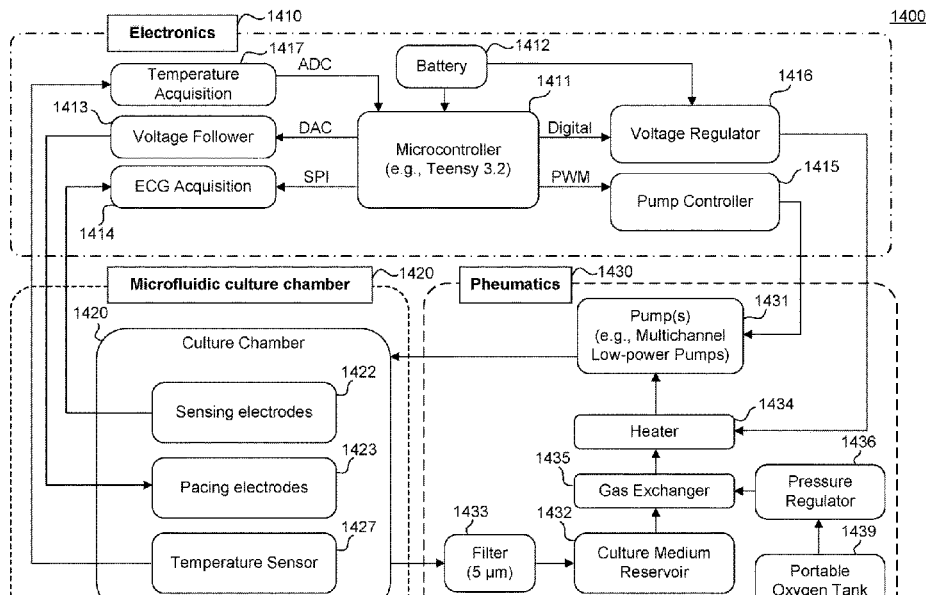
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(57) **ABSTRACT**

Systems comprising a microfluidic device are provided for maintaining and analyzing tissue slices. Methods for maintaining tissue slices in a microfluidic device are further provided.



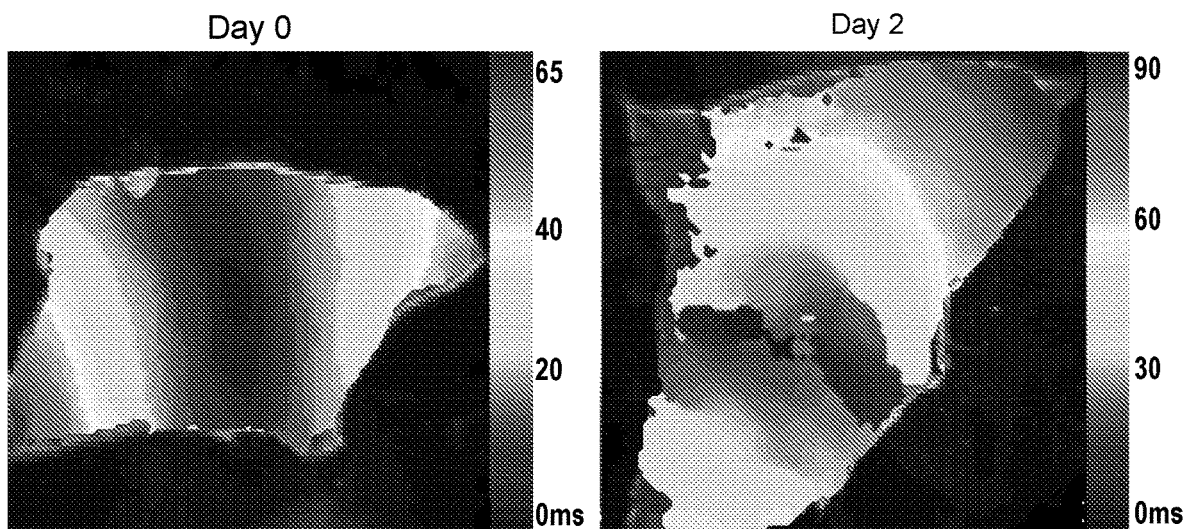


FIG. 1A

FIG. 1B

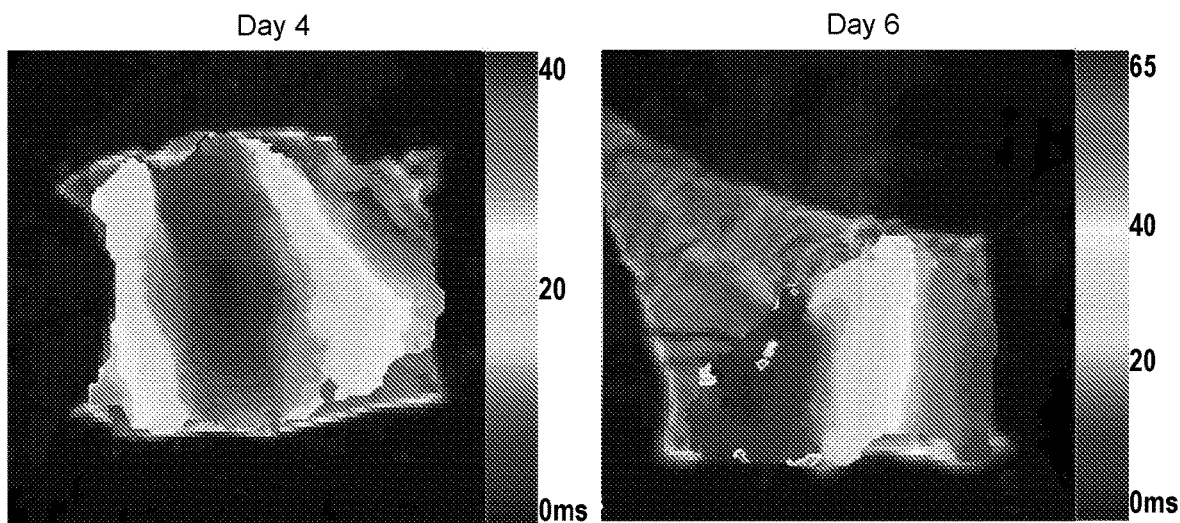


FIG. 1C

FIG. 1D

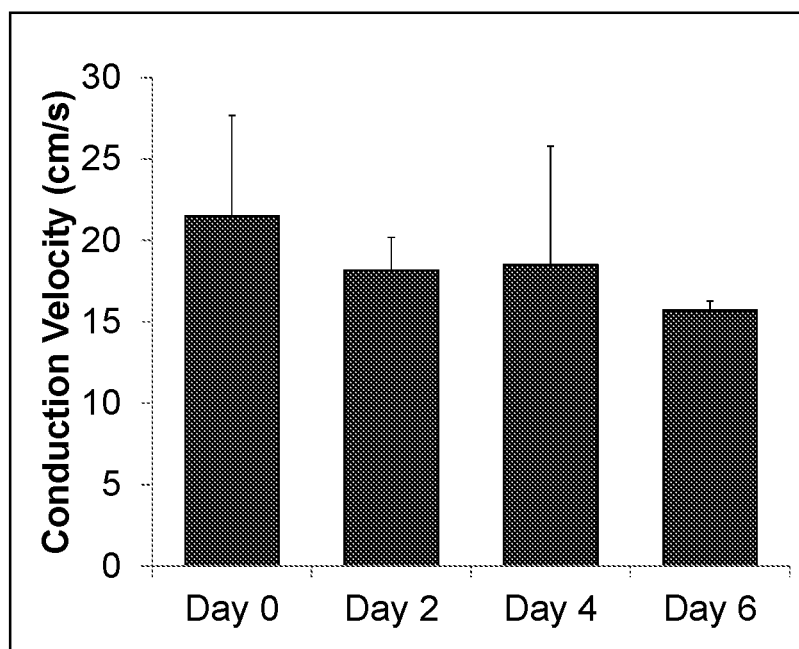


FIG. 2

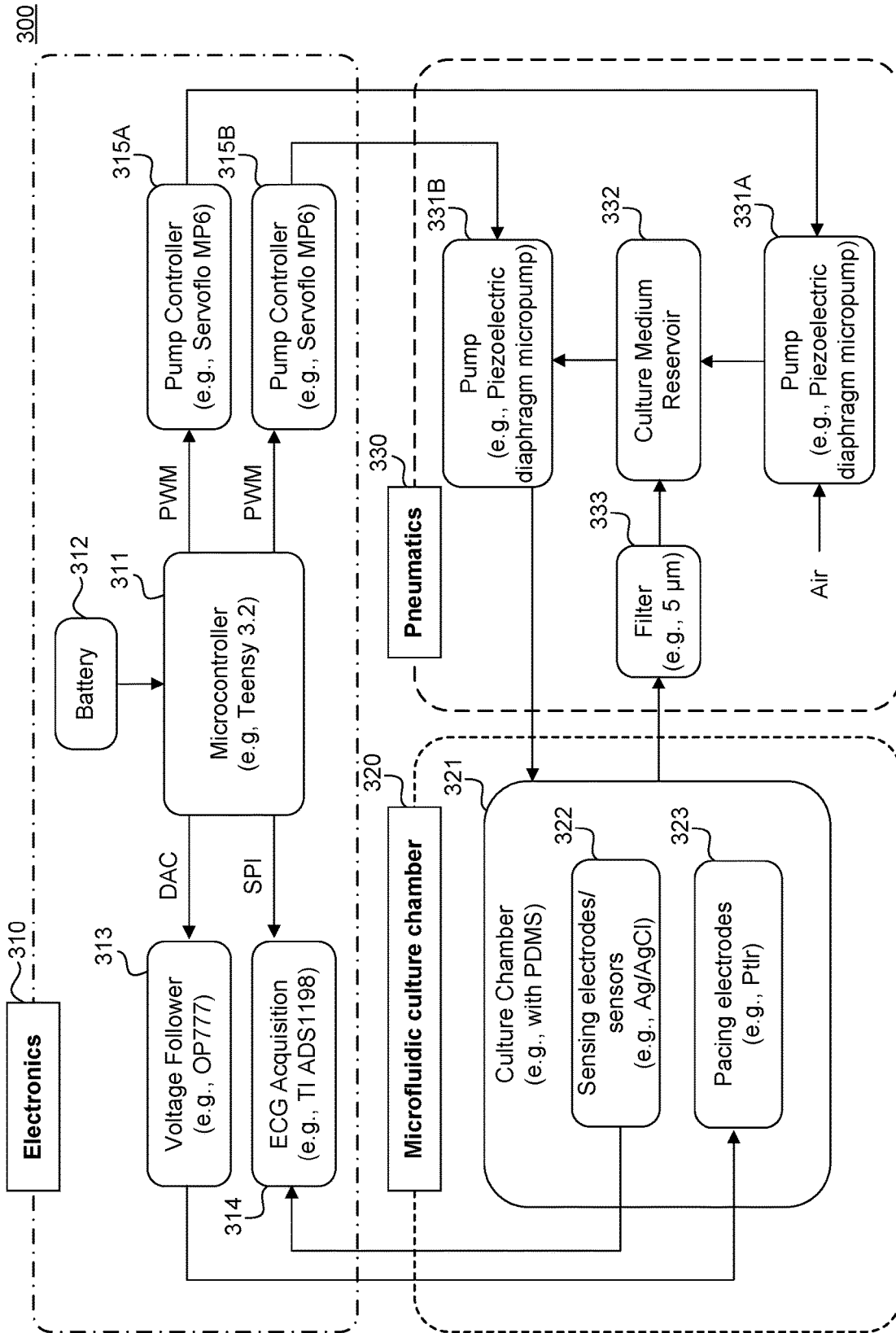


FIG. 3

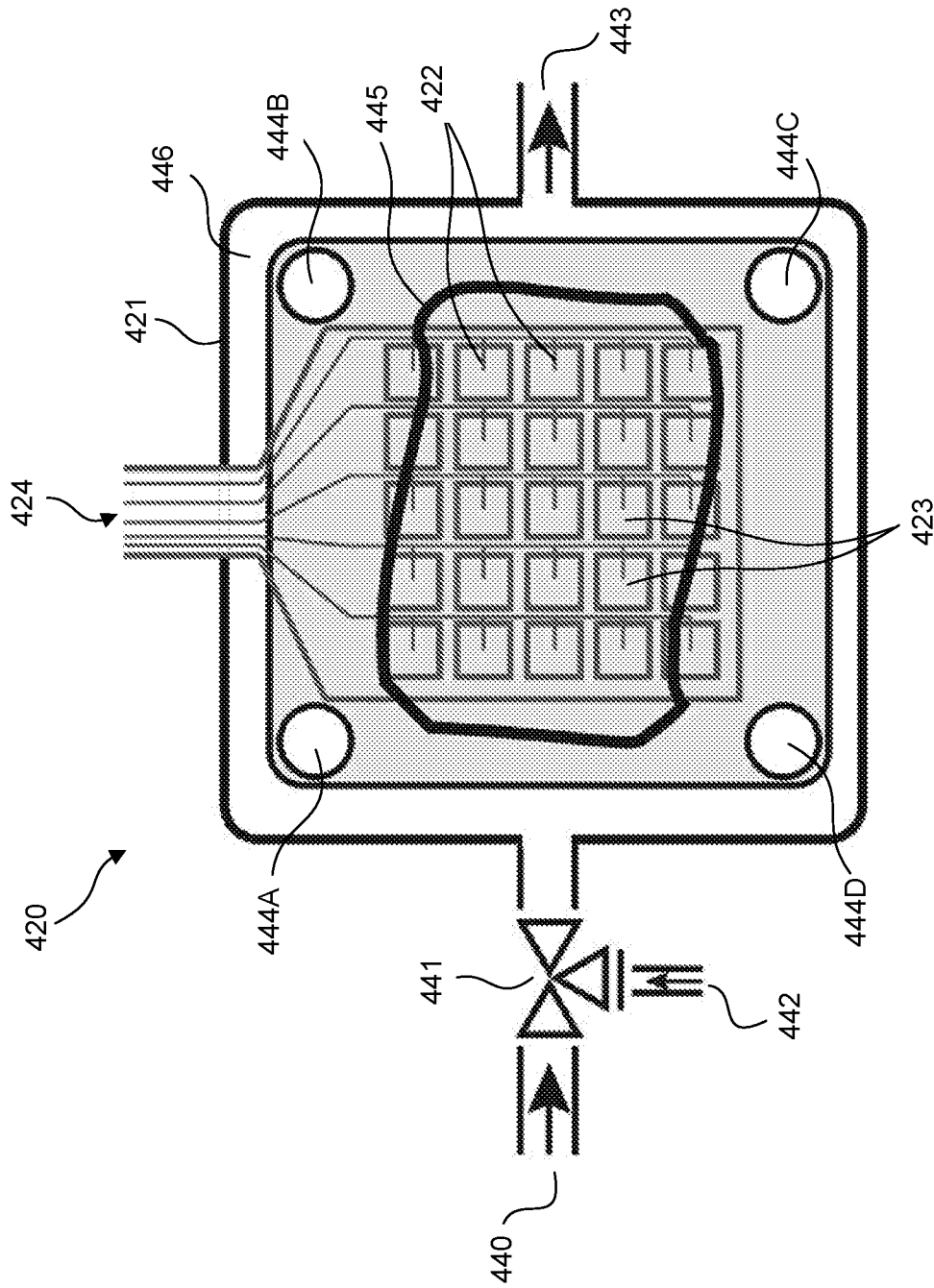


FIG. 4A

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