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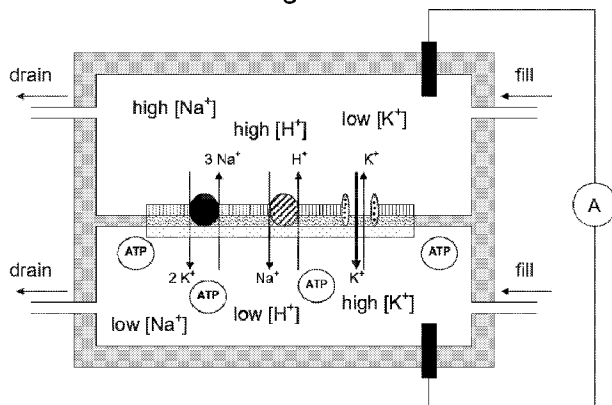
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(54) Title: BIOMIMETIC ARTIFICIAL MEMBRANE DEVICE

Fig. 1



● Na⁺/K⁺-ATPase (sodium pump)

▨ Na⁺/H⁺ antiporter

○ Kir7.1 inwardly rectifying K⁺ channel

PC lipid bilayer (~ 4 nm)
 polyelectrolyte "cushion" (~ 40 nm)
 porous physical membrane support

(57) Abstract: The invention relates to a device comprising a casing and a biomimetic artificial membrane arranged within the casing to form two distinct chambers, wherein each chamber is provided for enclosing a liquid of a given composition, and wherein the biomimetic artificial membrane comprises a semi-permeable membrane for supporting a lipid membrane, the lipid membrane comprising a plurality of lipid molecules arranged in a layer and including at least a transport protein, the transport protein being adapted for transport of ions and/or molecules of the liquids between the two chambers.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

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See patent family annex.

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Information on patent family members

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