[0026] **FIG. 12A** is a current response graph of an electro-osmotic pump using a Ti plate with RuO_x drop-coated thereon as an electrode when 2.5 V is applied to both ends of the electrode for 30 seconds and **FIG. 12B** is a pressure response graph under the same conditions according to an example of the present disclosure.

[0027] **FIG. 13A** is a current response graph of an electro-osmotic pump using a Ni plate with RuO_x drop-coated thereon as an electrode when 2.5 V is applied to both ends of the electrode for 30 seconds and **FIG. 13B** is a pressure response graph under the same conditions according to an example of the present disclosure.

[0028] **FIG. 14A** illustrates an electrode in which RuO_x is drop-coated but not thermo-compressed on a Ti plate, **FIG. 14B** and **FIG. 14C** illustrate an electrode in which RuO_x is drop-coated on a Ti plate and then thermo-compressed thereon by using a thermo-compressor according to an embodiment of the present disclosure.

[0029] **FIG. 15A** is a current response graph of an electro-osmotic pump using a Ti plate with RuO_x drop-coated and thermo-compressed thereon as an electrode when 2.5 V is applied to both ends of the electrode for 10 seconds and **FIG. 15B** is a pressure response graph under the same conditions according to an example of the present disclosure.

[0030] **FIG. 16A** and **FIG. 16B** are flowcharts for explaining a method of manufacturing an electrode that constitutes an electro-osmotic pump according to another embodiment of the present disclosure.

~~**[0031]** **FIG. 17** is a flowchart for explaining an operation method of a fluid pumping system according to yet another embodiment of the present disclosure.~~

DETAILED DESCRIPTION

[0032] Hereafter, embodiments will be described in detail with reference to the accompanying drawings so that the present disclosure may be readily implemented by a person with