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(54) **PRESSURE ACTUATED SINGLE-LUMEN BLOOD PUMPING DEVICE**

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CPC ..... ***A61M 1/1037*** (2013.01); ***A61M 1/1046*** (2013.01); *A61M 1/101* (2013.01); *A61M 1/106* (2013.01)

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See application file for complete search history.

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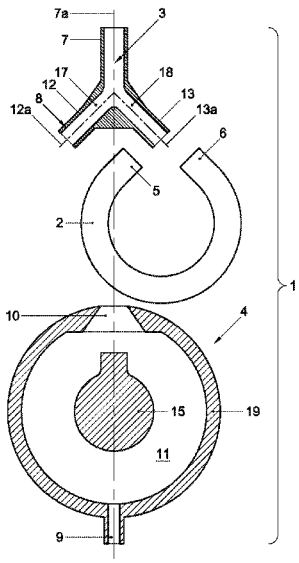
(57) **ABSTRACT**

A pressure actuated single-lumen blood pumping device has a housing (**4**) having a wall (**19**) bounding a pressure transfer chamber (**11**; **411**). The housing (**4**) bounds a pressure transfer port (**9**) for connection to a pressure source, the pressure transfer port (**9**) communicating with the pressure transfer chamber (**11**; **411**) for alternatingly transferring over pressure and under pressure from the pressure source to the pressure transfer chamber (**11**; **411**). A flexible tubular membrane (**2**; **102**; **202**; **302**; **402**) is arranged in the pressure transfer chamber (**11**; **411**). A blood transfer conduit (**3**; **103**; **203**; **303**; **403**) passes through the wall (**19**) bounding the pressure transfer chamber (**11**; **411**) and the blood transfer conduit (**3**; **103**; **203**; **303**; **403**) connects to opposite ends (**5**, **6**; **105**; **405**, **406**) of the flexible tubular membrane (**2**; **102**; **202**; **302**; **402**).

**18 Claims, 3 Drawing Sheets**