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(54) **CONTROL CIRCUIT AND METHOD FOR NEGATIVE PRESSURE WOUND TREATMENT APPARATUS**

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CPC ..... ***A61M 1/0023*** (2013.01); ***A61M 1/005*** (2014.02); ***A61M 1/0031*** (2013.01); (Continued)

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See application file for complete search history.

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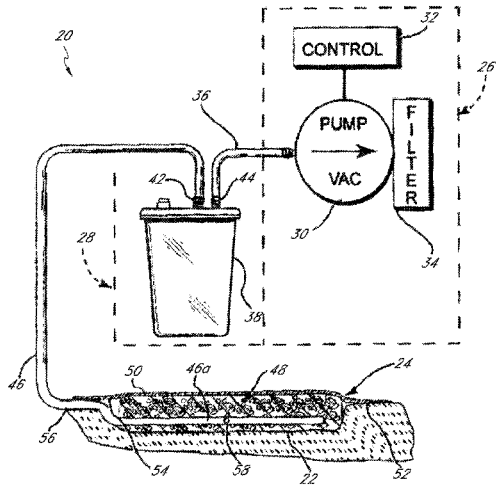
(57) **ABSTRACT**

A negative pressure wound therapy apparatus can include a wound dressing, a fluid collection container, a vacuum pump comprising a pump motor, and tubing. Additionally, the apparatus can include a pressure sensor that measures a pressure in the tubing. One or more tubes can channel a fluid between the wound dressing, the fluid collection canister, and the pump. In addition, first and second control circuits can be provided for controlling the pump motor without using a processor. The first control circuit can generate a difference signal between a desired pressure input and a pressure sensor input, and can further generate a motor control signal responsive to the difference signal. Moreover, a second control circuit can provide an override signal based at least in part on the difference signal and at least one reference signal. The override signal beneficially overrides the motor control signal to prevent the pump motor from stalling.

25 Claims, 13 Drawing Sheets