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(54) **ROBOTIC ARM DLUS FOR PERFORMING SURGICAL TASKS**

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(51) Int. Cl.<sup>7</sup> ..... **A61B 17/00**

(52) U.S. Cl. .... **606/1; 606/130; 600/102; 414/1**

(58) Field of Search ..... **606/1, 130; 128/897, 128/898; 414/1; 600/101, 102**

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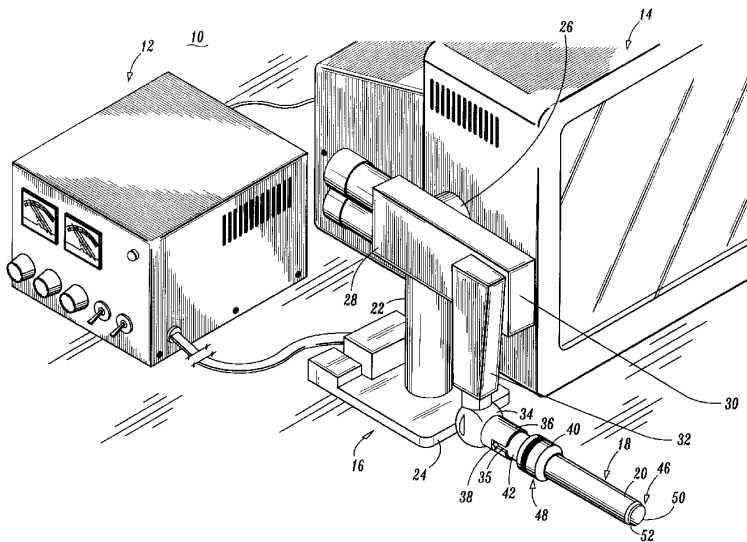
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(57) **ABSTRACT**

Disposable loading units (DLUs) configured for mounting to a robotic arm for performing at least one surgical task are presented. Each DLU includes an attachment platform having at least one connector for engaging at least one connector on a distal end of the robotic arm for connecting the DLU to the robotic arm, a head portion connected to the attachment platform at one end and configured for housing an electro-mechanical actuation assembly therein, and at least one surgical tool member extending from the head portion and operatively associated with the electro-mechanical actuation assembly for controlling the operation and movement of the at least one surgical tool member. The at least one surgical tool member may include a cutting assembly, an aortic hole punch assembly, a lasing assembly, a coring assembly, or a vascular suturing assembly.

**14 Claims, 8 Drawing Sheets**



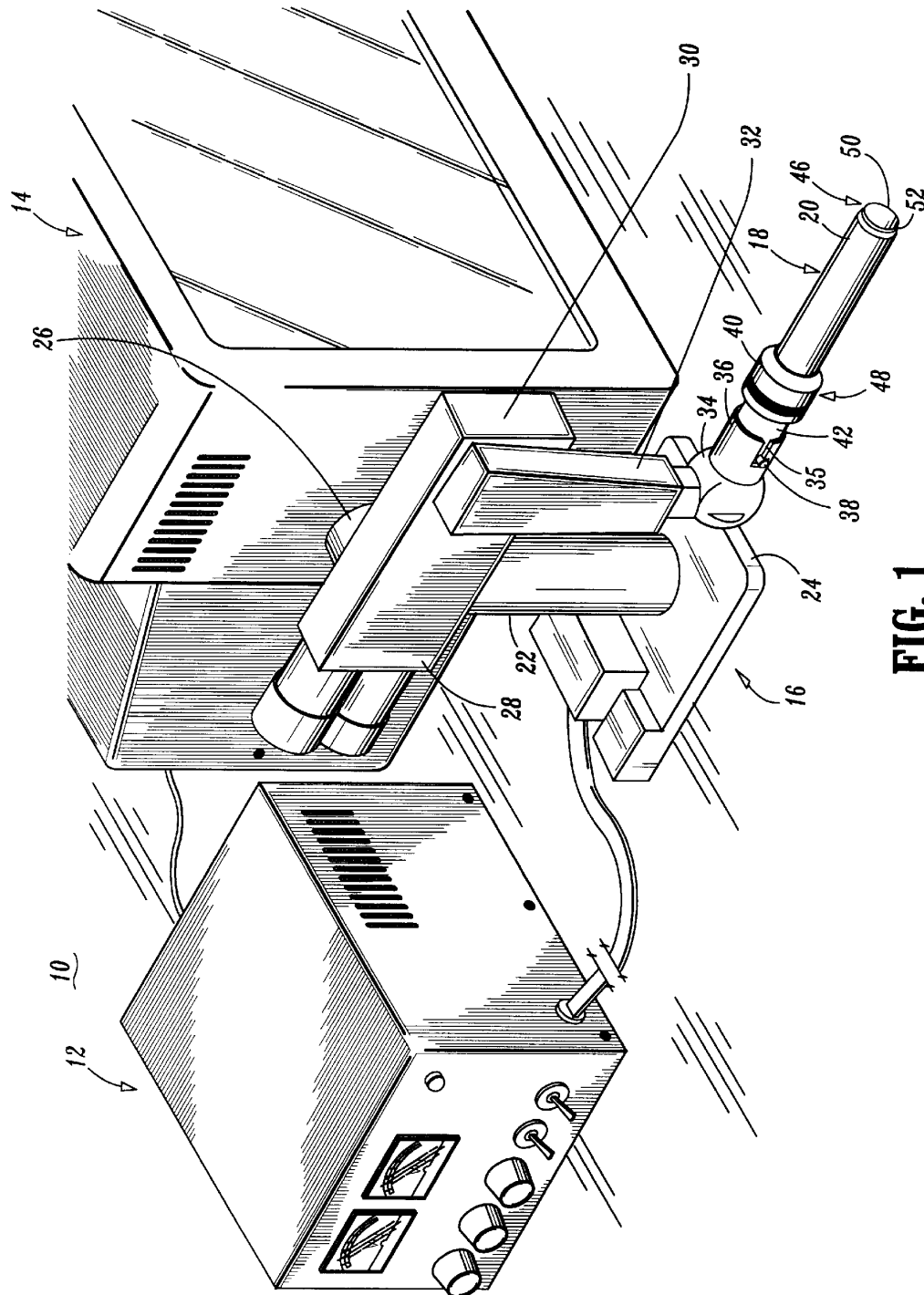
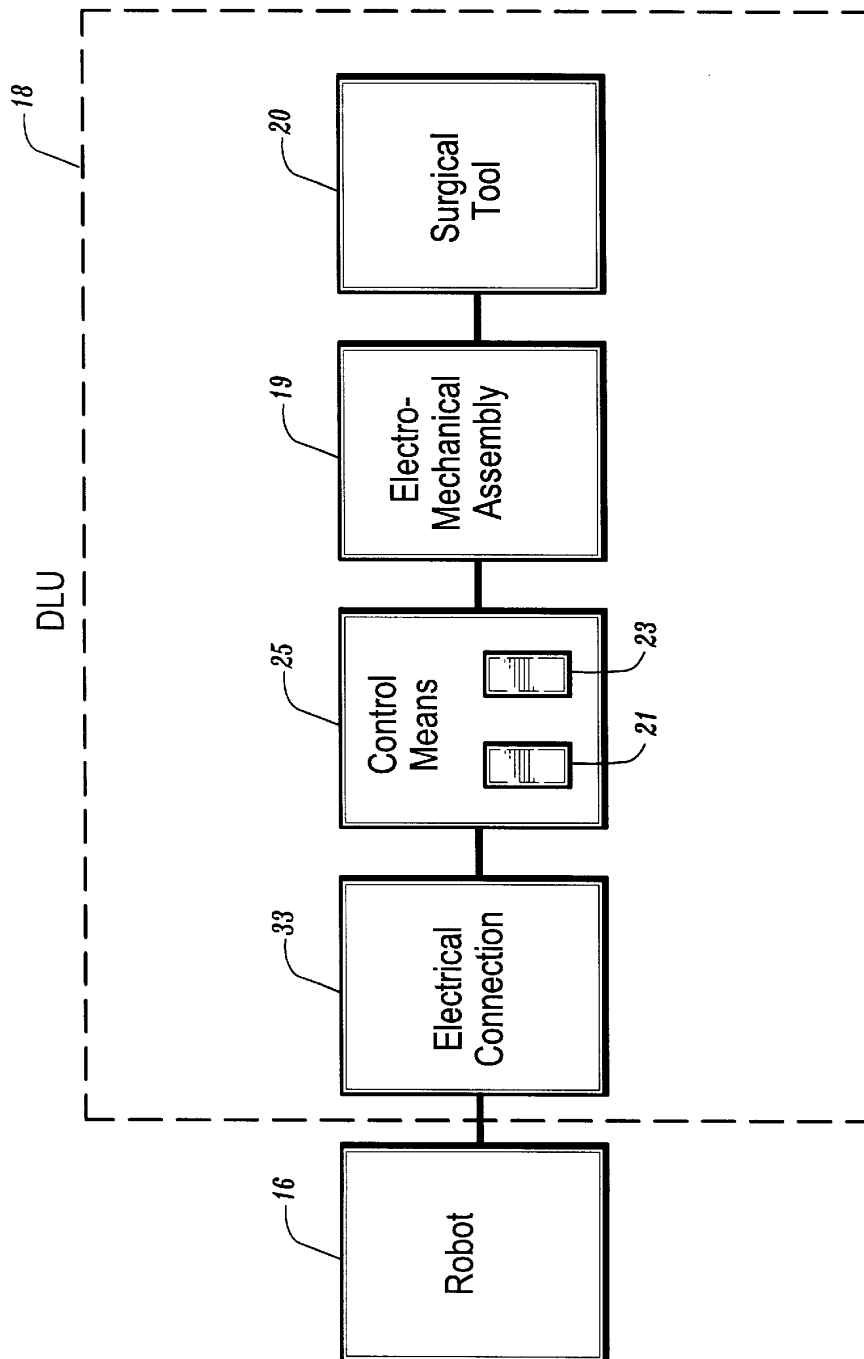
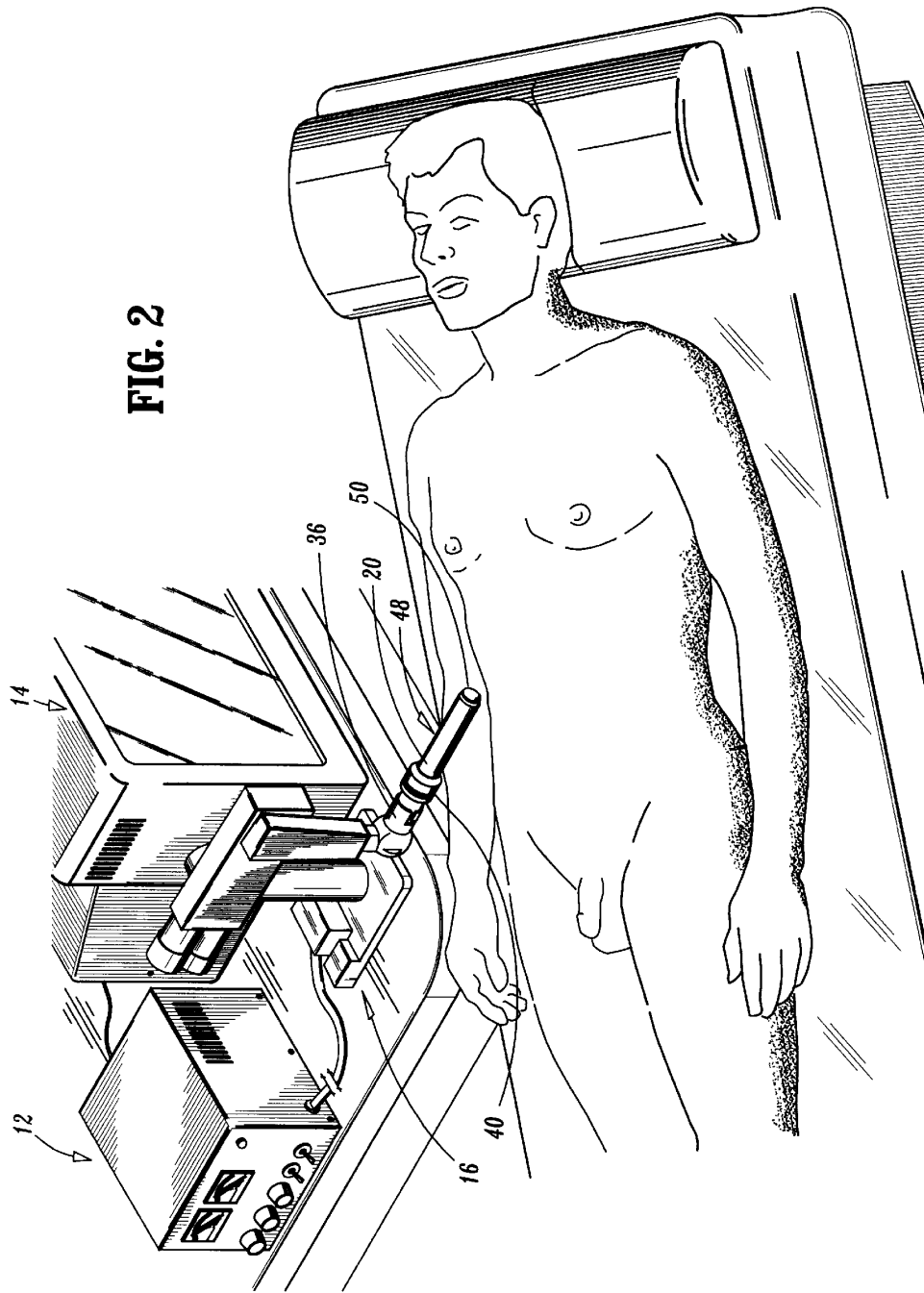


FIG. 1



**FIG. 1A**



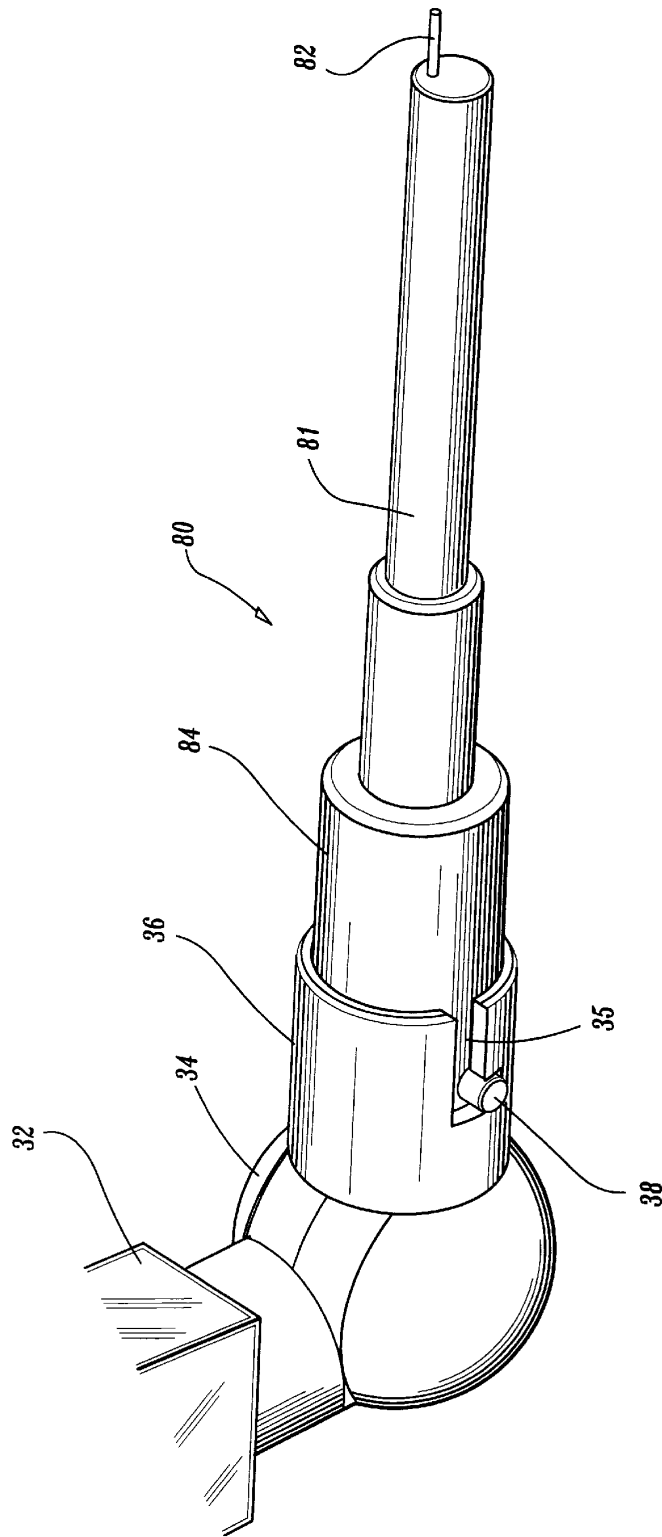


FIG. 3

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