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Yang

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(54) **ELECTROACTIVE POLYMER ACTUATOR
BRAILLE CELL AND BRAILLE DISPLAY**

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(58) **Field of Search** 434/112, 113,
434/114, 115; 340/407.1, 407.2

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(57) **ABSTRACT**

The present invention provides a Braille cell being of compact design and having low power consumption. The novel Braille cell is based on the bending characteristics of electroactive polymers to provide hydraulic actuation of a Braille dot. As such, the bending mechanism of the electroactive polymer actuator is transferred to the linear motion of the Braille dot. Additionally, to reduce power consumption, a latching and support mechanism is provided.

21 Claims, 6 Drawing Sheets

