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(54) **ELECTROTHERMAL REFRESHABLE  
BRAILLE CELL AND METHOD FOR  
ACTUATING SAME**

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(57) **ABSTRACT**

An electrothermal actuated refreshable Braille cells, display systems using the cells, and methods for actuating refreshable Braille cells/displays. One method according to the invention comprises at least the following steps: a) providing power to a microheater within a cylinder, wherein the cylinder has a membrane at a first end and a microheater at a second end, and fluid in between; b) heating the fluid with the microheater, thereby causing it to expand; and c) allowing the membrane at the first end to bulge out, thereby forming a dot.

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