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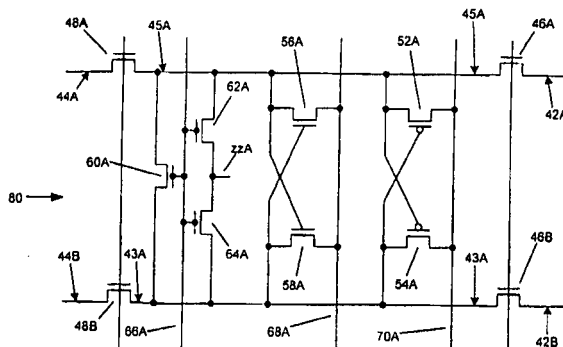
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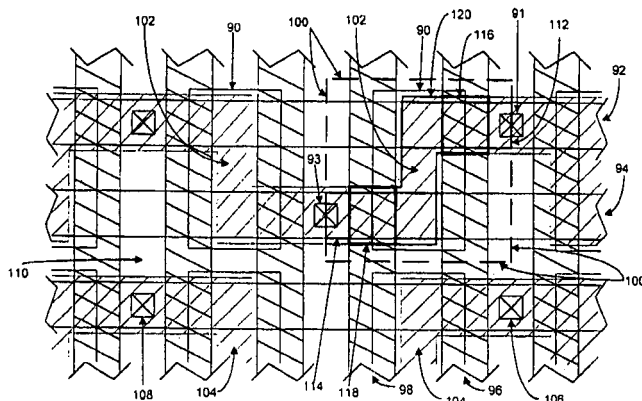
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- (71) Applicant: **MICRON TECHNOLOGY, INC.** [US/US]; 8000 S. Federal Way, P.O. Box 6, Boise, Idaho 83707-0006 (US).
- (72) Inventors: **KEETH, Brent**; 5077 N. Fifeshire Place, Boise, ID 83713 (US). **DENNISON, Chuck**; 5719 Algonquin Way, San Jose, CA 95138 (US).
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(54) Title: SEMICONDUCTOR MEMORY HAVING DUAL PORT CELL SUPPORTING HIDDEN REFRESH



(57) Abstract: The present invention is directed to an integrated circuit device having a memory cell for storing a data and refresh circuitry for refreshing that data in the memory cell. In one illustrative embodiment, the device comprises a memory cell having a storage element, a read/write access device, and a refresh access device. A read/write digit line is coupled to the read/write access device, and a refresh digit line is coupled to the refresh access device. A sense amplifier is coupled to the read/write digit line, and input/output circuitry is coupled to the read/write digit line. A refresh sense amplifier is coupled to the refresh digit line. The memory cell is constructed in such a way as to provide a large charge storage capacity in a relatively small, compact area.



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