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# United States Patent [19]

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## [54] LOW-POWER BICMOS/ECL SRAM

[75] Inventors: **Muhammad S. Elrabaa**, Hillsboro, Oreg.; **Mohamed I. Elmasry**, Waterloo, Canada

[73] Assignee: **University of Waterloo**, Waterloo, Canada

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[58] Field of Search ..... **365/177, 189.05, 365/189.11, 190, 205, 225.6, 227, 230.06, 230.08, 189.08**

*Primary Examiner*—David C. Nelms  
*Assistant Examiner*—Andrew Q. Tran  
*Attorney, Agent, or Firm*—Connolly & Hutz

## [57] ABSTRACT

A SRAM includes an ECL input buffer connected between an address bus and a W-OR predecoder array. The logic output of the W-OR predecoder array is applied to a level translator array and level shifted. The level shifted output of the level translator array is supplied to a plurality of self-resetting word-line decoder and driver (WLDD) circuits. The WLDD circuits supply activation pulses to selected blocks of memory in a memory cell array. Sense amplifiers sense and latch-in the data stored in the activated selected blocks of memory. The design of the W-OR predecoder array, level translator array, WLDD circuits and sense amplifiers is such to reduce the overall power consumption of the SRAM.

## [56] References Cited

### U.S. PATENT DOCUMENTS

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**36 Claims, 9 Drawing Sheets**

