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**Paul et al.**

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(54) **SHIELDED CAPACITOR STRUCTURE**

(75) Inventors: **Susanne A. Paul**, Austin, TX (US);  
**Timothy J. Dupuis**, Austin, TX (US);  
**Ali M. Niknejad**, Berkeley, CA (US)

(73) Assignee: **Silicon Laboratories, Inc.**, Austin, TX (US)

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(52) **U.S. Cl.** ..... **257/306; 257/306; 257/307**

(58) **Field of Search** ..... 257/306, 307,  
257/308, 309; 174/521, 35 R; 438/669,  
393; 396/84; 361/313

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*Primary Examiner*—David Nelms

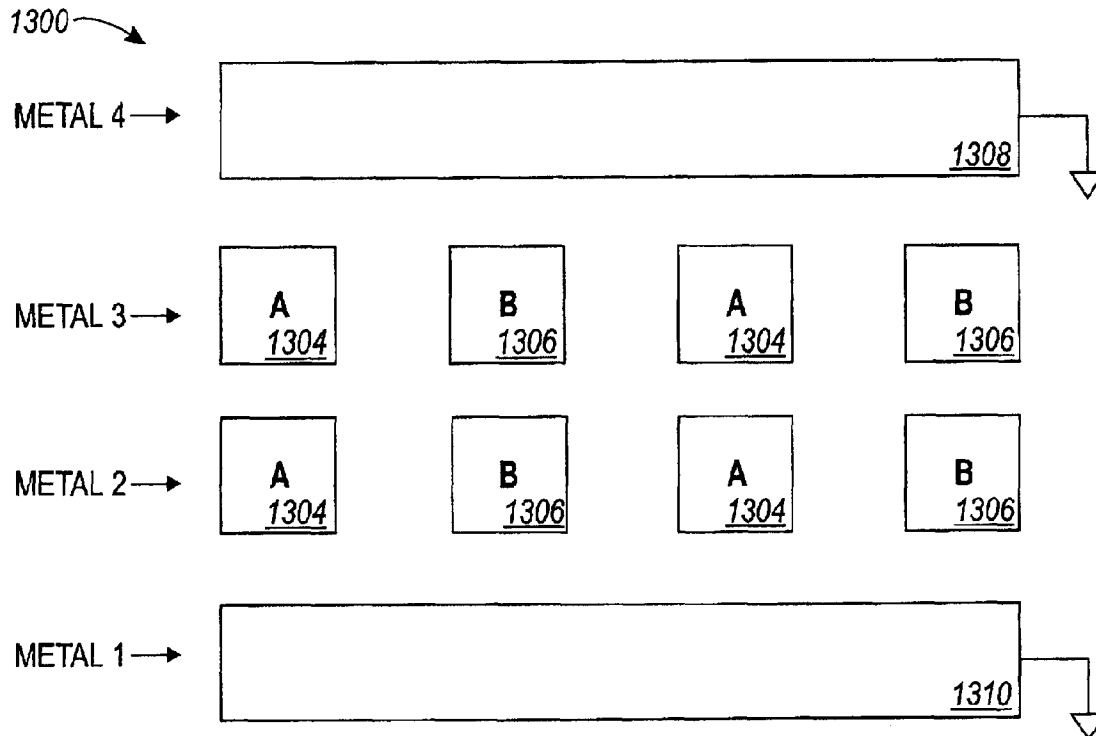
*Assistant Examiner*—Thinh T Nguyen

(74) *Attorney, Agent, or Firm*—Johnson & Assoc.

(57) **ABSTRACT**

A method and apparatus if provided for shielding a capacitor structure formed in a semiconductor device. In a capacitor formed in an integrated circuit, one or more shields are disposed around layers of conductive strips to shield the capacitor. The shields confine the electric fields between the limits of the shields.

**44 Claims, 7 Drawing Sheets**



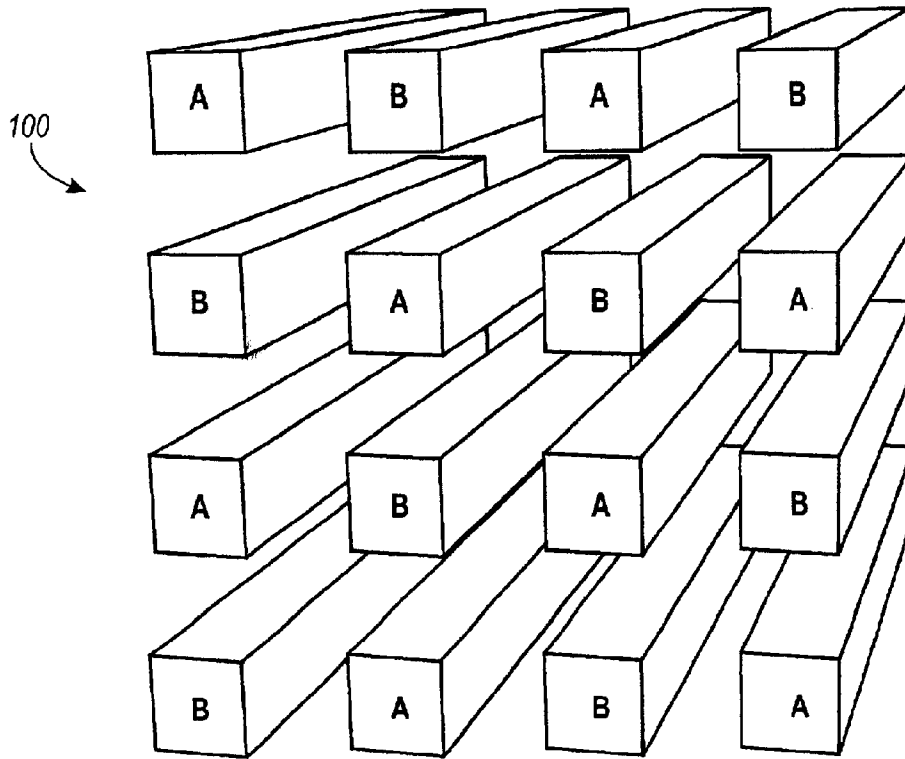


FIG. 1 (Prior Art)

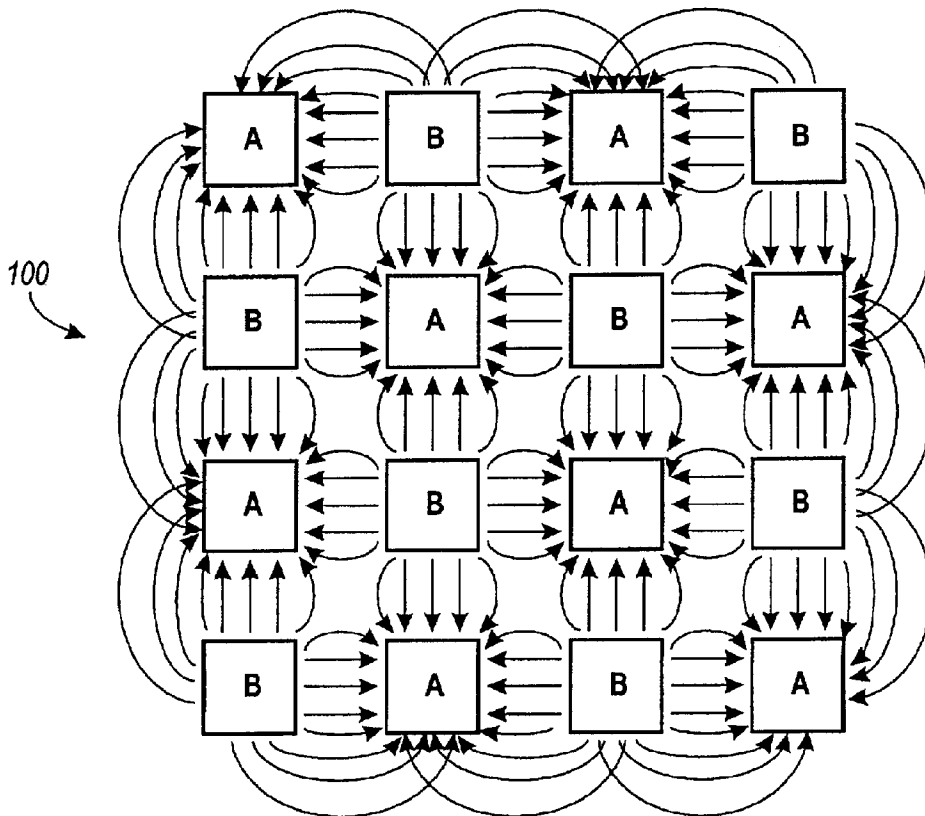


FIG. 2 (Prior Art)

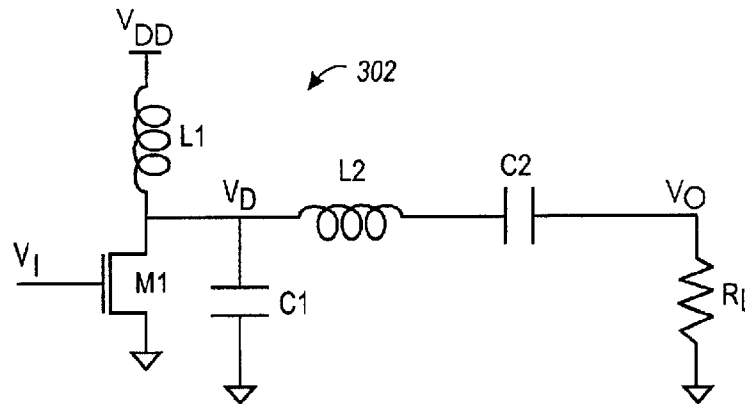


FIG. 3

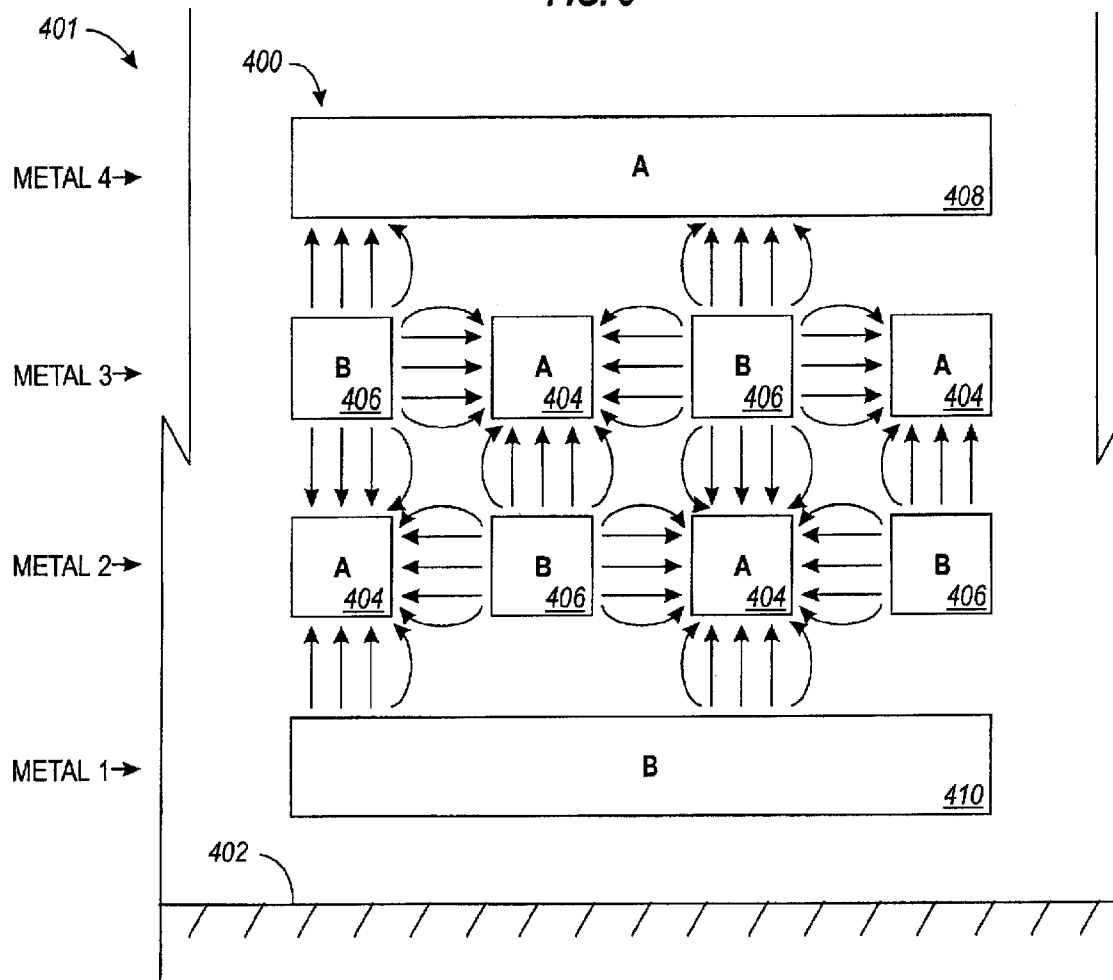
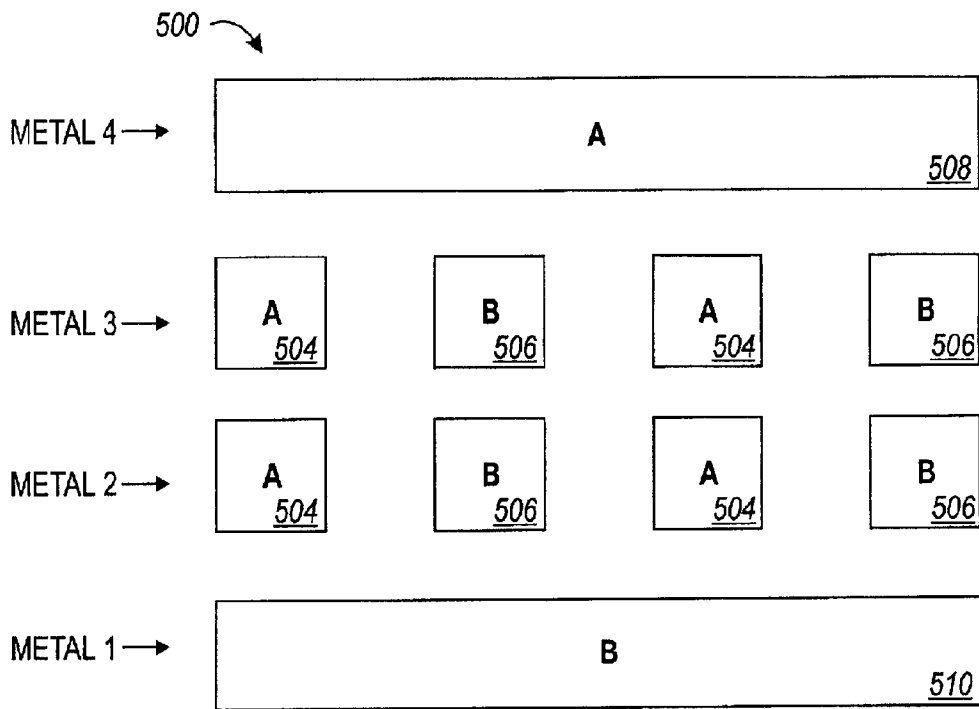
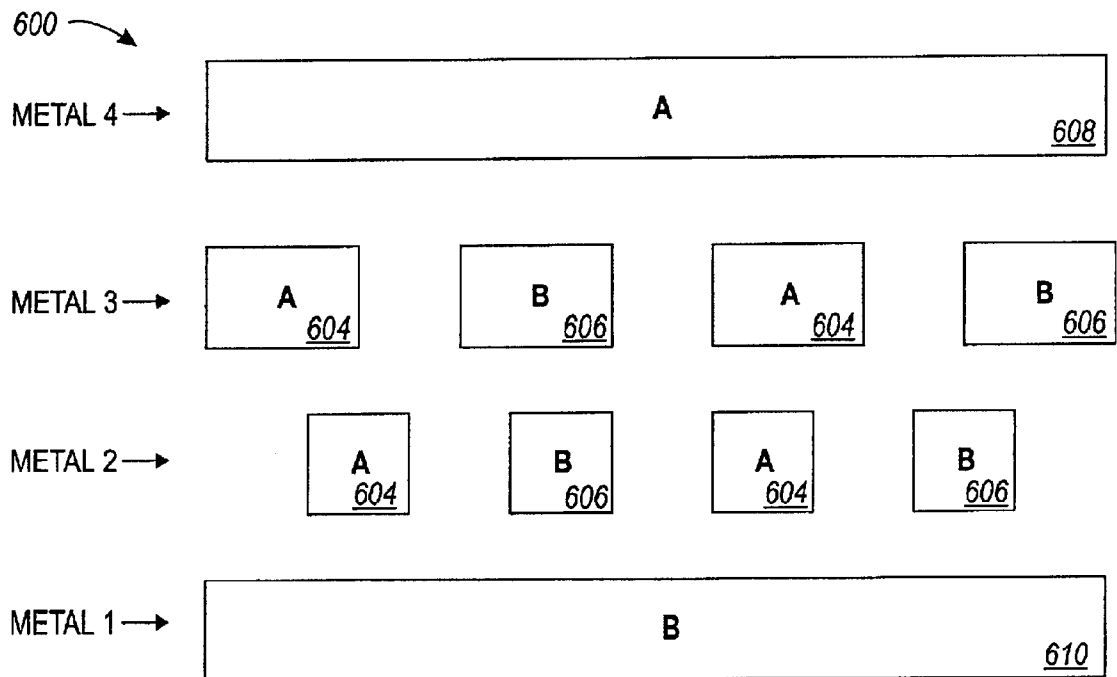


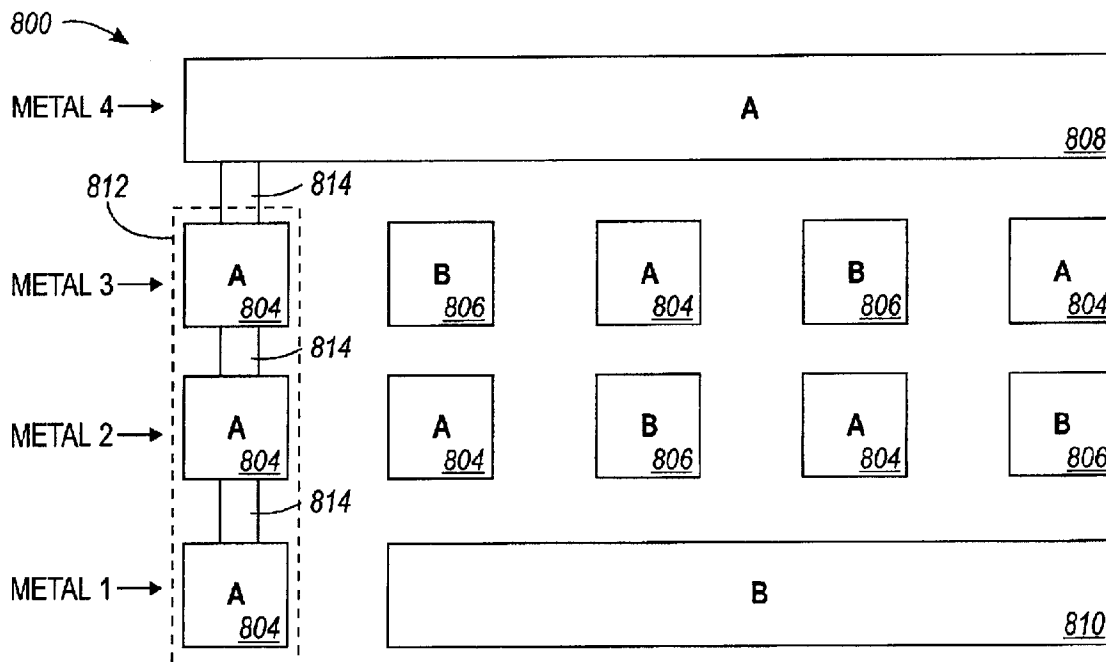
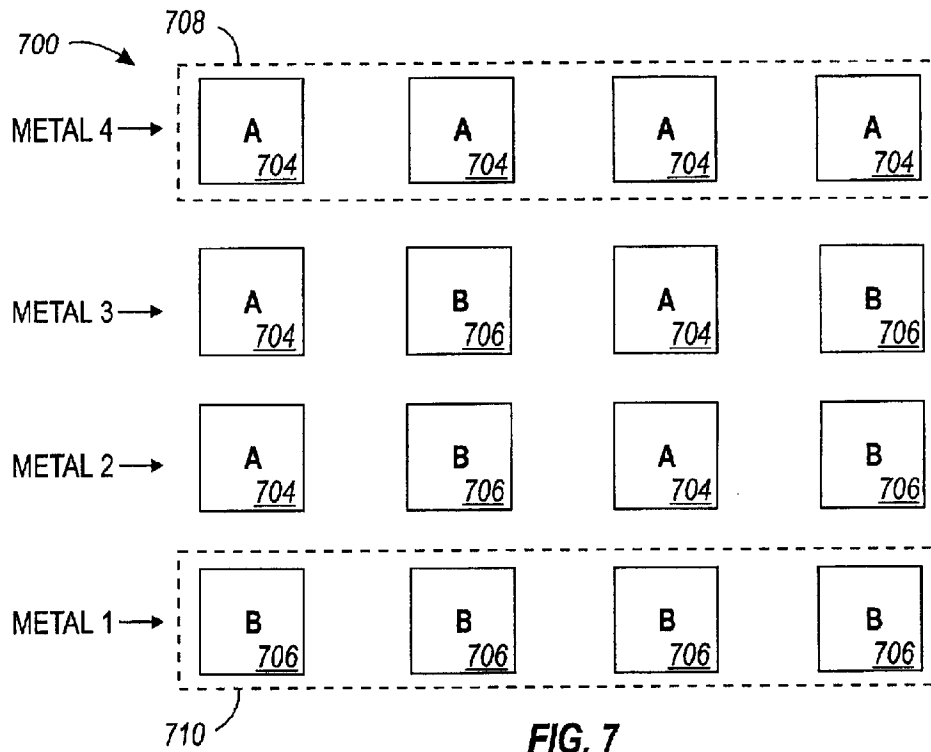
FIG. 4



**FIG. 5**



**FIG. 6**



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