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McCain

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[54] **INTEGRATED CIRCUIT PACKAGE WITH LAMINATED BACKUP CELL**

[75] Inventor: **Joseph H. McCain**, Plano, Tex.

[73] Assignee: **SGS-Thomson Microelectronics, Inc.**, Carrollton, Tex.

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[52] U.S. Cl. **357/75; 357/70; 357/72; 365/228; 365/229**

[58] Field of Search **357/75, 70, 72; 365/226, 227, 228, 229; 320/6, 49; 136/249, 250, 251; 429/123, 124, 127, 162**

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Primary Examiner—Andrew J. James

Assistant Examiner—Carl Whitehead, Jr.
Attorney, Agent, or Firm—Dennis T. Griggs; Lisa K. Jorgenson; Richard K. Robinson

[57] **ABSTRACT**

An integrated circuit package encapsulates a memory chip and a laminated backup battery for preserving data in the event of loss of main power supply. The package includes a lead frame assembly encapsulated within a body of non-conductive material, with the memory chip being mounted onto a device support plate on one side of the lead frame. The laminated battery is supported beneath the device support plate on the opposite side of the lead frame. A flat geometry interconnect media connects the electrodes of the laminated backup battery for wire bond interconnection with the positive and negative power input nodes of the memory chip. The interconnect media is in the form of a flexible, laminated strip having a central conductive laminate sandwiched between a pair of insulation laminates. The integrated circuit chip, the laminated battery, the inter-connected media, the lead frame assembly and the gold interconnect wires are completely encapsulated within the molded package body.

15 Claims, 3 Drawing Sheets

