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### SYSTEMS AND METHODS FOR PROVIDING NONVOLATILE MEMORY MANAGEMENT IN WIRELESS PHONES

Inventor: Schweiray Joseph Lee, San Diego, CA (US)

> Correspondence Address: KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR **IRVINE, CA 92614 (US)**

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(57)**ABSTRACT** 

to the wireless phone volatile memory.

The present invention is related to memory management, and in particular, to methods and systems for accessing and managing nonvolatile, such as in a wireless phone. A wireless phone memory controller is disclosed that, comprises a first interface circuit configured to be coupled to wireless phone nonvolatile memory, a second interface circuit configured to be coupled to wireless phone volatile memory, a first processor interface configured to be coupled to a first wireless phone processor, wherein the first processor interface is configured to provide the first processor with access to the wireless phone volatile memory, a second processor interface configured to be coupled to a second wireless phone processor, and a controller circuit configured to copy

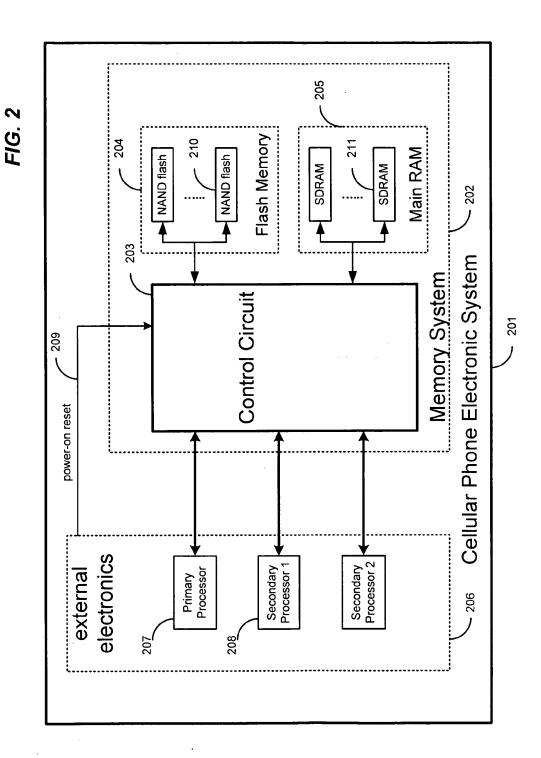
at least a portion of wireless phone nonvolatile memory data

power-on reset external electronics 204 NAND flash Primary 210 Processo NAND flash Control Circuit Flash Memory SDRAM Secondary Processor 2 SDRAM Main RAM Memory System Cellular Phone Electronic System 201

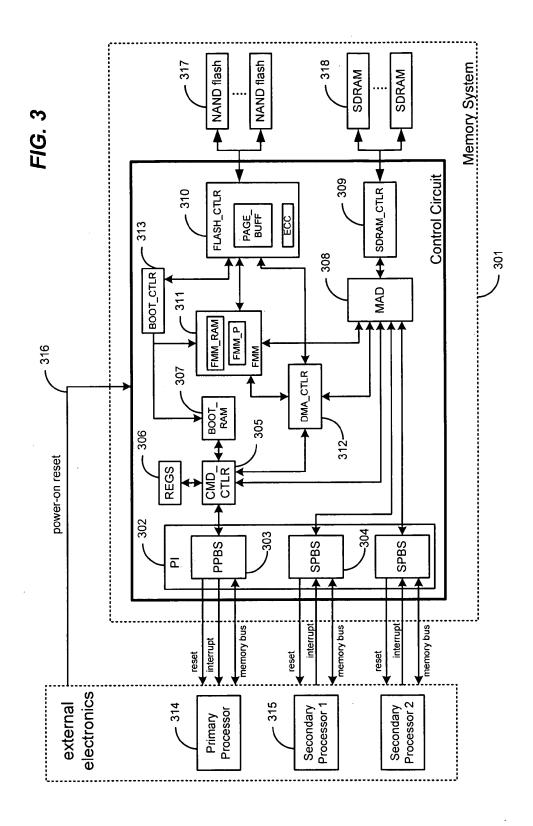


**1**04 Cellular Phone Electronic System Memory System Main RAM Flash Memory 101 Control Circuit 103 External Electronics

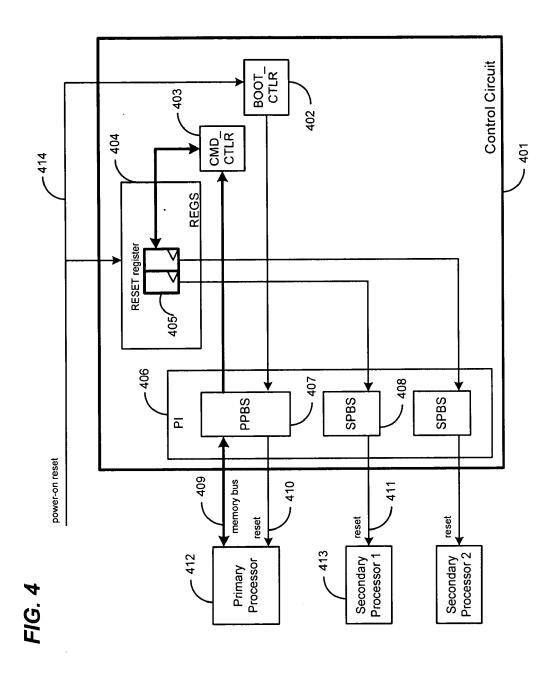
FIG. 1











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