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## (12) United States Patent

#### Kolokowsky

#### (54) FLASH DRIVE FAST WEAR LEVELING

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- (73) Assignee: Cypress Semiconductor Corporation, San Jose, CA (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 147 days.
- (21) Appl. No.: 11/468,569
- (22) Filed: Aug. 30, 2006

#### (65) **Prior Publication Data**

US 2007/0050536 A1 Mar. 1, 2007

#### **Related U.S. Application Data**

- (60) Provisional application No. 60/713,913, filed on Sep. 1, 2005.
- (51) Int. Cl. *G06F 12/00*

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#### (10) Patent No.: US 7,853,749 B2

#### (45) **Date of Patent:** Dec. 14, 2010

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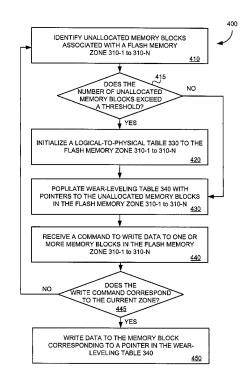
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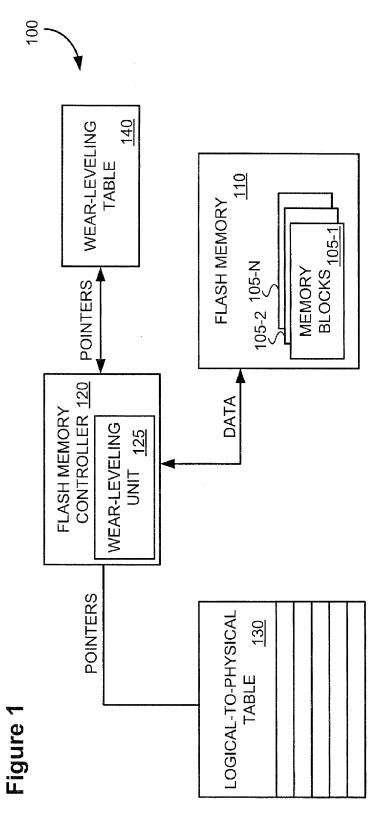
Primary Examiner—Kevin L Ellis Assistant Examiner—Matthew Bradley

#### (57) ABSTRACT

A system and method comprising a non-volatile memory including one or more memory blocks to store data, a controller to allocate one or more of the memory blocks to store data, and a wear-leveling table populated with pointers to unallocated memory blocks in the non-volatile memory, the controller to identify one or more pointers in the wear-leveling table and to allocate the unallocated memory blocks associated with the identified pointers for the storage of data.

#### 10 Claims, 4 Drawing Sheets

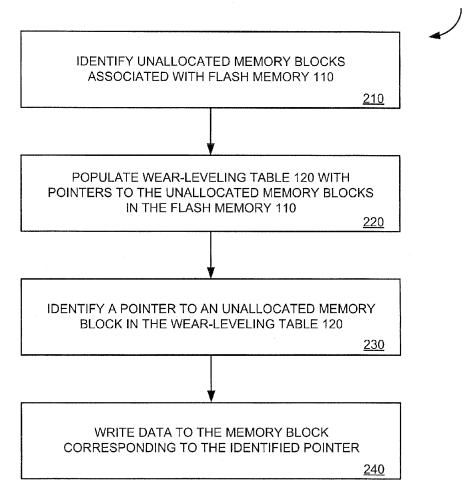


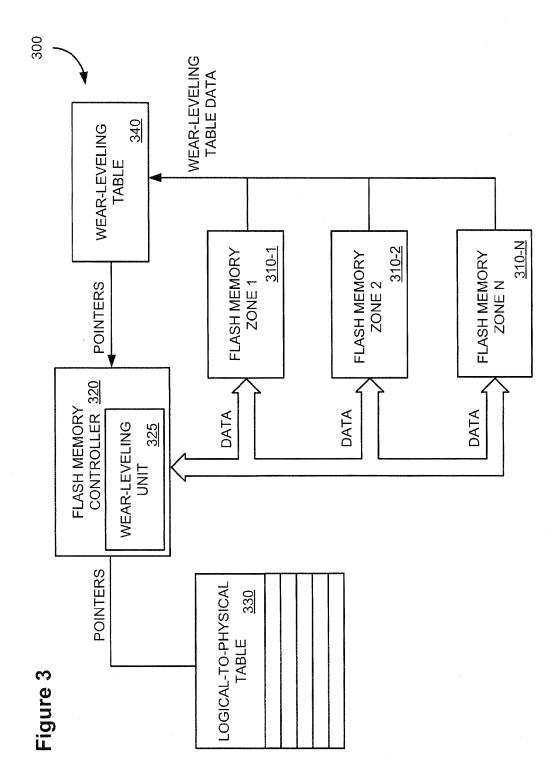


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Figure 2

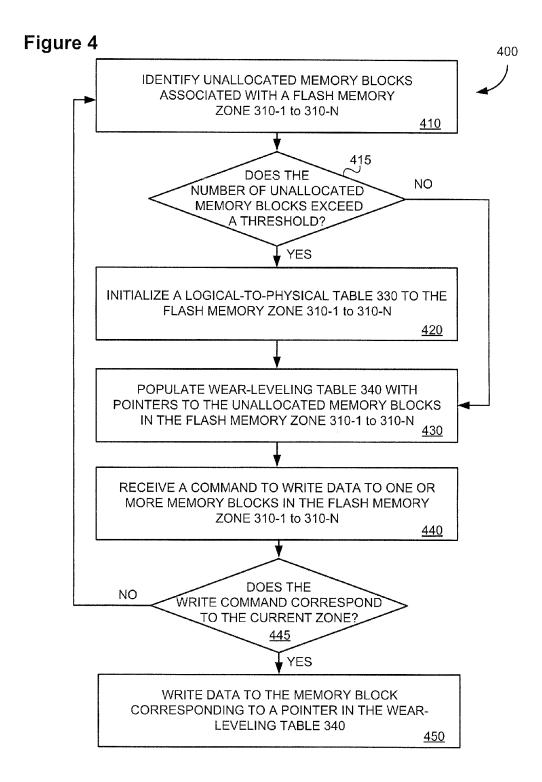




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