

US007584330B2

# (12) United States Patent

McKinney et al.

# (10) Patent No.: US 7,584,330 B2 (45) Date of Patent: Sep. 1, 2009

### (54) MULTI-PROCESSOR DATA COHERENCY

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(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 148 days.

(21) Appl. No.: 10/886,231

(22) Filed: Jul. 7, 2004

(65) Prior Publication Data

US 2005/0188009 A1 Aug. 25, 2005

#### Related U.S. Application Data

- (63) Continuation of application No. 10/037,129, filed on Jan. 4, 2002, now abandoned, which is a continuation of application No. 08/802,827, filed on Feb. 19, 1997, now Pat. No. 6,374,329.
- (60) Provisional application No. 60/011,979, filed on Feb. 20, 1996, provisional application No. 60/011,932, filed on Feb. 20, 1996.
- (51) **Int. Cl.** *G06F 12/08* (2006.01)
- (52) **U.S. Cl.** ...... 711/146; 711/144

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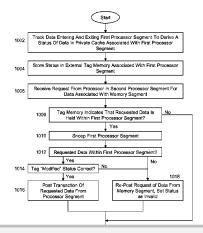
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#### (57) ABSTRACT

A method for maintaining coherent data in a multiprocessor system having a plurality of processors coupled to main memory, where each processor has an internal cache which is externally unreadable outside the processor. The method includes requesting data associated with a memory location in main memory and determining if an external cache coupled to an application specific integrated circuit associated with a second processor contains a reference to the requested data. A snoop cycle is performed on the second processor if the external cache has a reference to the requested data, whereupon a determination is made as to whether the requested data has been modified.

#### 6 Claims, 11 Drawing Sheets





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