

METHOD AND APPARATUS FOR IMPLEMENTING AUTOMATIC CACHE
VARIABLE UPDATE

ABSTRACT

A method and apparatus are provided for implementing automatic cache variable update. A cache variable update hardware (110) maintains a plurality of variables indicative of a data segment in the cache (106,108). The plurality of variables (130) include a segment state variable (132), a segment starting address variable (134), a segment length variable (136) and a segment offset variable (138). The cache variable update hardware (110) monitors the cache (106,108) to identify a selection of a segment for a data transfer to and from the cache (106,108) and to identify data transfers. The plurality of variables (130) are initialized responsive to an identified cache search. The segment length variable (136) is incremented responsive to a data block written to the cache (106,108). The segment state variable (132) is modified responsive to a data transfer complete.

FIG 1A

This Sheet Has Been Replaced

