ABSTRACT

SYSTEM AND METHOD OF EXECUTING PROGRAM THREADS IN A MULTI-THREADED PROCESSOR

A multithreaded processor device is disclosed and includes a first program thread and second program thread. The second program thread is execution linked to the first program thread in a lock step manner. As such, when the first program thread experiences a stall event, the second program thread is instructed to perform a no operation instruction in order to keep the second program thread execution linked to the first program thread. Also, the second program thread performs a no operation instruction during each clock cycle that the first program thread is stalled due to the stall event. When the first program thread performs a first successful operation after the stall event, the second program thread restarts normal execution.

Figure 6