

METHOD AND SYSTEM FOR SINGLE CYCLE DIRECT EXECUTION OF FLOATING-POINT STATUS AND CONTROL REGISTER INSTRUCTIONS

ABSTRACT

A method and system for providing direct execution of a serializing instruction in a processor (10) is disclosed. The processor (10) has the serializing instruction and a nonserializing instruction. The processor (10) includes execution logic having a pipeline for executing the nonserializing instruction. The processor (10) also includes logic separate from the execution logic for executing the serializing instruction. The method and system include recognizing the serializing instruction, recognizing the nonserializing instruction, providing the nonserializing instruction to the execution logic, and providing the serializing instruction to the separate logic. The serializing instruction is executed without providing the serializing instruction to the pipeline.

Fig.1