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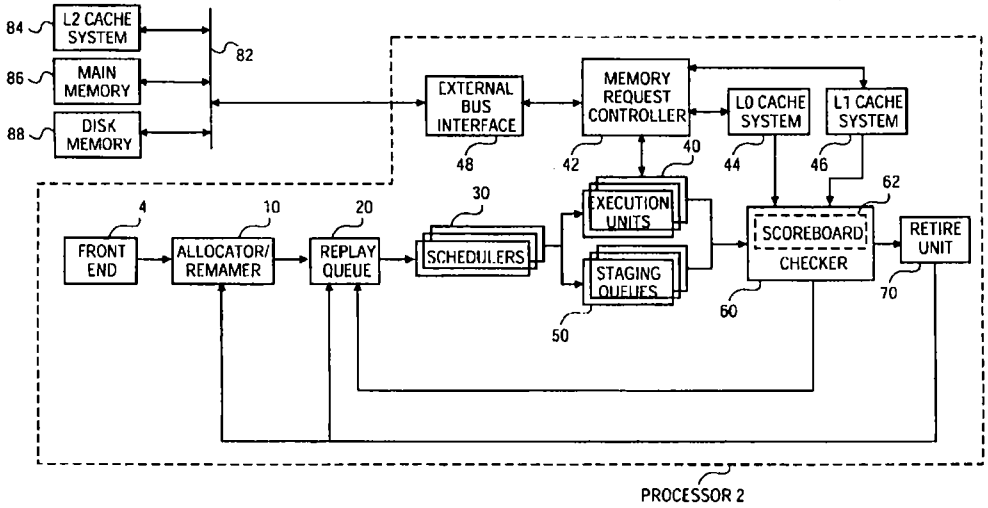
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(54) Title: APPARATUS AND METHOD TO RESCHEDULE INSTRUCTIONS



(57) Abstract: Breaking replay dependency loops in a processor using a rescheduled replay queue. The processor comprise a replay queue to receive a plurality of instructions, and an execution unit to execute the plurality of instructions. A scheduler is coupled between the replay queue and the execution unit. The scheduler speculatively schedules instructions for execution and increments a counter for each of the plurality of instructions to reflect the number of times each of the plurality of instructions has been executed. The scheduler also dispatches each instruction to the execution unit either when the counter does not exceed a maximum number of replays or, if the counter exceeds the maximum number of replays, when the instruction is safe to execute. A checker is coupled tot he execution unit to determine whether each instruction has executed successfully. The checker is also coupled to the replay queue to communicate to the replay queue each instruction that has not executed successfully.

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