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ABSTRACT OF THE DISCLOSURE

SYSTEM WITH HIGH POWER AND LOW POWER PROCESSORS AND THREAD TRANSFER

A system on chip (SOC) includes first and second processors and a control module. The first processor implemented by the SOC has active and inactive states and processes first and second sets of threads during the active state. The second processor implemented by the SOC has active and inactive states, wherein the second processor consumes less power when operating in the active state than the first processor operating in the active state. The control module, implemented by the SOC communicates with the first and second processors, selectively transfers the second set of threads from the first processor to the second processor and selects the inactive state of the first processor. The second processor processes the second set of threads.

FIG. 31A

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