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- (54) **INNOVATIVE INTERCONNECT DESIGN FOR PACKAGE ARCHITECTURE TO IMPROVE LATENCY**

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(57) **ABSTRACT**

An integrated circuit includes a package substrate that includes first and second electrical traces. The integrated circuit includes first, second, third, and fourth configurable dies, which are mounted on the package substrate. The first and second configurable dies are arranged in a first row. The third and fourth configurable dies are arranged in a second row, which is approximately parallel to the first row. The first and third configurable dies are arranged in a first column. The second and fourth configurable dies are arranged in a second column, which is approximately parallel to the first column. The first electrical trace couples the first and third configurable dies, and the second electrical trace couples the second and third configurable dies. The second electrical trace is oblique with respect to the first electrical trace. The oblique trace improves the latency of signals transmitted between dies and thereby increases the circuit operating speed.

