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(54) **INTERCONNECT STRUCTURE AND FORMING METHOD THEREOF**

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(57) **ABSTRACT**

An interconnect structure includes a first dielectric layer, a first metal layer, a metal via, and a second metal layer. The first dielectric layer is over a substrate. The first metal layer is over the first dielectric layer and has a first segment and a second segment separated from the first segment. The metal via includes a first portion between the first and second segments of the first metal layer, and a second portion above the first metal layer. The second metal layer is over the metal via. From a top view, the second metal layer includes a metal line extending across the first and second segments of the first metal layer. From a cross-sectional view, the first portion of the metal via has opposite sidewalls respectively offset from opposite sidewalls of the second portion of the metal via.

