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(54) **THIN FILM TRANSISTORS AND RELATED FABRICATION TECHNIQUES**

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ABSTRACT

Methods and apparatuses for thin film transistors and related fabrication techniques are described. The thin film transistors may access two or more decks of memory cells disposed in a cross-point architecture. The fabrication techniques may use one or more patterns of vias formed at a top layer of a composite stack, which may facilitate building the thin film transistors within the composite stack while using a reduced number of processing steps. Different configurations of the thin film transistors may be built using the fabrication techniques by utilizing different groups of the vias. Further, circuits and components of a memory device (e.g., decoder circuitry, interconnects between aspects of one or more memory arrays) may be constructed using the thin film transistors as described herein along with related via-based fabrication techniques.

