

# (12) United States Patent

### Schuster

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|------|-----------|-----------------|--------------|

(54) SEMICONDUCTOR MEMORY MODULE

- Assignee: Infineon Technologies AG, Neubiberg
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### (30)Foreign Application Priority Data

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- Int. Cl. (51)H05K 7/02 (2006.01)
- 174/260; 29/834; 365/63; 257/723
- Field of Classification Search .............................. 361/720, 361/722, 723, 737, 736, 748, 760, 764, 783; 174/260; 365/63; 257/723, 724, 778, 698, 257/700, 686; 29/832, 834-836

See application file for complete search history.

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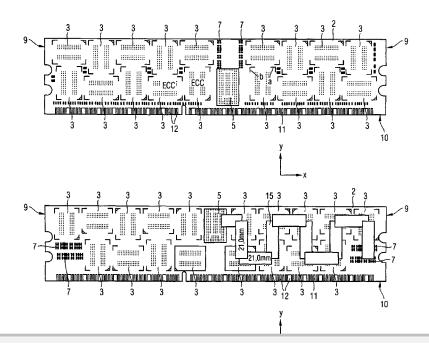
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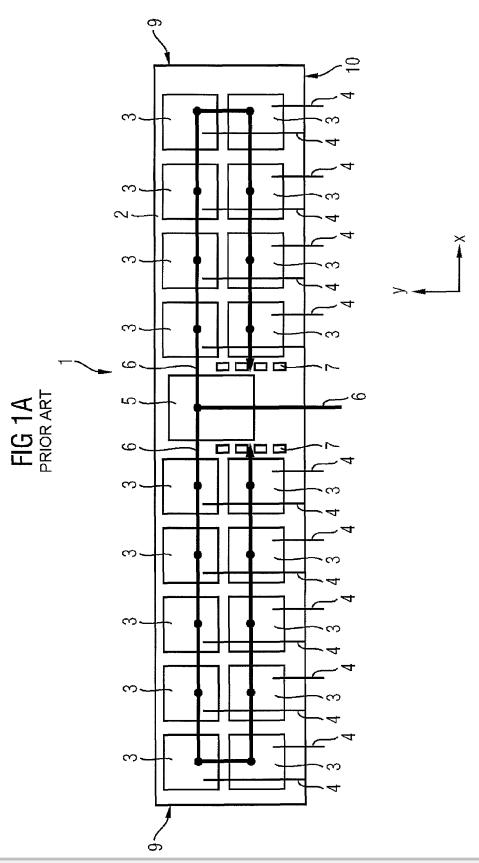
#### (57)**ABSTRACT**

A semiconductor memory module includes an electronic printed circuit board with a contact strip and a plurality of semiconductor memory chips of identical type that are mounted on at least one external area of the printed circuit board. The semiconductor memory chips are rectangular in shape and are arranged, in at least two rows with the adjacent chips being oriented perpendicular to one another, such that the area used on the PC board is optimized.

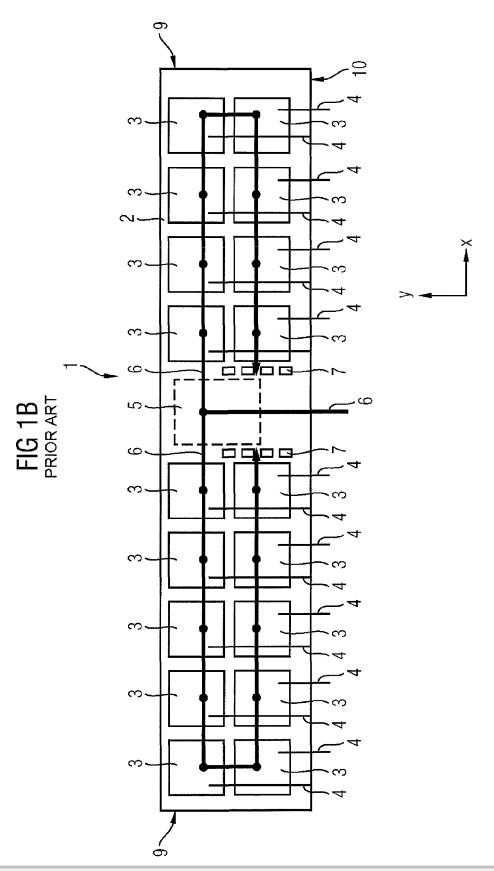
### 7 Claims, 8 Drawing Sheets



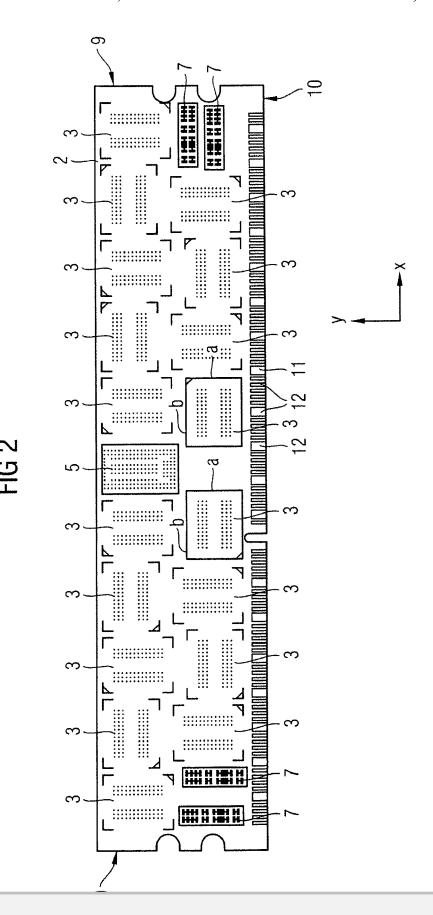




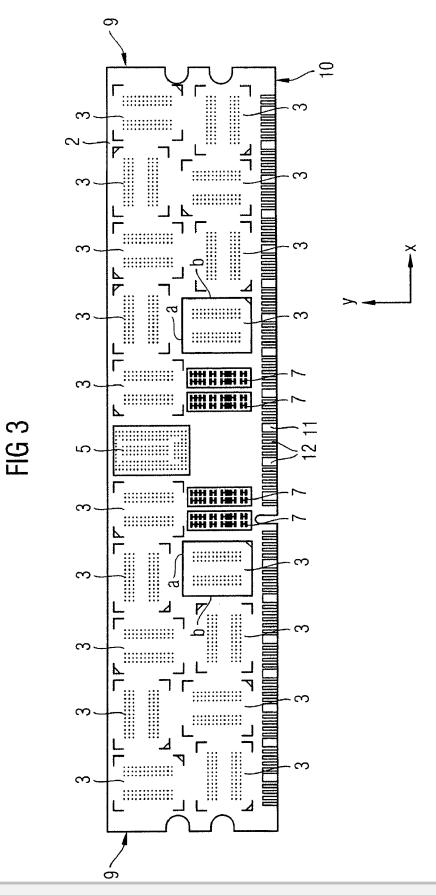














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