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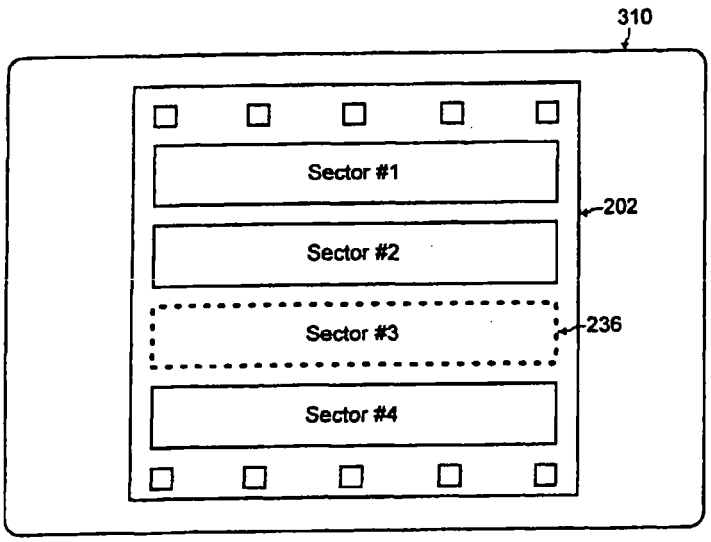
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(54) Title: AUTOMATED DETERMINATION AND DISPLAY OF THE PHYSICAL LOCATION OF A FAILED CELL IN AN ARRAY OF MEMORY CELLS



(57) Abstract: A computer system (300) automatically determines and displays the physical location of a failed memory cell of an array of memory cells on magnified images of a memory IC (integrated circuit) die from label information of the failed memory cell generated by a test station. The label information includes any combination of a sector label, an I/O label, a column label, and a row label. The memory IC die is comprised of a plurality of sectors, and the sector label corresponds to the sector having the failed memory cell located therein. A sector is comprised of a plurality of I/O regions, and the I/O label specifies the I/O region having the failed memory cell located therein, within the sector having the sector label. An I/O region is comprised of a plurality of horizontal conductive structures and vertical conductive structures. The column label indicates the vertical conductive structure coupled to the failed memory cell, and the row label indicates the horizontal conductive structure coupled to the failed memory cell, within the I/O region having the I/O label. The computer system (300) accepts the label information and automatically determines and displays any combination of a first magnified image of the memory IC die with the sector corresponding to the sector label highlighted and/or a second magnified image of the sector corresponding to the sector label with the I/O region corresponding to the I/O label highlighted and/or a third magnified image of the I/O region corresponding to the I/O label with the vertical conductive structure corresponding to the column label and/or the horizontal conductive structure corresponding to the row label highlighted, on a GUI (graphical user interface) (310) of the computer system (300).

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