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(54) **MEMORY REPAIR ANALYSIS METHOD
AND CIRCUIT**

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G06F 11/00 (2006.01)

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(58) **Field of Classification Search** **714/6,**
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See application file for complete search history.

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(57) **ABSTRACT**

A method and circuit for repairing a memory array having
one or more memory segments each having one spare
column and a predetermined number of spare rows common
to all segments, the method comprises, while testing the
memory array for failures, generating an equal number of
unique segment repair solutions for each segment with each
segment repair solution including one defective column
address, if any, and a number of defective row addresses, if
any, corresponding to the predetermined number of spare
rows; and, after completing testing, analyzing all segment
repair solution combinations consisting of one segment
repair solution selected from each segment; and identifying
the best segment repair solution combination of combina-
tions having a number of different defective row addresses
which is less than or equal to the predetermined number of
spare rows.

46 Claims, 11 Drawing Sheets

