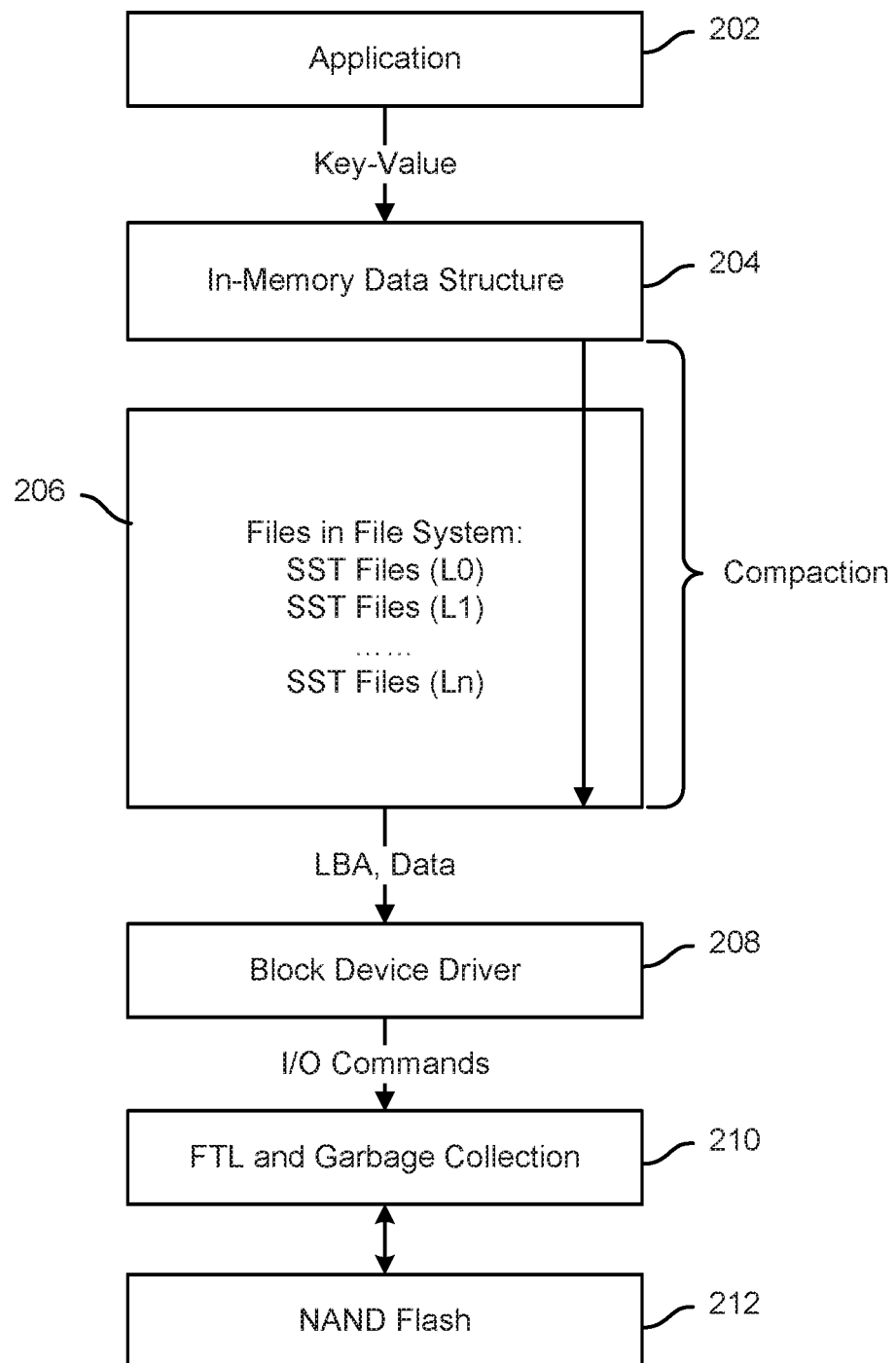


Key	Value
Key1	111, 222, 333
Key2	ABC, DEF, 123
Key3	ZZZ, YYY
Key4	AAA, 3, 9/12/2016

FIG. 1

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**FIG. 2**

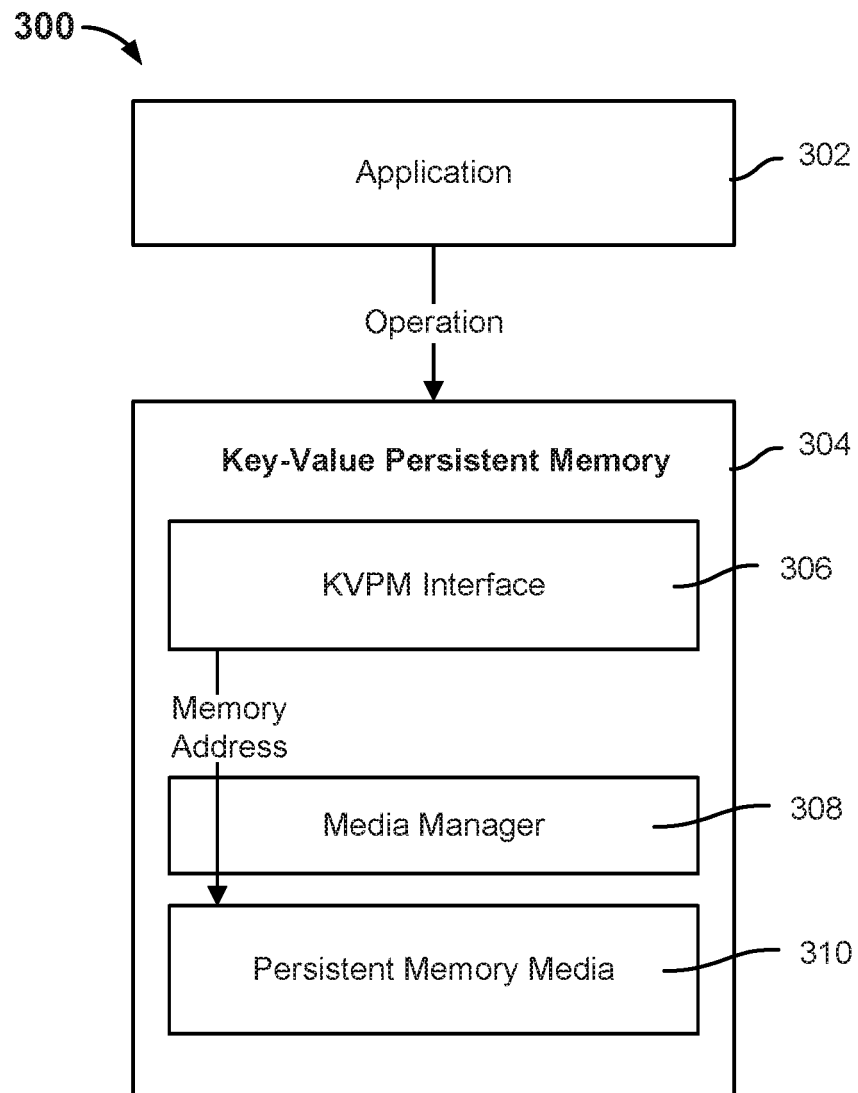


FIG. 3

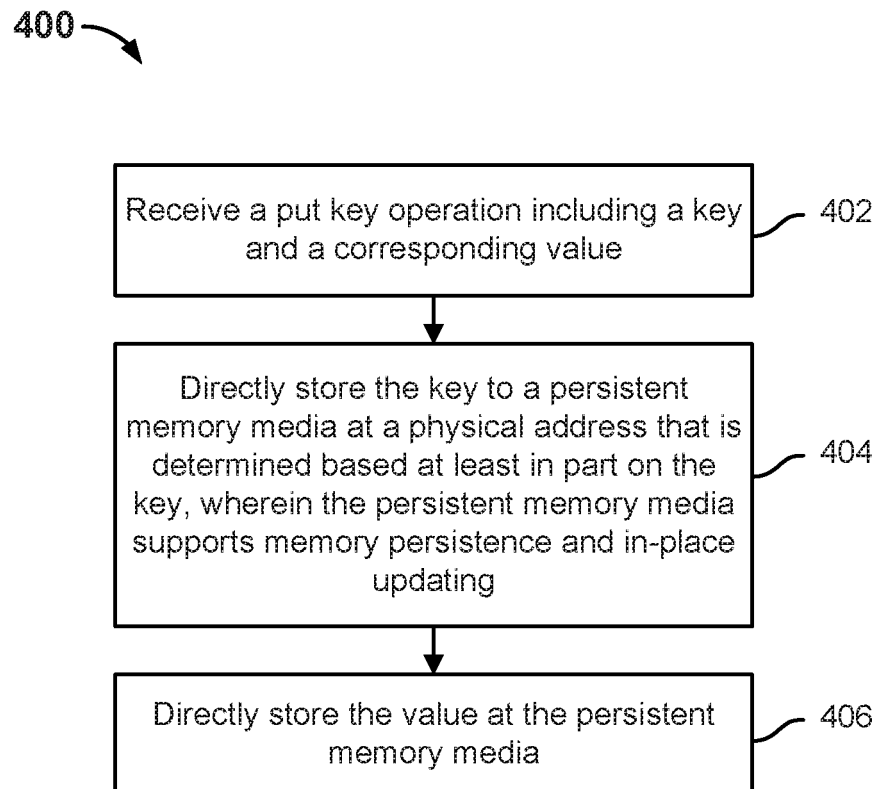


FIG. 4A

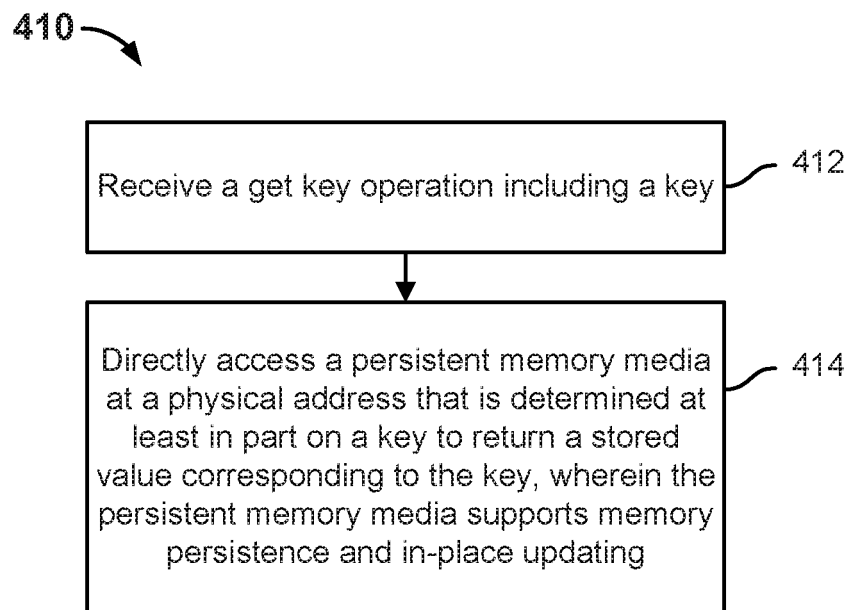


FIG. 4B

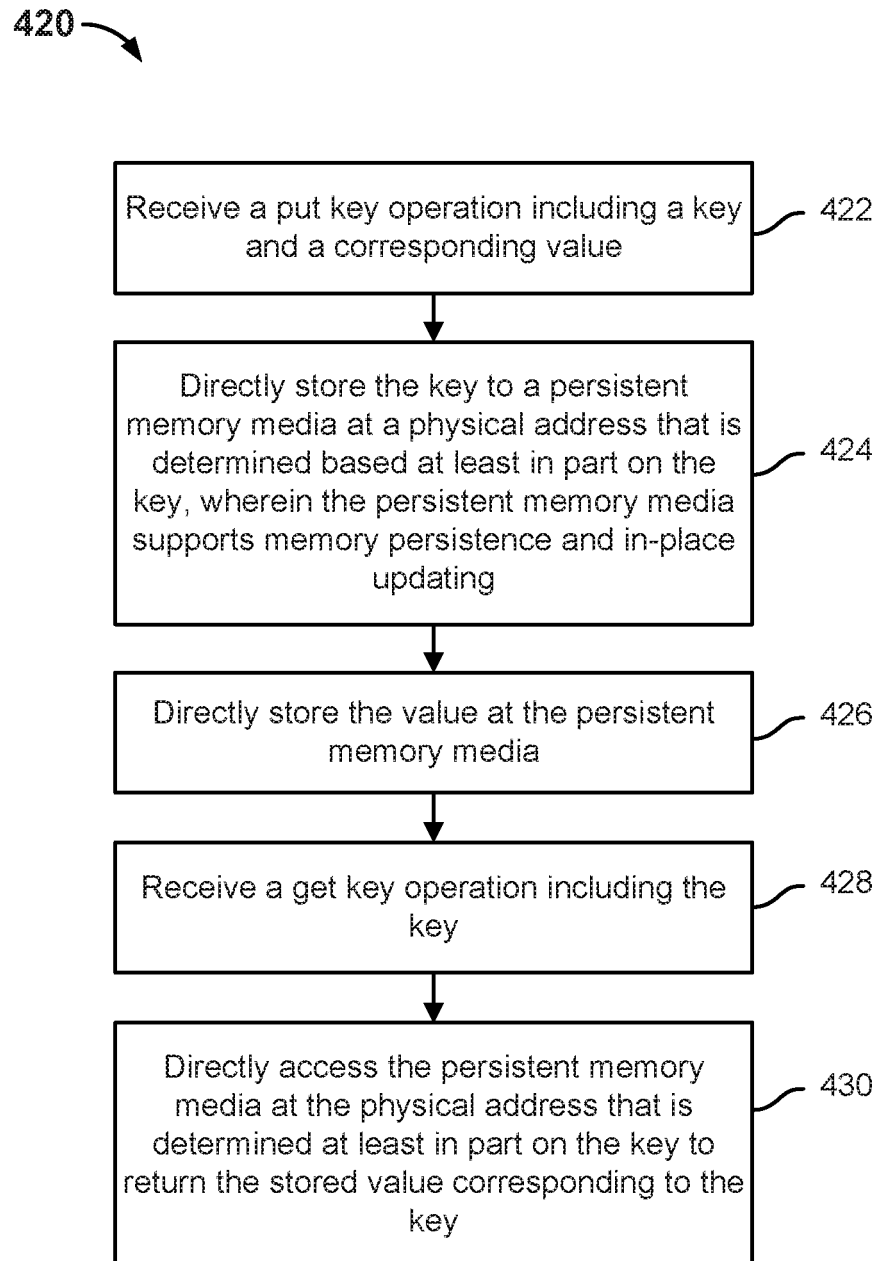


FIG. 4C

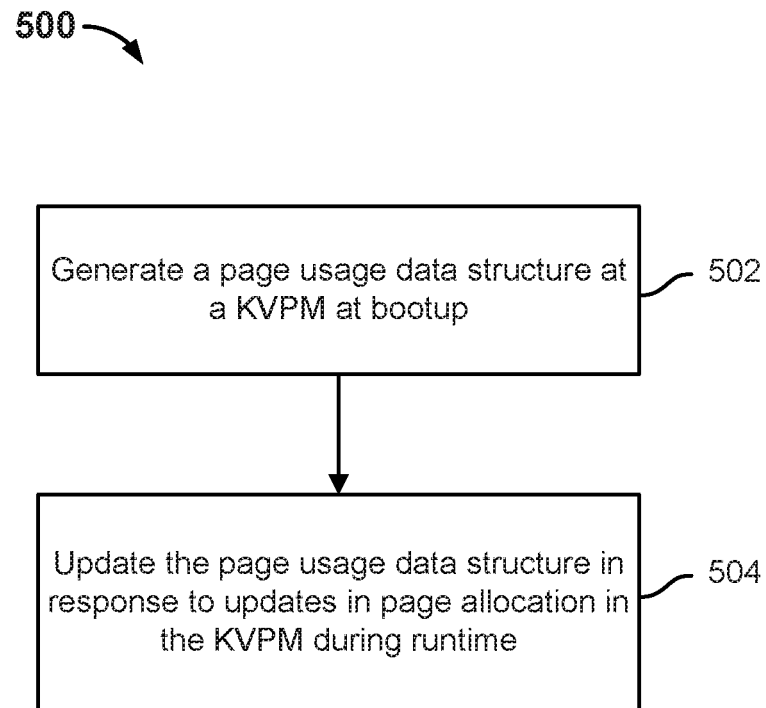


FIG. 5

Page type field
Pointer to current value page chain
Snapshot count
Delete flag
Statistical Information

FIG. 6A

Page type field
Version number of the value page chain
Pointer to next value page in chain
Pointer to previous version of value page chain
Back pointer

FIG. 6B

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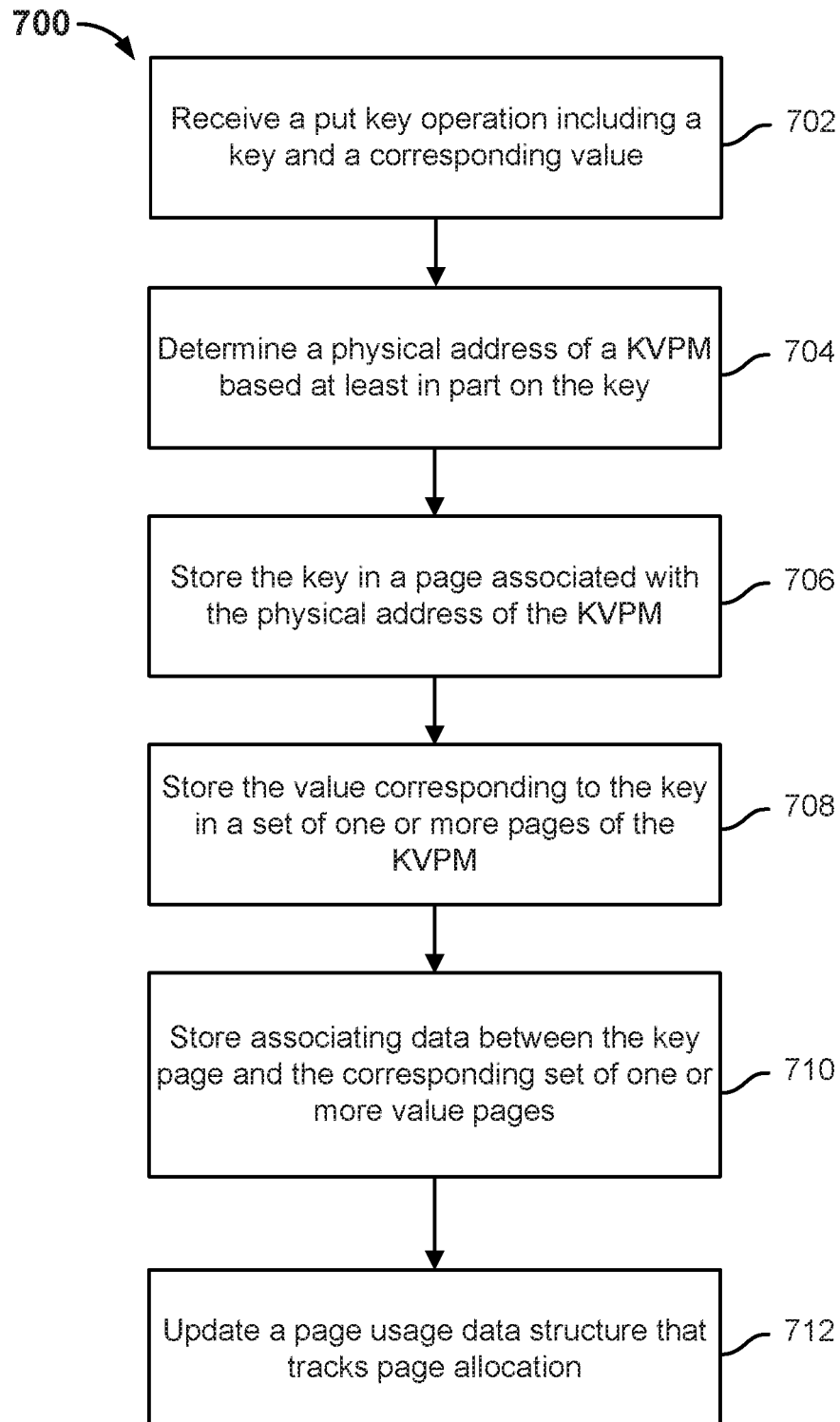


FIG. 7

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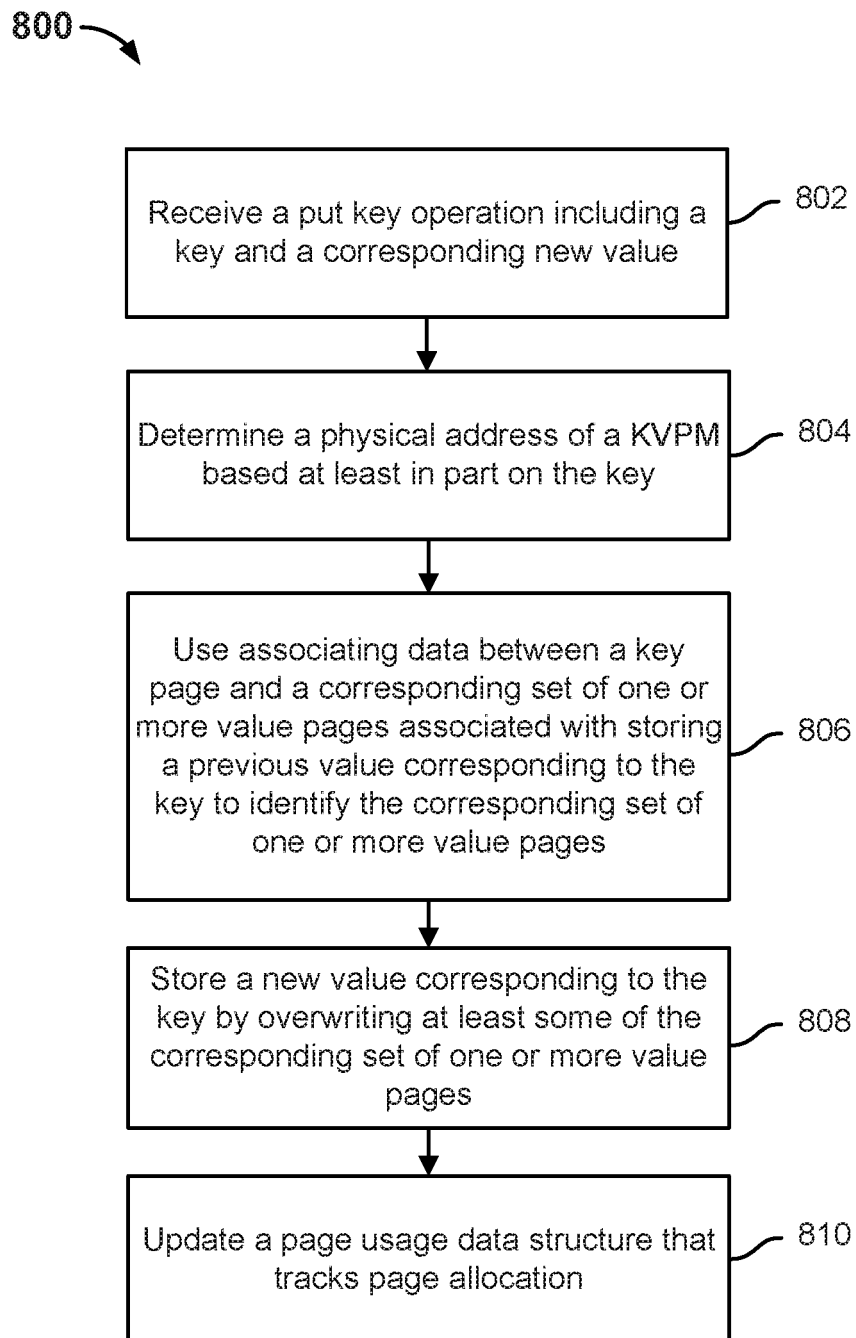


FIG. 8

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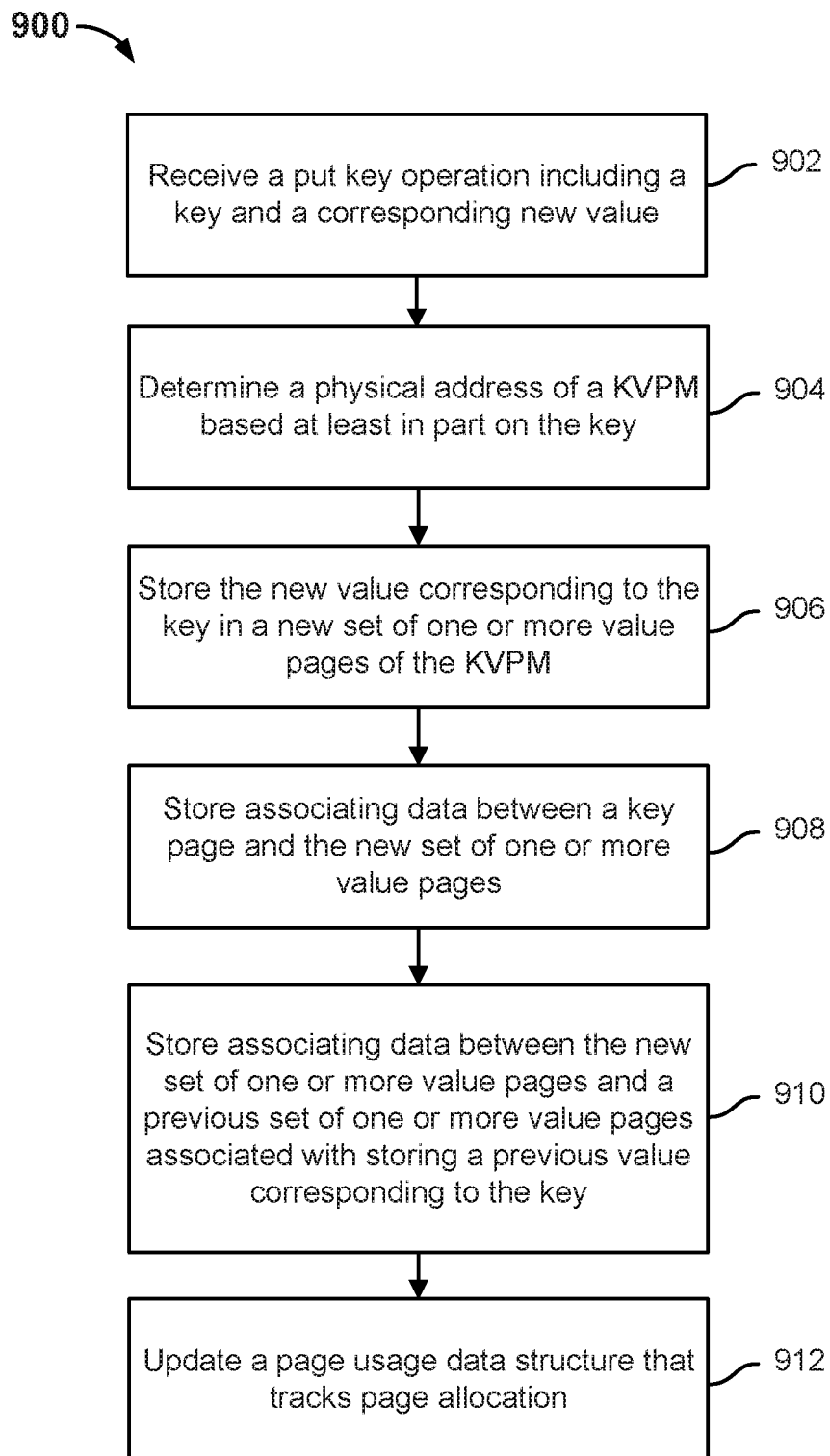


FIG. 9

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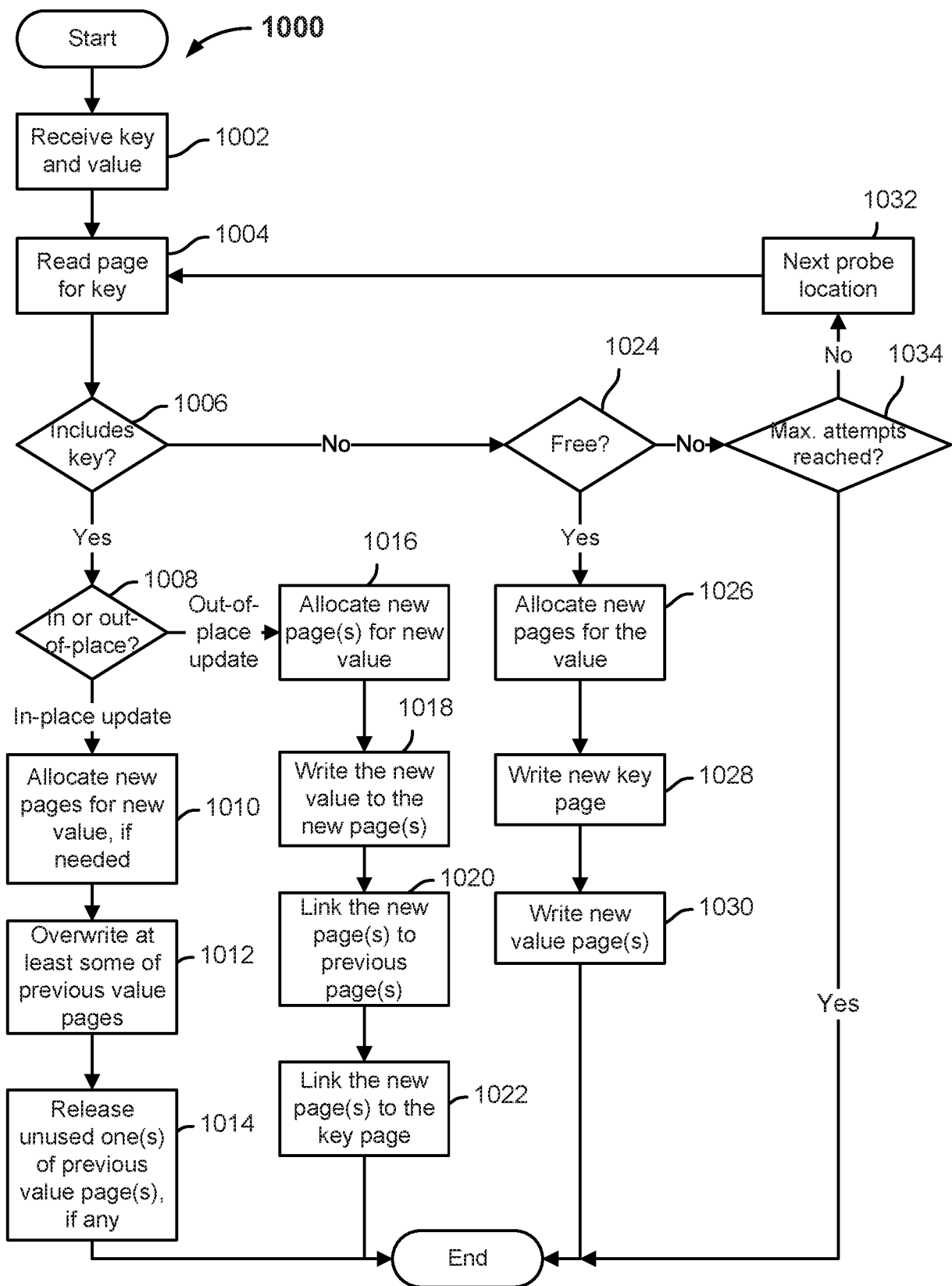


FIG. 10

Put_Key(Key1-dog,cat)

Hash(Key1) = 012

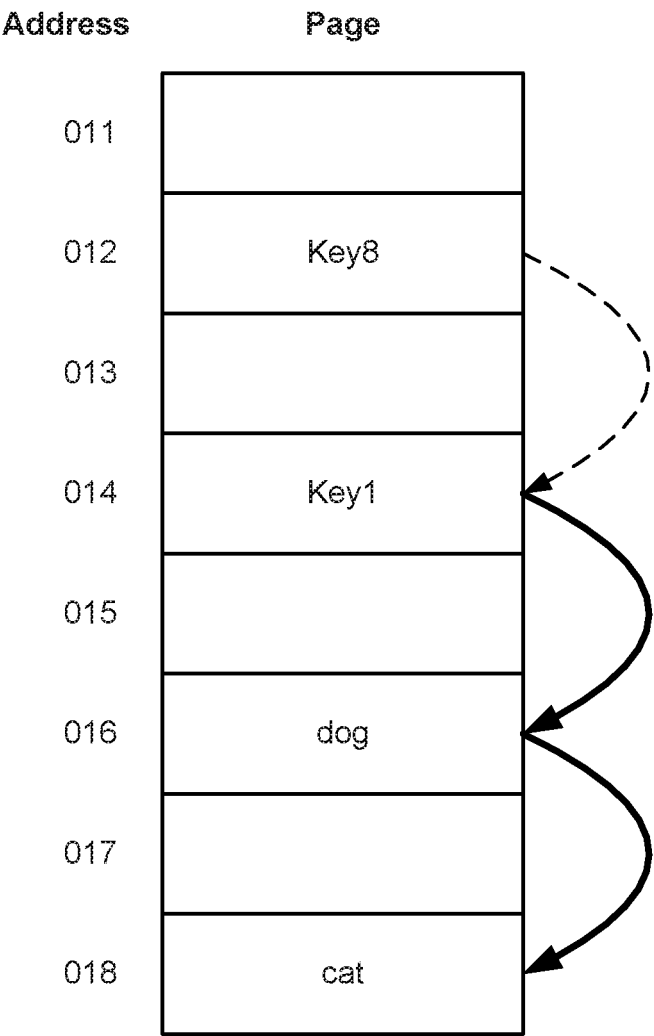
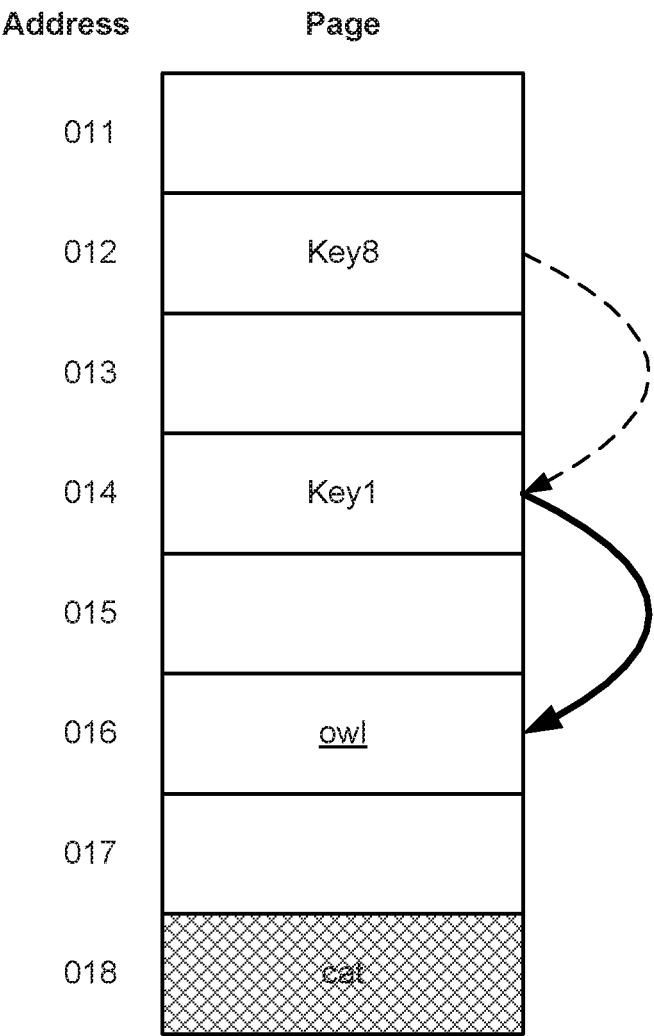


FIG. 11

Put_Key(Key1-owl)
Hash(Key1) = 012



 Marked as unused

FIG. 12

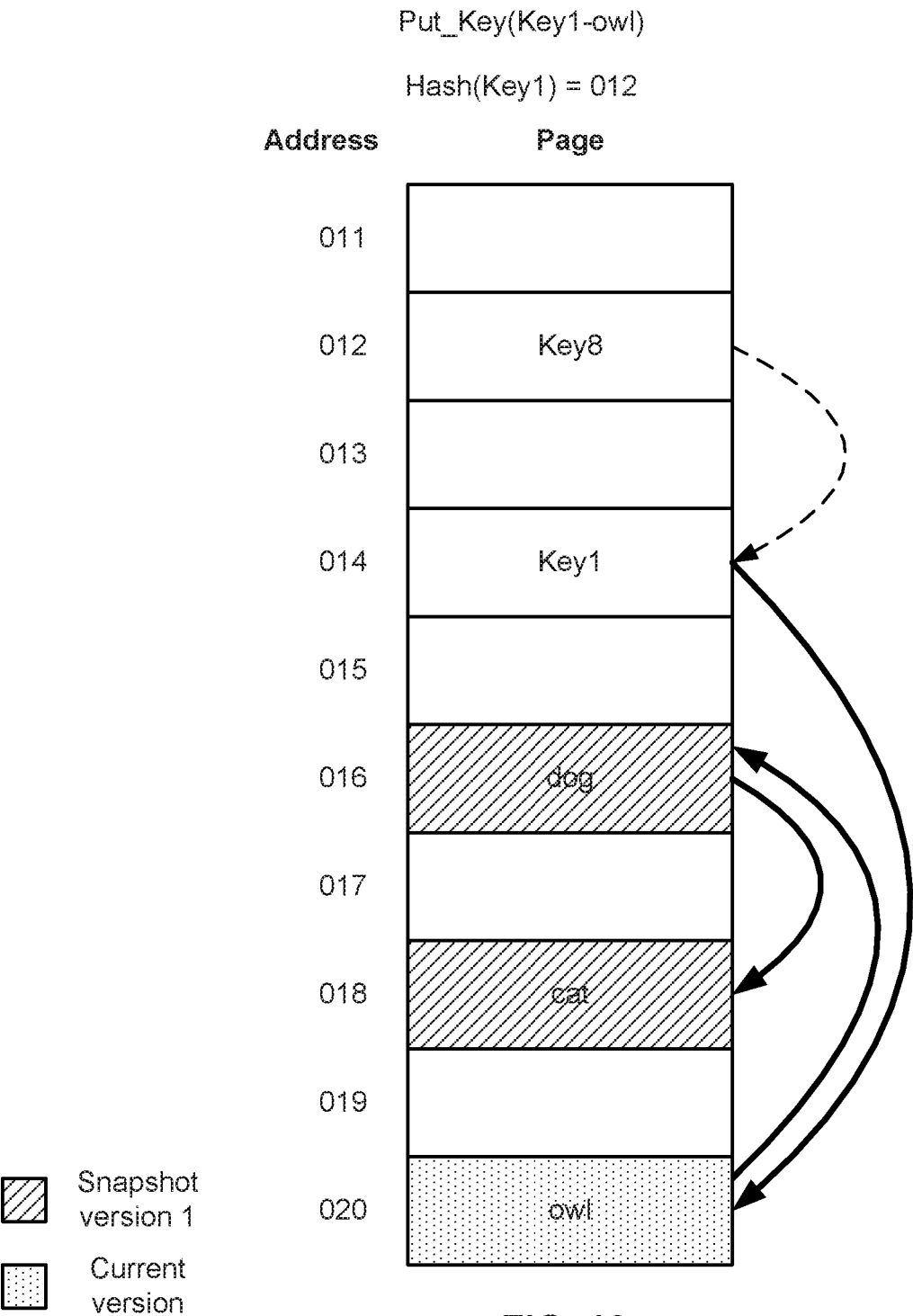


FIG. 13

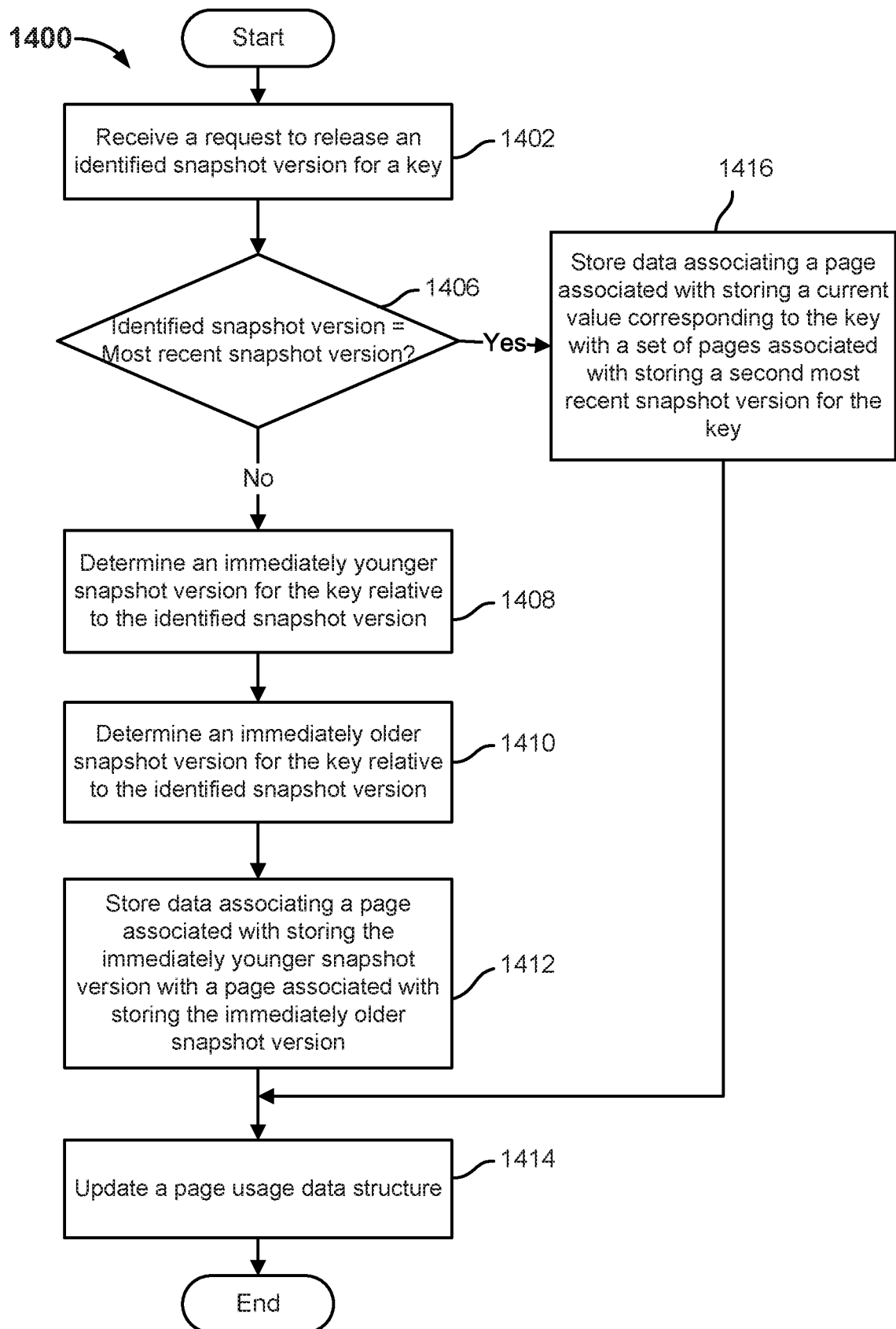


FIG. 14

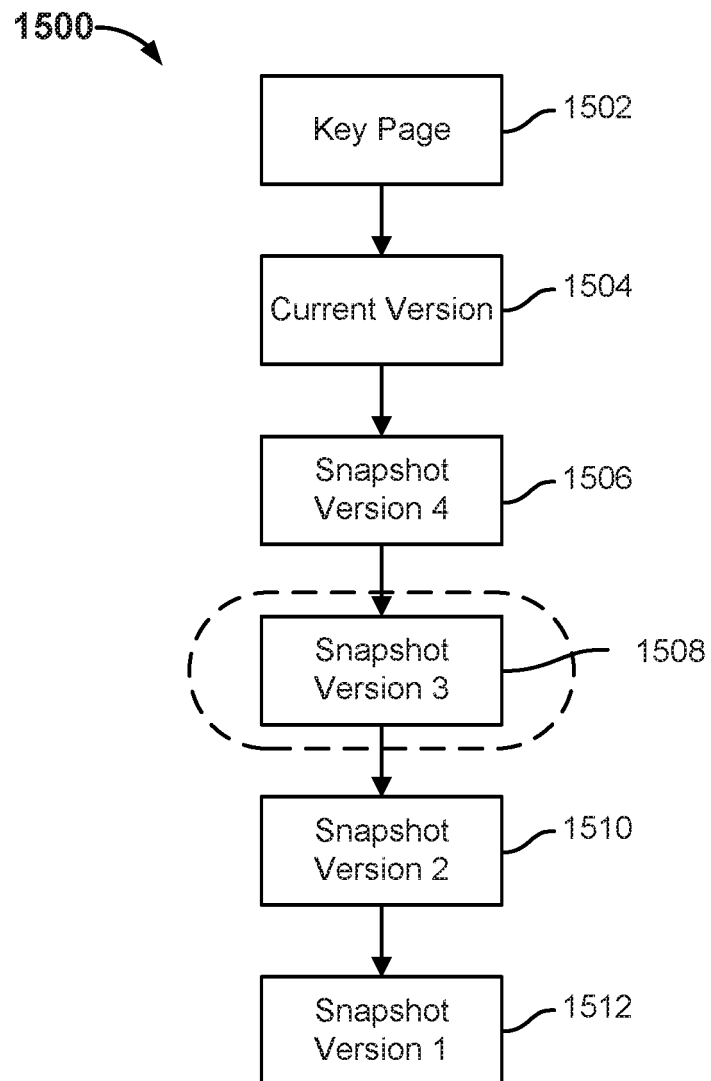
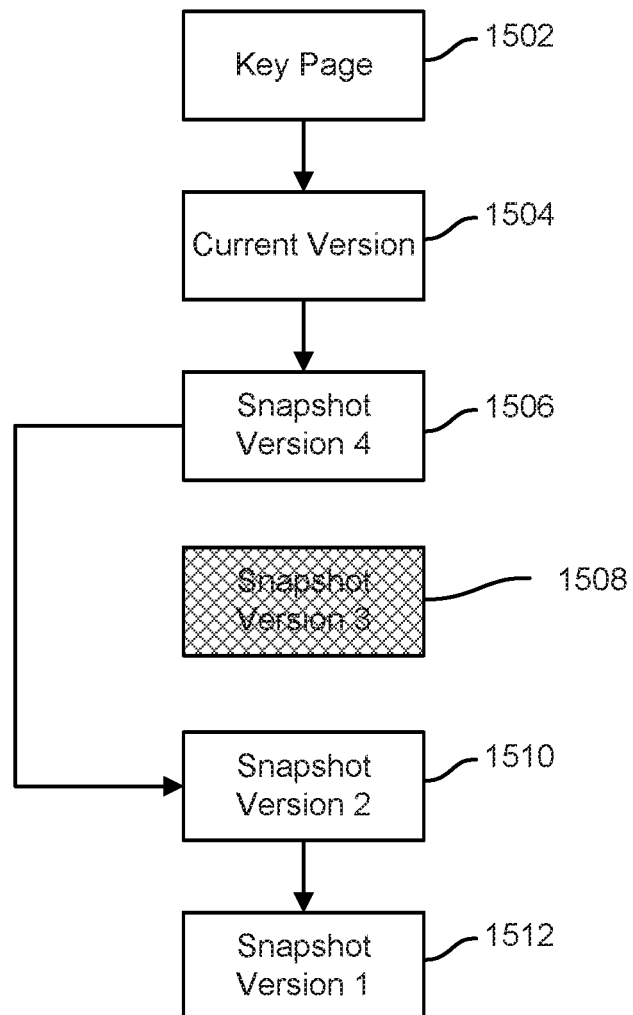


FIG. 15



 Marked as unused

FIG. 16

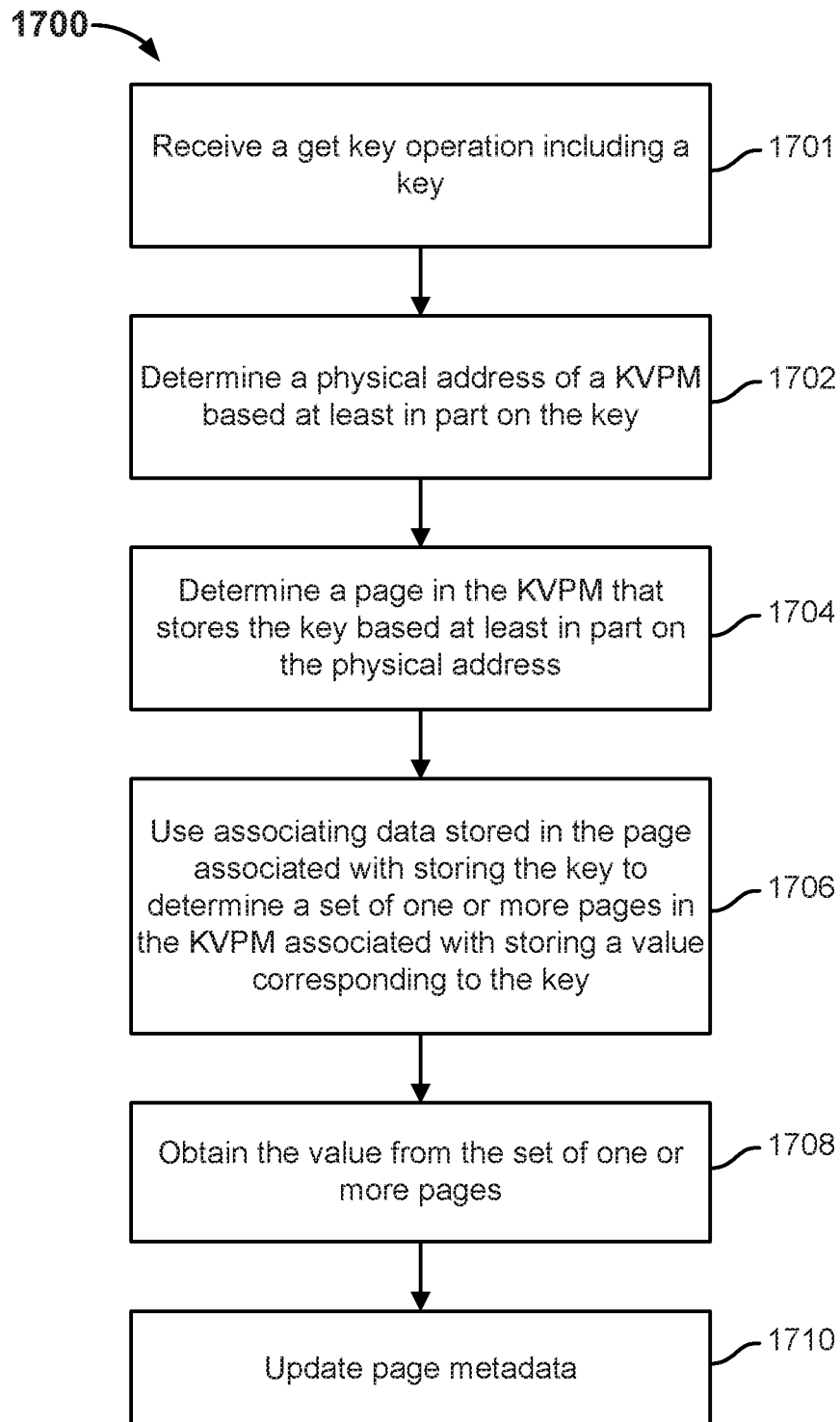


FIG. 17

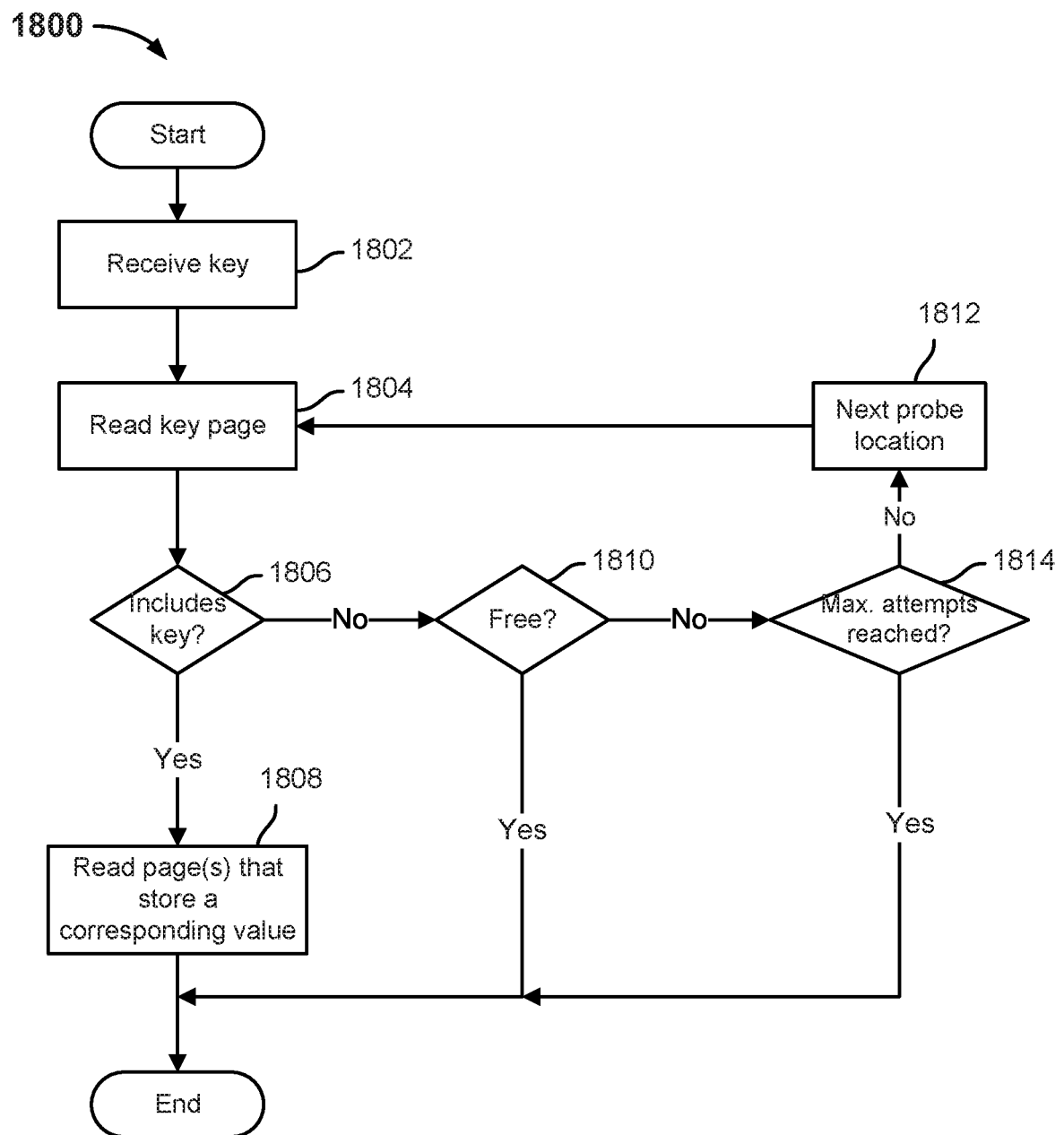


FIG. 18

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Get_Key(Key1)

Hash(Key1) = 012

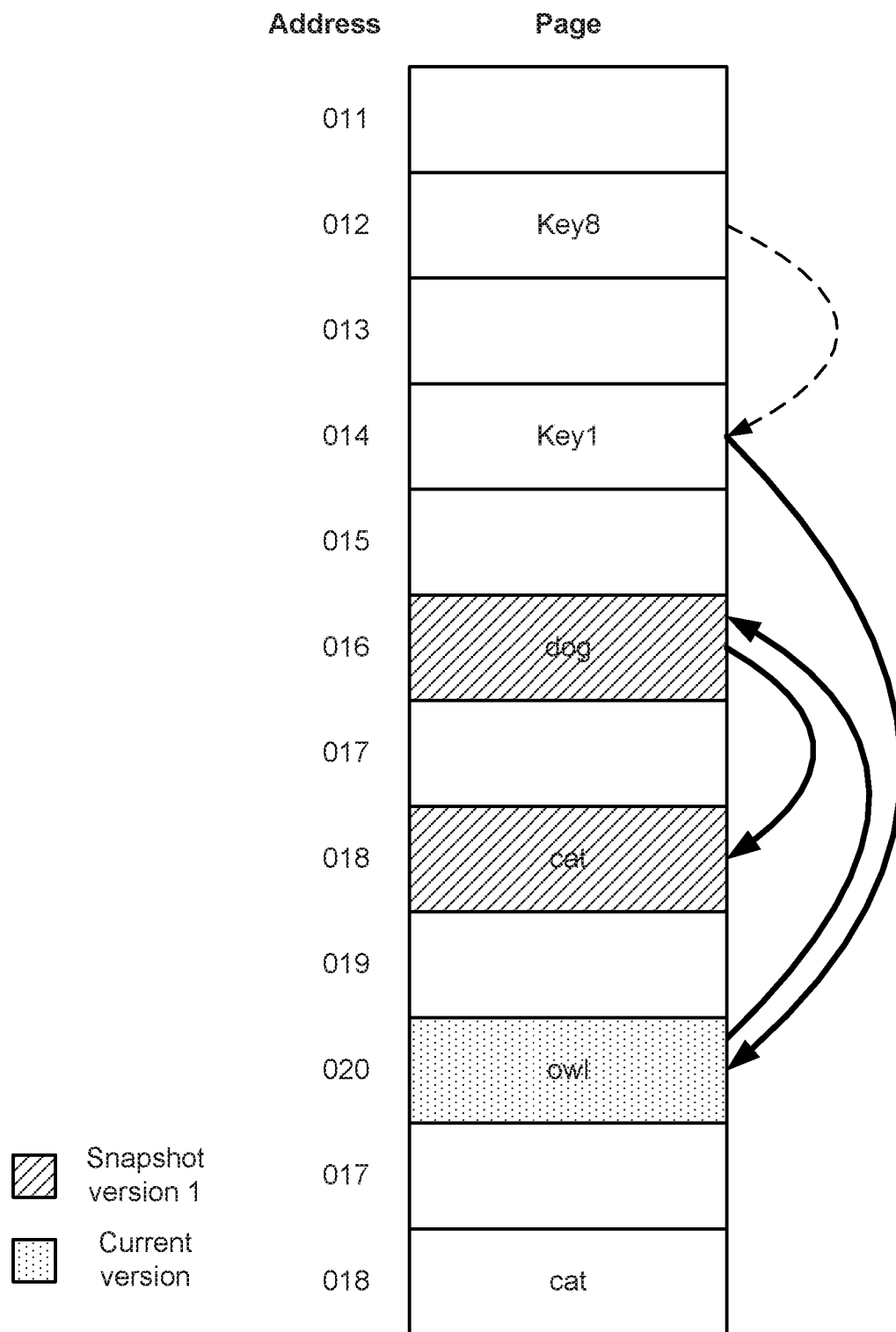


FIG. 19