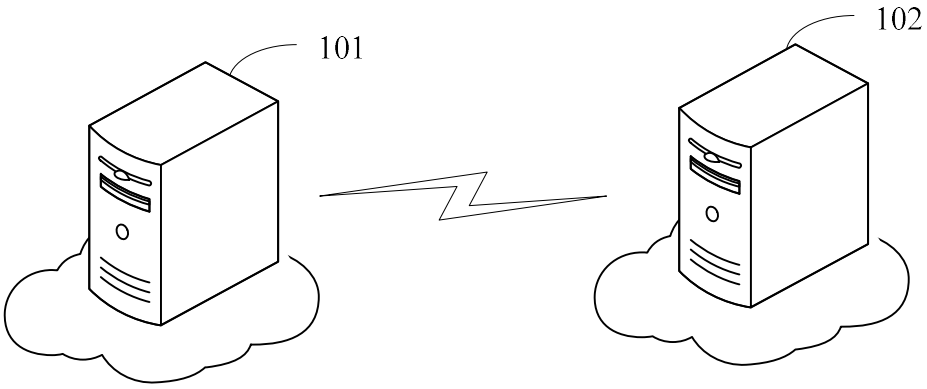
101
102

FIG. 1

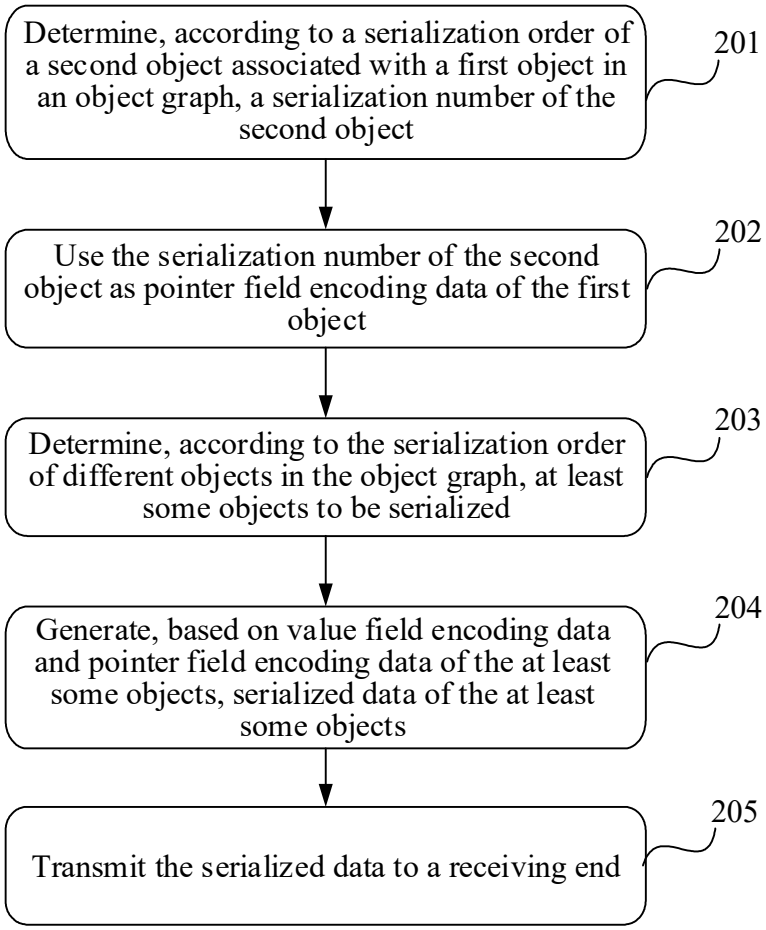
Determine, according to a serialization order of a second object associated with a first object in an object graph, a serialization number of the second object
201
Use the serialization number of the second object as pointer field encoding data of the first object
202
Determine, according to the serialization order of different objects in the object graph, at least some objects to be serialized
203
Generate, based on value field encoding data and pointer field encoding data of the at least some objects, serialized data of the at least some objects
204
Transmit the serialized data to a receiving end
205

FIG. 2

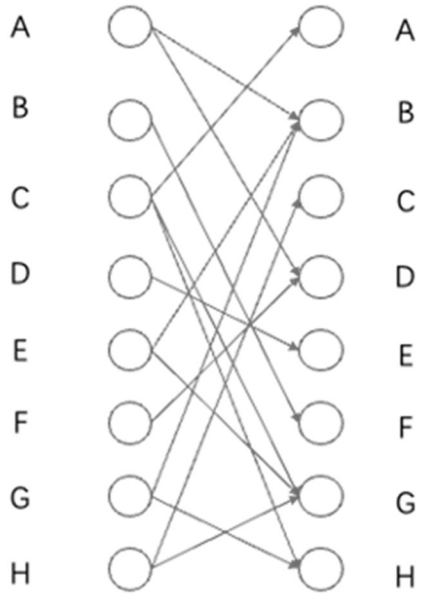

FIG. 3

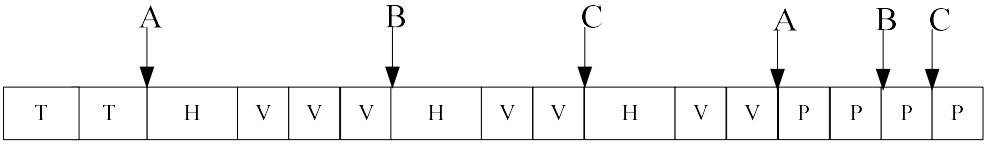

FIG. 4A

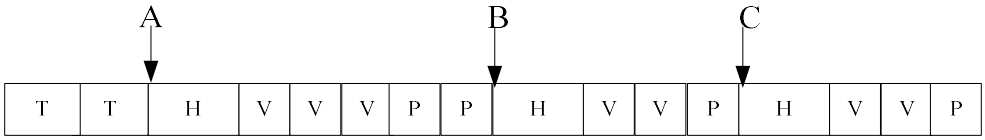

FIG. 4B

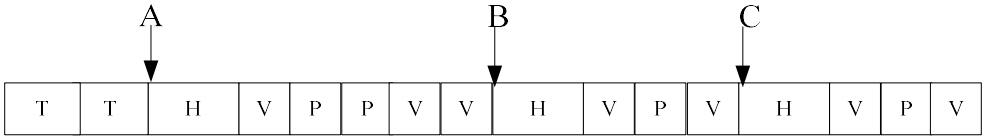

FIG. 4C

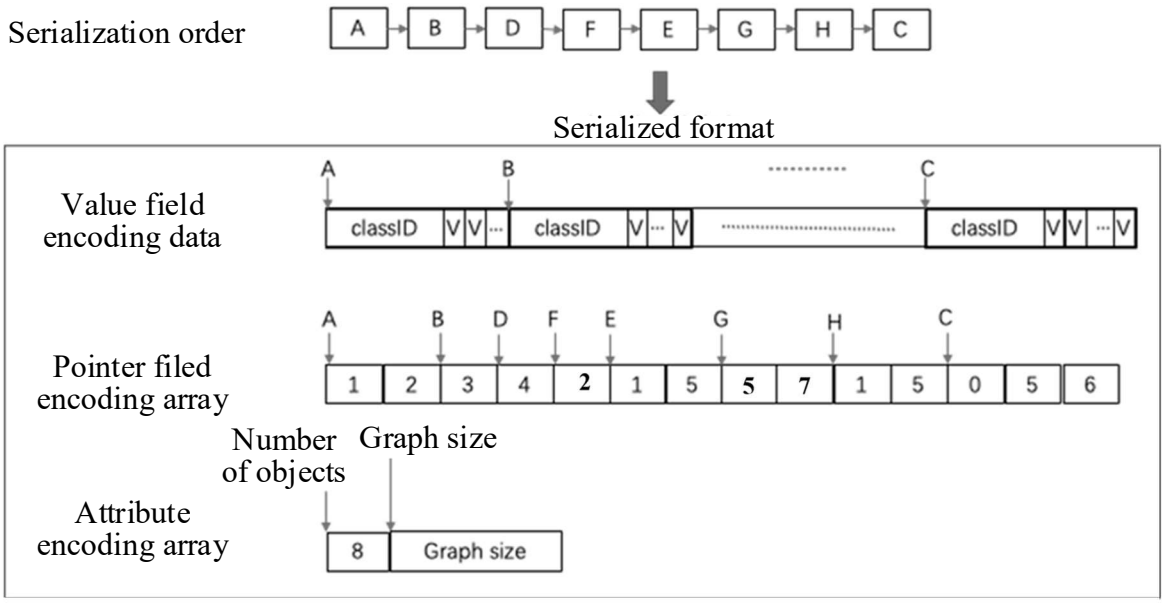
Serialization order
A
B
D
F
E
G
H
C
Serialized format
Value field encoding data
classID
V
Pointer filed encoding array
1
2
3
4
2
1
5
5
7
1
5
0
5
6
Number of objects
Graph size
Attribute encoding array
8
Graph size

FIG. 4D

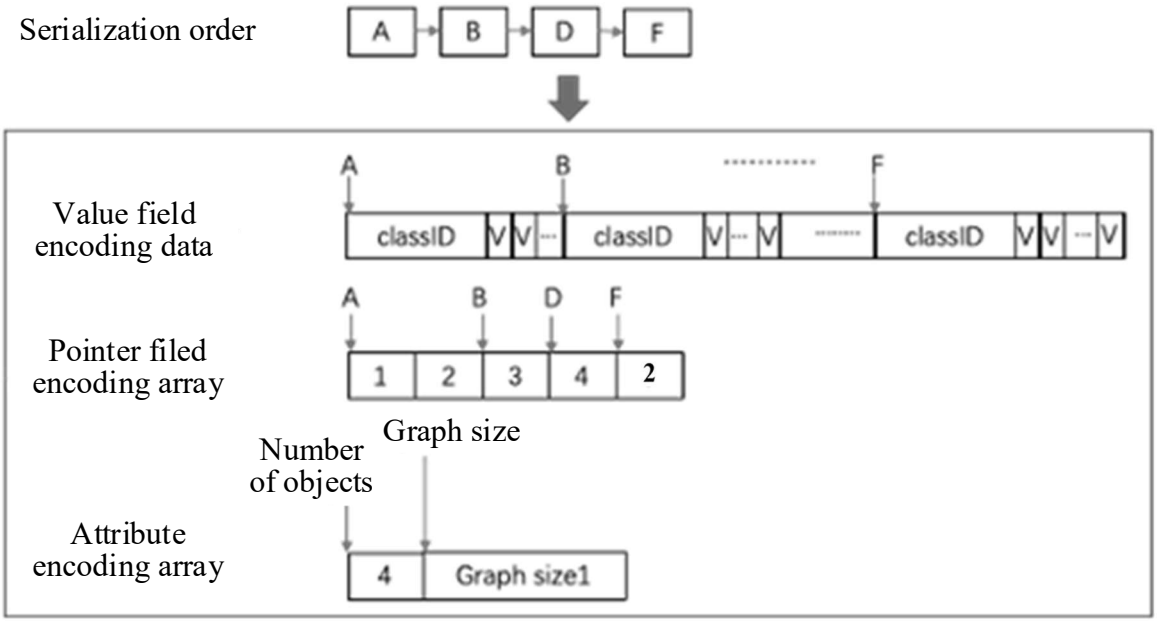
Serialization order
A
B
D
F
Value field encoding data
classID
V
Pointer filed encoding array
1
2
3
4
2
Graph size
Number of objects
Attribute encoding array
4
Graph size1

FIG. 4E

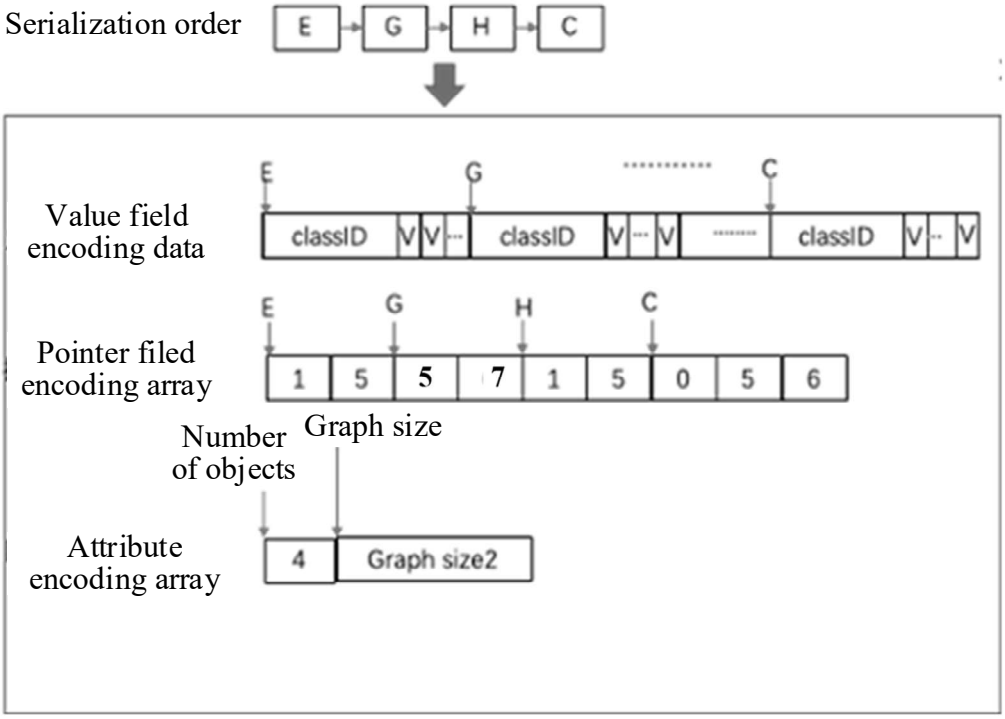
Serialization order
E
G
H
C
Value field encoding data
classID
V
Pointer filed encoding array
1
5
5
7
1
5
0
5
6
Number of objects
Graph size
Attribute encoding array
4
Graph size2

FIG. 4F

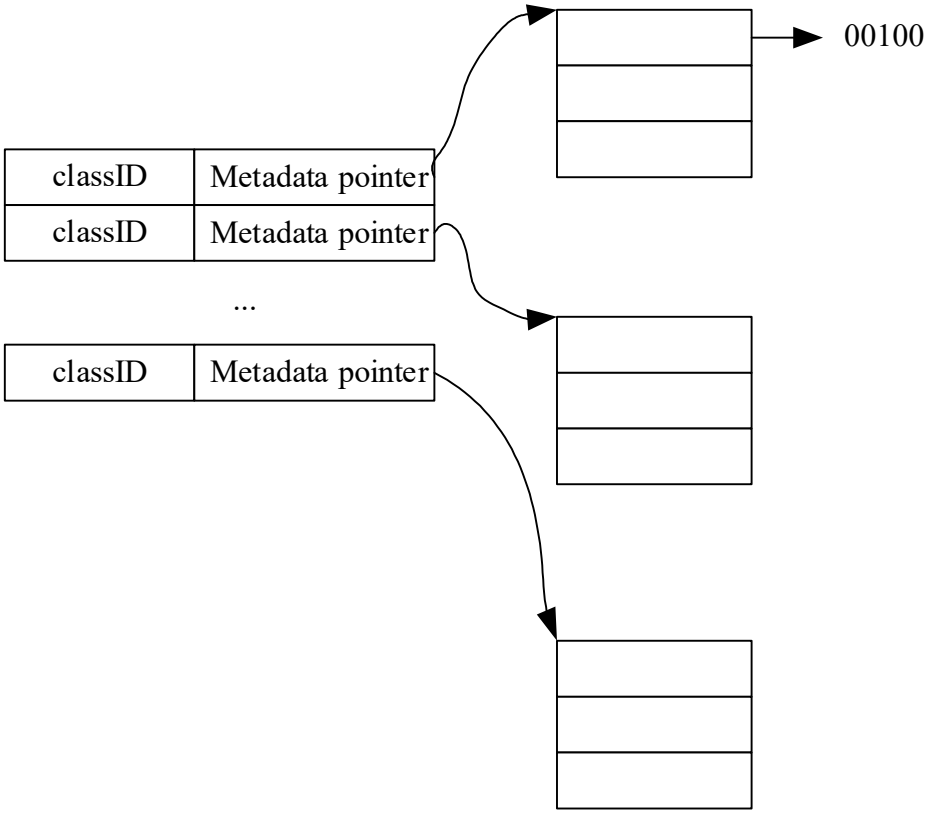
00100
classID
Metadata pointer
classID
Metadata pointer
...
classID
Metadata pointer

FIG. 4G

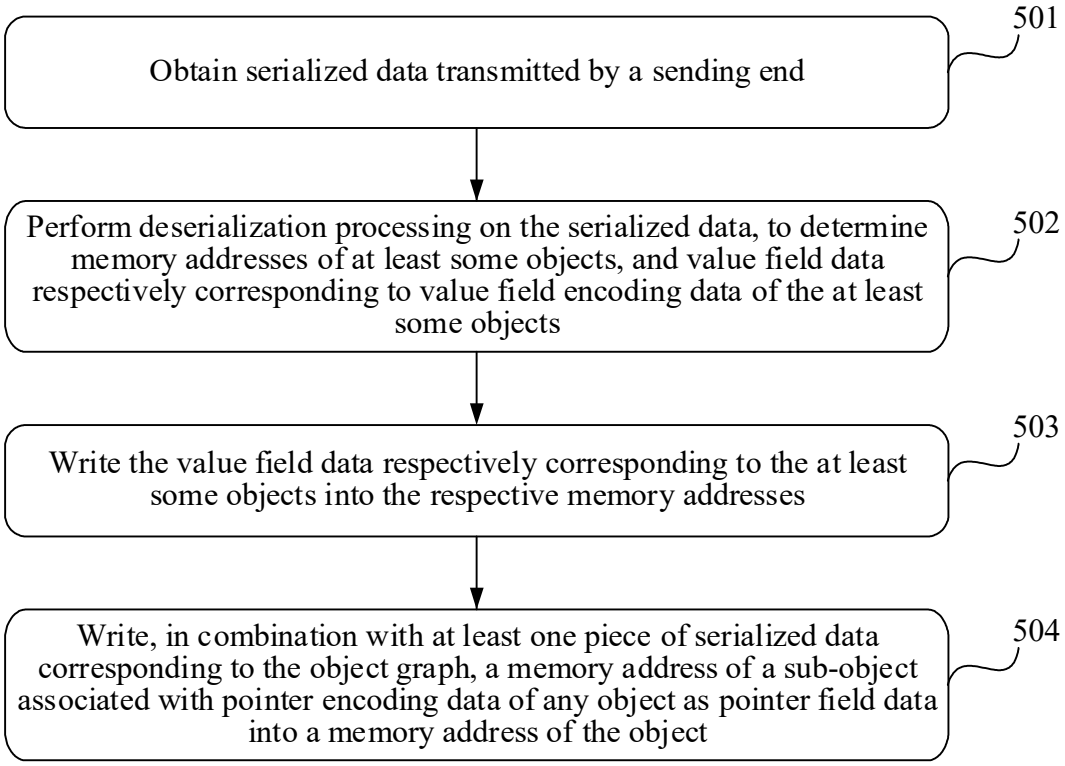

FIG. 5

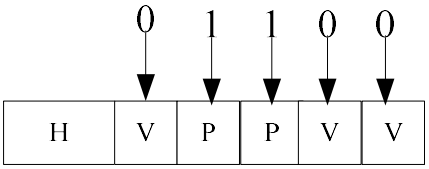

FIG. 6A

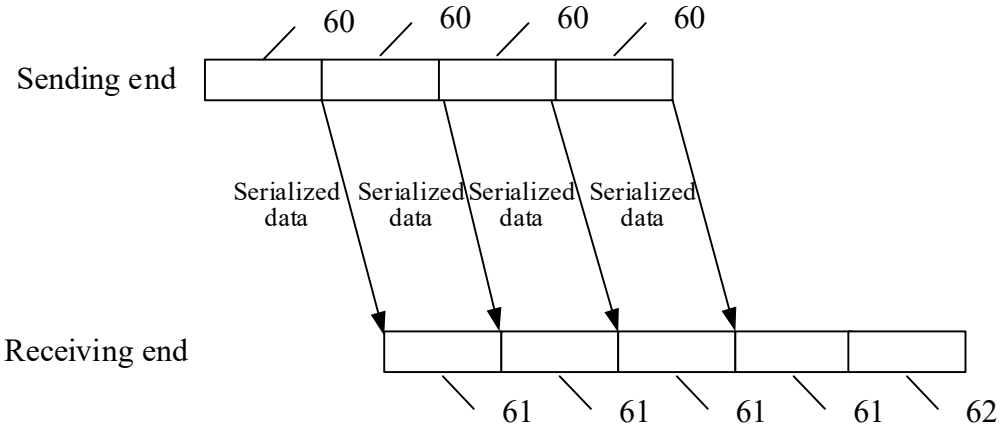

FIG. 6B

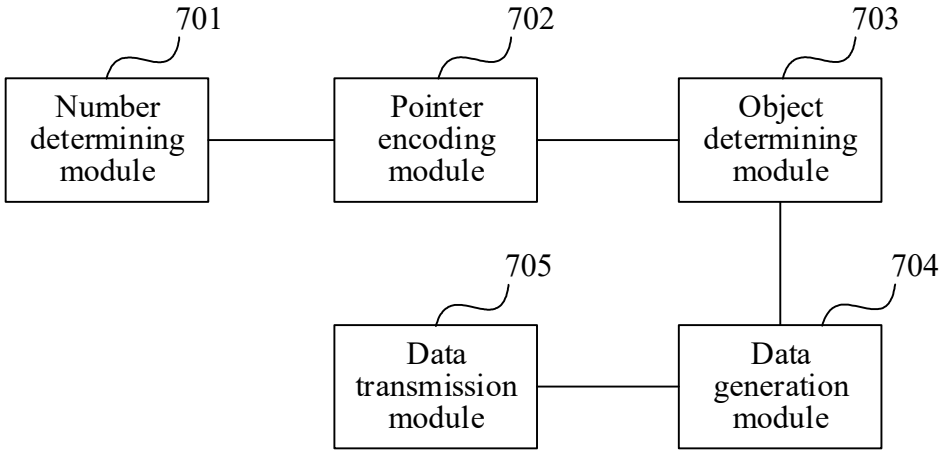

FIG. 7

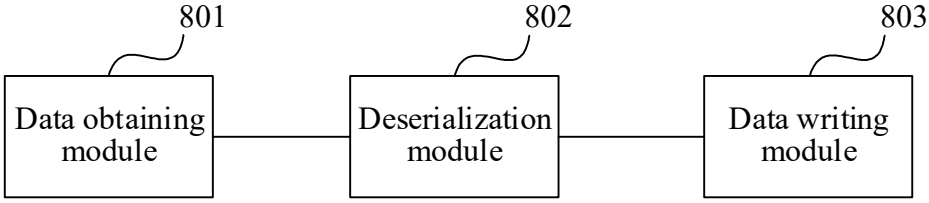

FIG. 8

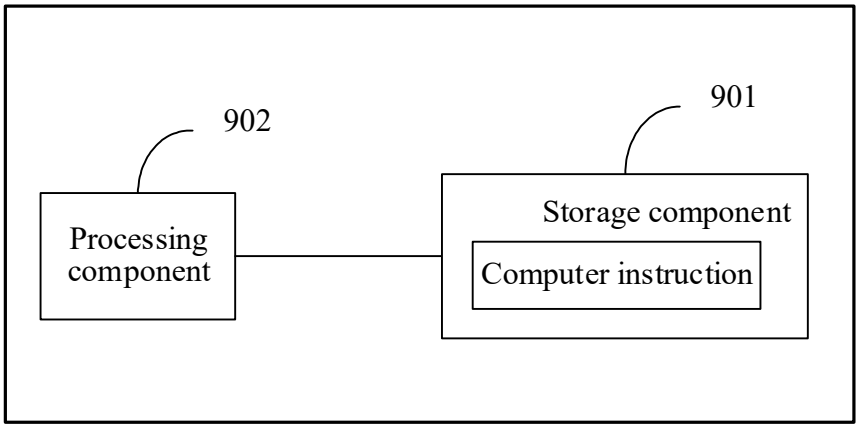

FIG. 9