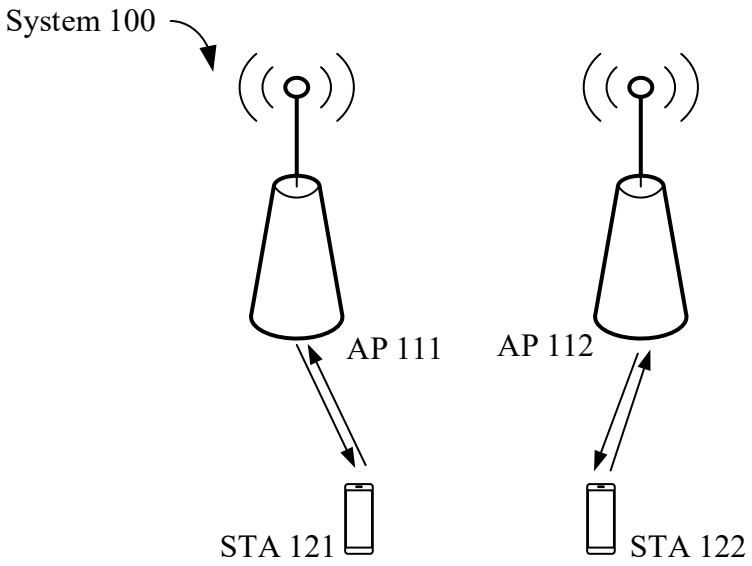

System 100
AP 111
AP 112
STA 121
STA 122

FIG. 1

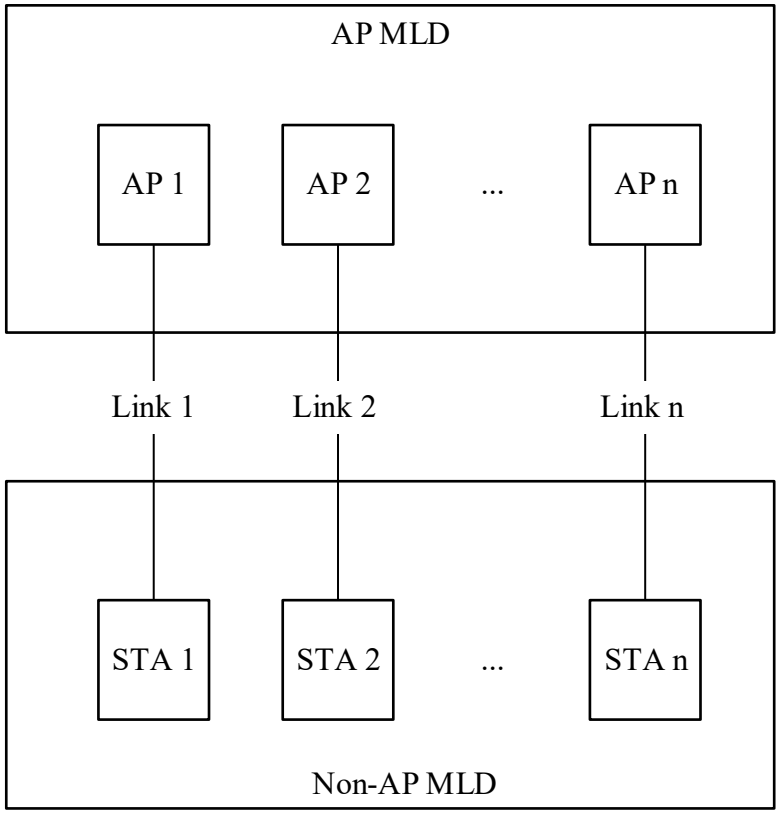

AP MLD
AP 1
AP 2
...
AP n
Link 1
Link 2
Link n
STA 1
STA 2
...
STA n
Non-AP MLD

FIG. 2

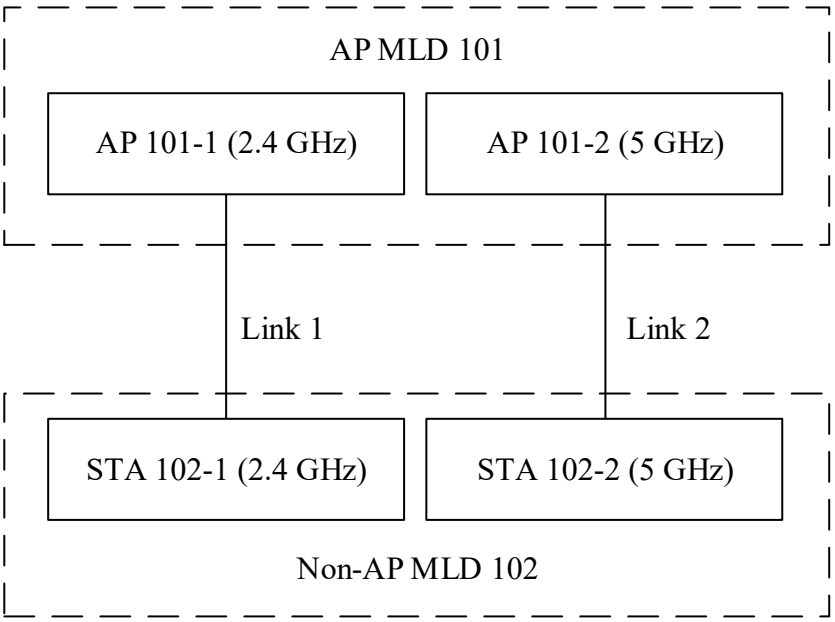

AP MLD 101
AP 101-1 (2.4 GHz)
AP 101-2 (5 GHz)
Link 1
Link 2
STA 102-1 (2.4 GHz)
STA 102-2 (5 GHz)
Non-AP MLD 102

FIG. 3A

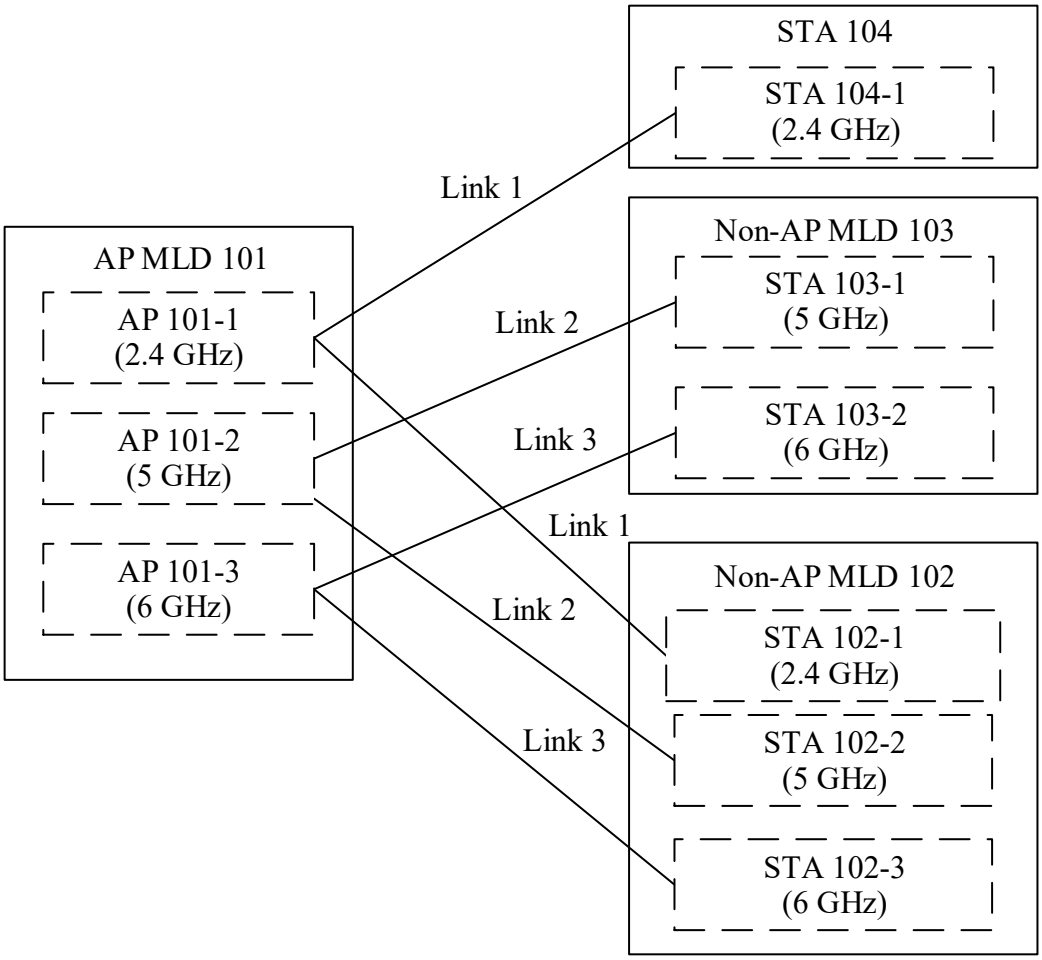

STA 104
STA 104-1
(2.4 GHz)
Link 1
Non-AP MLD 103
STA 103-1
(5 GHz)
Link 2
STA 103-2
(6 GHz)
Link 3
AP MLD 101
AP 101-1
(2.4 GHz)
AP 101-2
(5 GHz)
AP 101-3
(6 GHz)
Link 1
Non-AP MLD 102
Link 2
STA 102-1
(2.4 GHz)
Link 3
STA 102-2
(5 GHz)
STA 102-3
(6 GHz)

FIG. 3B

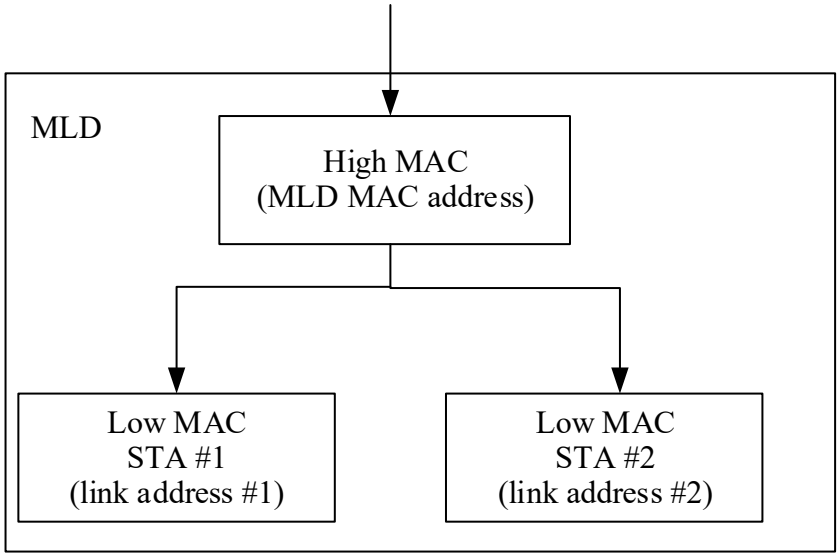

MLD
High MAC
(MLD MAC address)
Low MAC
STA #1
(link address #1)
Low MAC
STA #2
(link address #2)

FIG. 4

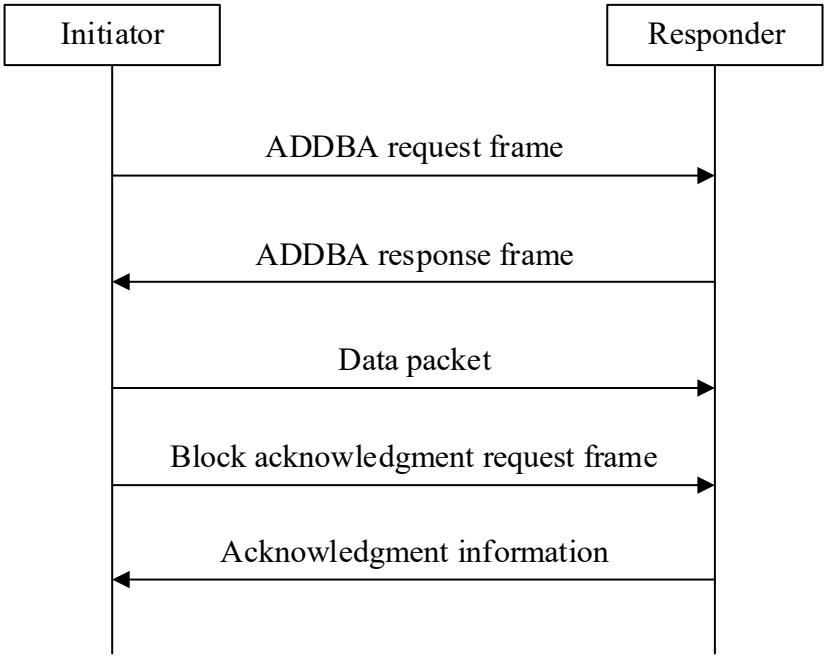

Initiator
Responder
ADDBA request frame
ADDBA response frame
Data packet
Block acknowledgment request frame
Acknowledgment information

FIG. 5

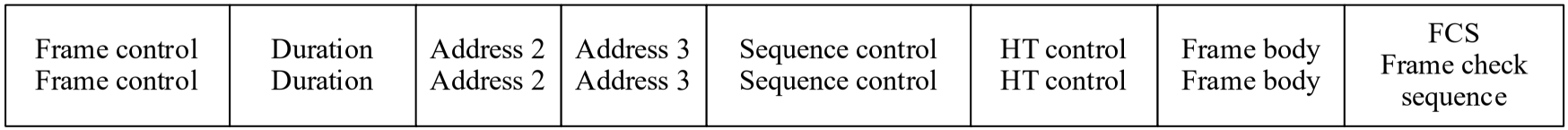

Frame control
Frame control
Duration
Duration
Address 2
Address 2
Address 3
Address 3
Sequence control
Sequence control
HT control
HT control
Frame body
Frame body
FCS
Frame check
sequence

FIG. 6

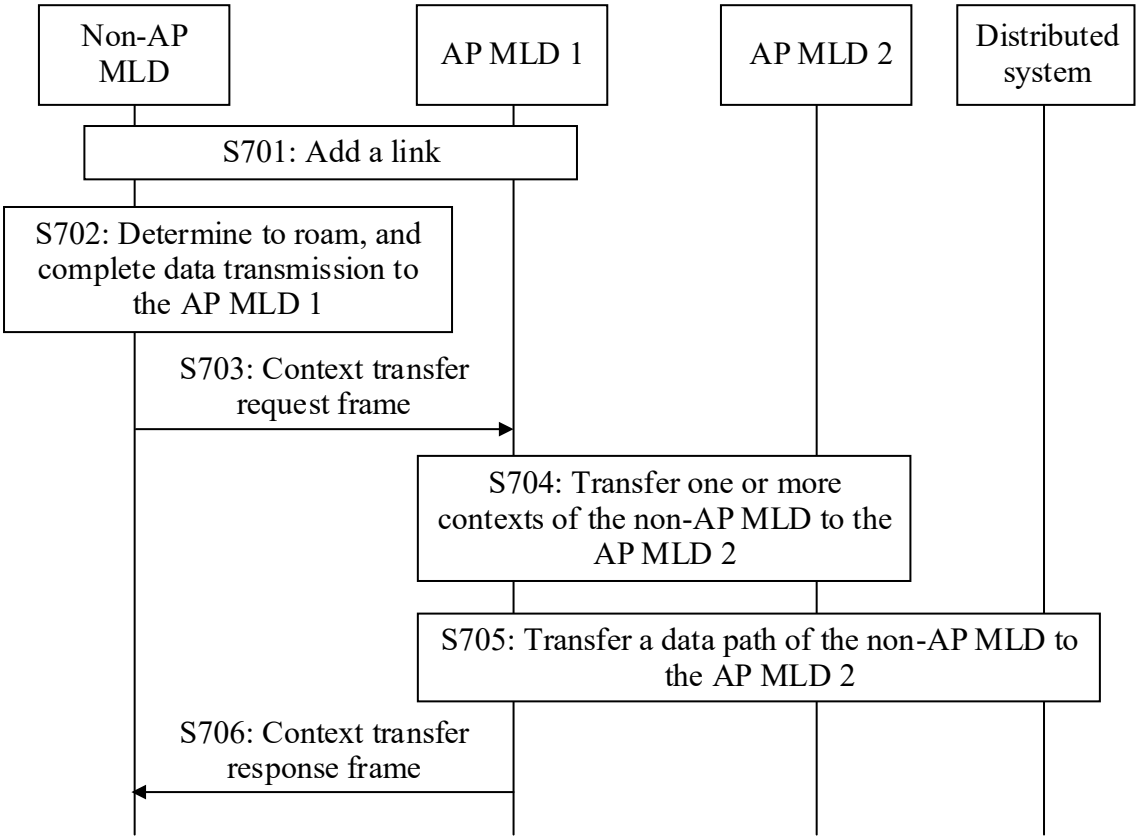

Non-AP MLD
AP MLD 1
AP MLD 2
Distributed system
S701: Add a link
S702: Determine to roam, and complete data transmission to the AP MLD 1
S703: Context transfer request frame
S704: Transfer one or more contexts of the non-AP MLD to the AP MLD 2
S705: Transfer a data path of the non-AP MLD to the AP MLD 2
S706: Context transfer response frame

FIG. 7

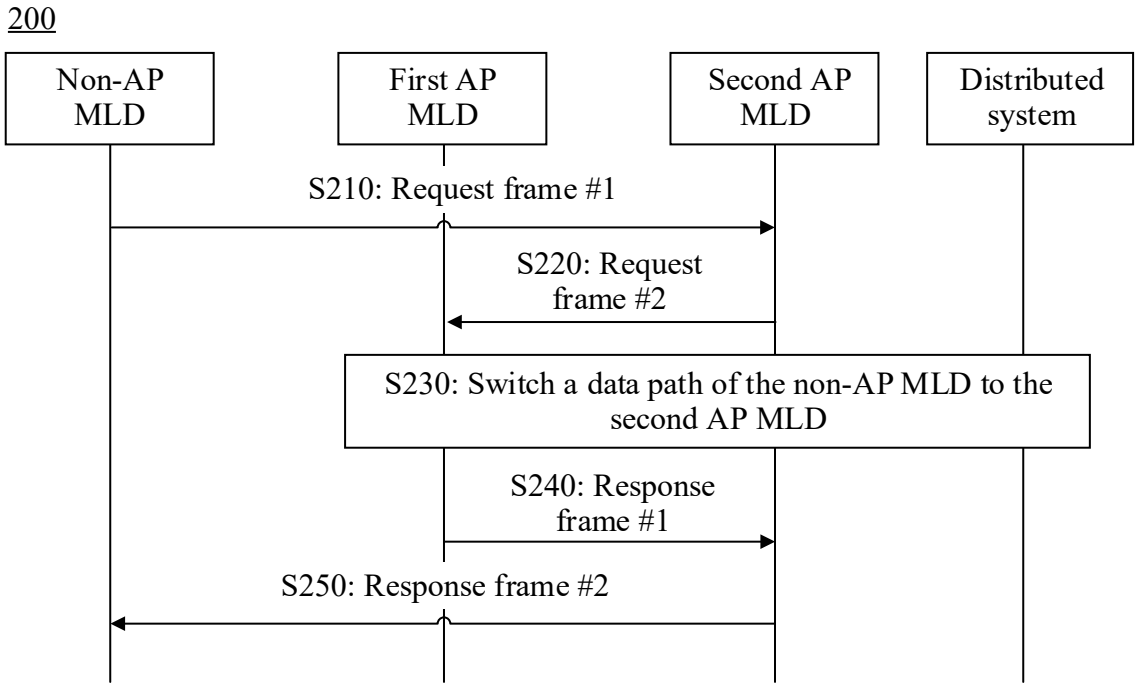

200
Non-AP MLD
First AP MLD
Second AP MLD
Distributed system
S210: Request frame #1
S220: Request frame #2
S230: Switch a data path of the non-AP MLD to the second AP MLD
S240: Response frame #1
S250: Response frame #2

FIG. 8

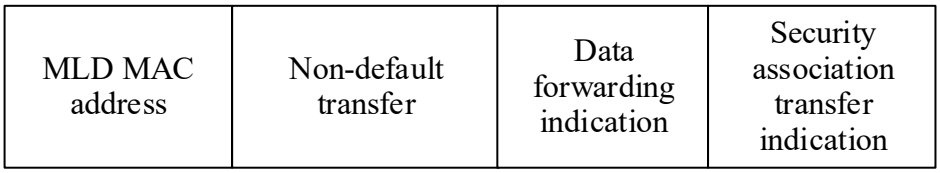

MLD MAC address
Non-default transfer
Data forwarding indication
Security association transfer indication

FIG. 9

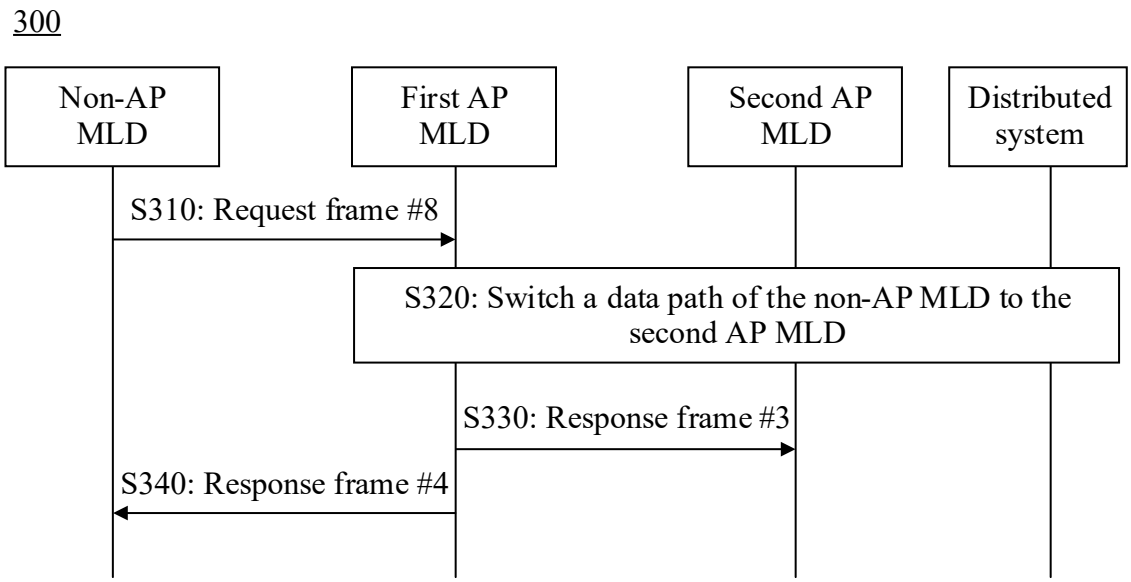

300
Non-AP MLD
First AP MLD
Second AP MLD
Distributed system
S310: Request frame #8
S320: Switch a data path of the non-AP MLD to the second AP MLD
S330: Response frame #3
S340: Response frame #4

FIG. 10

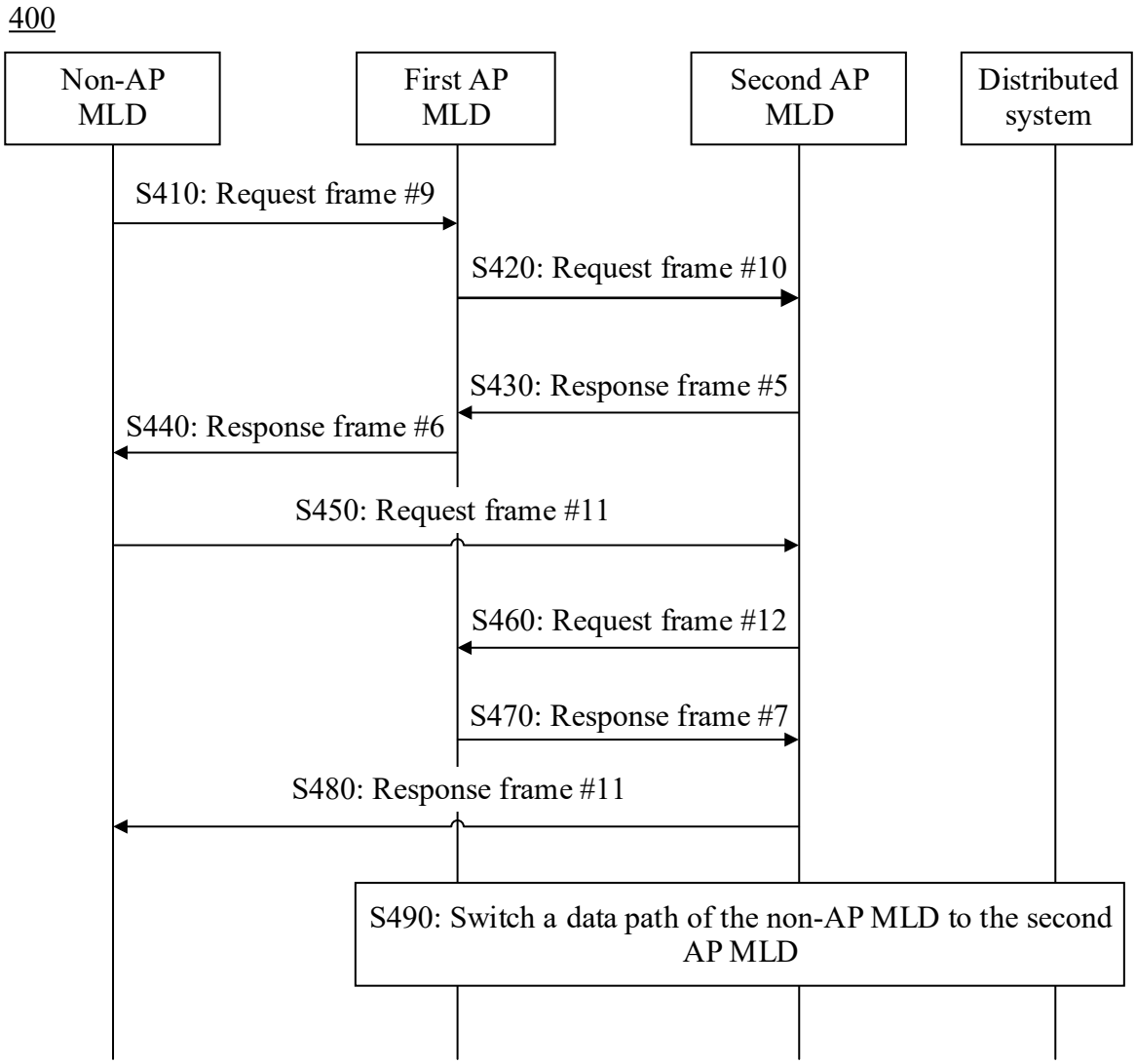

400
Non-AP MLD
First AP MLD
Second AP MLD
Distributed system
S410: Request frame #9
S420: Request frame #10
S430: Response frame #5
S440: Response frame #6
S450: Request frame #11
S460: Request frame #12
S470: Response frame #7
S480: Response frame #11
S490: Switch a data path of the non-AP MLD to the second AP MLD

FIG. 11

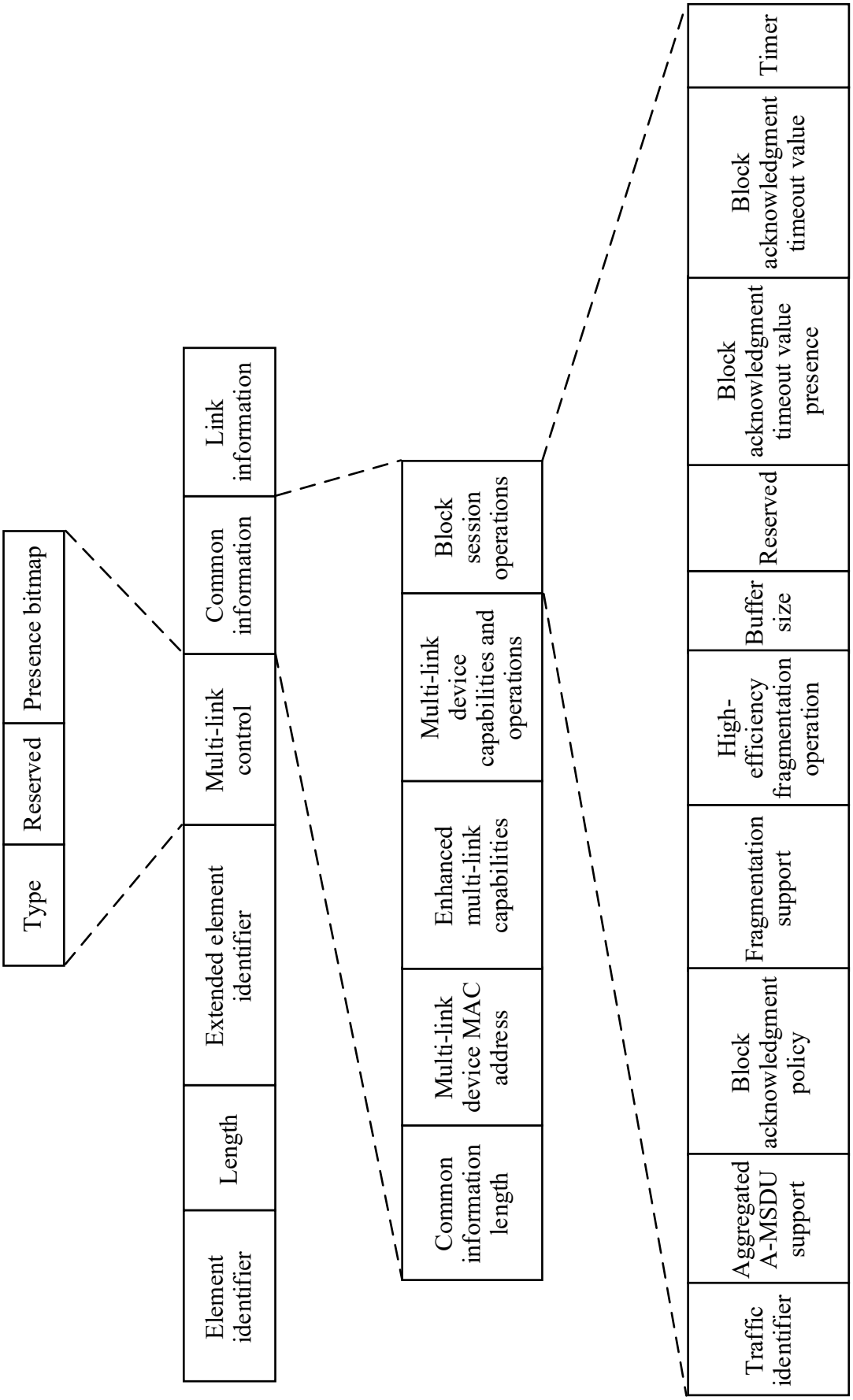

Element identifier
Length
Extended element identifier
Multi-link control
Common information
Link information
Type
Reserved
Presence bitmap
Common information length
Multi-link device MAC address
Enhanced multi-link capabilities
Multi-link device capabilities and operations
Block session operations
Traffic identifier
Aggregated A-MSDU support
Block acknowledgment policy
Fragmentation support
High-efficiency fragmentation operation
Buffer size
Reserved
Block acknowledgment timeout value presence
Block acknowledgment timeout value
Timer

FIG. 12

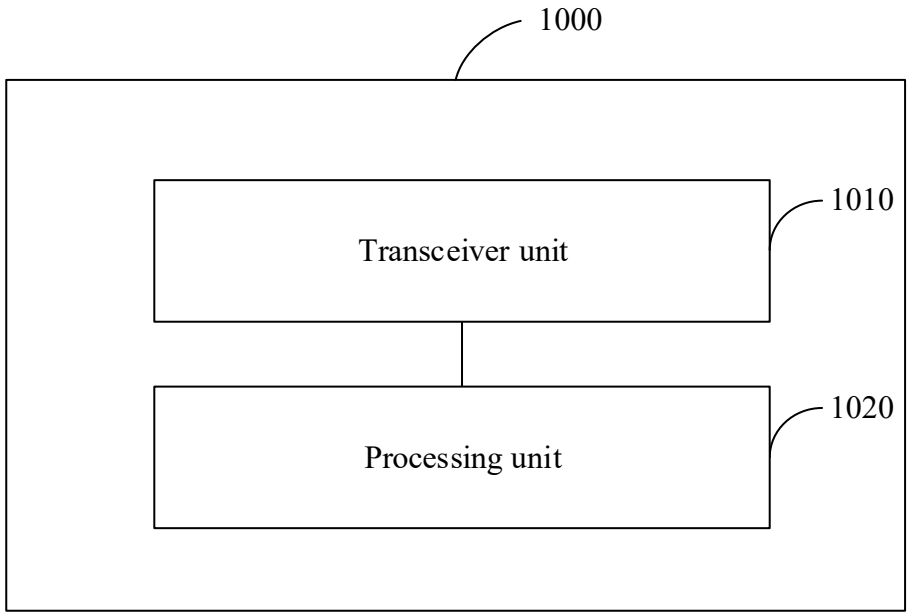

1000
1010
Transceiver unit
1020
Processing unit

FIG. 13

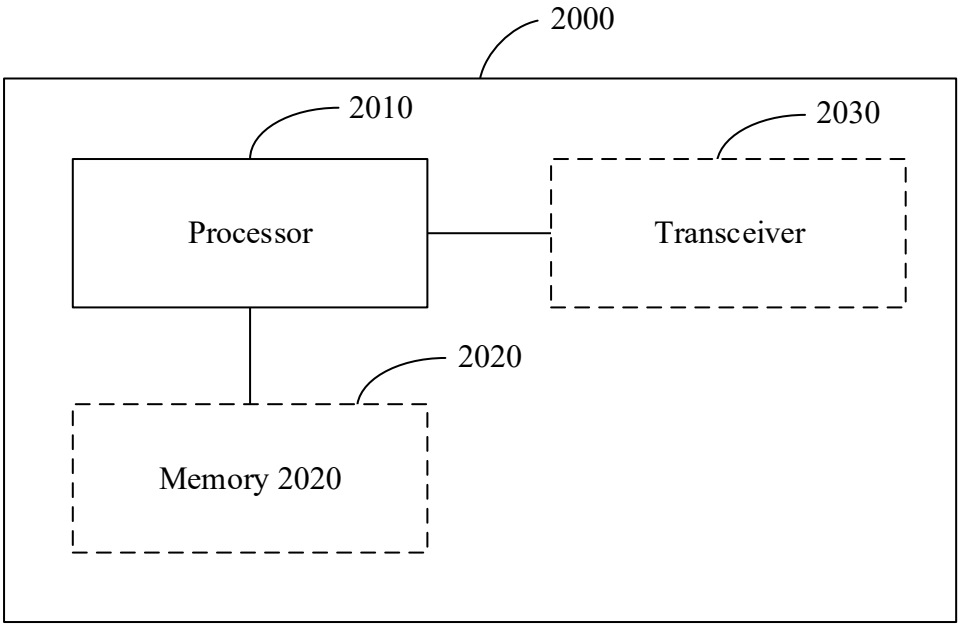

2000
2010
2030
Processor
Transceiver
2020
Memory 2020

FIG. 14