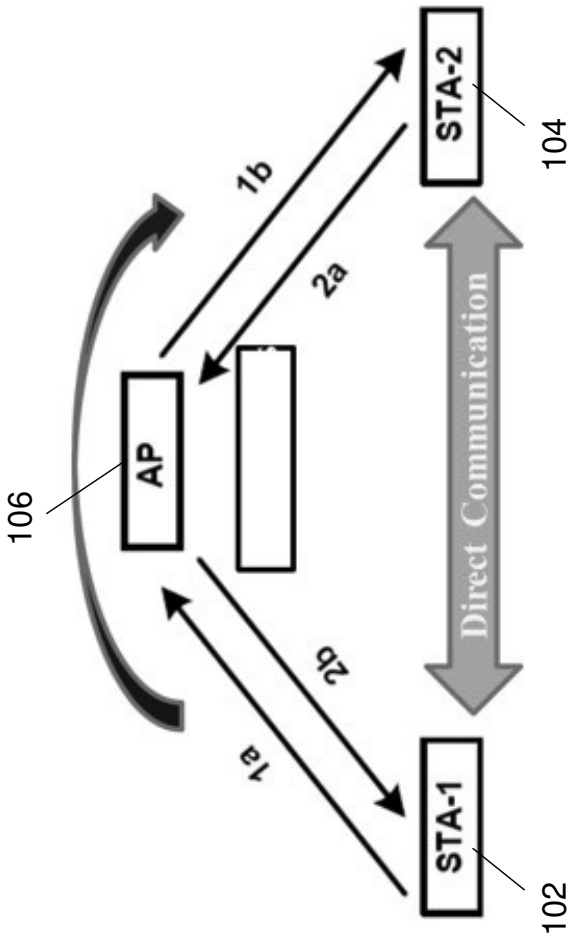


Figure 1

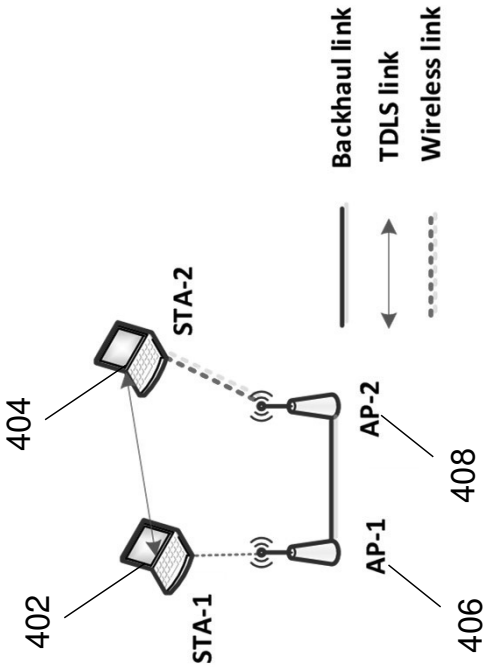

Backhaul link
TDLS link
Wireless link
STA-2
STA-1
AP-2
AP-1
402
404
406
408

Figure 4

400

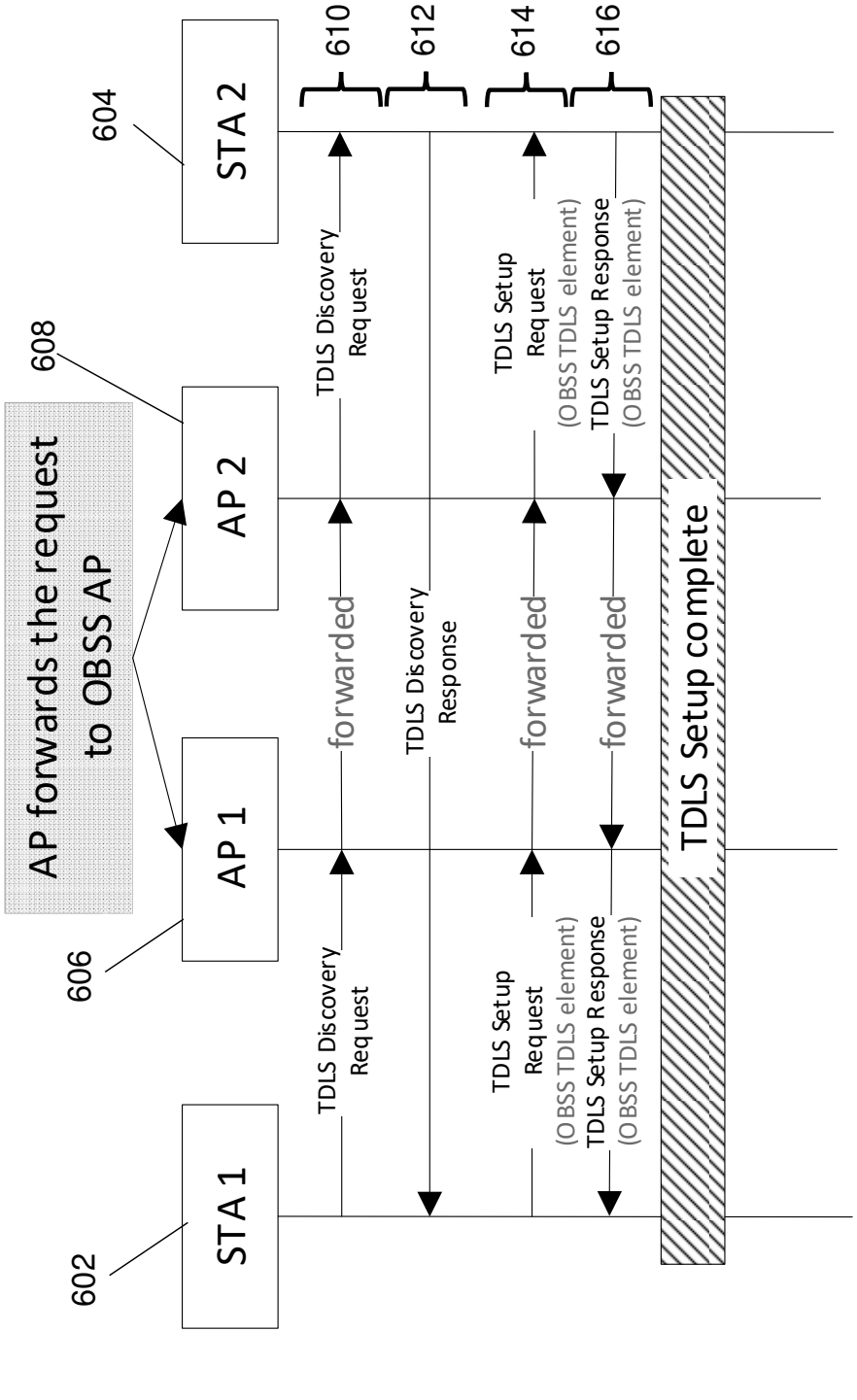

STA 1
602
AP 1
606
AP 2
608
STA 2
604
AP forwards the request to OBSS AP
610
612
614
616
TDLS Discovery Request
forwarded
TDLS Discovery Response
TDLS Setup Request (OBSS TDLS element)
forwarded
TDLS Setup Response (OBSS TDLS element)
forwarded
TDLS Setup complete
600

Figure 6

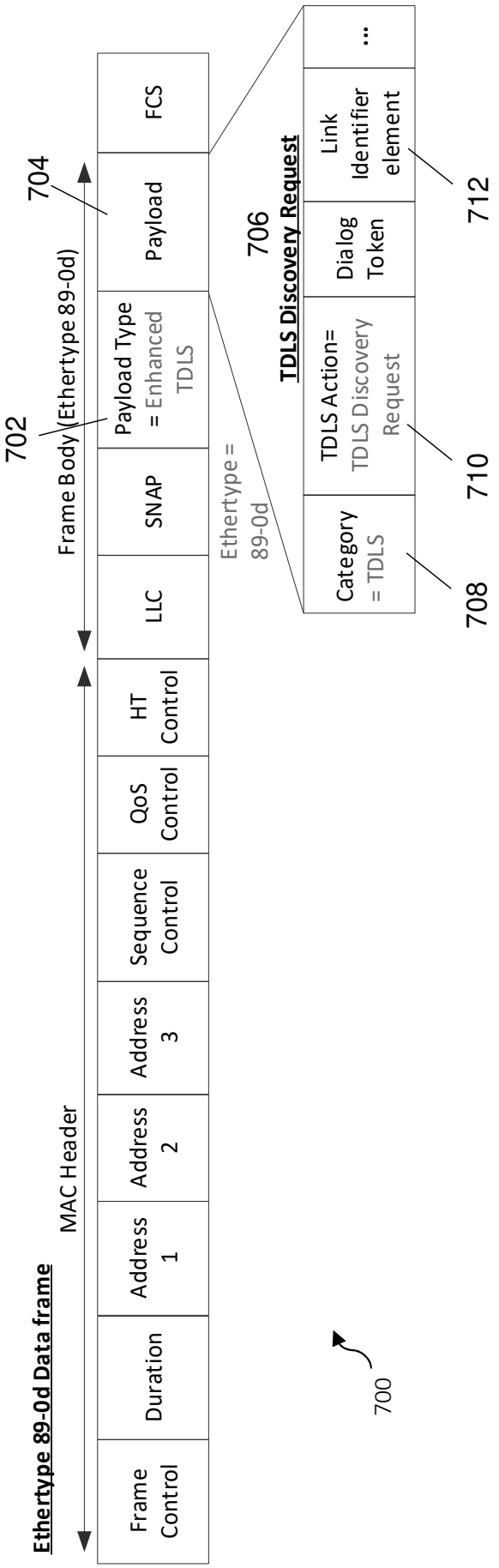


Figure 7A

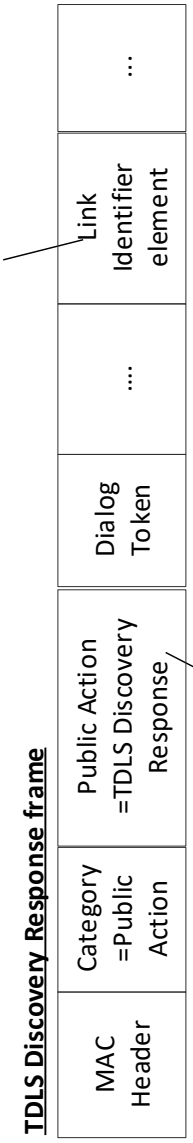


Figure 7B

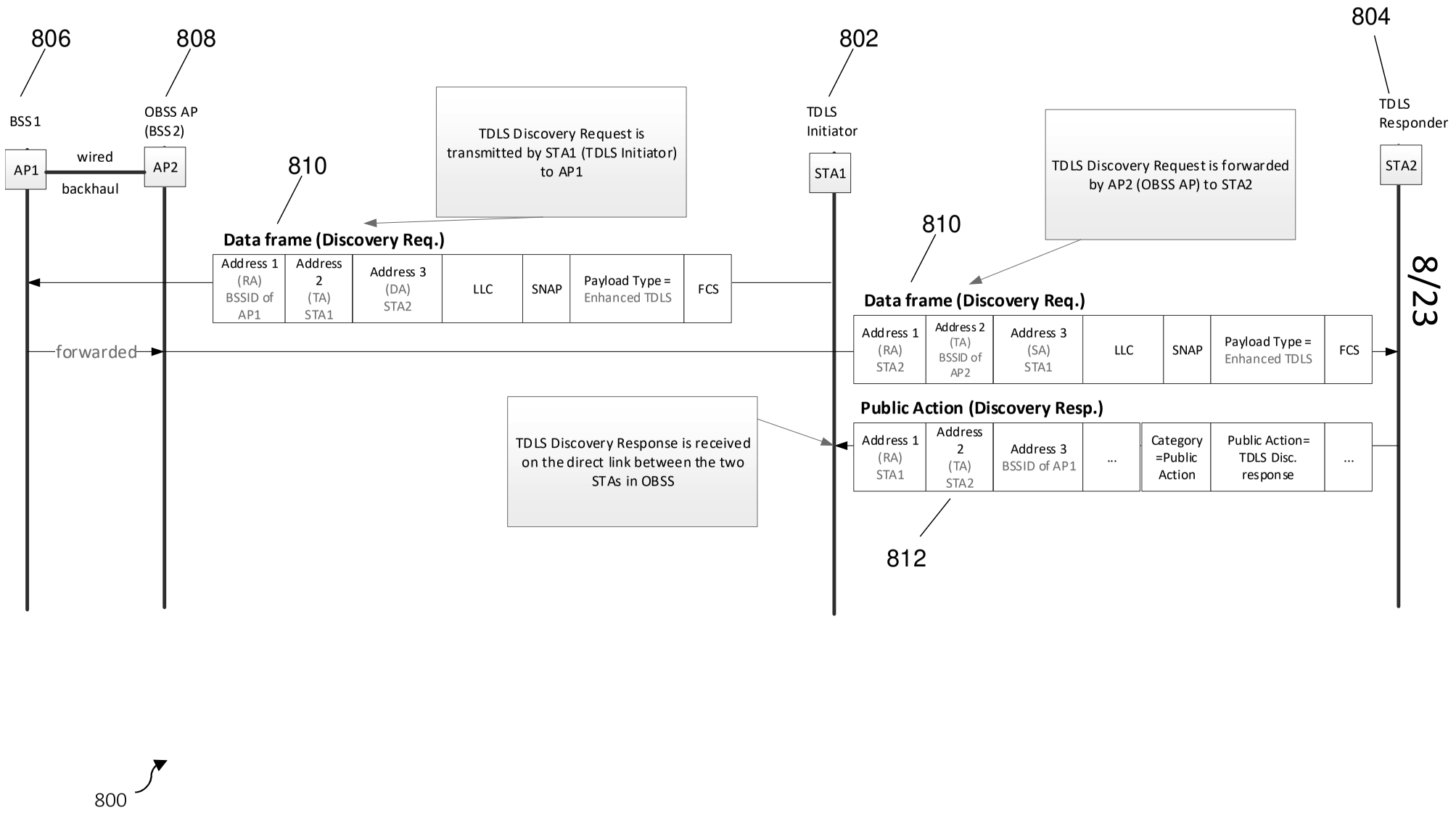

806
808
802
804
BSS 1
OBSS AP
(BSS 2)
TDLS
Initiator
TDLS
Responder
AP1
wired
backhaul
AP2
STA1
STA2
810
TDLS Discovery Request is transmitted by STA1 (TDLS Initiator) to AP1
TDLS Discovery Request is forwarded by AP2 (OBSS AP) to STA2
Data frame (Discovery Req.)
Address 1 (RA) BSSID of AP1
Address 2 (TA) STA1
Address 3 (DA) STA2
LLC
SNAP
Payload Type = Enhanced TDLS
FCS
forwarded
Data frame (Discovery Req.)
Address 1 (RA) STA2
Address 2 (TA) BSSID of AP2
Address 3 (SA) STA1
LLC
SNAP
Payload Type = Enhanced TDLS
FCS
TDLS Discovery Response is received on the direct link between the two STAs in OBSS
Public Action (Discovery Resp.)
Address 1 (RA) STA1
Address 2 (TA) STA2
Address 3 BSSID of AP1
...
Category =Public Action
Public Action= TDLS Disc. response
...
812
8/23
800

Figure 8

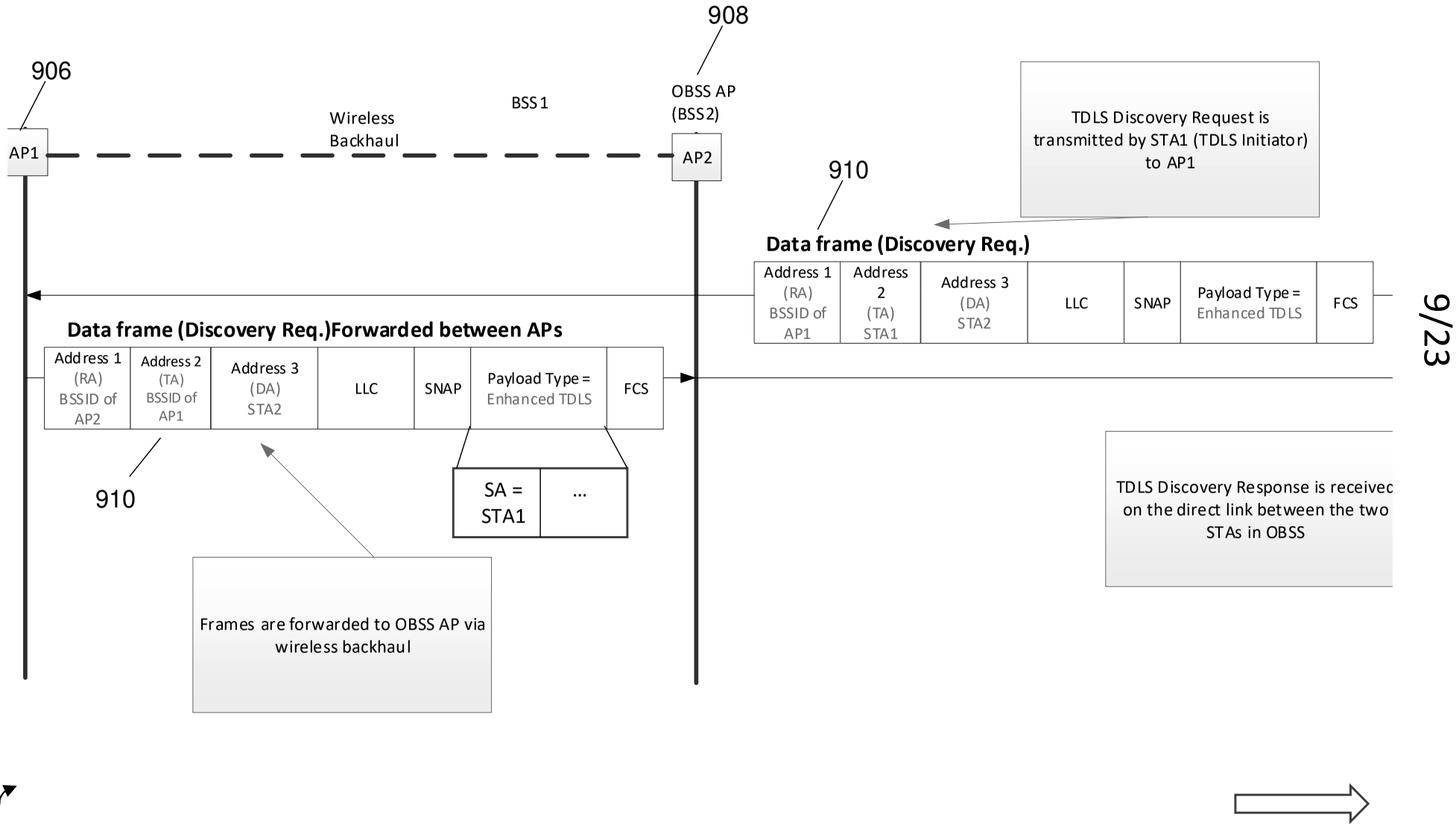


Figure 9 continued on page 10

Figure 9

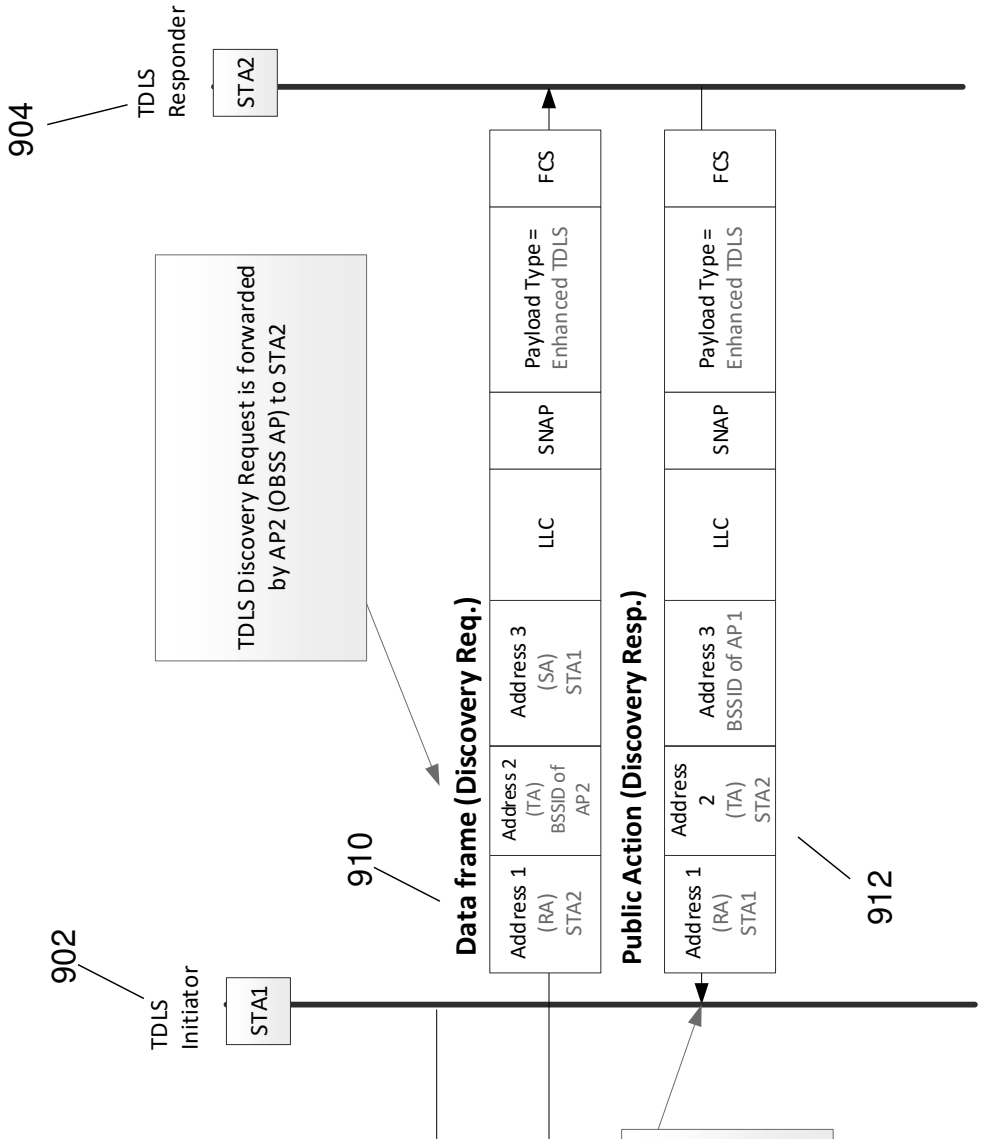


Figure 9

Figure 9 continued from page 9

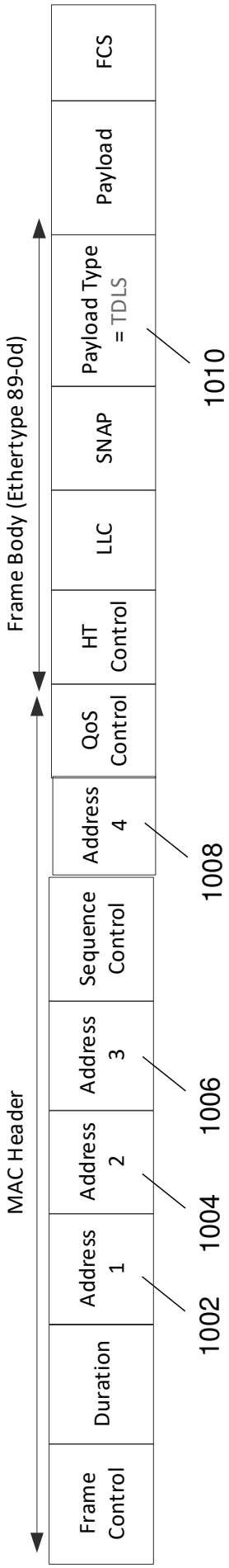

Frame Control
Duration
Address 1
Address 2
Address 3
Sequence Control
Address 4
QoS Control
HT Control
LLC
SNAP
Payload Type = TDLS
Payload
FCS
MAC Header
Frame Body (Ethertype 89-0d)
1002
1004
1006
1008
1010
1000

Figure 10

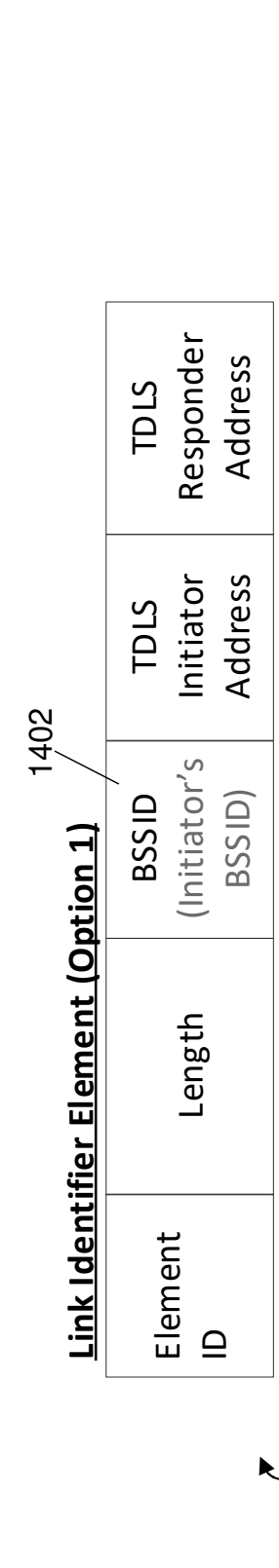


Figure 14A



Figure 14B



Figure 14C

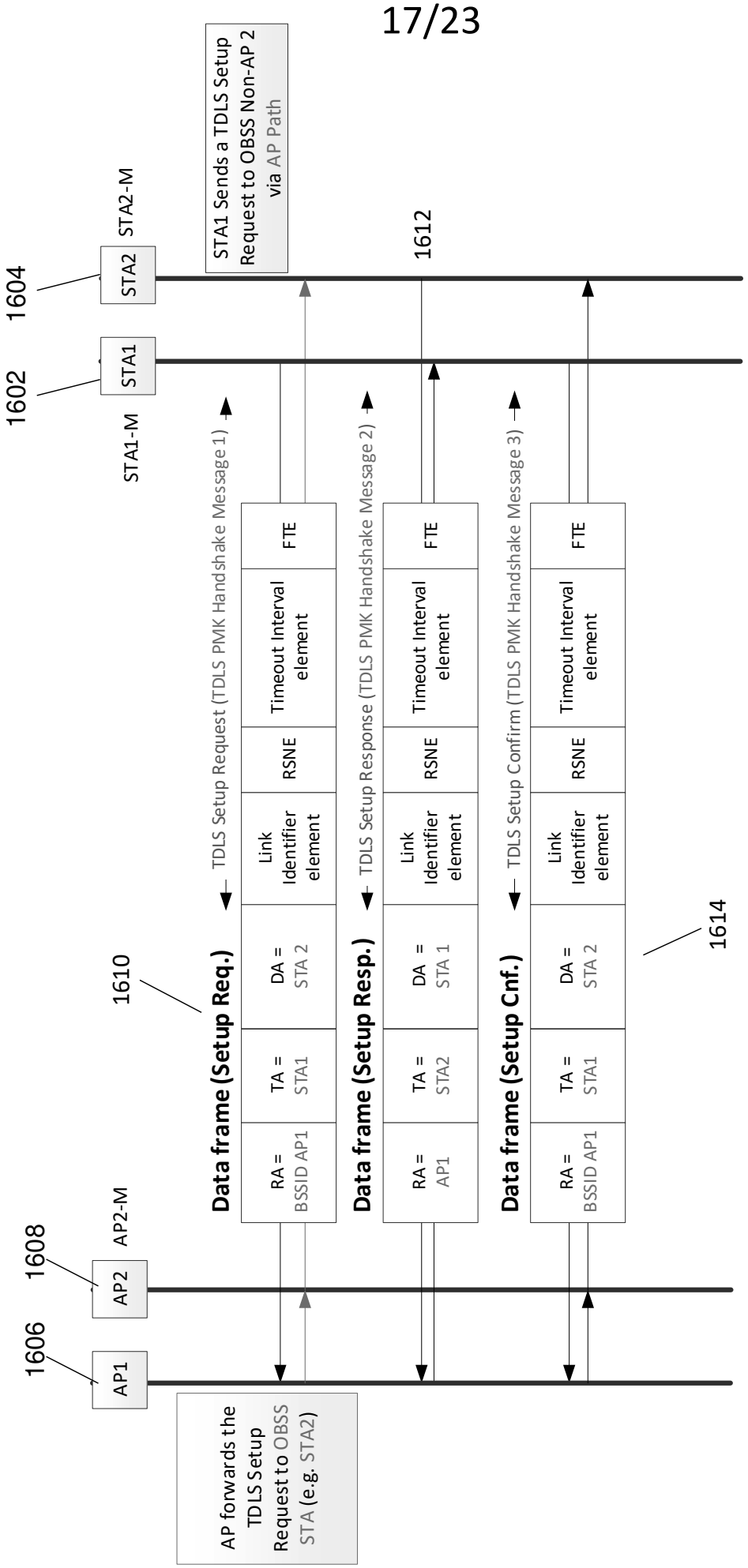

1600
1602
1604
1606
1608
1610
1612
1614
STA1-M
STA2-M
AP2-M
STA1
STA2
AP1
AP2
STA1 Sends a TDLS Setup Request to OBSS Non-AP 2 via AP Path
TDLS Setup Request (TDLS PMK Handshake Message 1)
TDLS Setup Response (TDLS PMK Handshake Message 2)
TDLS Setup Confirm (TDLS PMK Handshake Message 3)
Data frame (Setup Req.)
Data frame (Setup Resp.)
Data frame (Setup Cnf.)
RA = BSSID AP1
TA = STA1
DA = STA 2
RA = AP1
TA = STA2
DA = STA 1
Link Identifier element
RSNE
Timeout Interval element
FTE
AP forwards the TDLS Setup Request to OBSS STA (e.g. STA2)

Figure 16

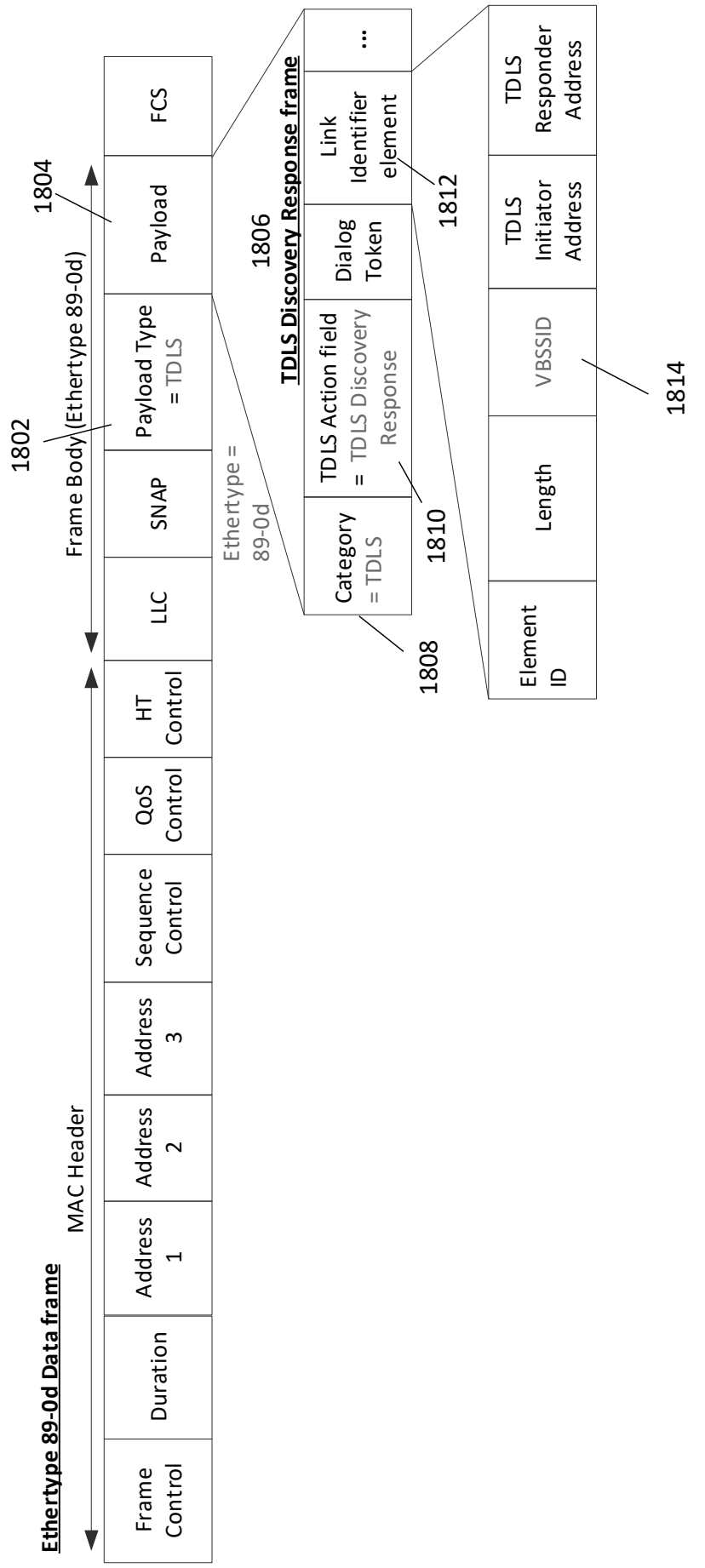

Ethertype 89-0d Data frame
MAC Header
Frame Control
Duration
Address 1
Address 2
Address 3
Sequence Control
QoS Control
HT Control
LLC
SNAP
Payload Type = TDLS
Payload
FCS
1802
Frame Body (Ethertype 89-0d)
1804
Ethertype = 89-0d
1806
TDLS Discovery Response frame
Category = TDLS
TDLS Action field = TDLS Discovery Response
Dialog Token
Link Identifier element
...
1808
1810
1812
Element ID
Length
VBSSID
TDLS Initiator Address
TDLS Responder Address
1814
1800

Figure 18