

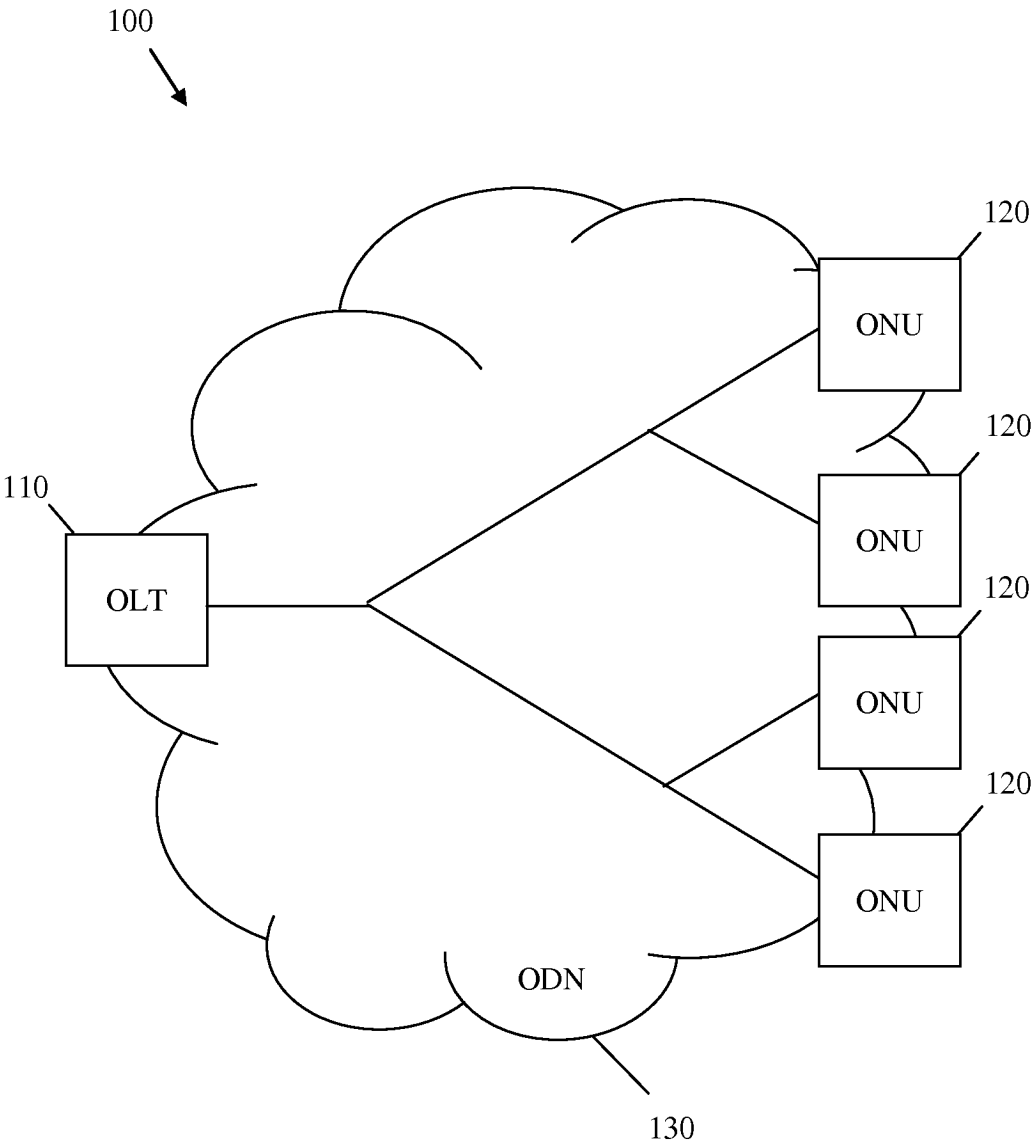


FIG. 1

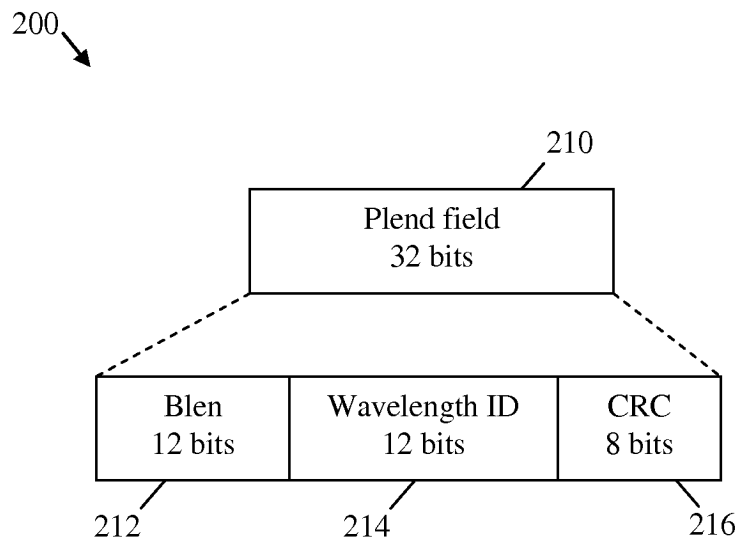


FIG. 2

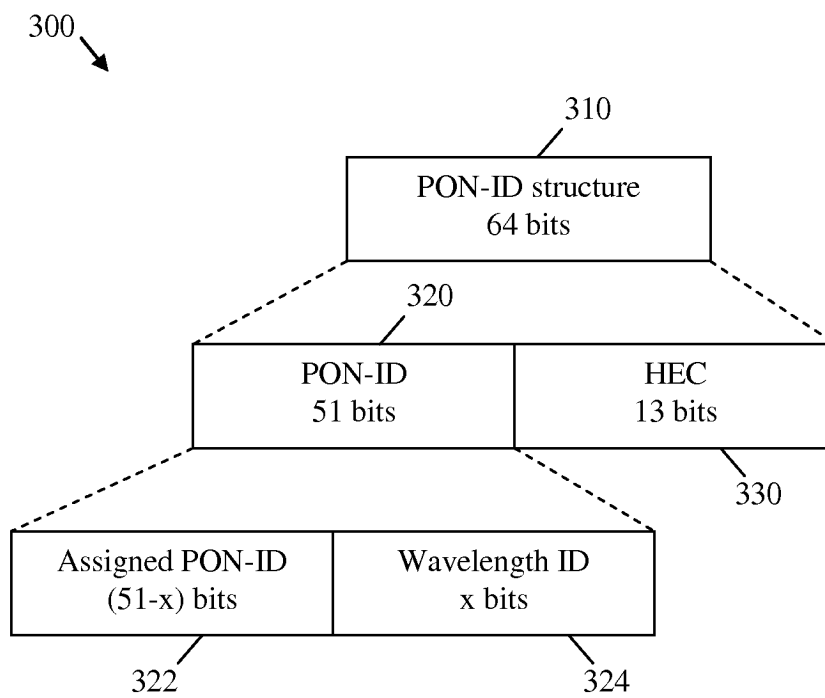


FIG. 3

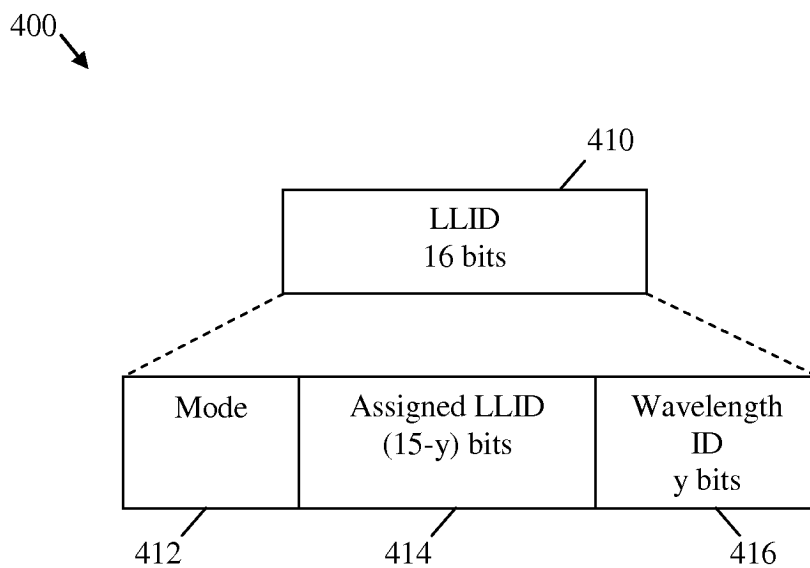


FIG. 4

500

Octet	Upstream_Overhead Content
1	Broadcast ONU-ID
2	Message ID
3	Guard bit number
4	Type 1 preamble bit number
5	Type 2 preamble bit number
6	Type 3 preamble pattern
7	Delimiter byte 1
8	Delimiter byte 2
9	Delimiter byte 3
10	Various indication
11	Pre-assigned delay
12	Pre-assigned delay

FIG. 5

600

Octet	Profile Content
1-2	Broadcast or directed ONU-ID
3	Message ID
4	Sequence number
5	Profile version and index
6	FEC indication
7	Delimiter length
8-15	Delimiter pattern
16	Preamble length
17	Preamble repeat count
18-25	Preamble pattern
26-33	PON-TAG
34-40	Padding
41-48	Message integrity check

FIG. 6

700

Octet	DS Wavelength Content
1-2	Broadcast or directed ONU-ID
3	Message type ID
4	Sequence number
5-a	Downstream wavelength
(a+1)-40	Reserved or padding
41-48	Message integrity check

FIG. 7

800
↓

Octet	GATE Content
1-6	Destination address
7-12	Source address
13-14	Length/Type
15-16	Opcode
17-20	Timestamp
21	Number of grants/Flags
22-60	Grant and pad
61-64	Frame check sequence

FIG. 8

900
↓

Octet	DS WAVELENGTH Content
1-6	Destination address
7-12	Source address
13-14	Length/Type
15-16	Opcode
17-20	Timestamp
21-b	Downstream wavelength
(b+1)-60	Pad
61-64	Frame check sequence

FIG. 9

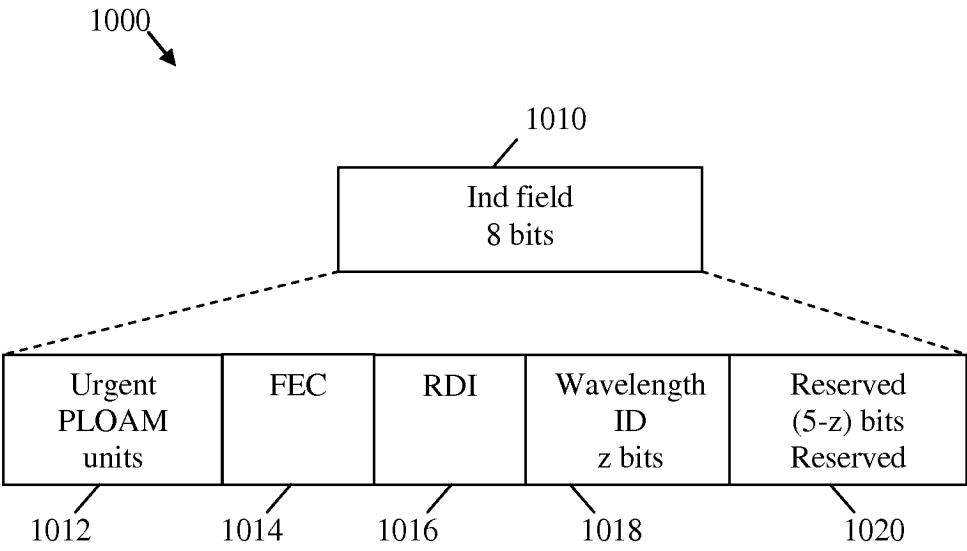


FIG. 10

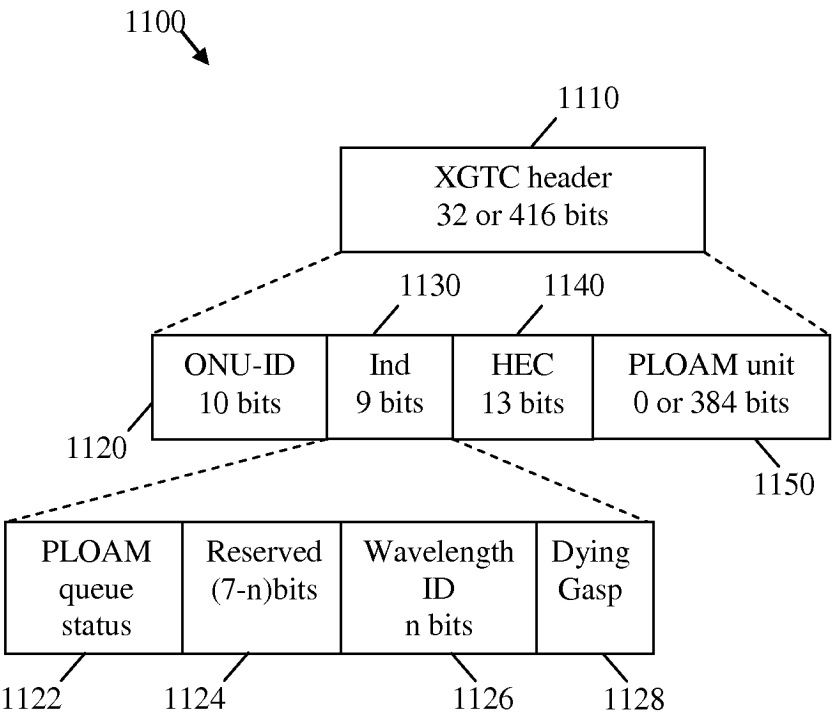


FIG. 11

1200


Octet	US_Wavelength Content
1-2	Broadcast or directed ONU-ID
3	Message type ID
4	Sequence number
5-a	Wavelength
(a+1)-40	Reserved or padding
41-48	Message integrity check

FIG. 12

1300


Octet	REPORT Content
1-6	Destination address
7-12	Source address
13-14	Length/Type
15-16	Opcode
17-20	Timestamp
21	Number of queue sets
22	Report bitmap
23-60	Report and Pad
61-64	Frame check sequence

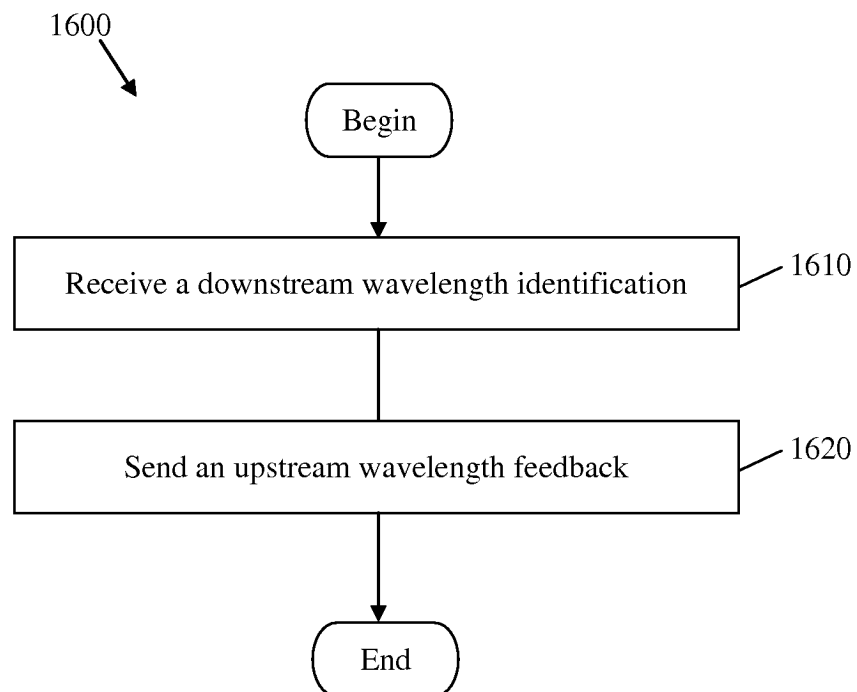
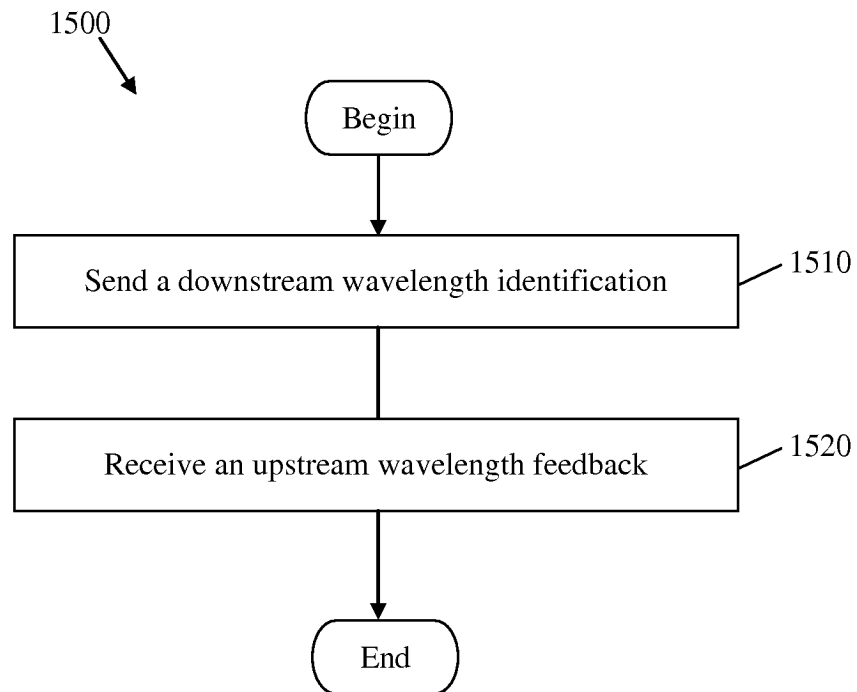
FIG. 13

1400


Octet	US WAVELENGTH Content
1-6	Destination address
7-12	Source address
13-14	Length/Type
15-16	Opcode
17-20	Timestamp
21-b	Wavelength
(b+1)-60	Pad
61-64	Frame check sequence

FIG. 14

9/11



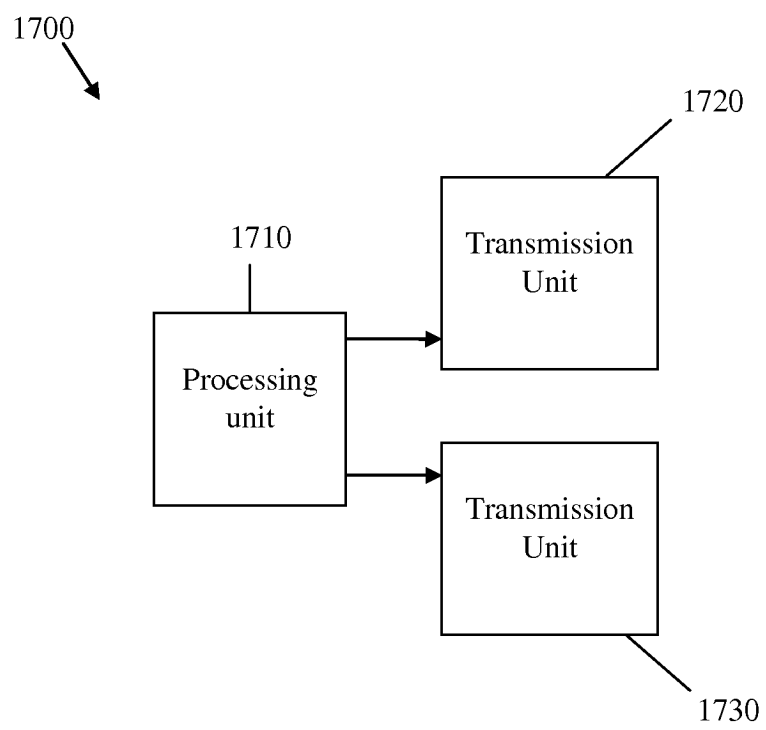


FIG. 17

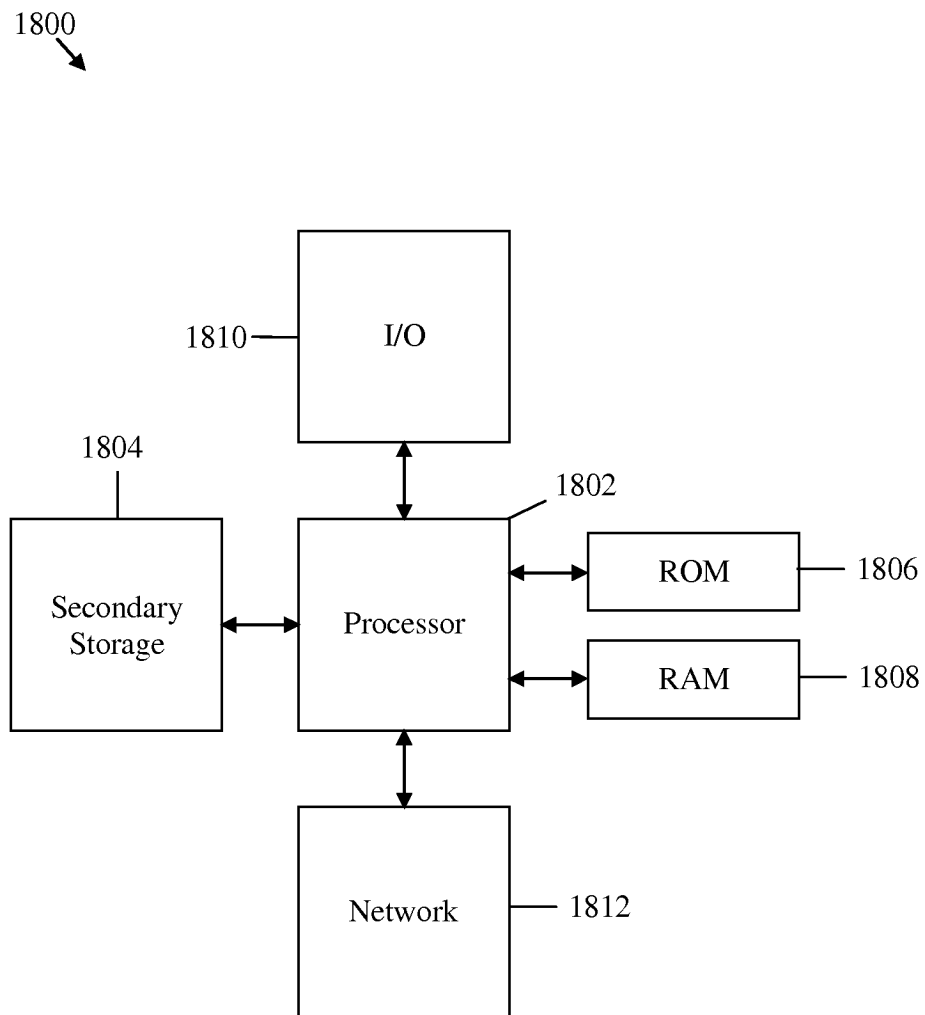


FIG. 18