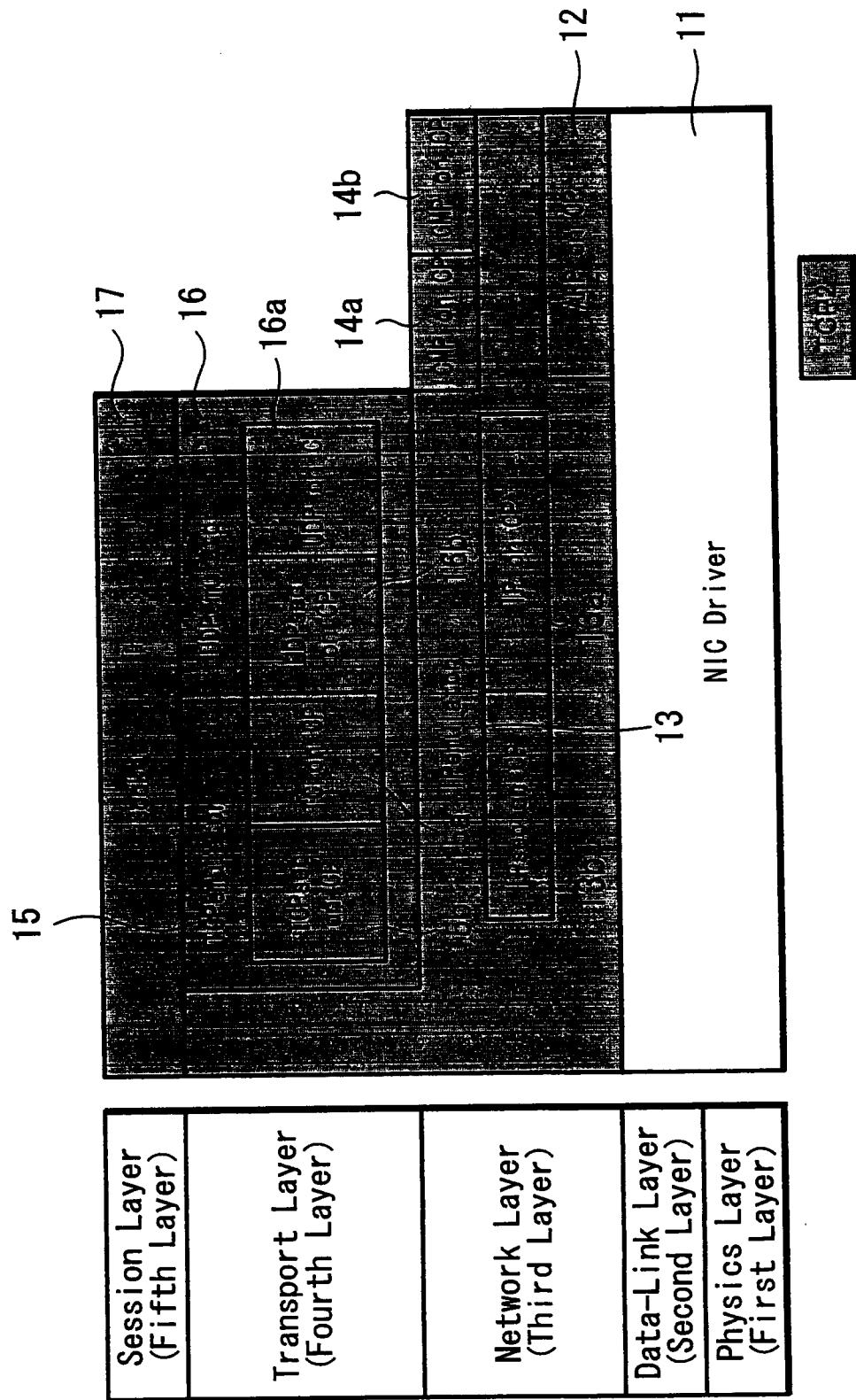
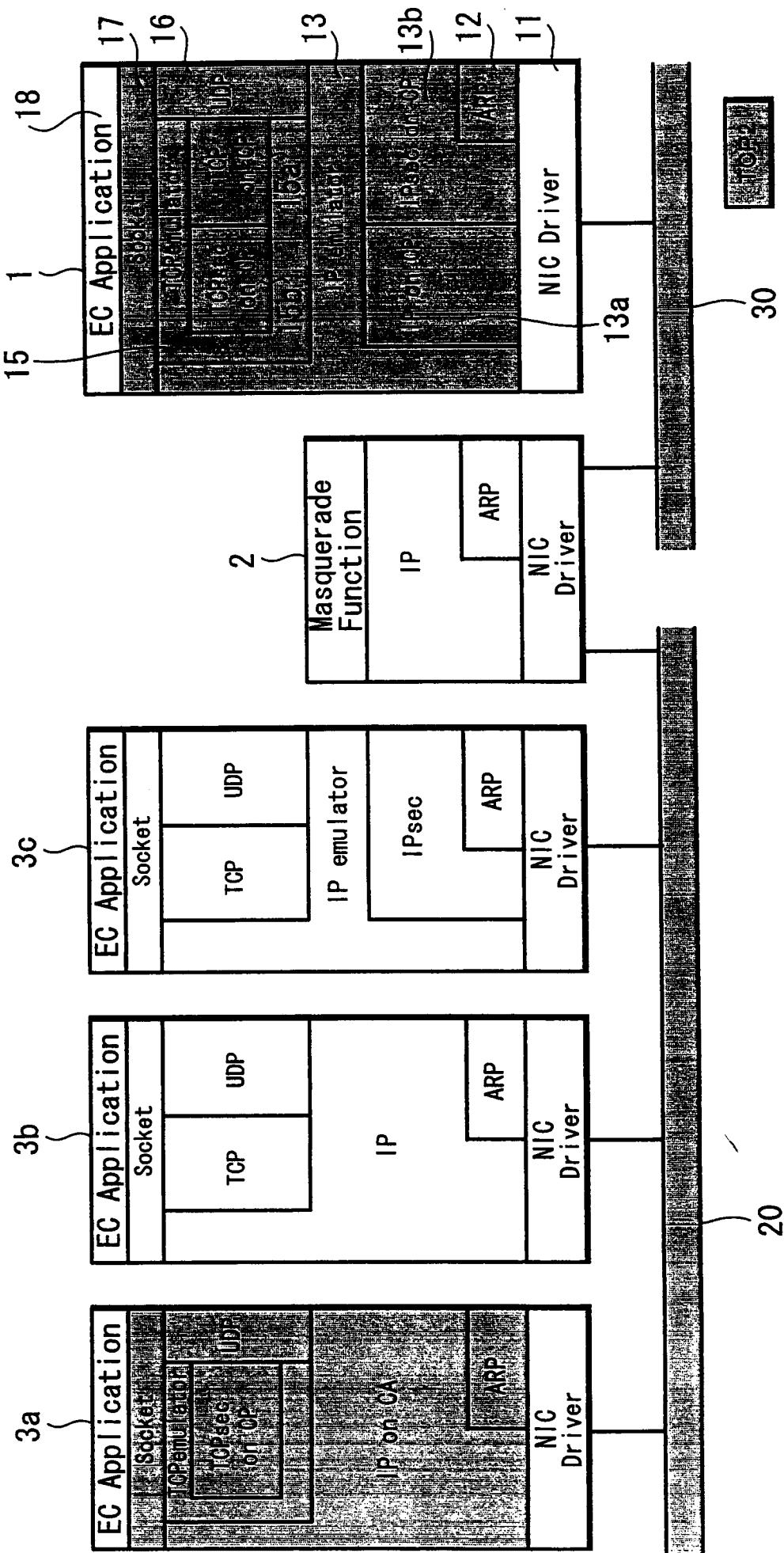


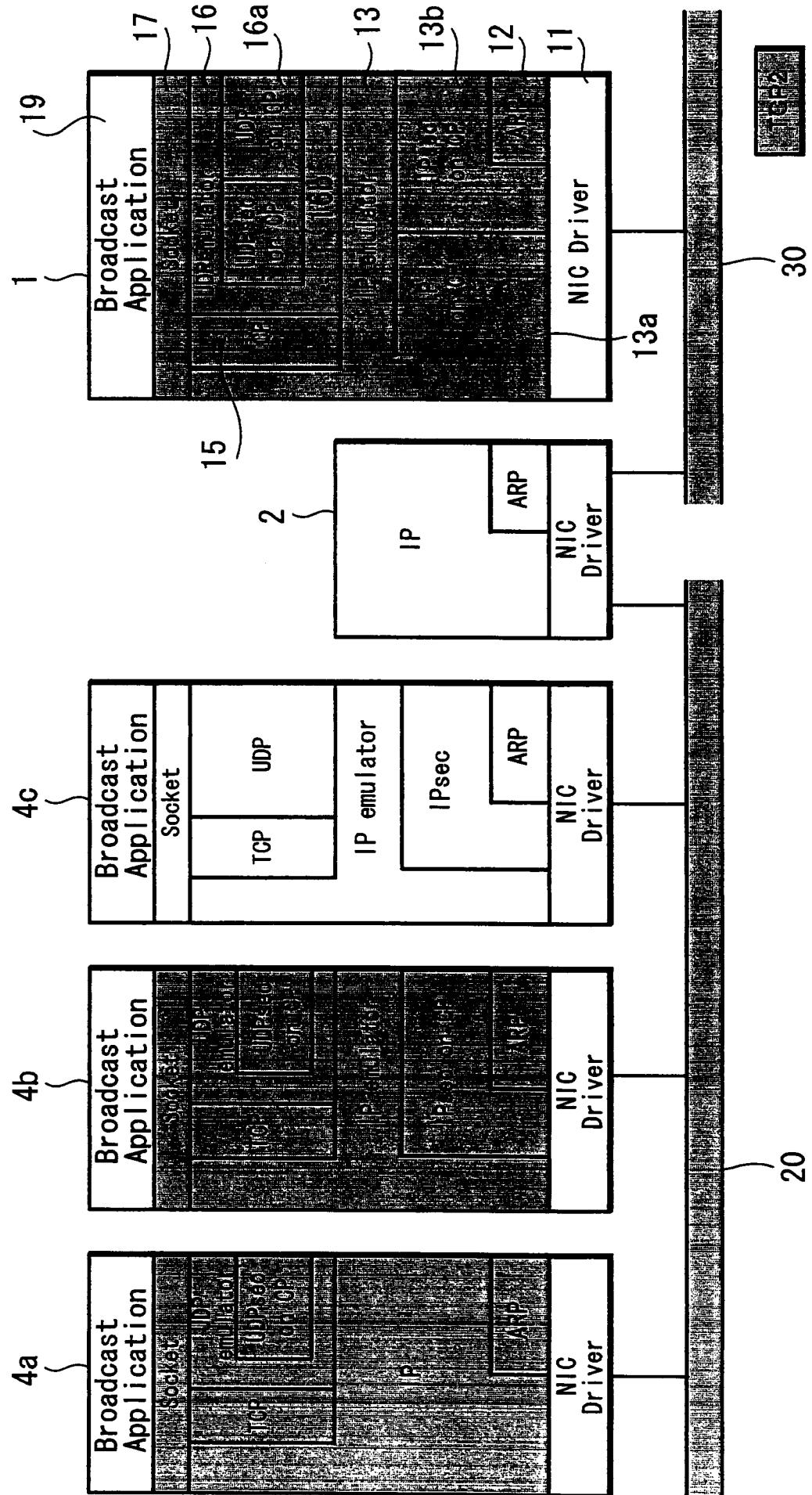
*FIG. 1*



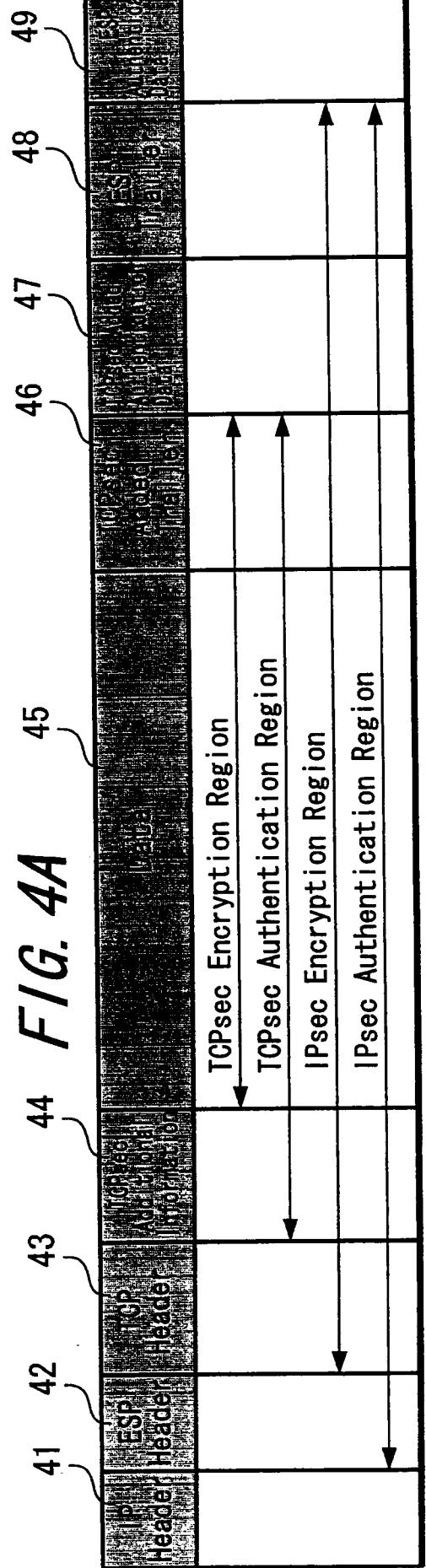
*FIG. 2*



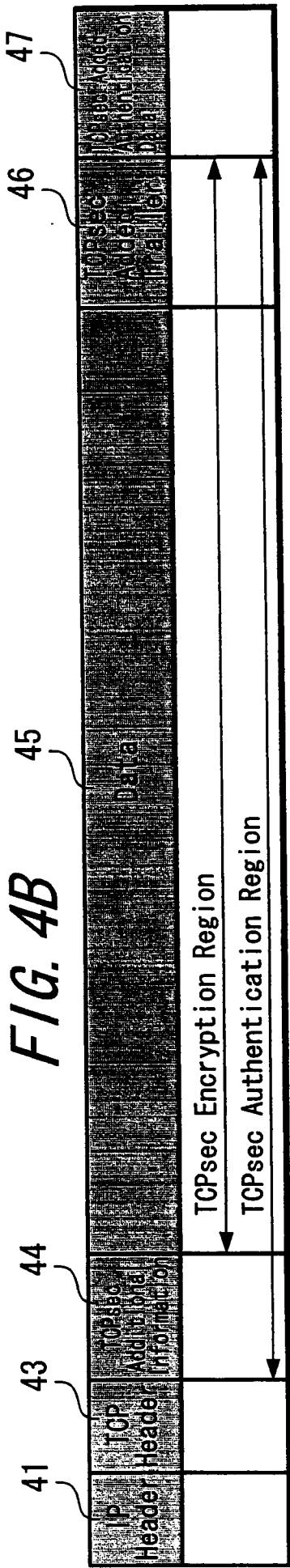
*FIG. 3*



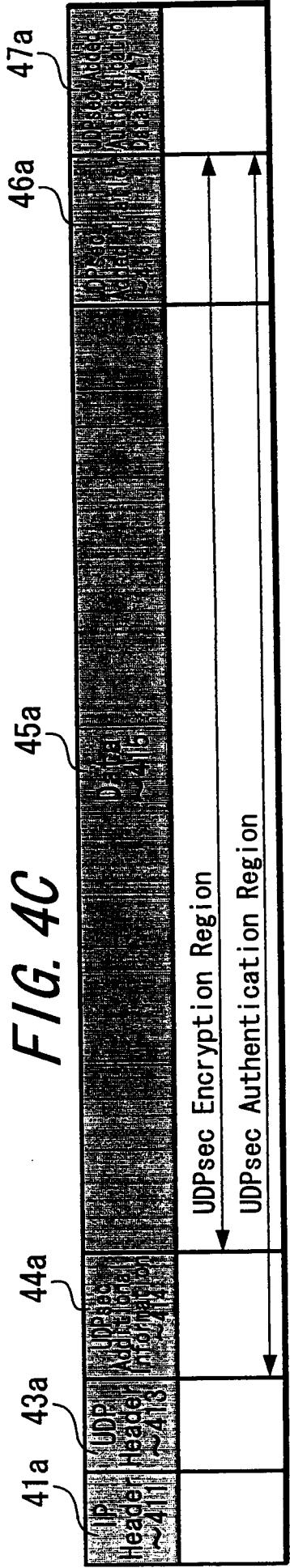
*FIG. 4A*



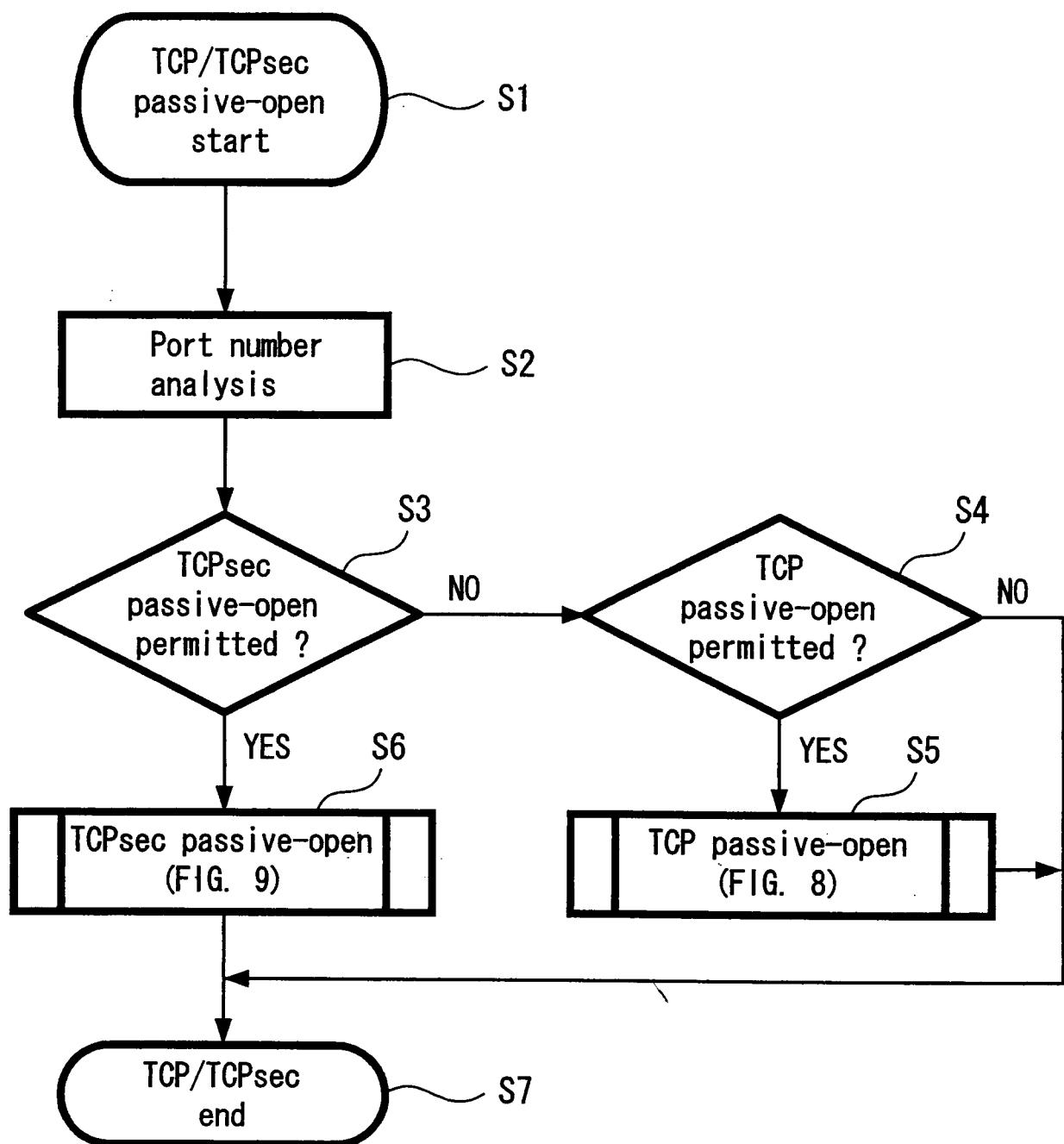
*FIG. 4B*



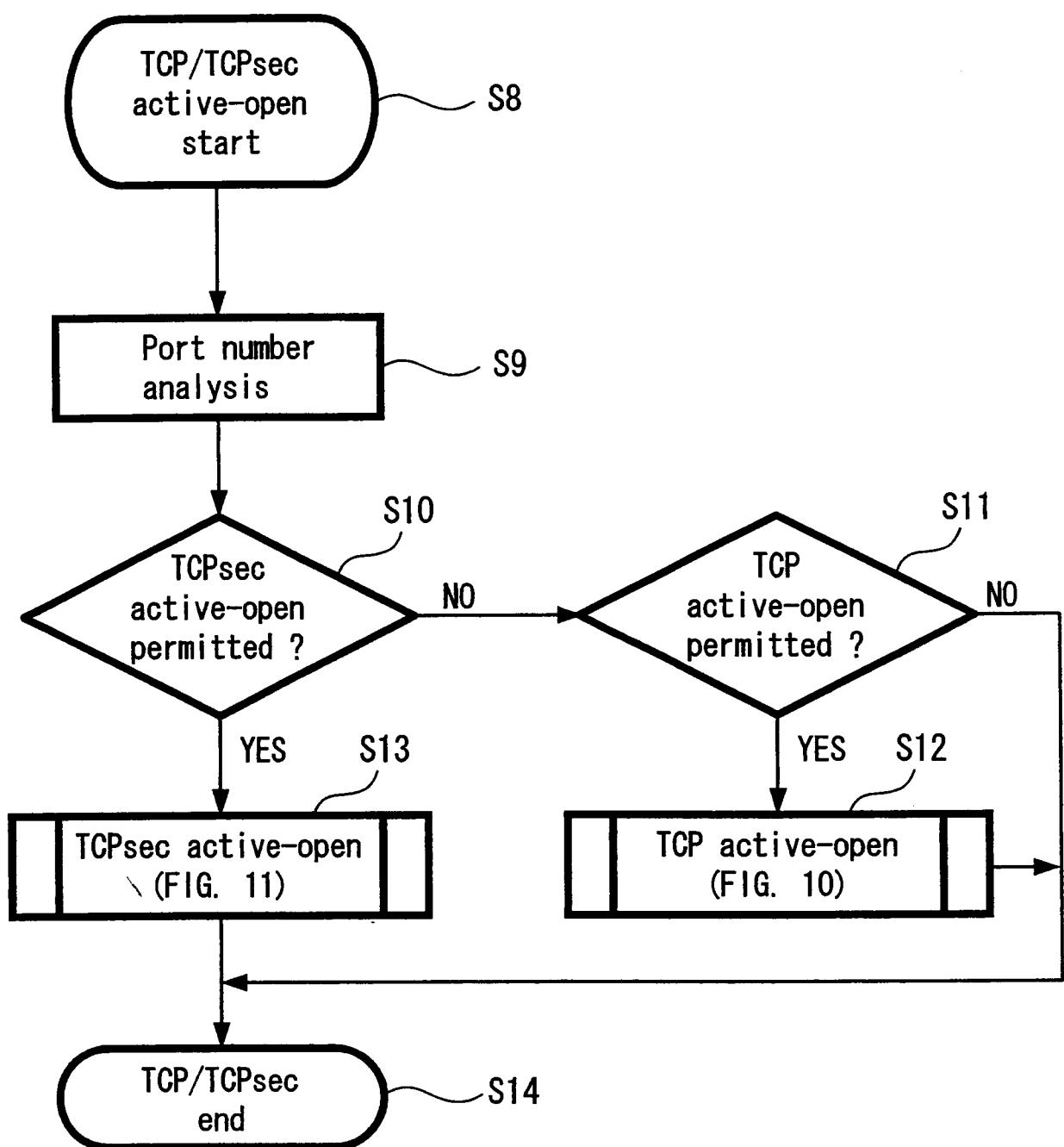
*FIG. 4C*



*FIG. 5*



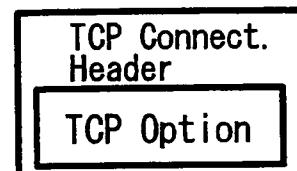
*FIG. 6*



*FIG. 7A*

Standard TCP

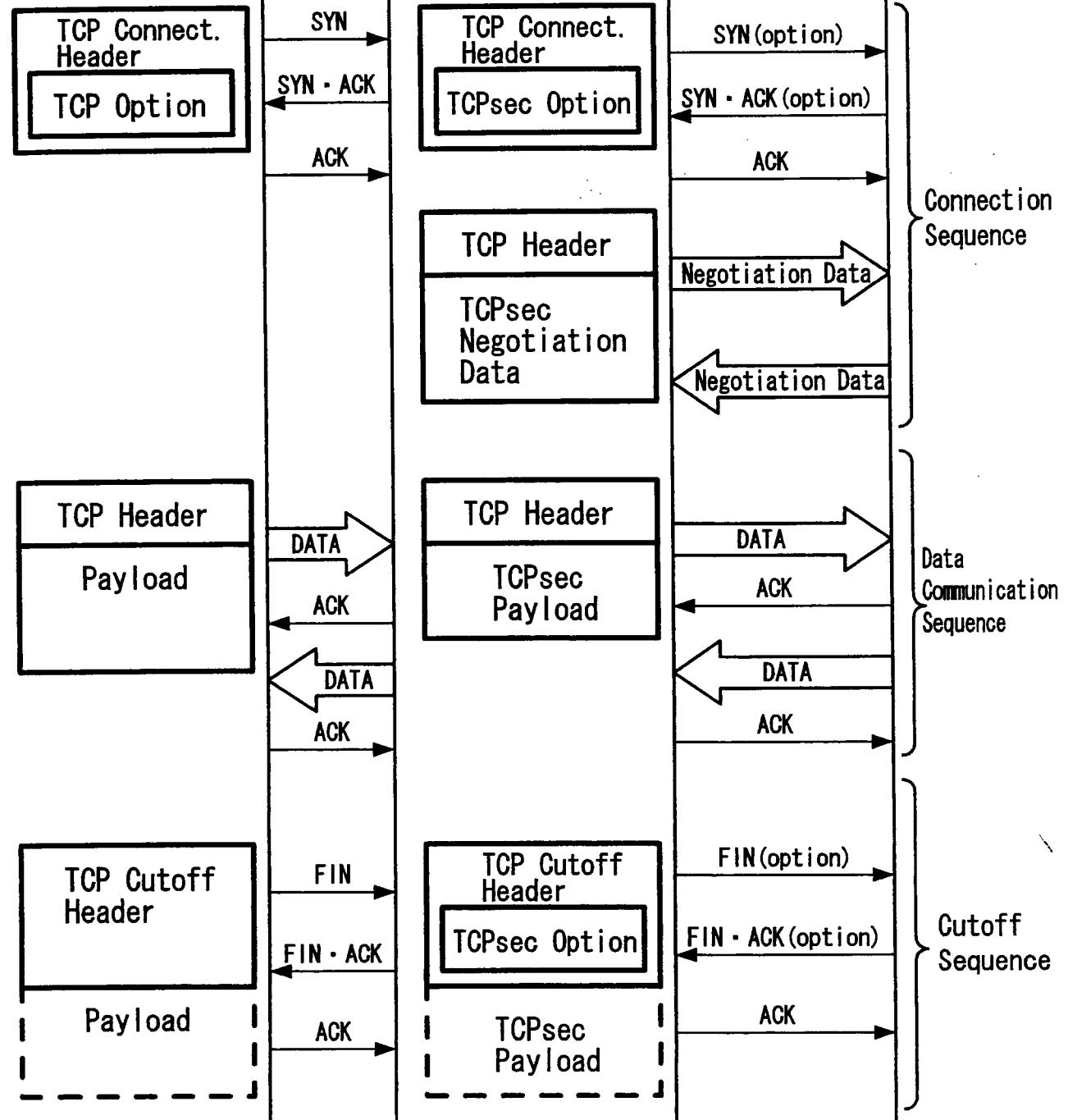
TCP Header & Payload  
Host A Host B



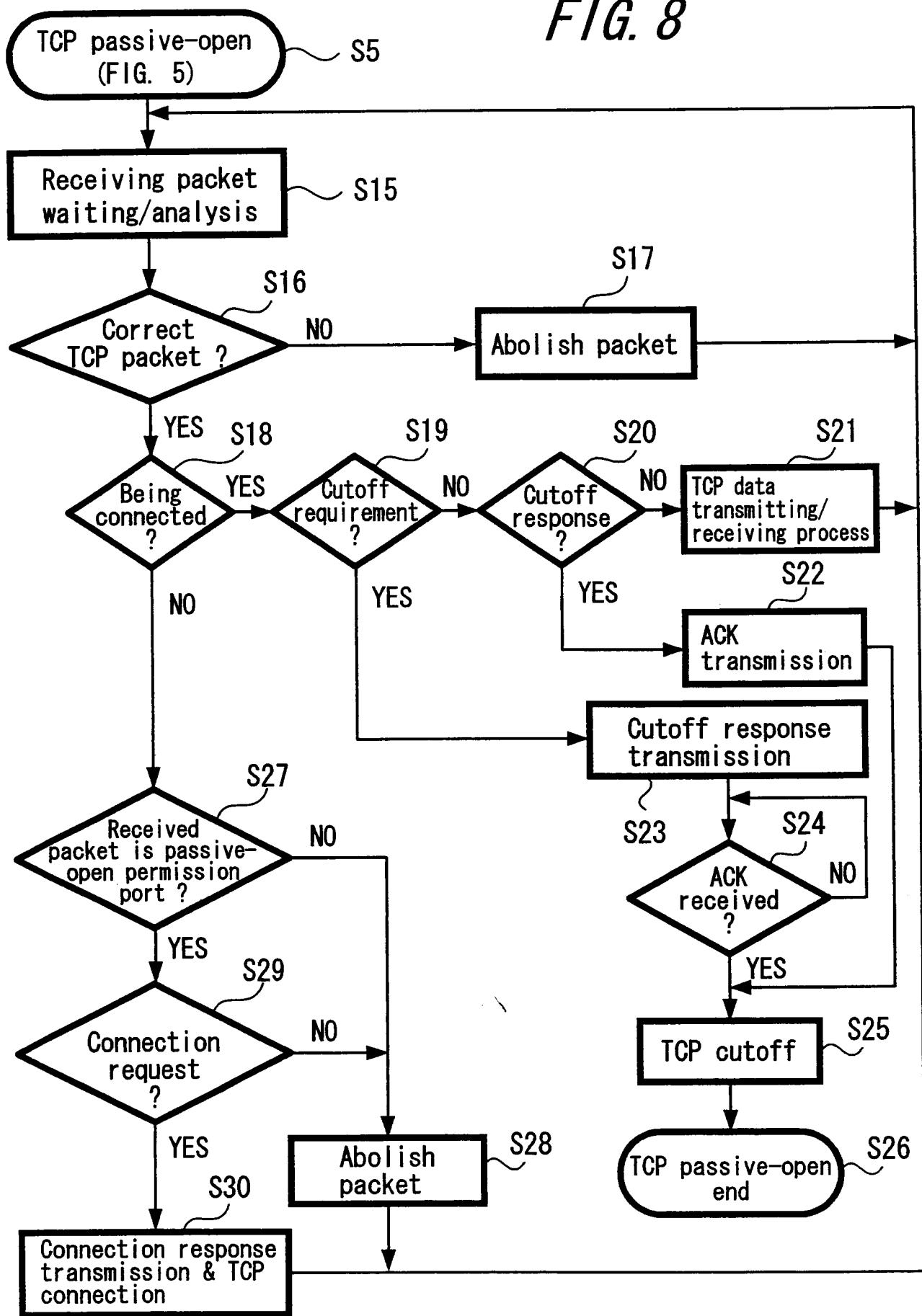
*FIG. 7B*

TCPsec

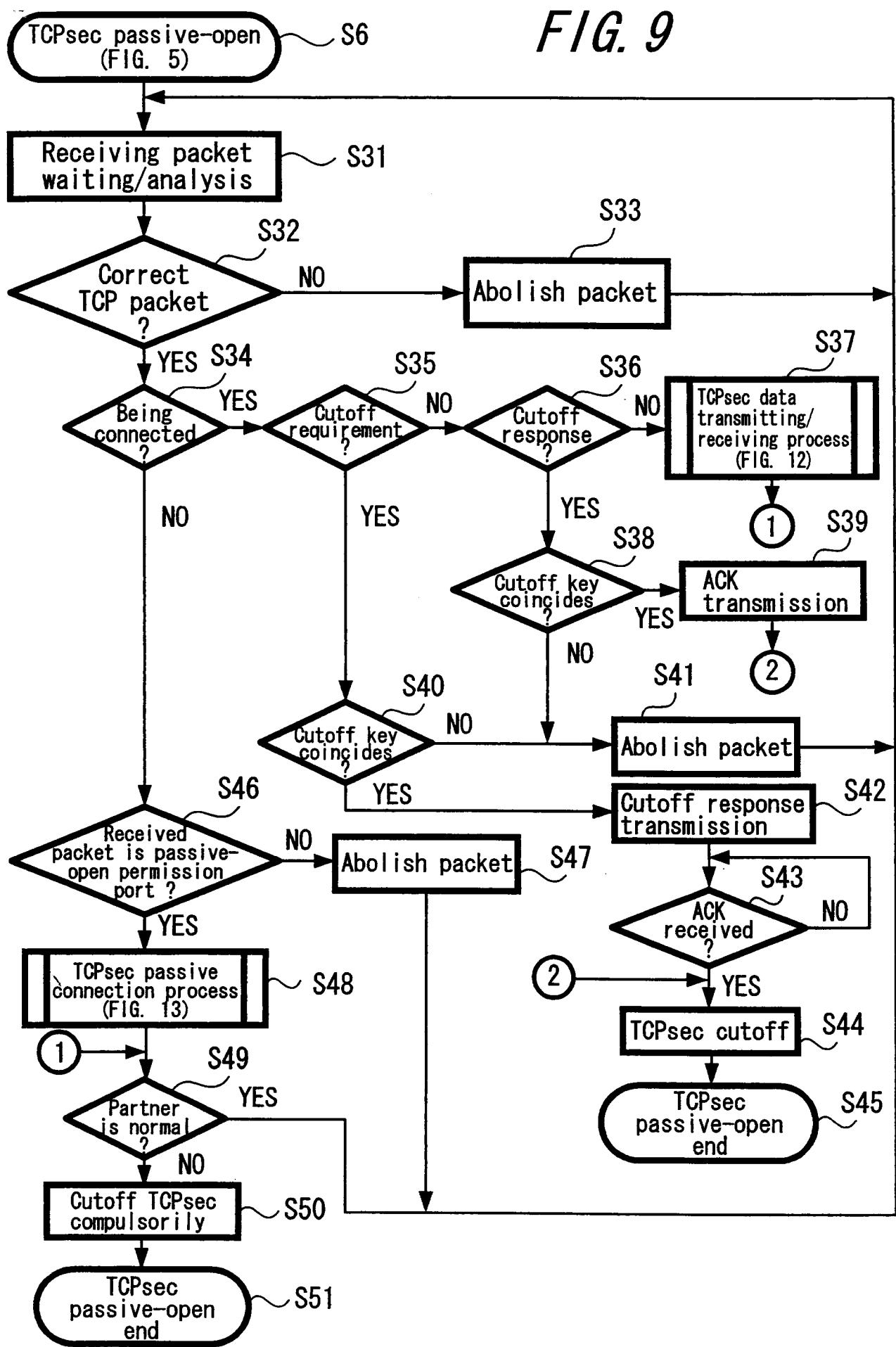
TCP Header & Payload  
Host A Host B



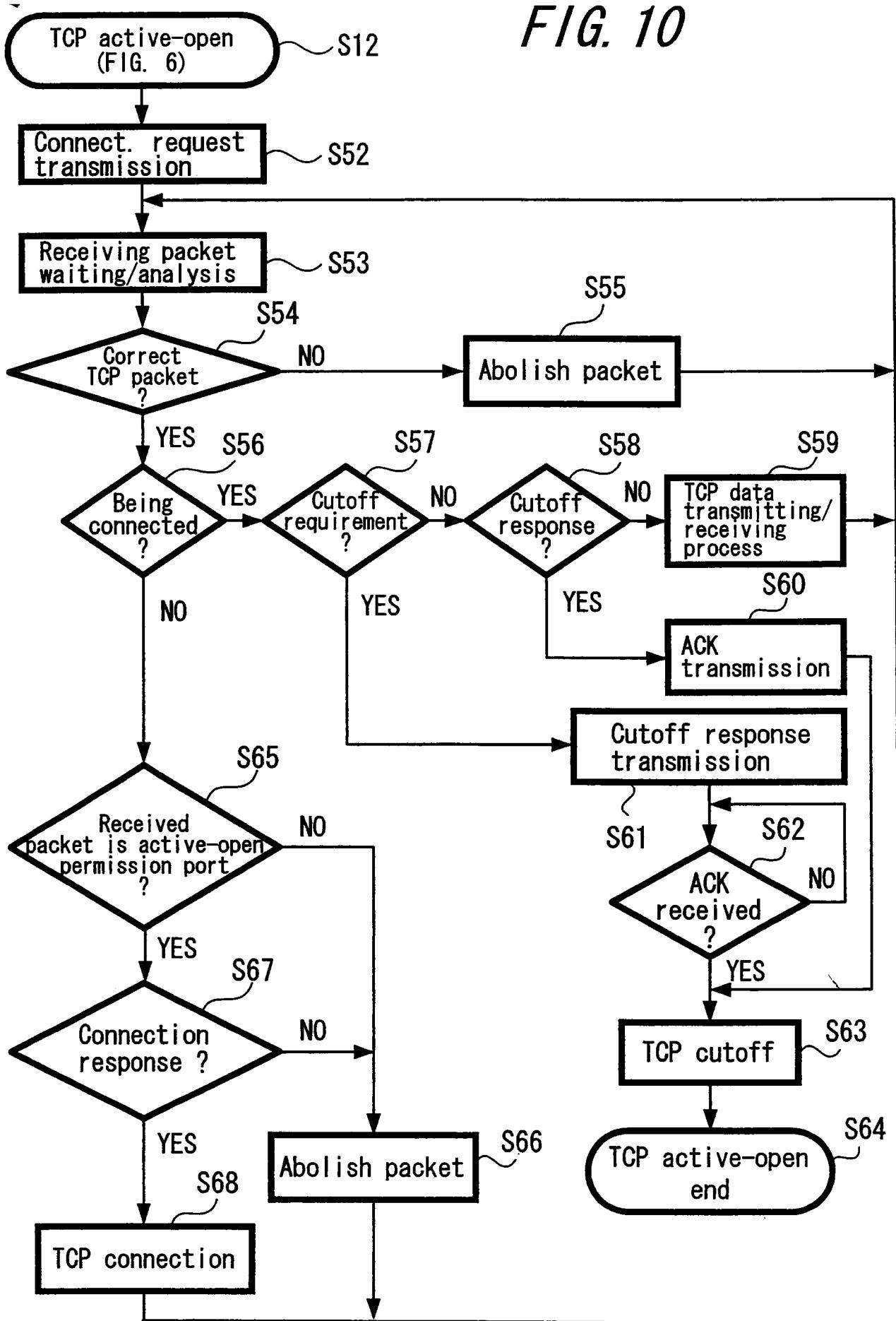
*FIG. 8*



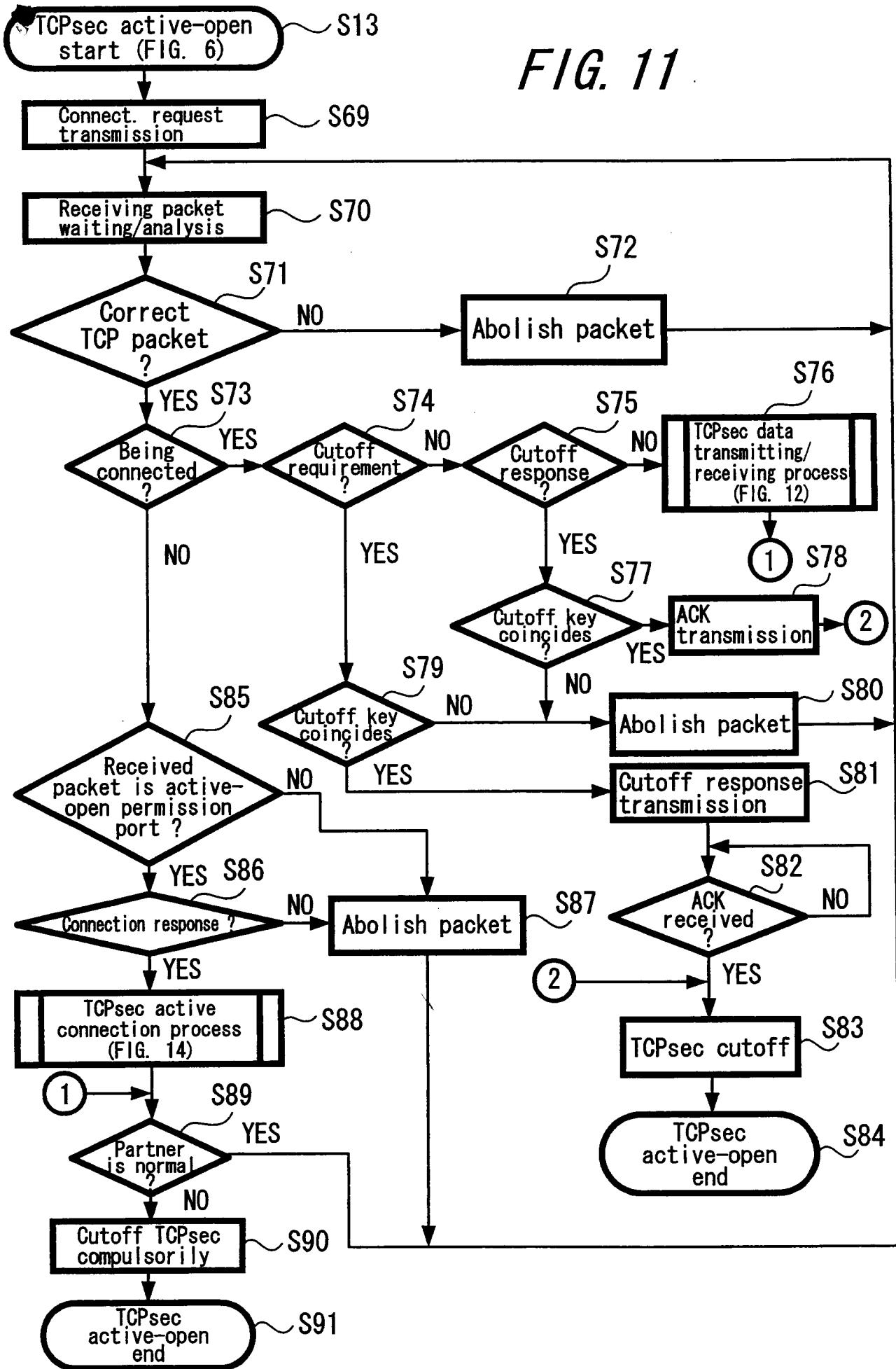
*FIG. 9*



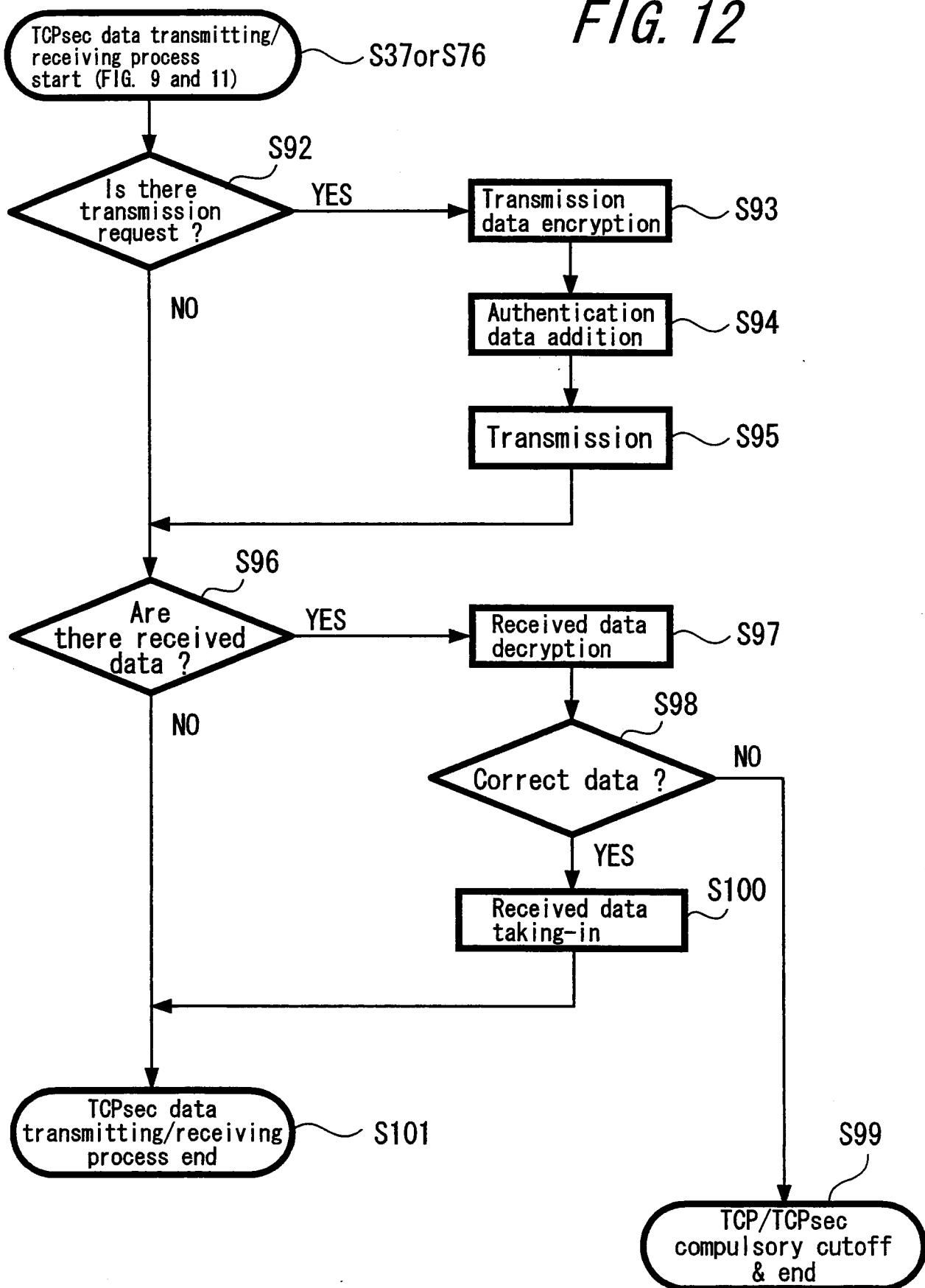
*FIG. 10*



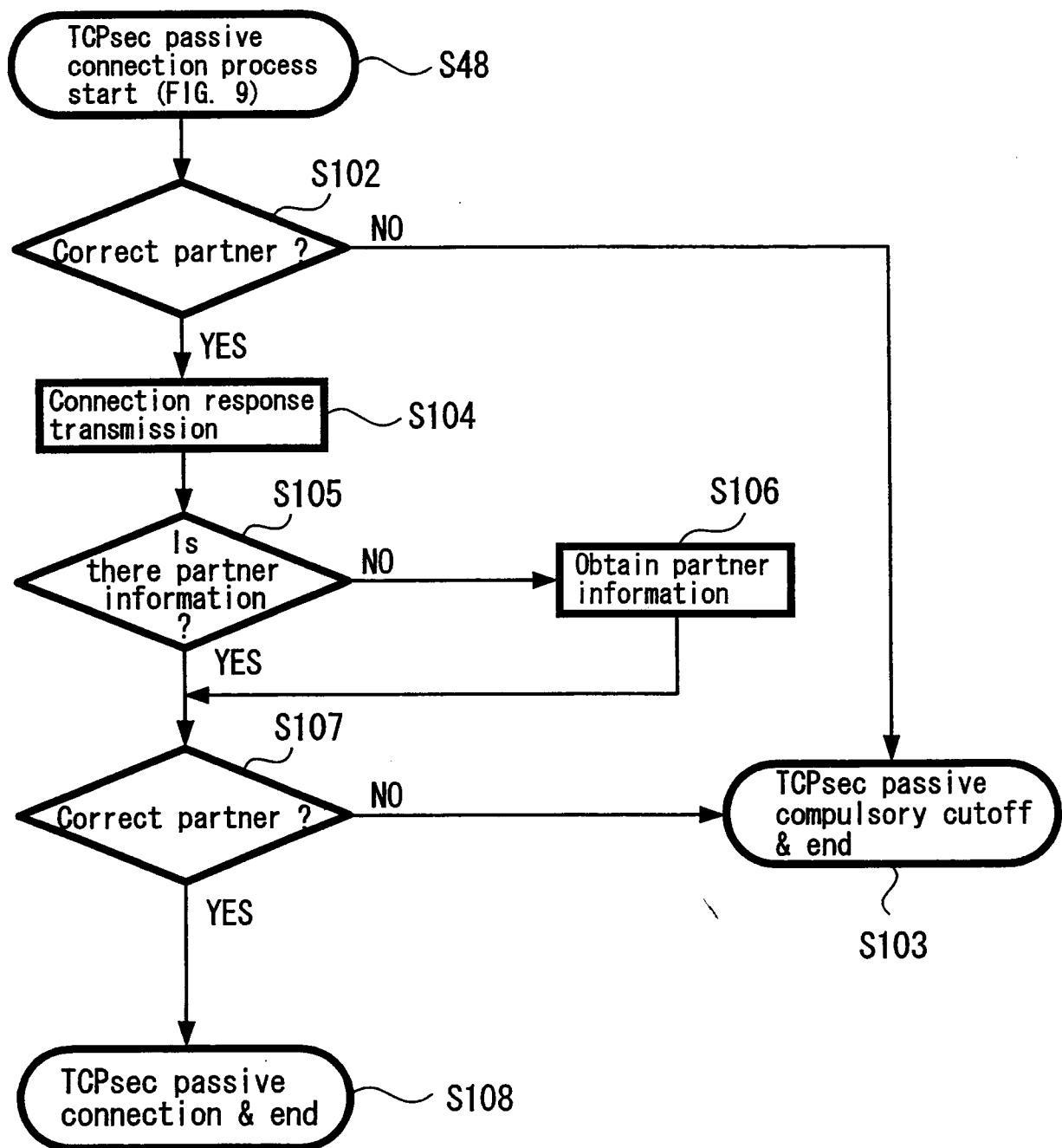
*FIG. 11*



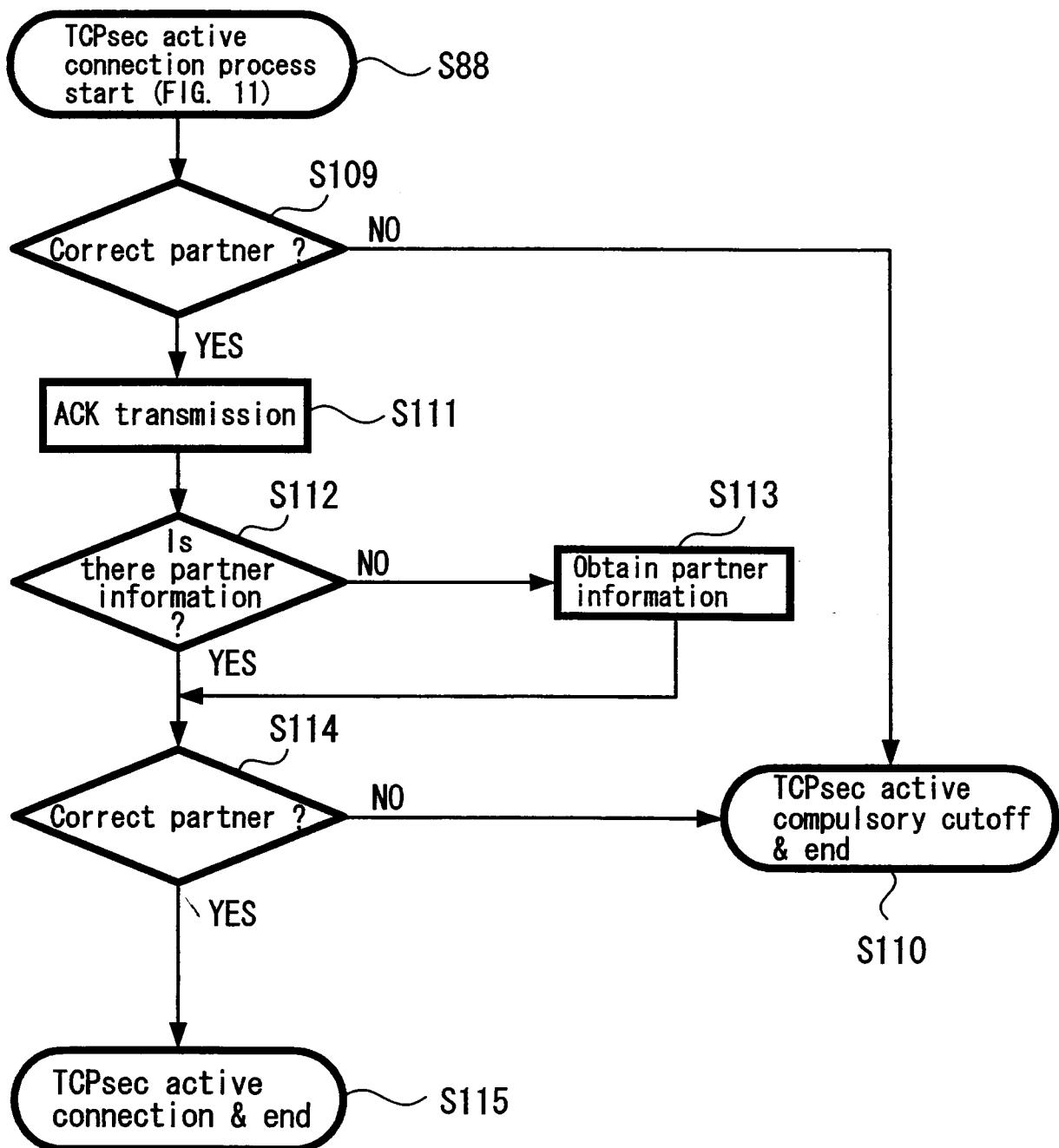
*FIG. 12*



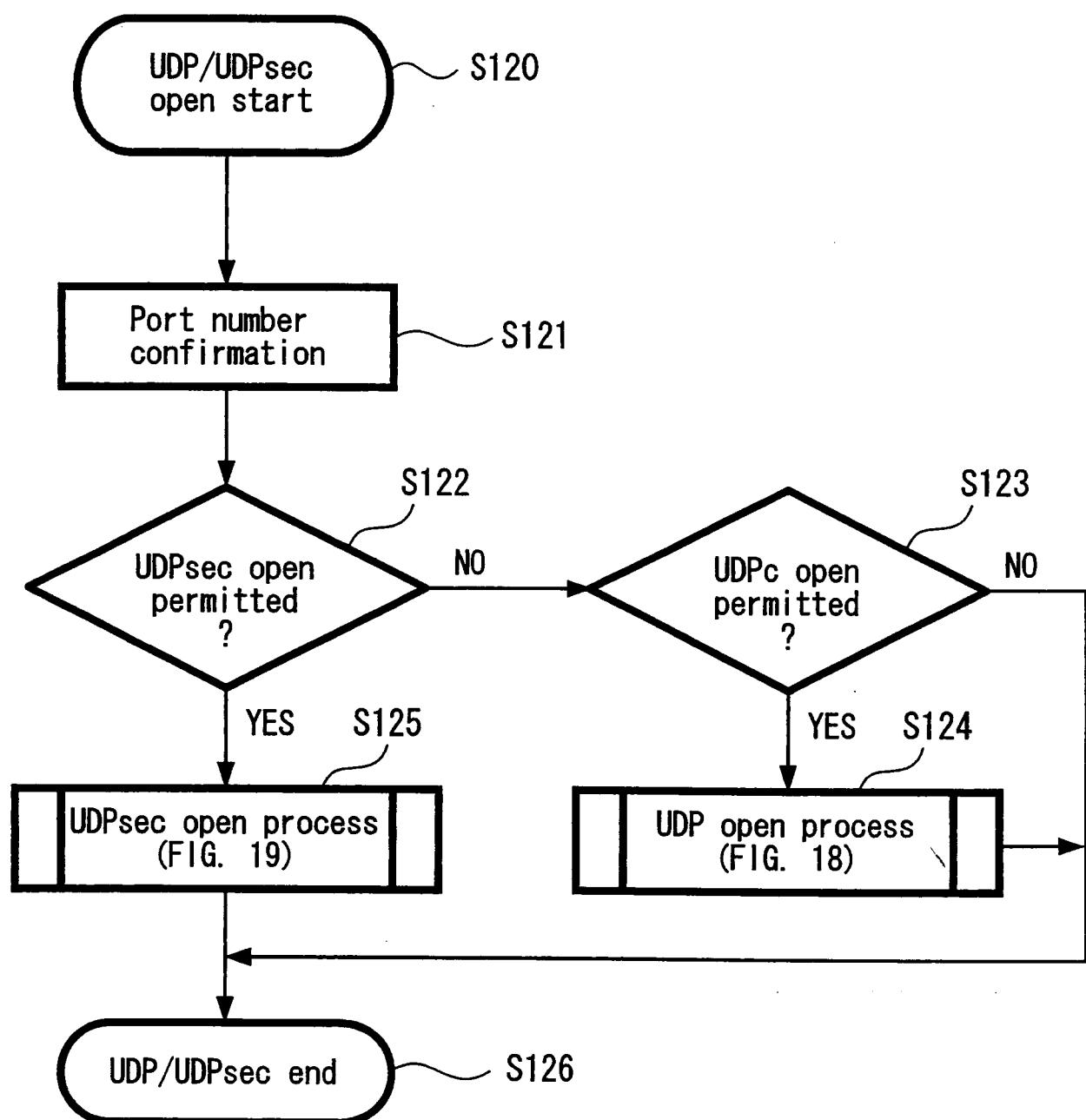
*FIG. 13*



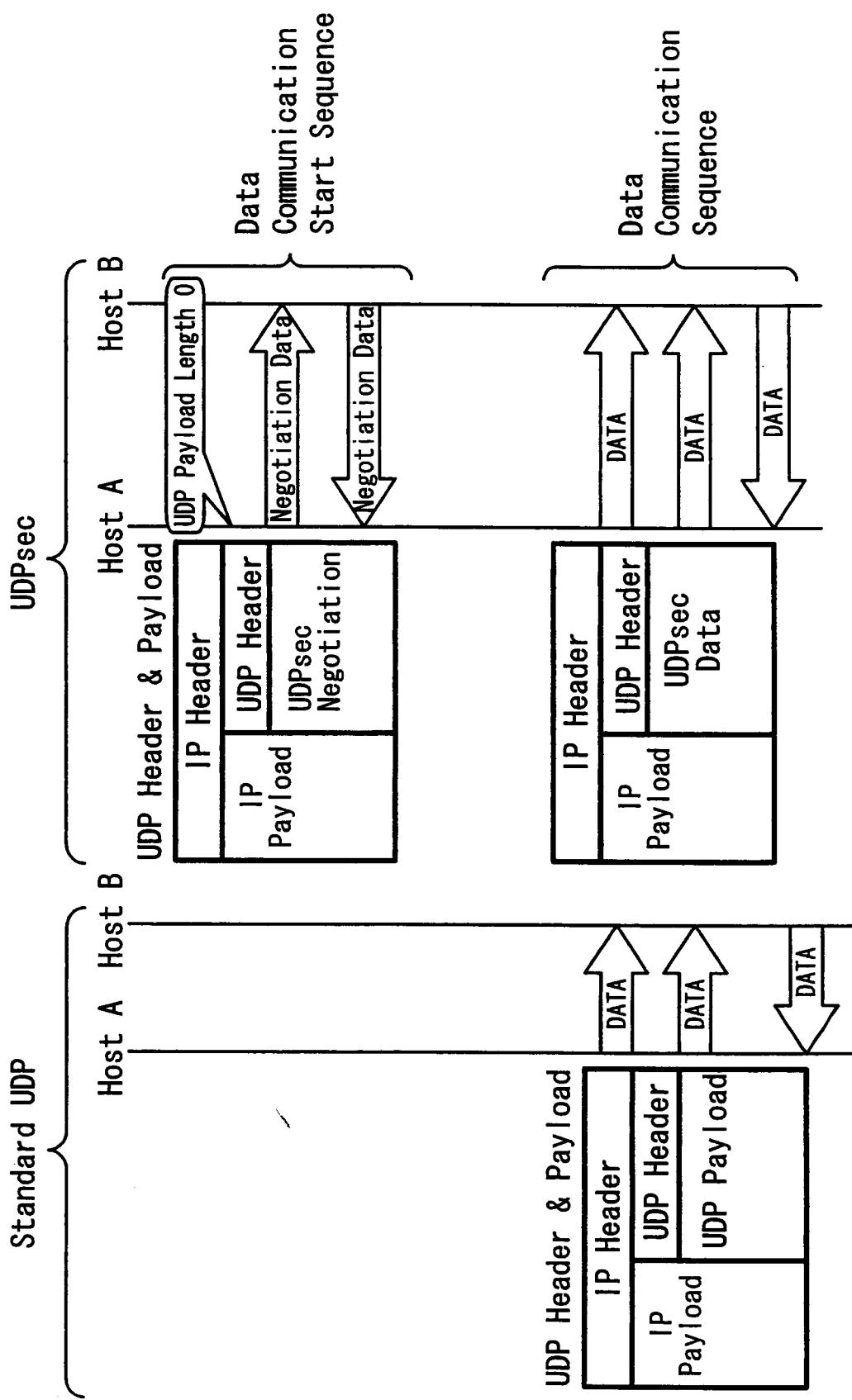
*FIG. 14*



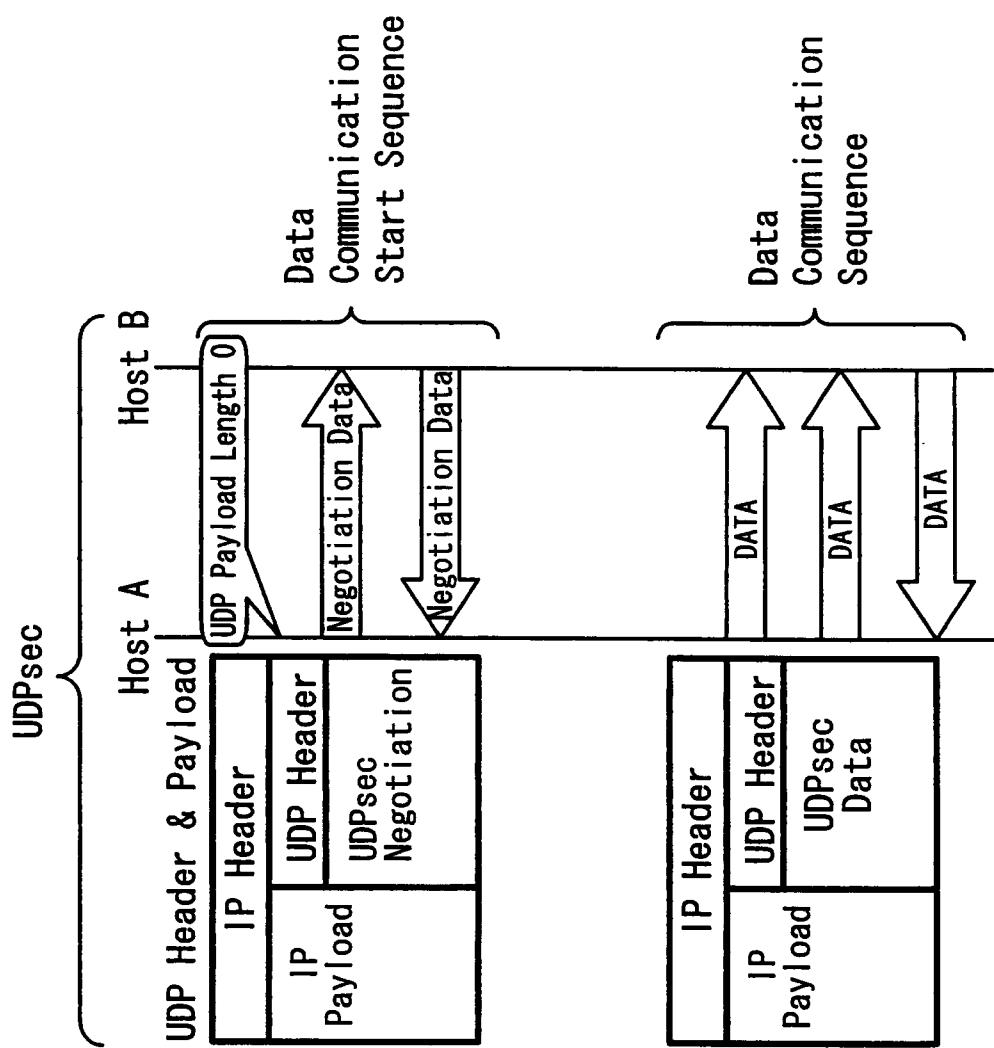
*FIG. 15*



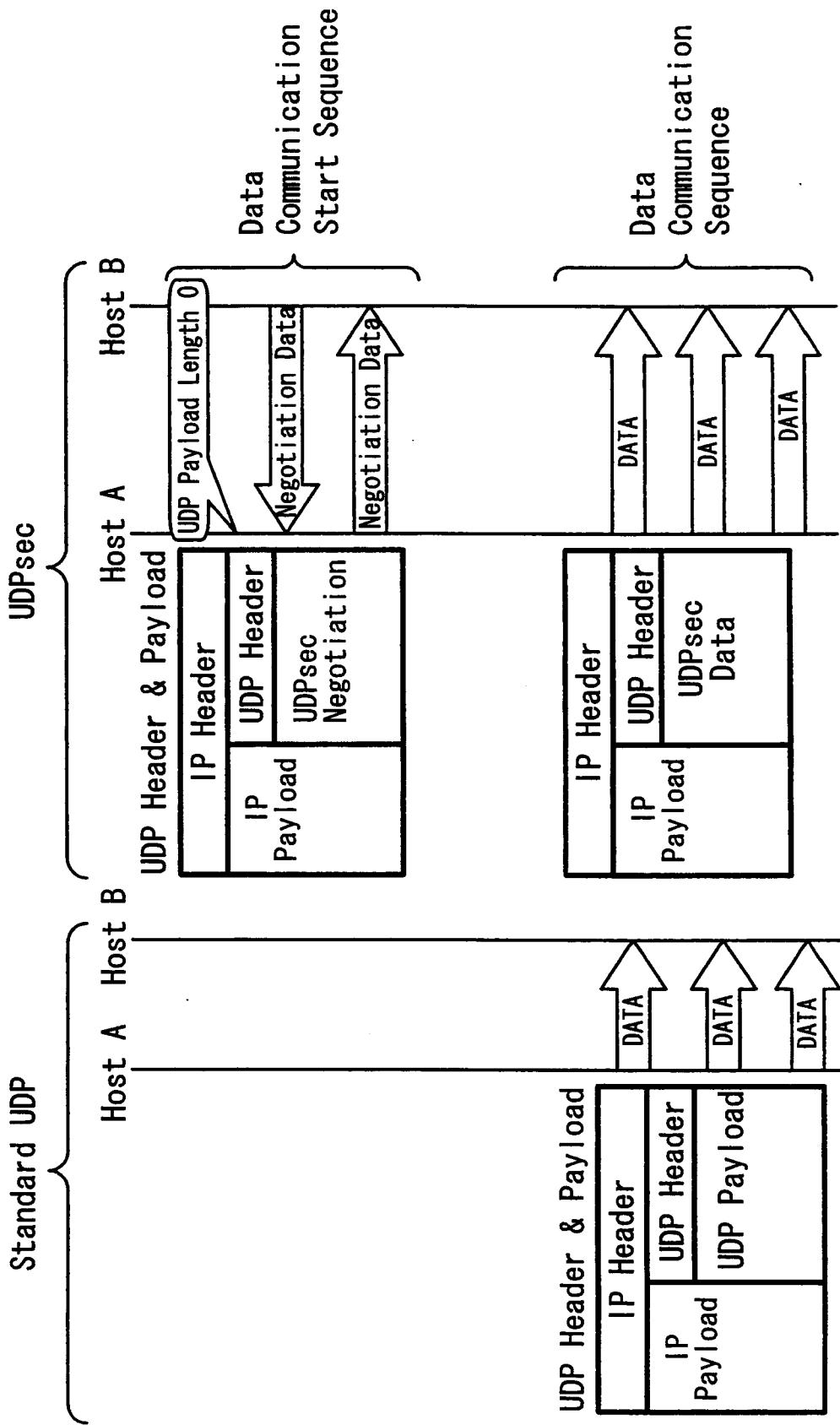
*FIG. 16A*



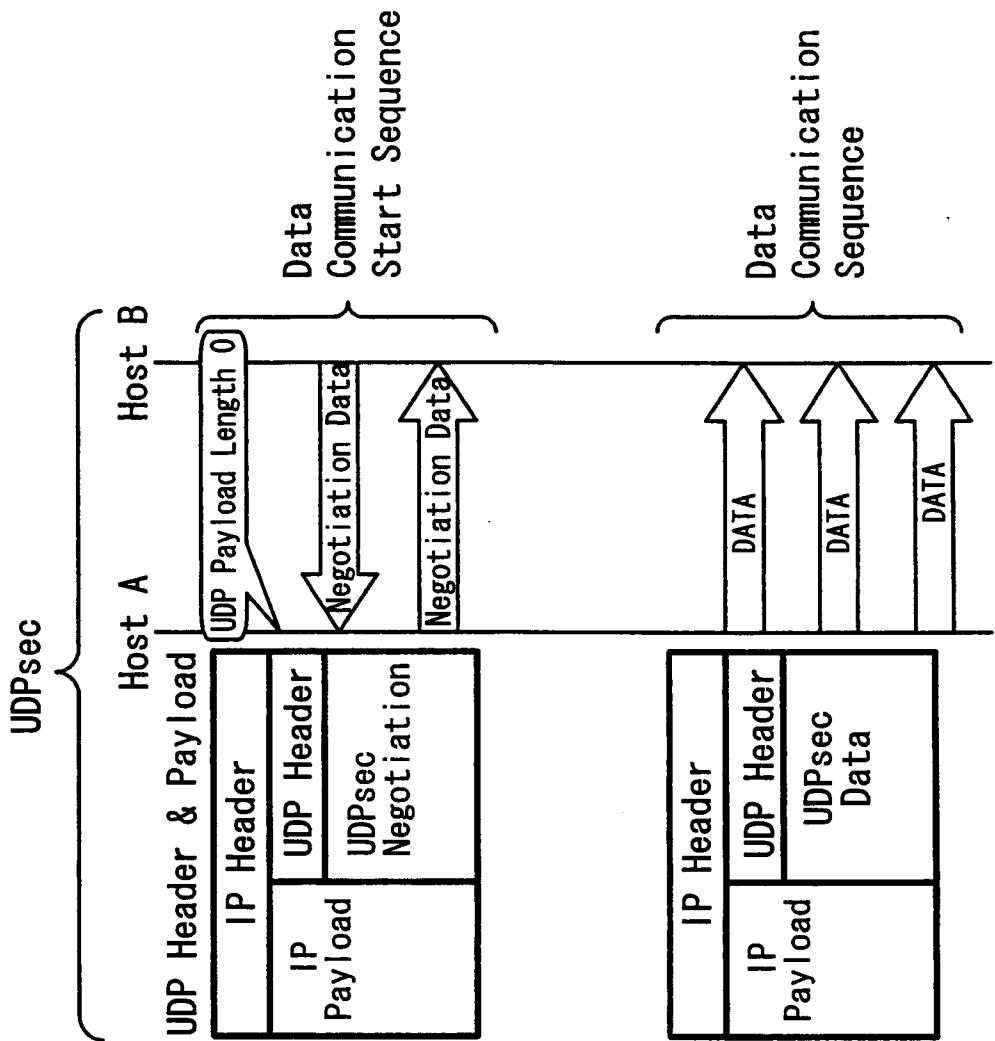
*FIG. 16B*



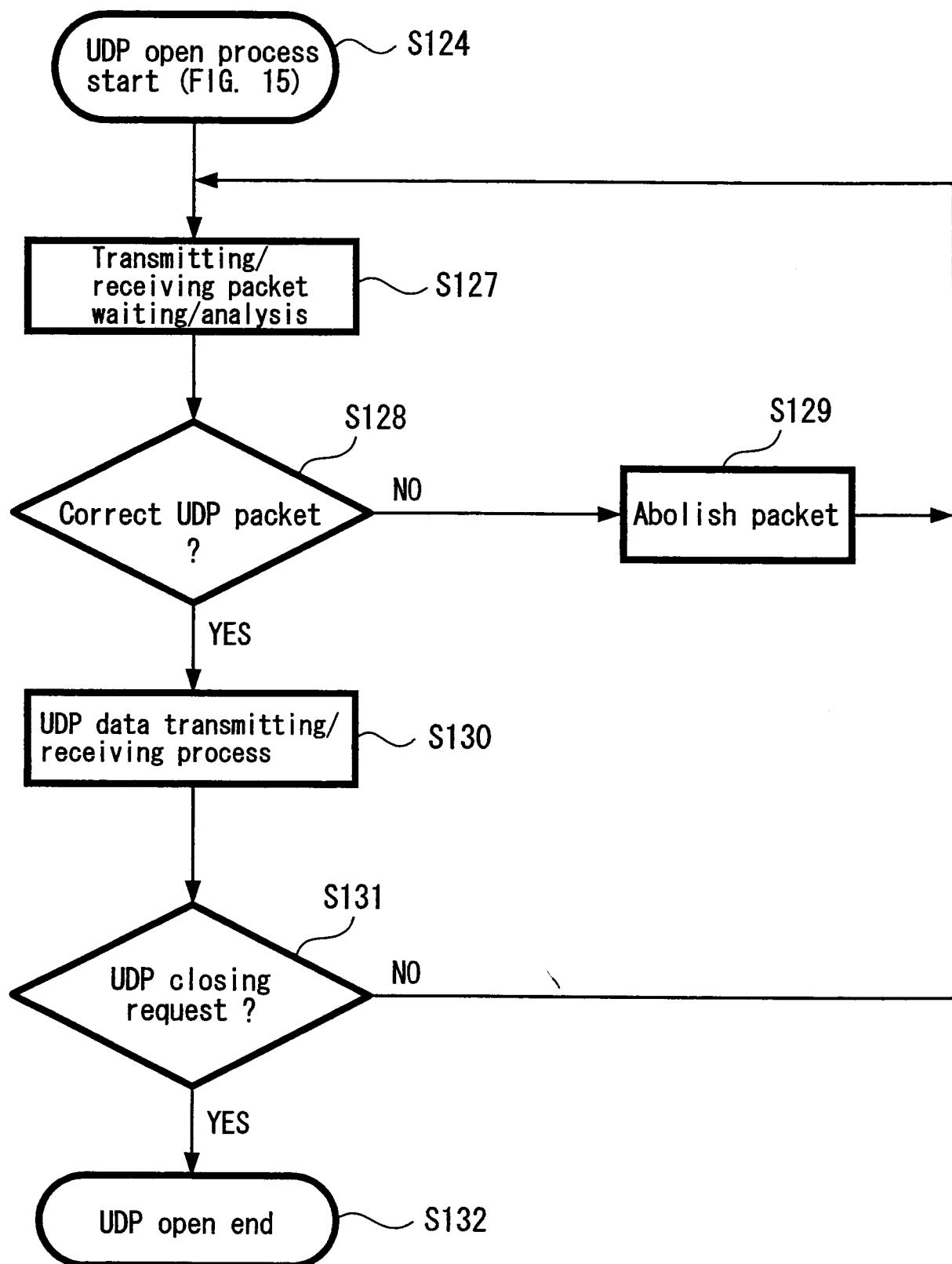
*FIG. 17A*



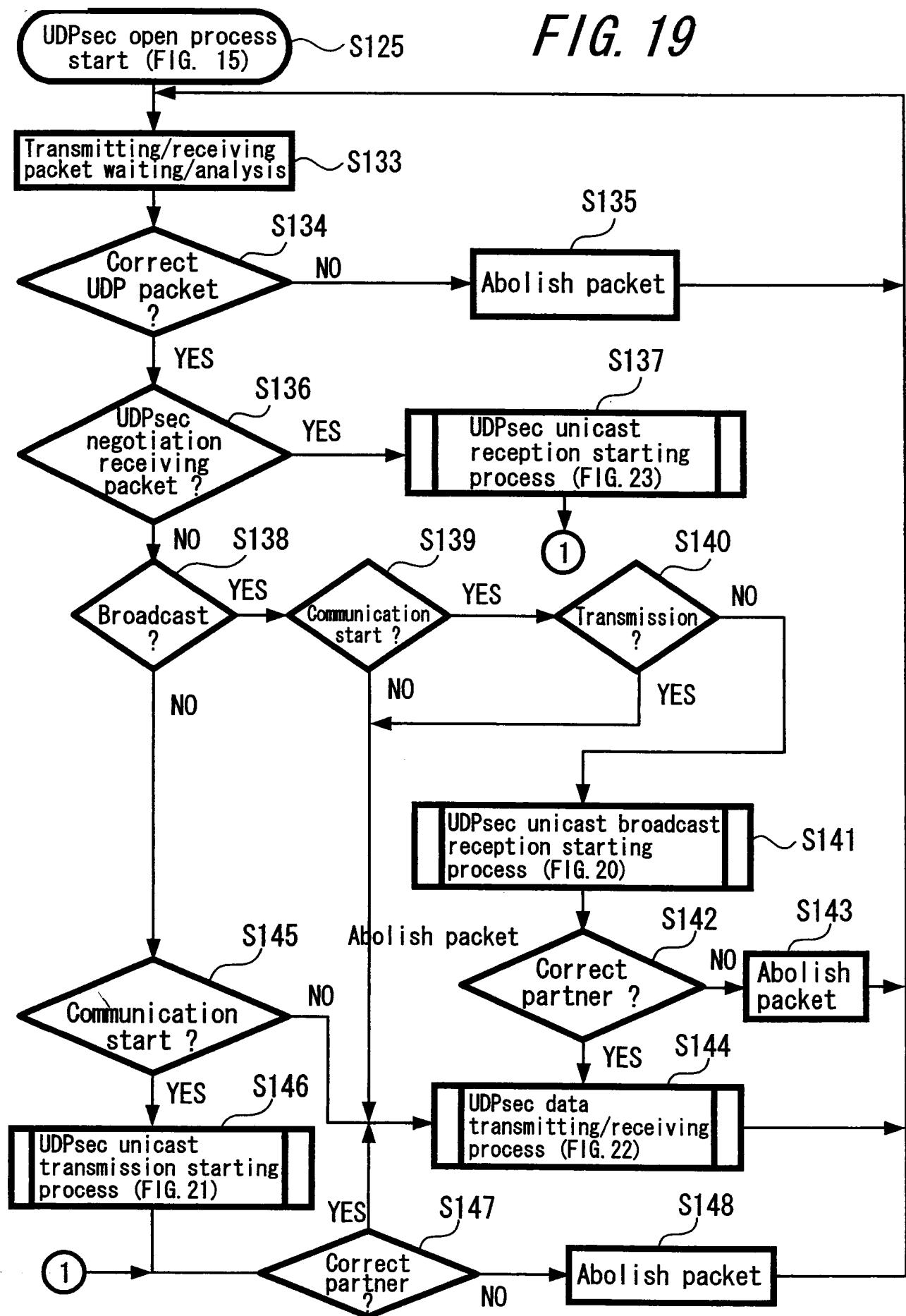
*FIG. 17B*



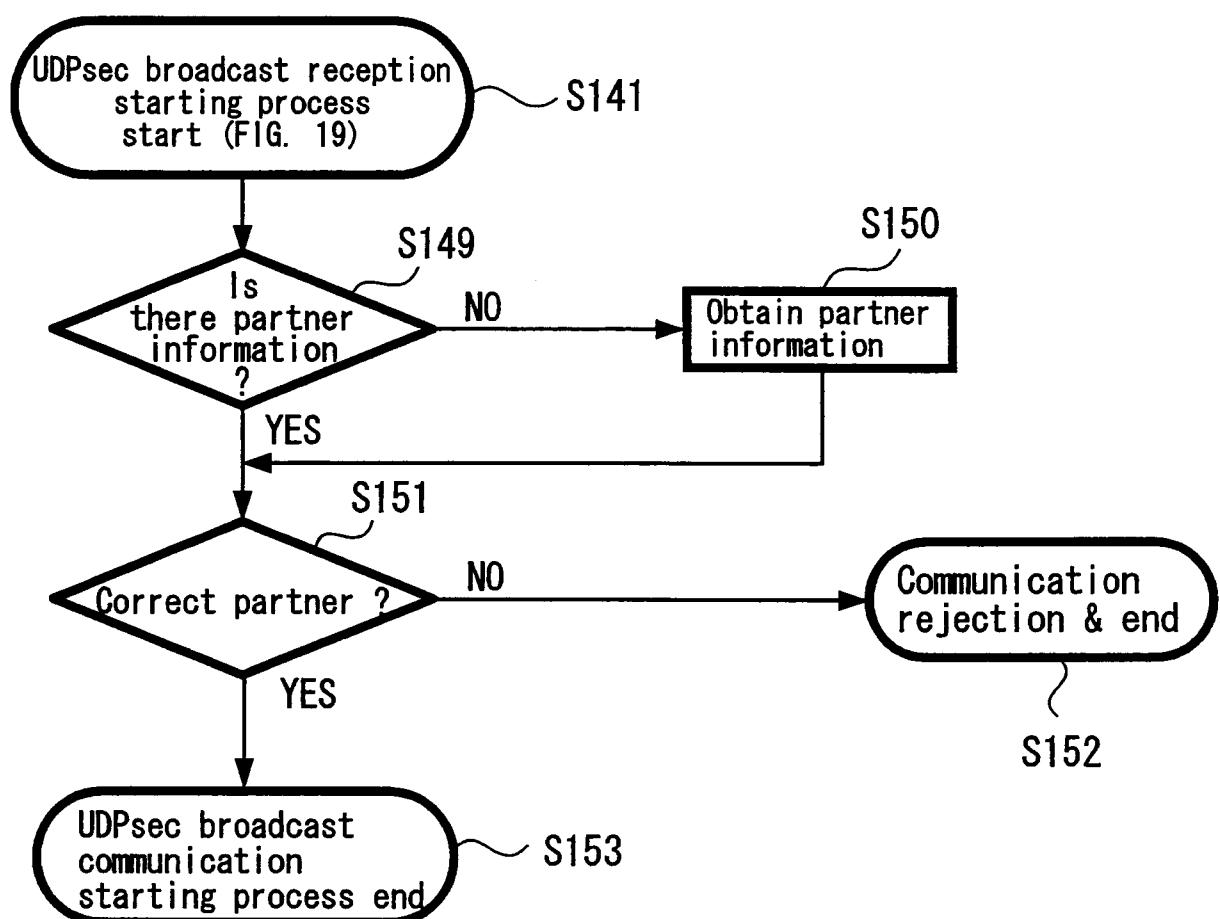
*FIG. 18*



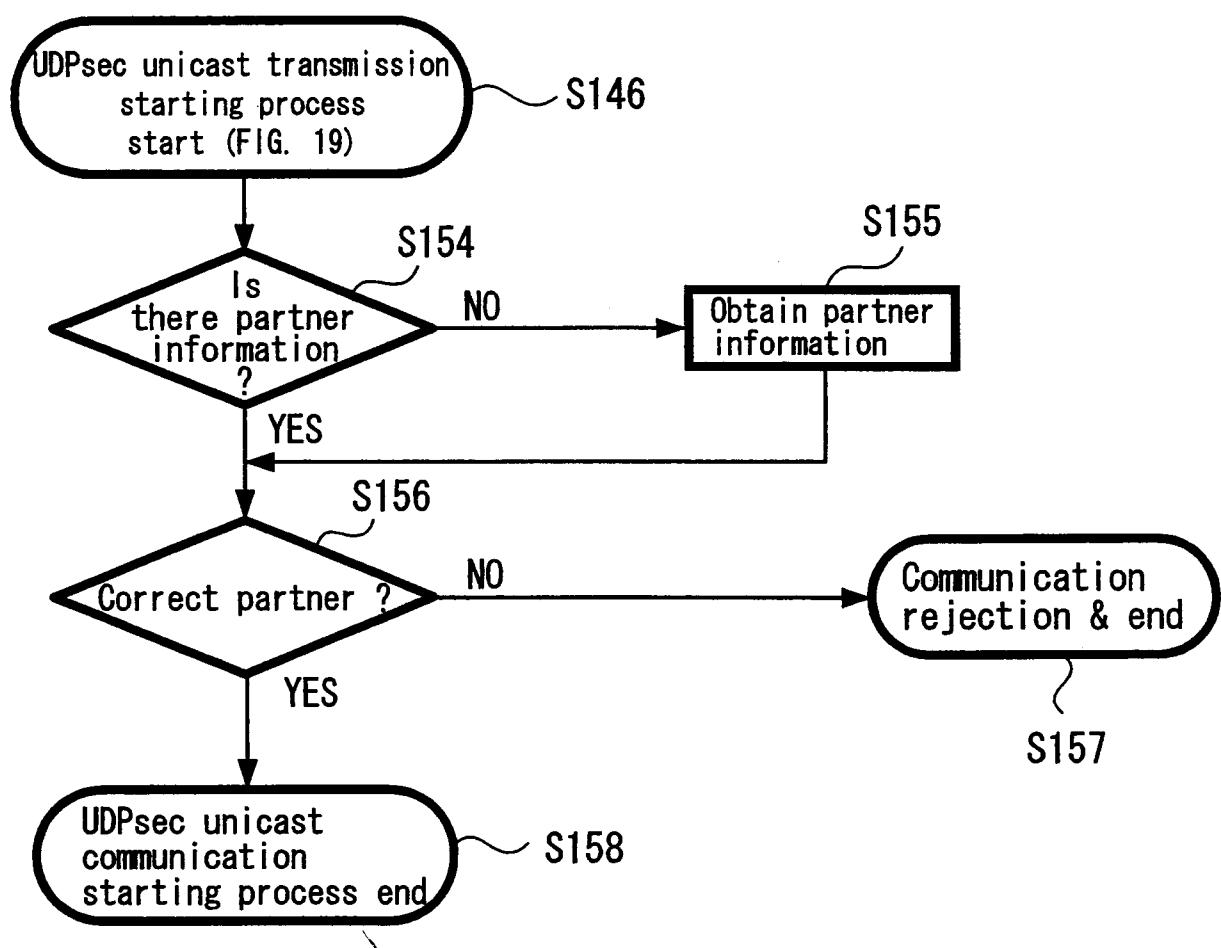
*FIG. 19*



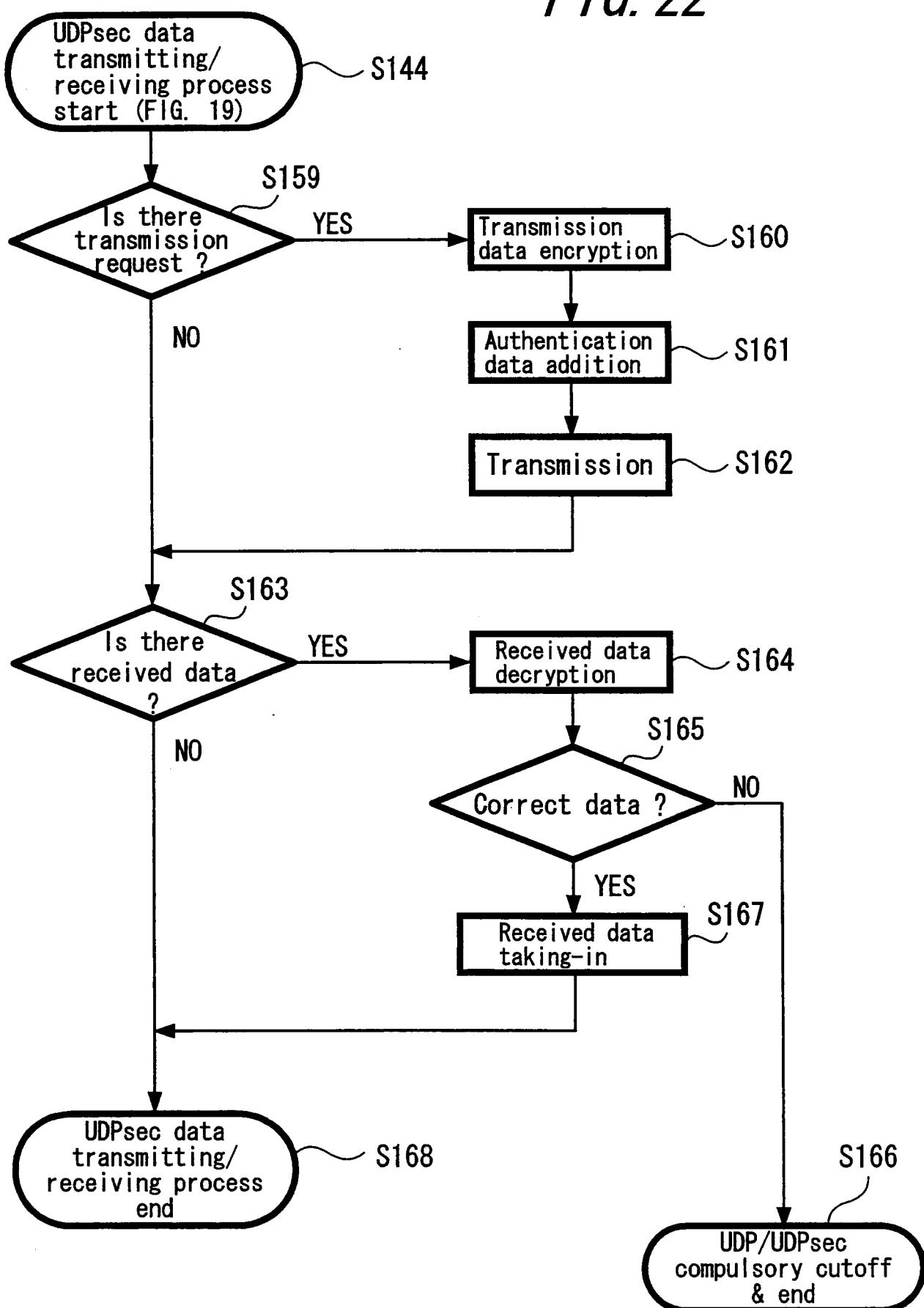
*FIG. 20*



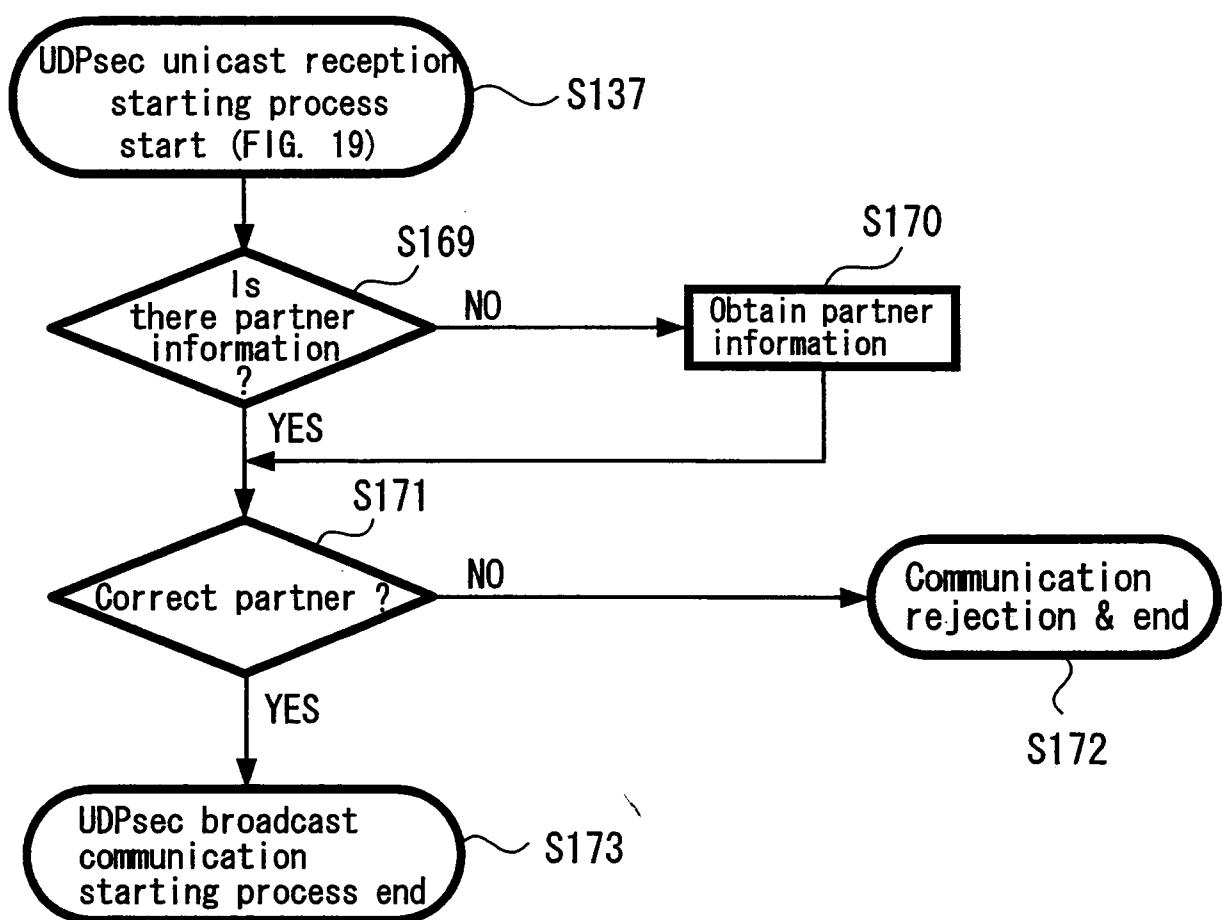
*FIG. 21*



*FIG. 22*



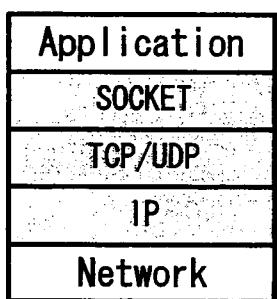
*FIG. 23*



*FIG. 24*

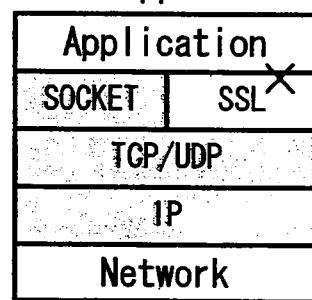
(a)

Protocol Stacks  
without Security



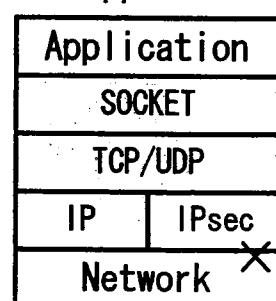
(b)

Protocol Stacks  
Applied with SSL

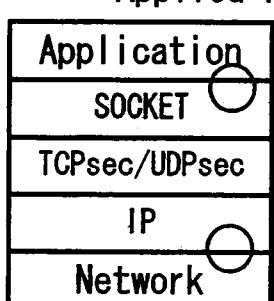


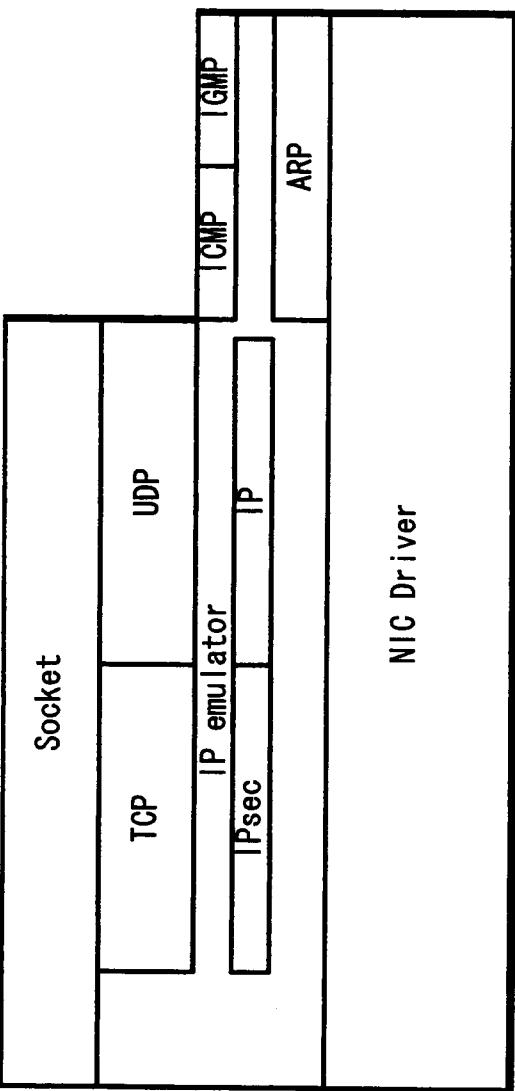
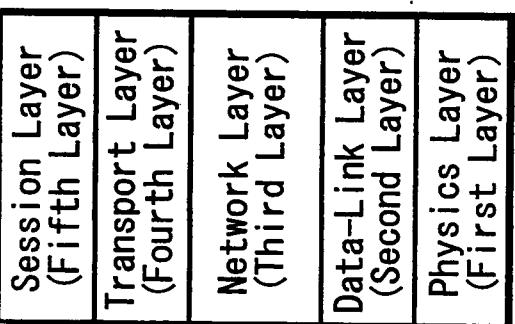
(c)

Protocol Stacks  
Applied with IPsec

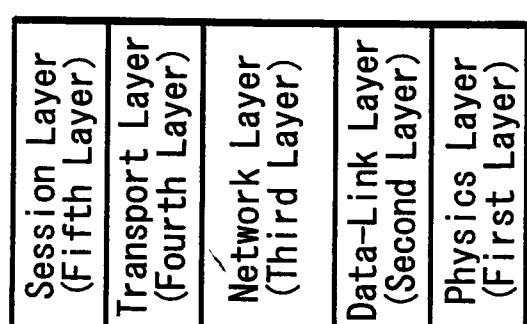


(d)  
Protocol Stacks  
Applied with TCP2





*FIG. 25*



*FIG. 26*

## DESCRIPTION OF REFERENCE NUMERALS

- 1 . . . host computer ,
- 2 . . . network control apparatus (router)
- 3a, 3b and 3c . . . client terminal
- 4a, 4b and 4c . . . client terminal
- 11 . . . NIC driver
- 12 . . . ARP or ARP on CP
- 13 . . . IP emulator
- 13b . . . IPsec on CP
- 15 . . . TCP emulator
- 15b . . . TCPsec on CP
- 16 . . . UDP emulator
- 16b . . . UDPsec on CP
- 17 . . . socket (Socket)
- 41 . . . IP header
- 42 . . . ESP header
- 43 . . . TCP header
- 44 . . . TCPsec additional information
- 45 . . . data (payload)
- 46 . . . TCPsec added trailer
- 47 . . . TCPsec added authentication data
- 48 . . . ESP trailer
- 49 . . . ESP authentication data