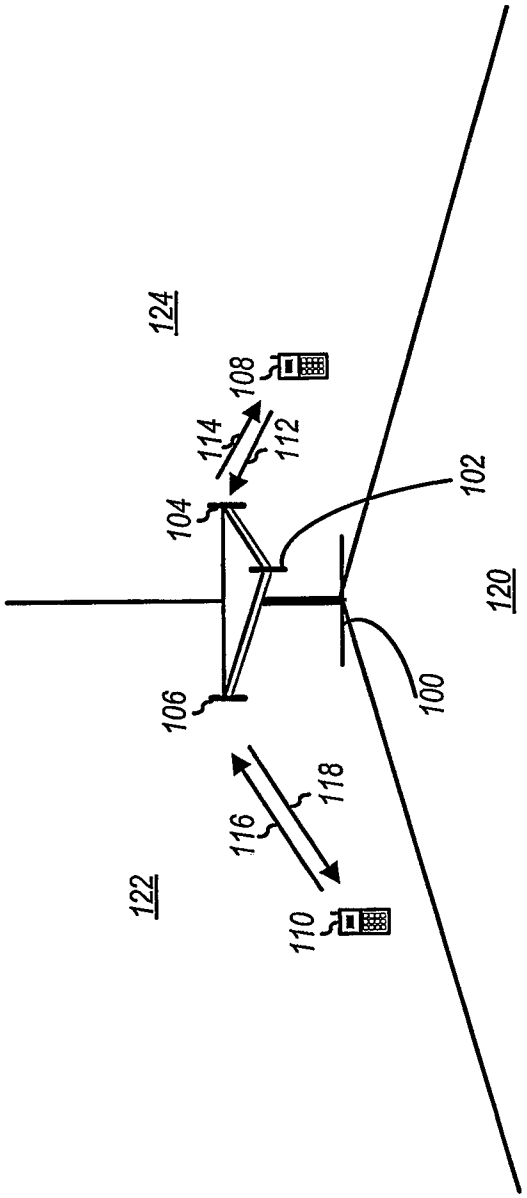


Fig. 1

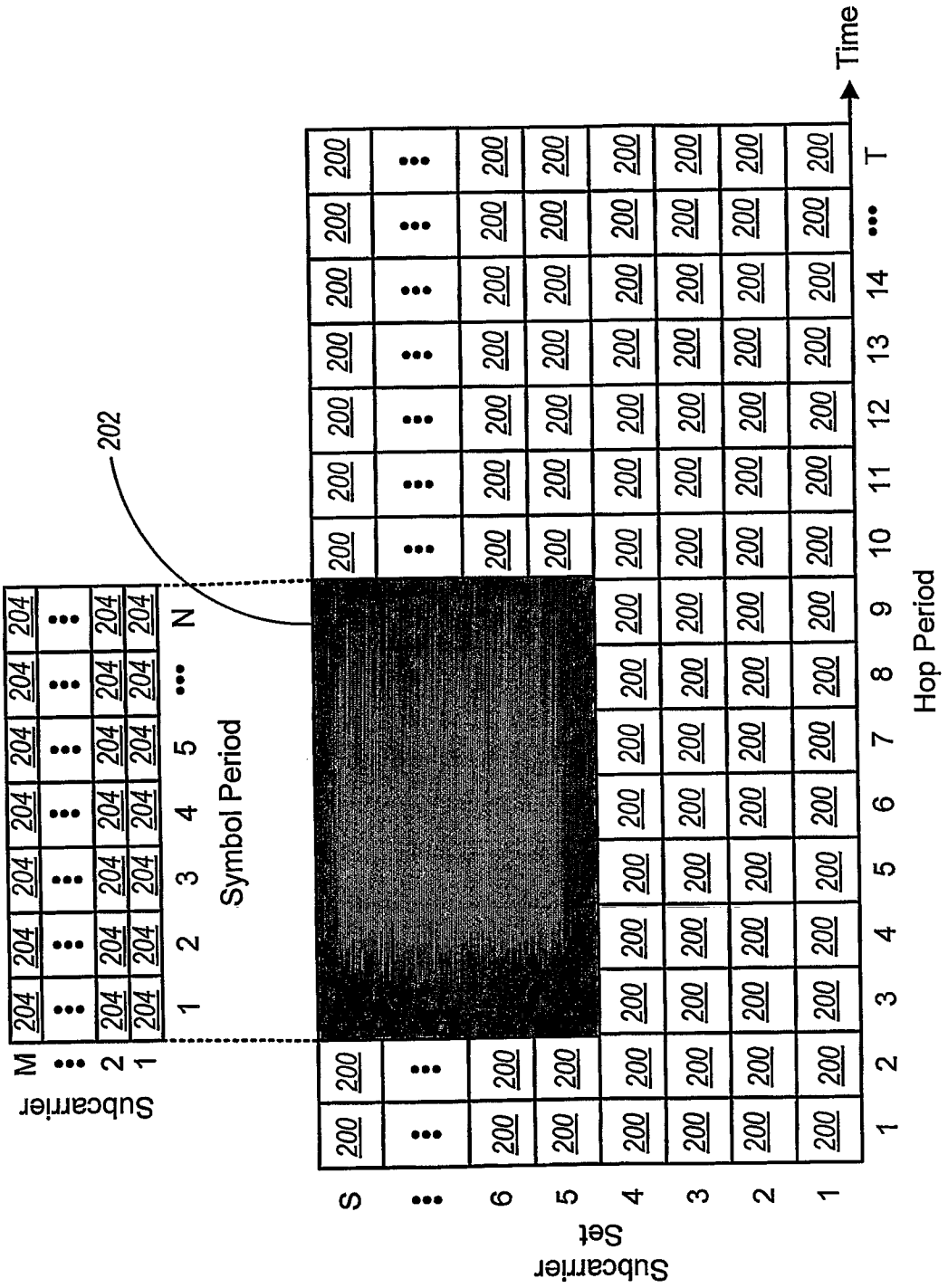

Time
Hop Period
Subcarrier Set
Symbol Period
Subcarrier
202
200
204

Fig. 2

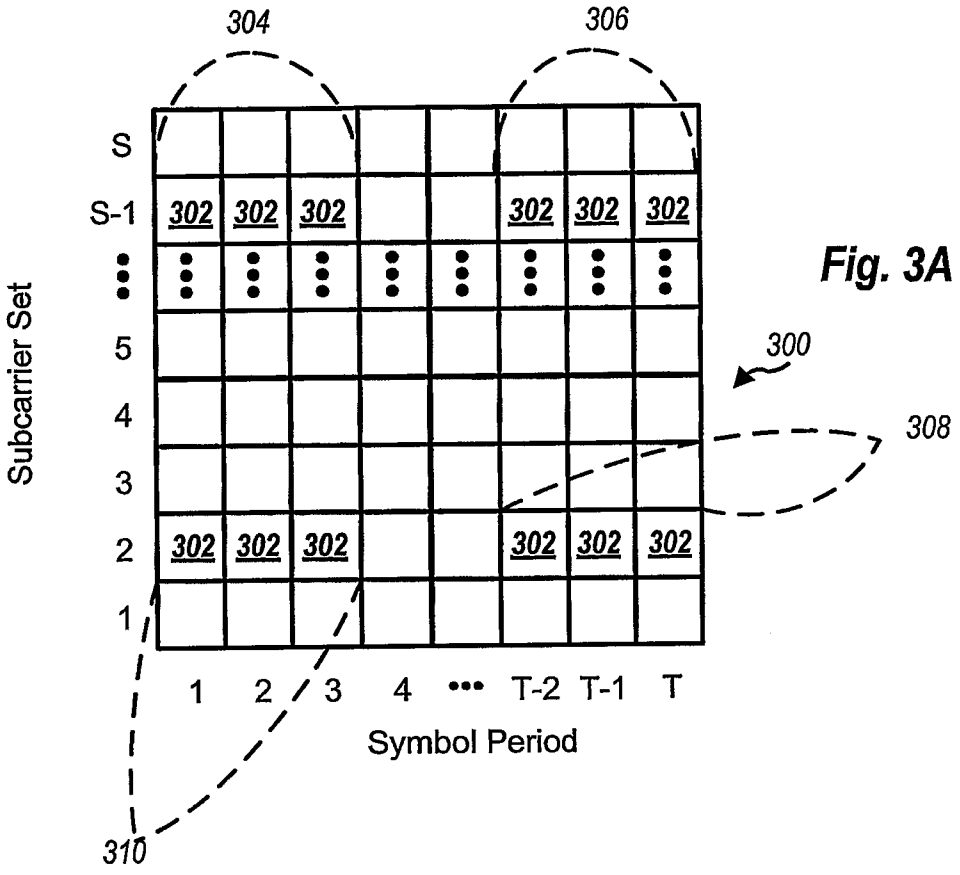

304
306
S
S-1
302
5
4
3
2
1
300
308
310
Subcarrier Set
1 2 3 4 ••• T-2 T-1 T
Symbol Period

Fig. 3A

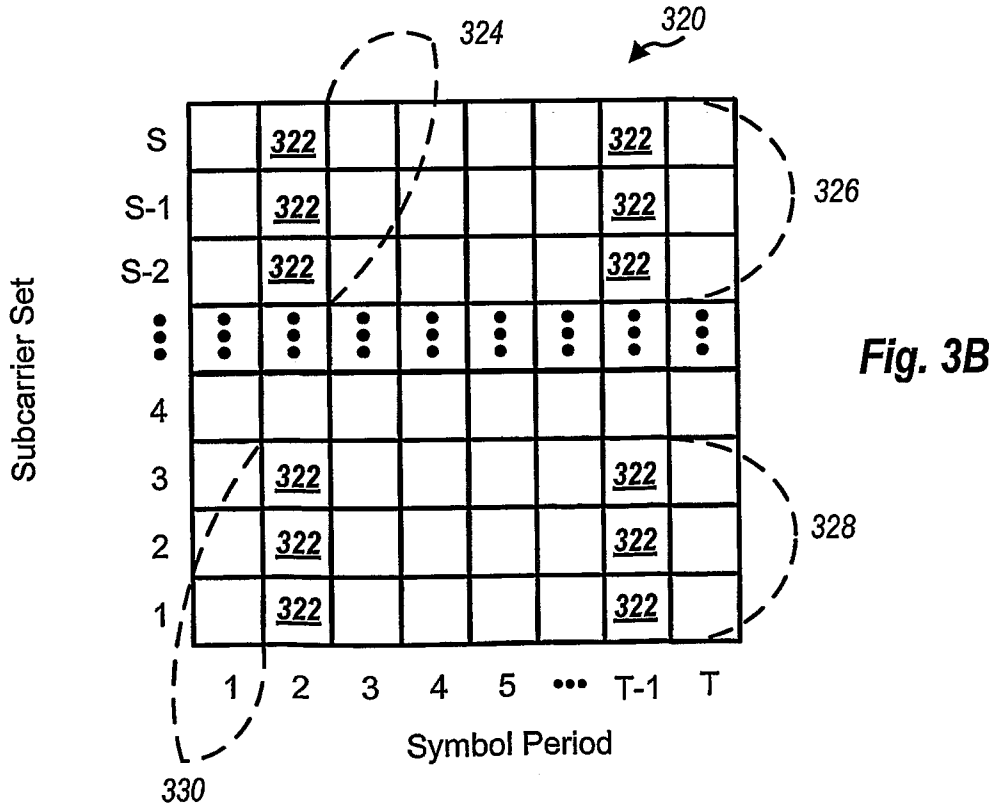

324
320
S
S-1
S-2
322
4
3
2
1
326
328
330
Subcarrier Set
1 2 3 4 5 ••• T-1 T
Symbol Period

Fig. 3B

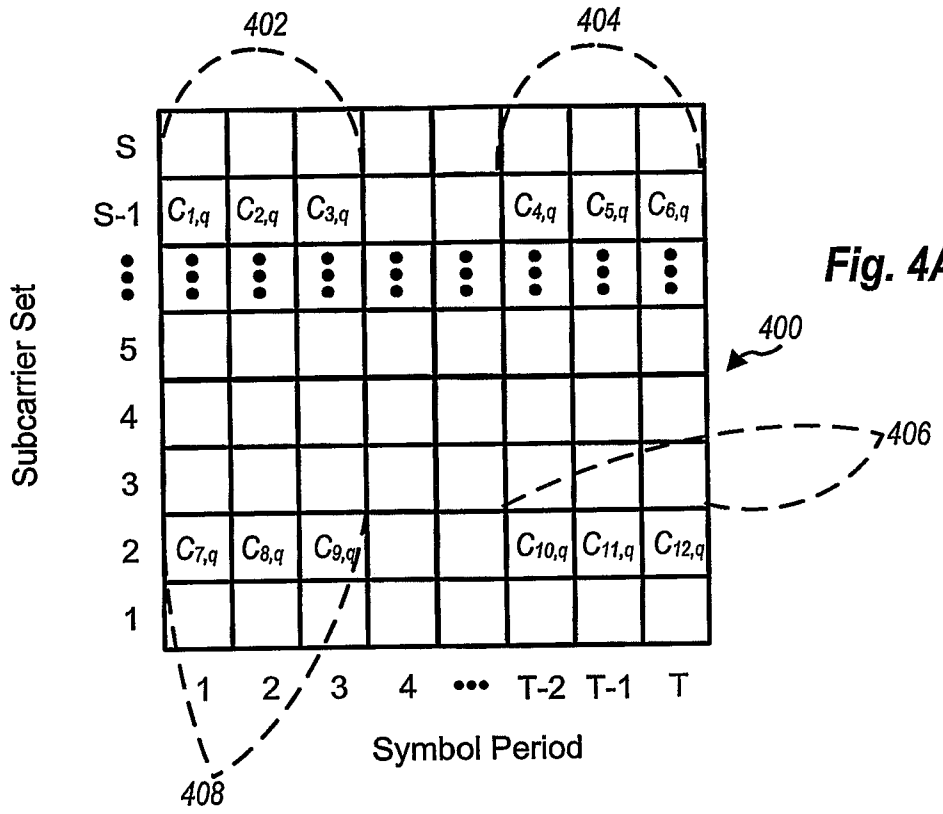

402
404
S
S-1
$C_{1,q}$ $C_{2,q}$ $C_{3,q}$ $C_{4,q}$ $C_{5,q}$ $C_{6,q}$
5
4
3
2
$C_{7,q}$ $C_{8,q}$ $C_{9,q}$ $C_{10,q}$ $C_{11,q}$ $C_{12,q}$
1
400
406
1 2 3 4 ••• T-2 T-1 T
Symbol Period
Subcarrier Set
408

Fig. 4A

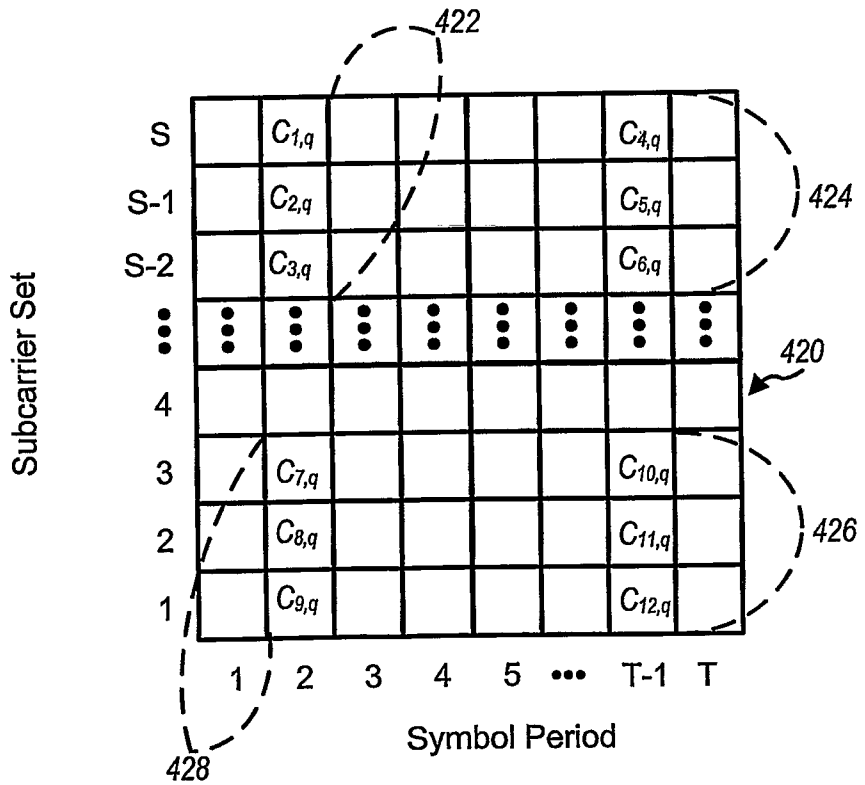

422
S
S-1
S-2
$C_{1,q}$ $C_{2,q}$ $C_{3,q}$ $C_{4,q}$ $C_{5,q}$ $C_{6,q}$
4
3
2
1
$C_{7,q}$ $C_{8,q}$ $C_{9,q}$ $C_{10,q}$ $C_{11,q}$ $C_{12,q}$
424
420
426
1 2 3 4 5 ••• T-1 T
Symbol Period
Subcarrier Set
428

Fig. 4B

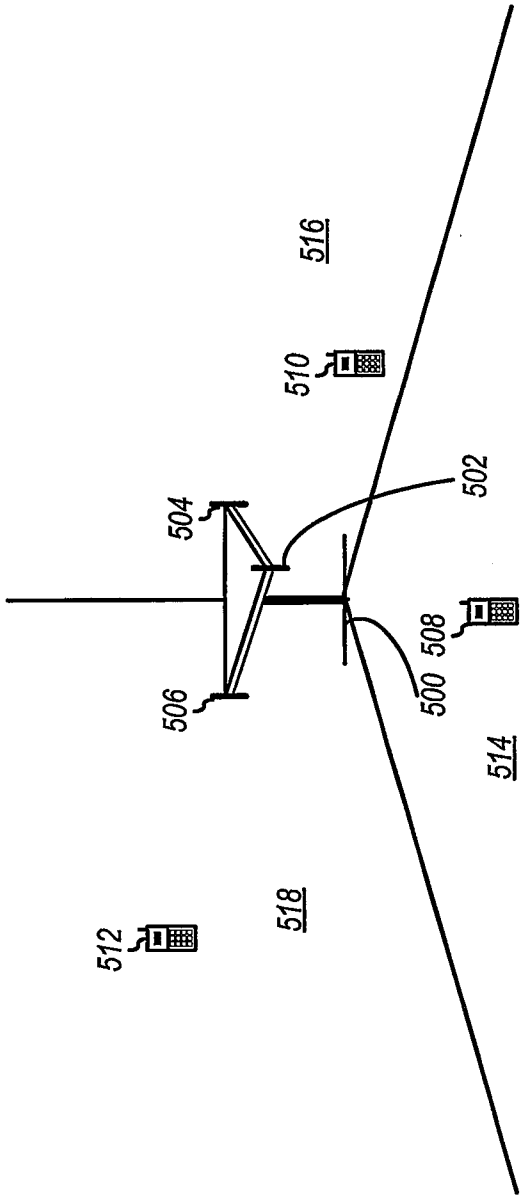


Fig. 5

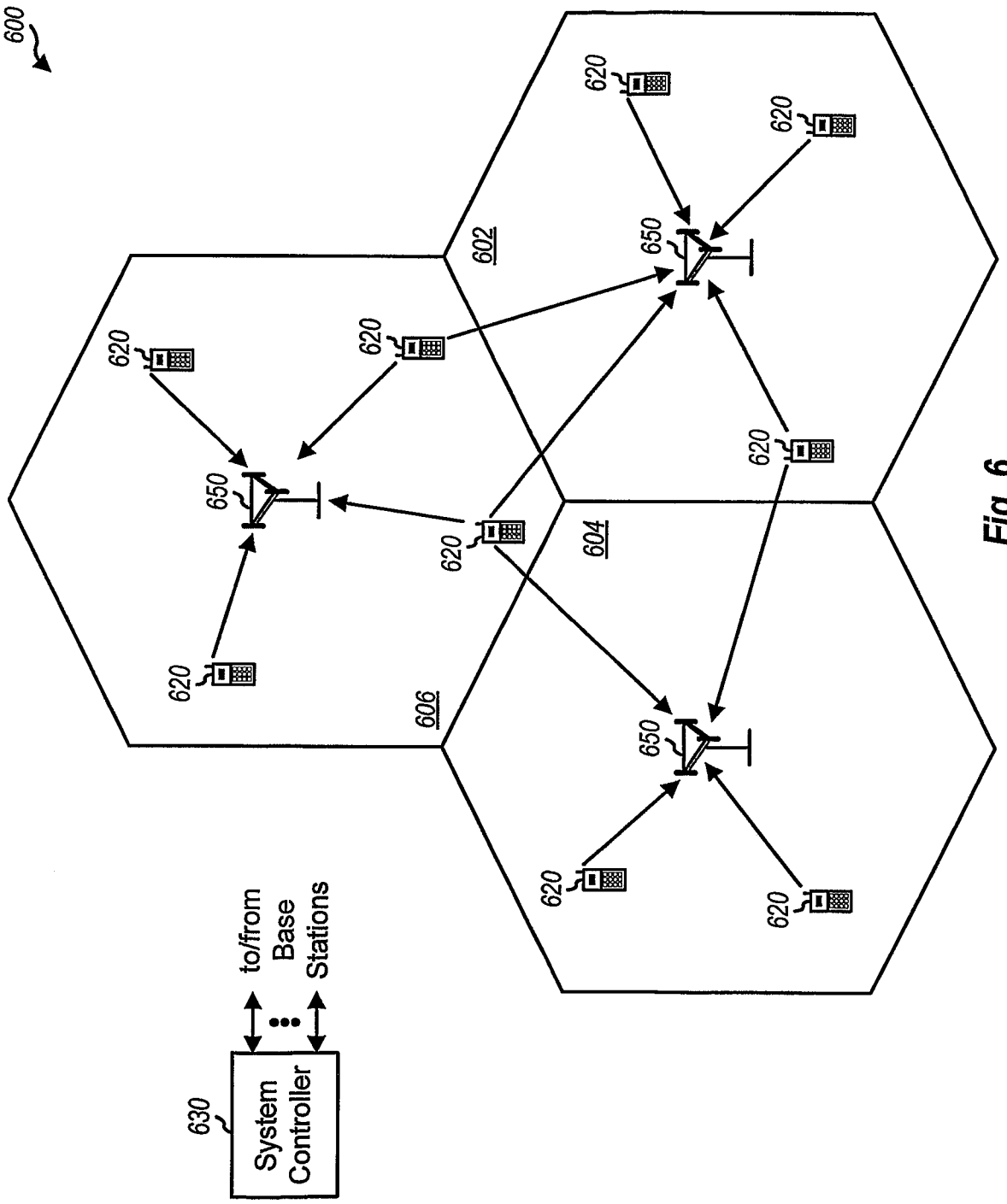

600
602
604
606
620
650
630
System Controller
to/from Base Stations

Fig. 6

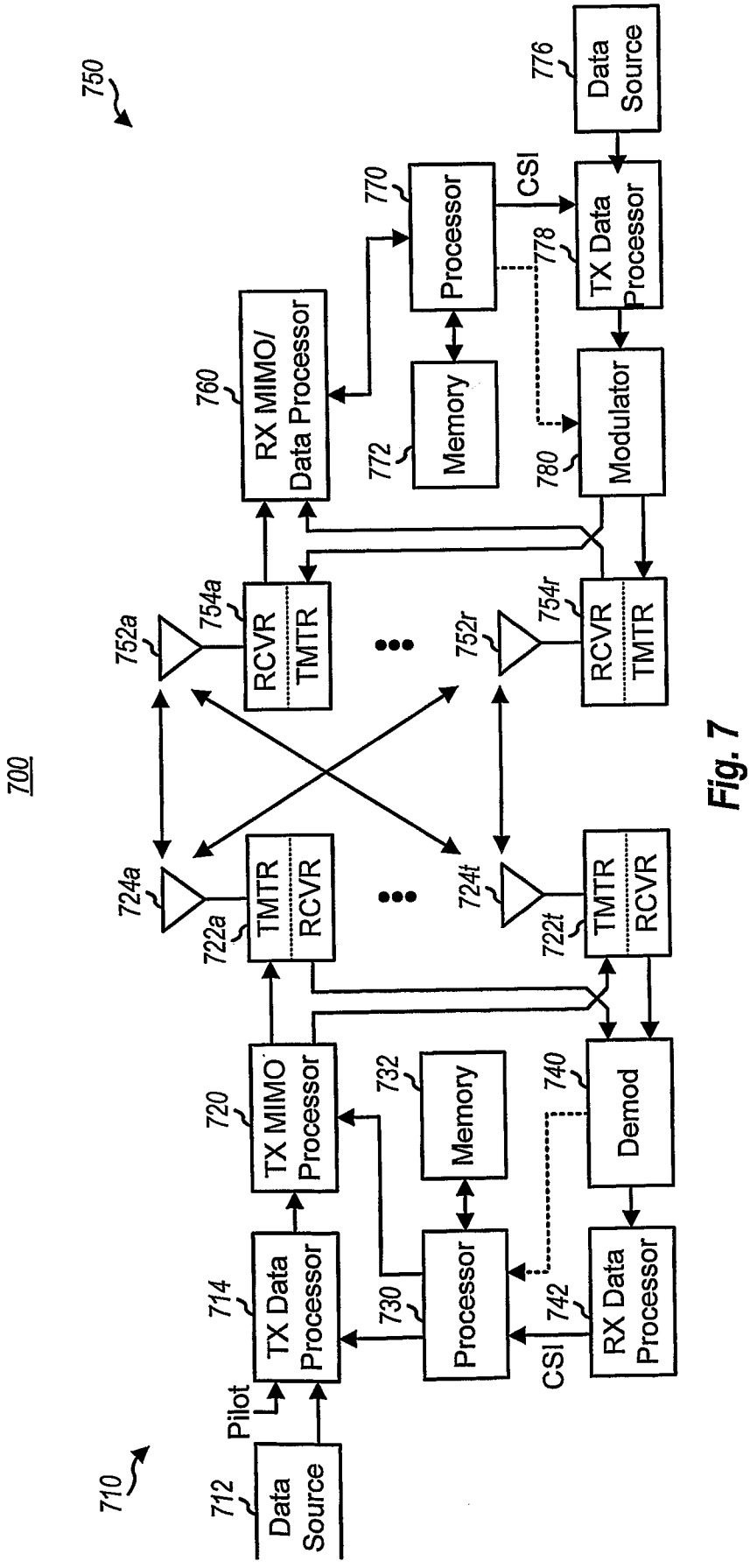

700
710
712
Data Source
Pilot
714
TX Data Processor
720
TX MIMO Processor
722a
TMTR
RCVR
724a
724t
730
Processor
732
Memory
740
Demod
742
RX Data Processor
CSI
752a
752r
754a
754r
RCVR
TMTR
760
RX MIMO/ Data Processor
770
Processor
772
Memory
776
Data Source
778
TX Data Processor
780
Modulator
CSI

Fig. 7

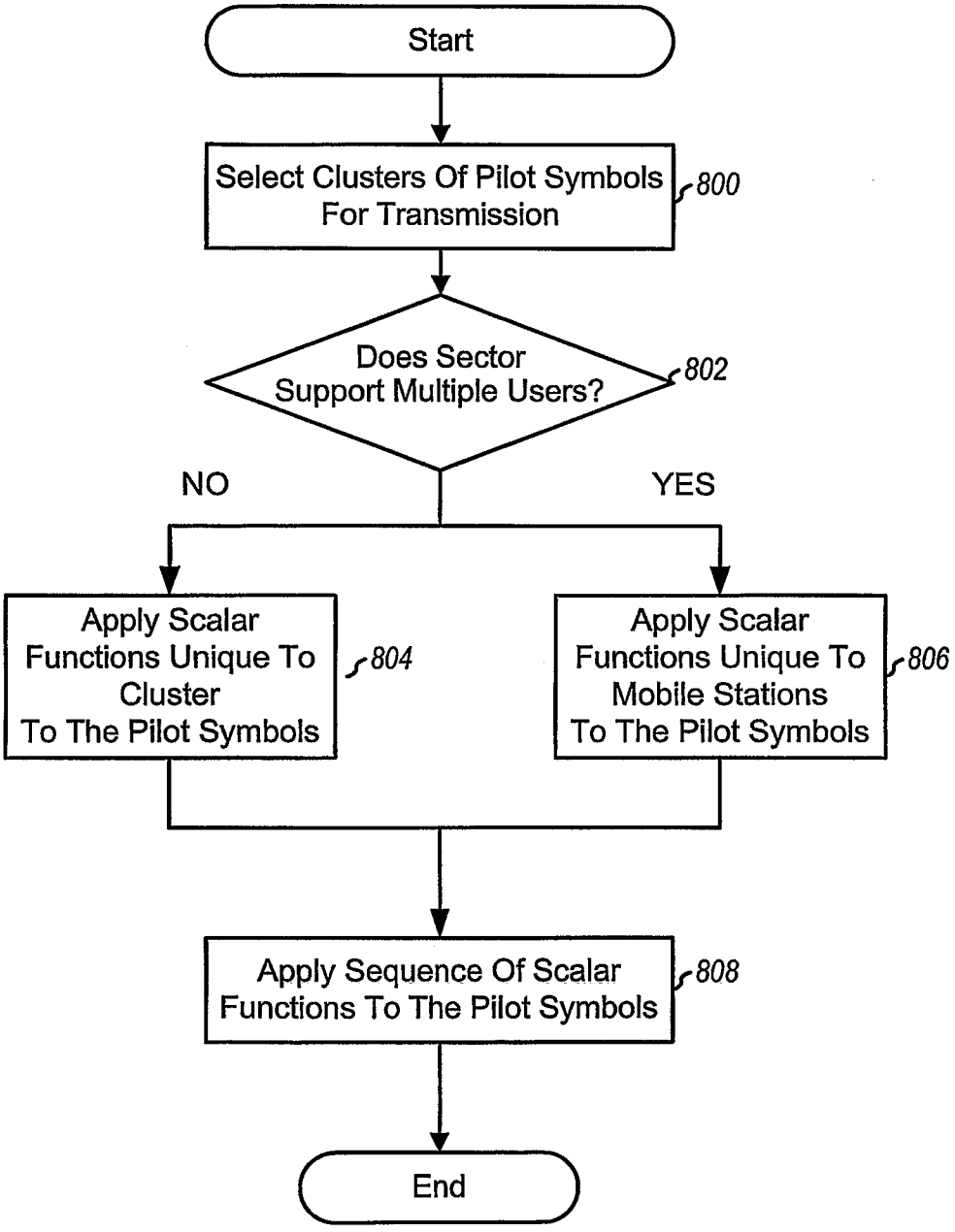

Start
Select Clusters Of Pilot Symbols For Transmission
800
Does Sector Support Multiple Users?
802
NO
YES
Apply Scalar Functions Unique To Cluster To The Pilot Symbols
804
Apply Scalar Functions Unique To Mobile Stations To The Pilot Symbols
806
Apply Sequence Of Scalar Functions To The Pilot Symbols
808
End

Fig. 8

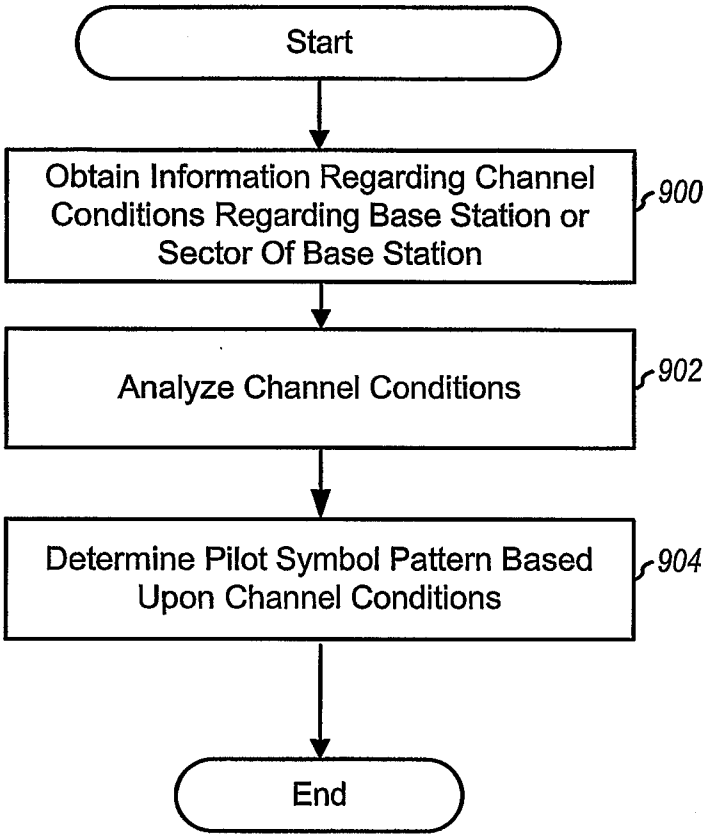

Start
Obtain Information Regarding Channel Conditions Regarding Base Station or Sector Of Base Station
900
Analyze Channel Conditions
902
Determine Pilot Symbol Pattern Based Upon Channel Conditions
904
End

Fig. 9