

FIG. 1

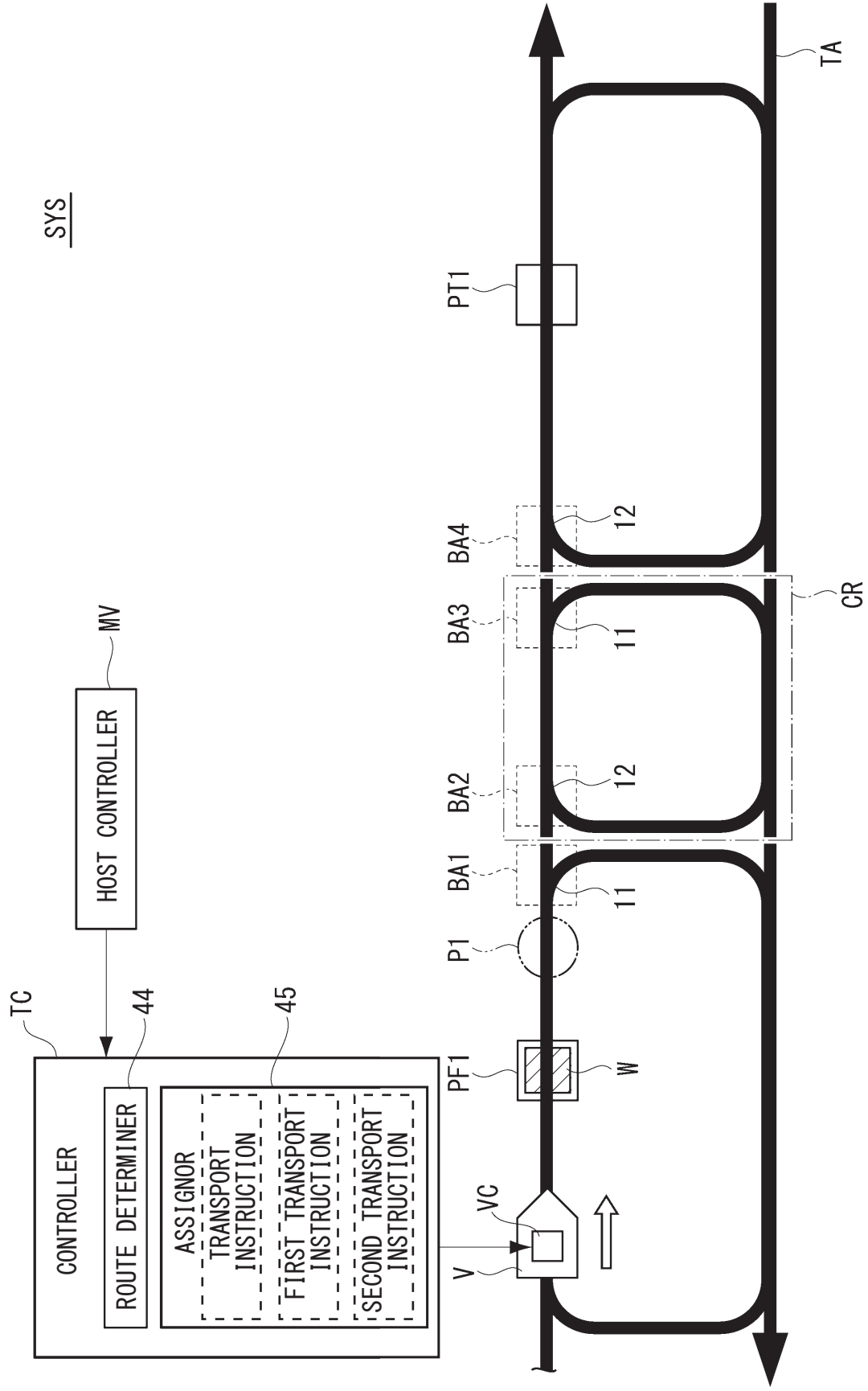


FIG. 2

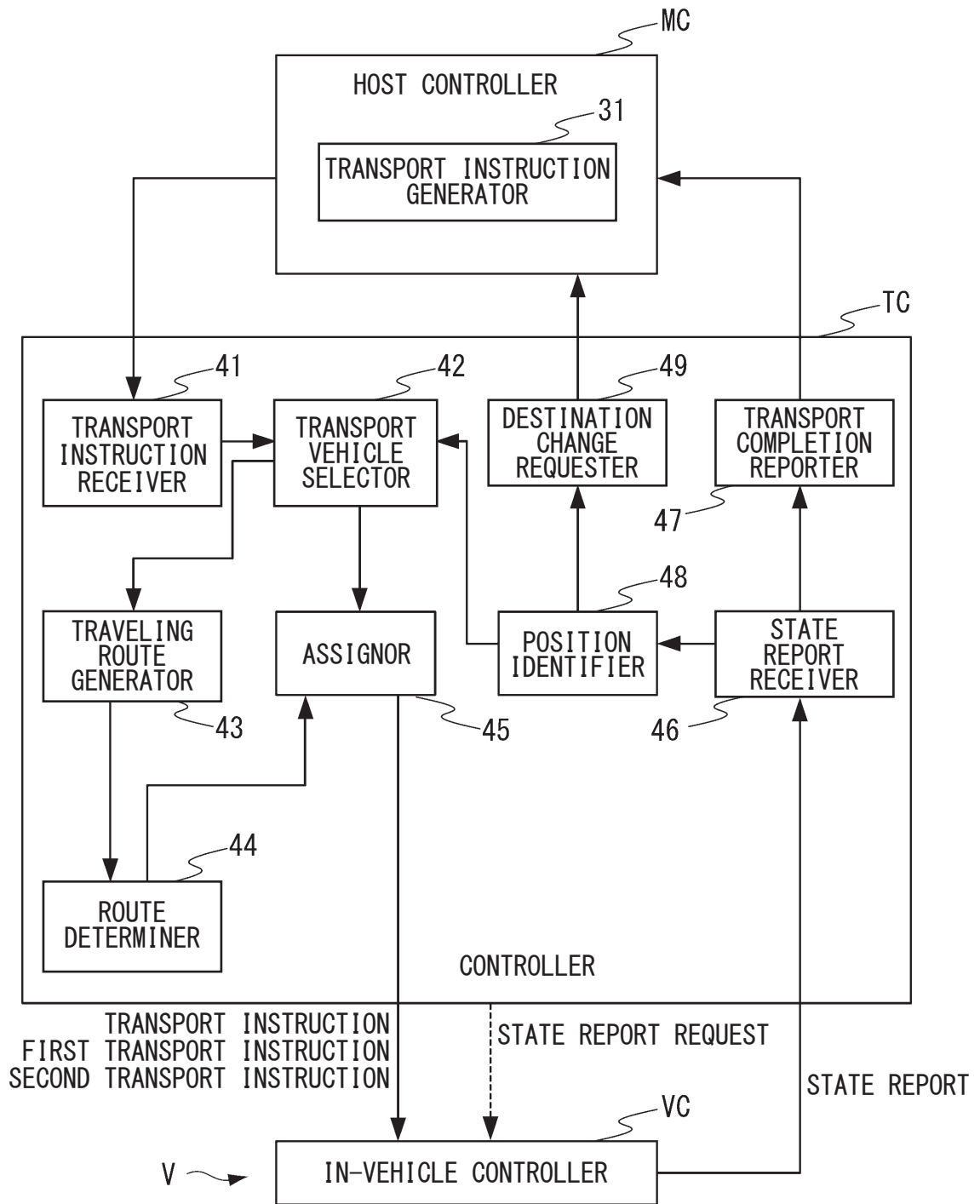


FIG. 3

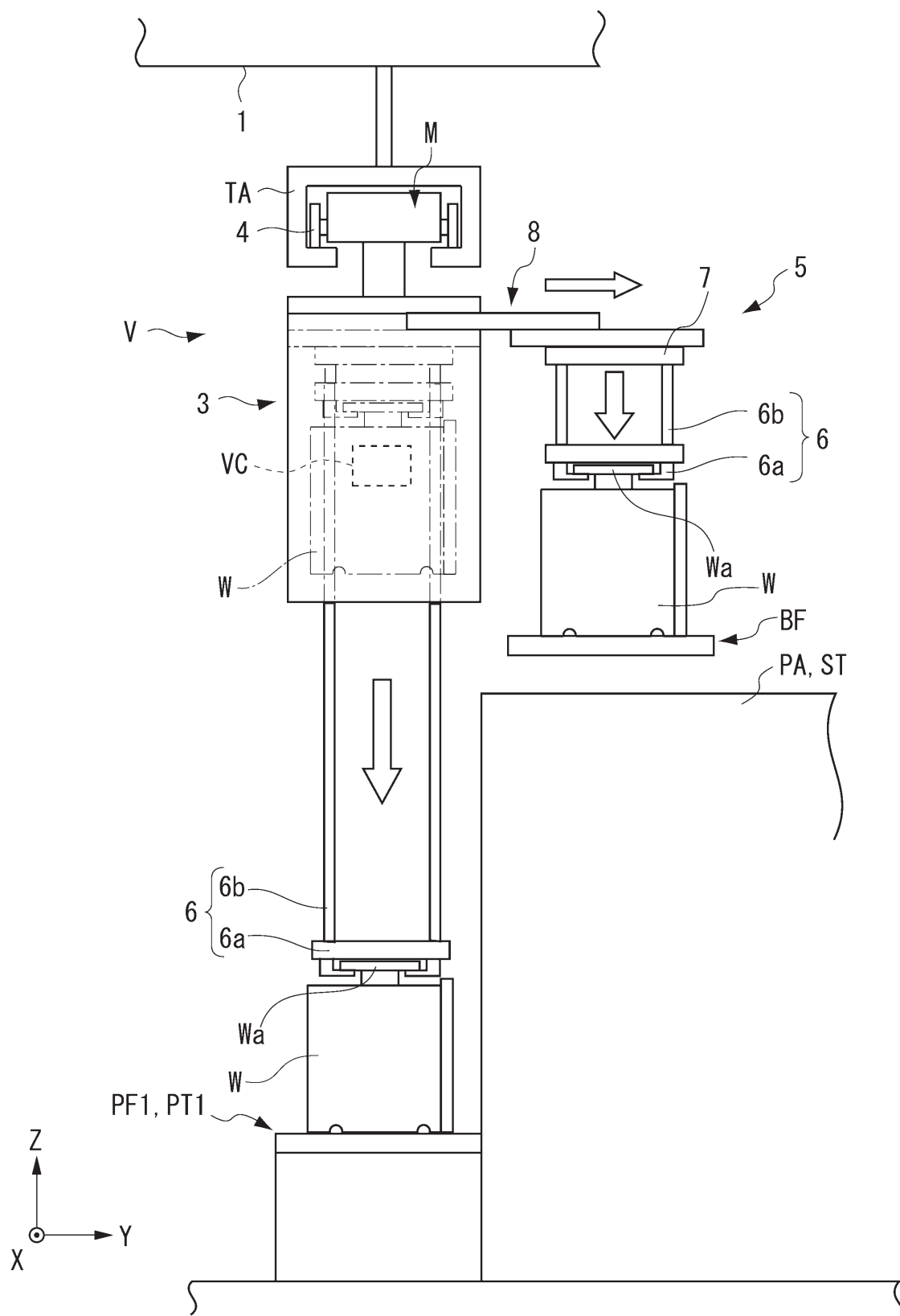


FIG. 4

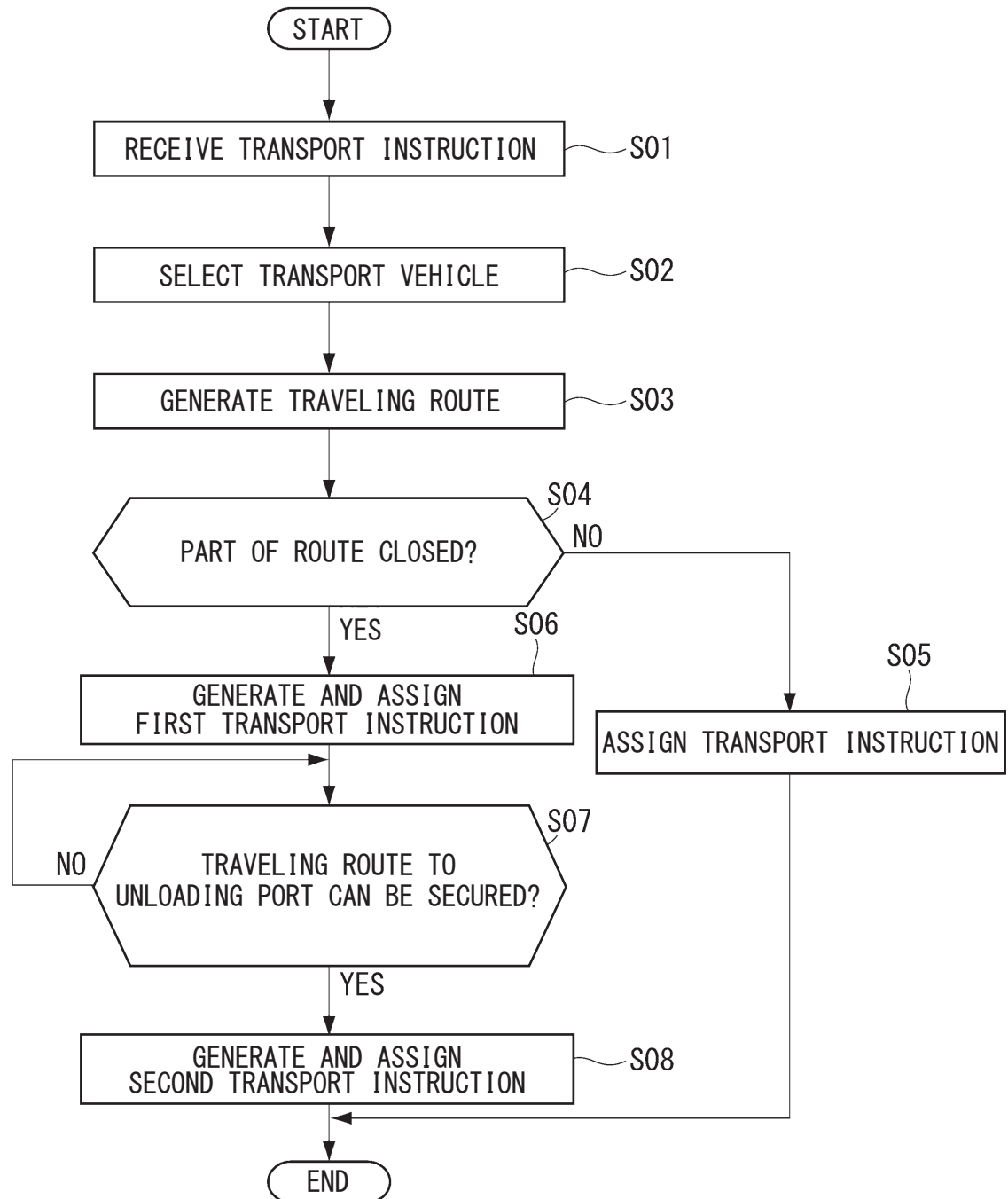


FIG. 5

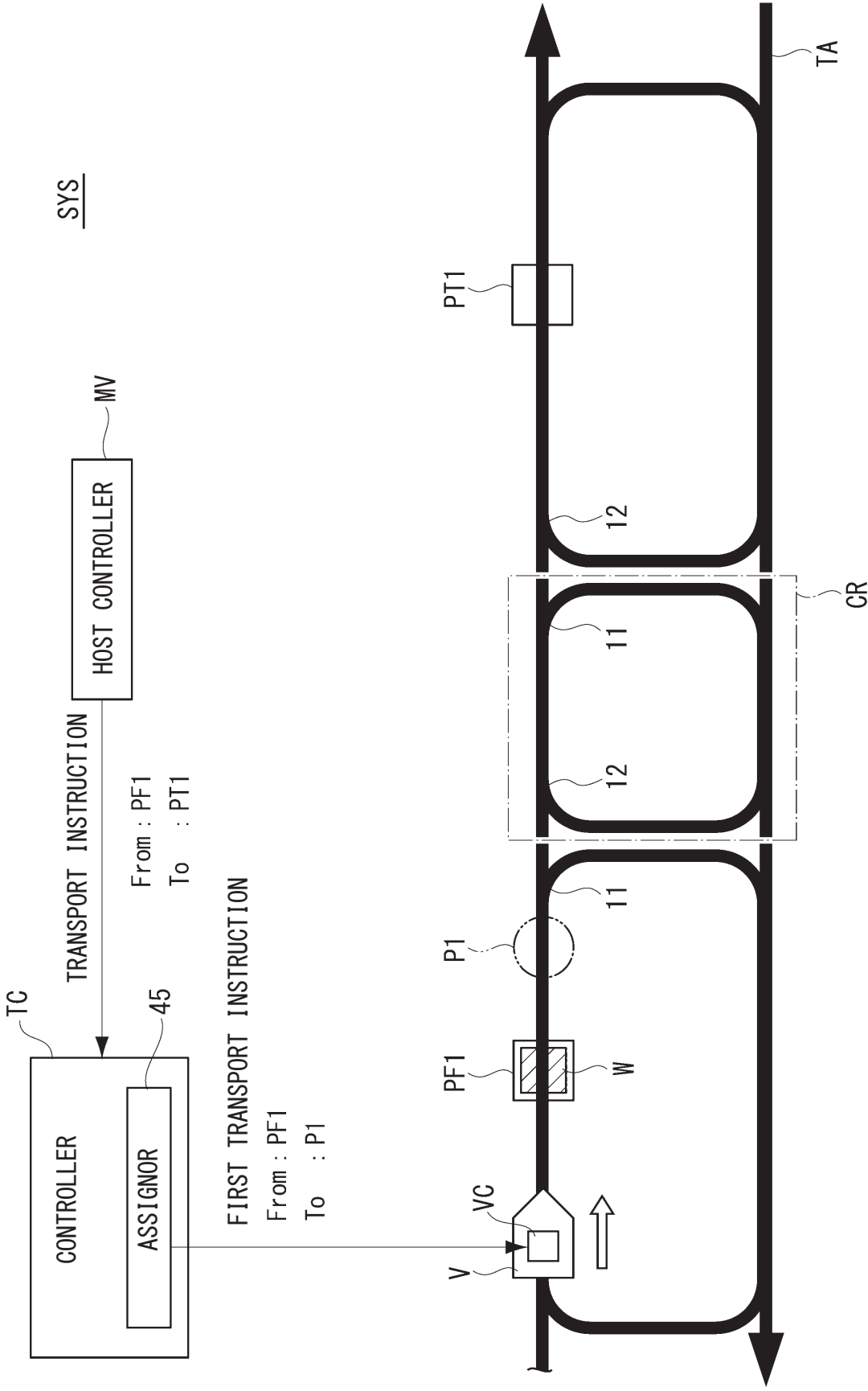


FIG. 6

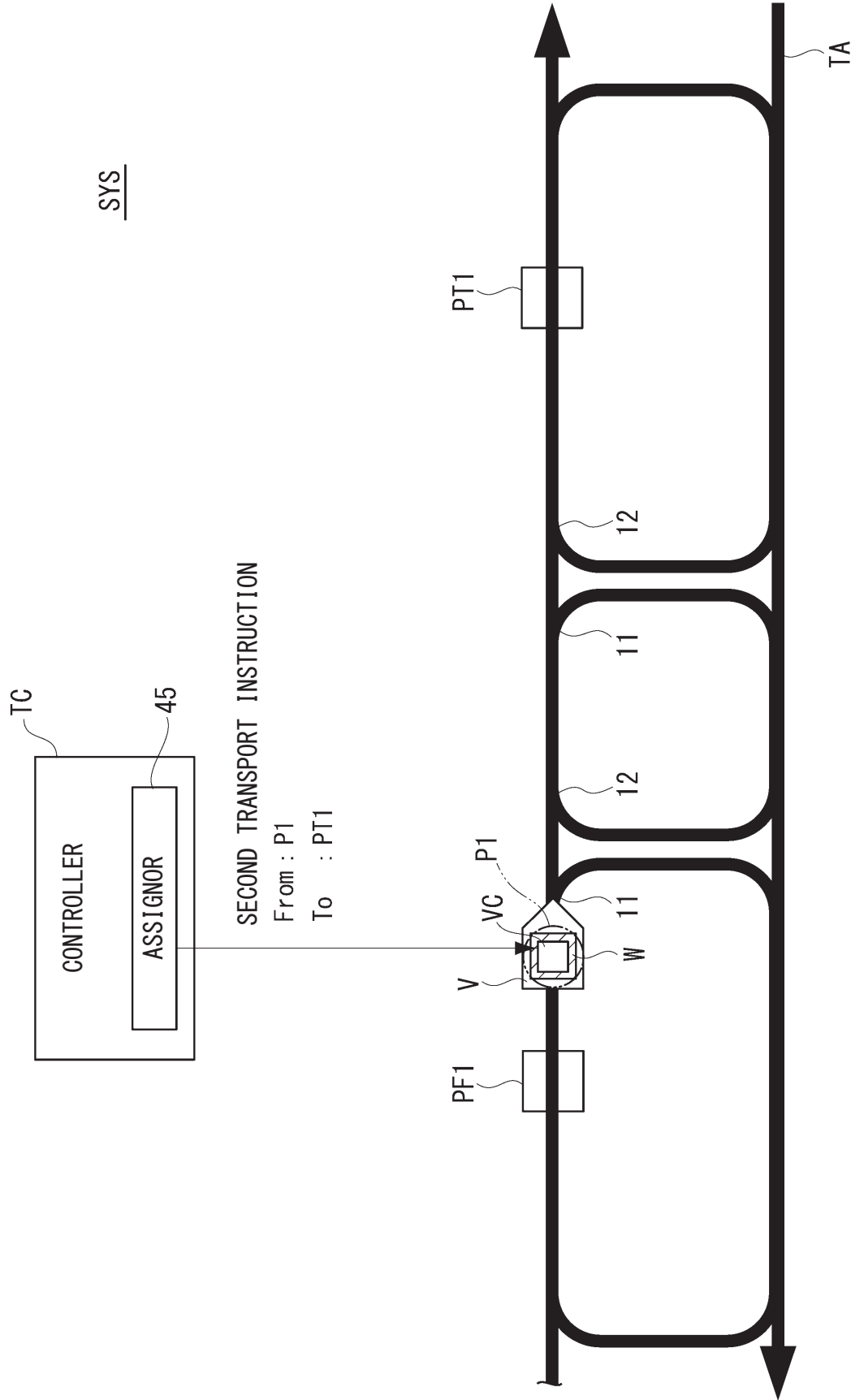


FIG. 7

SYS

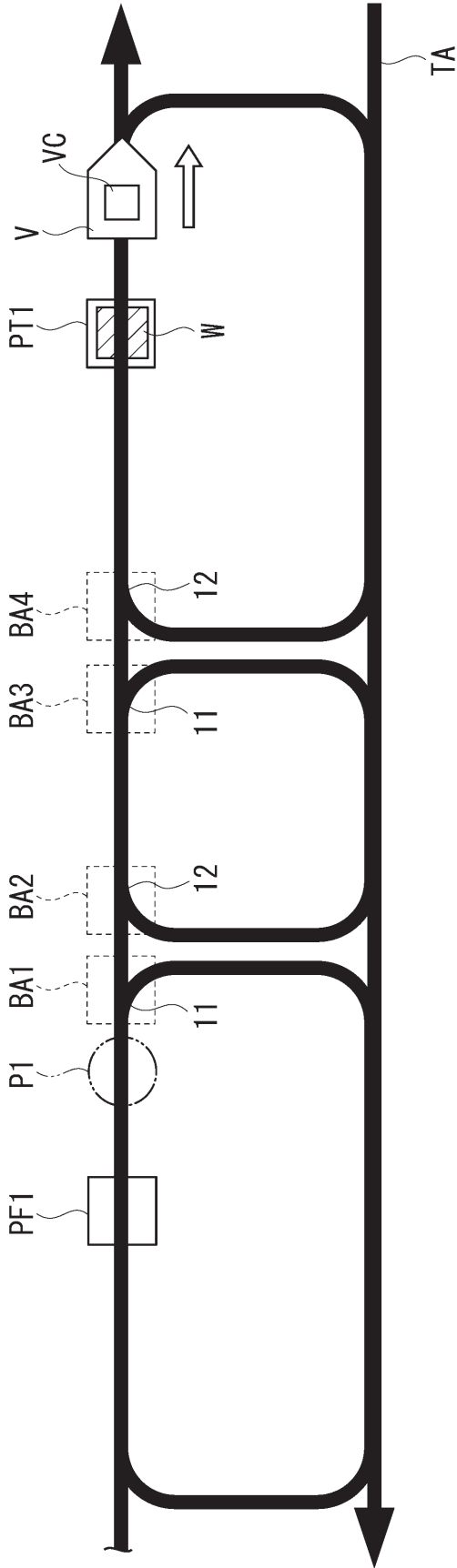


FIG. 8

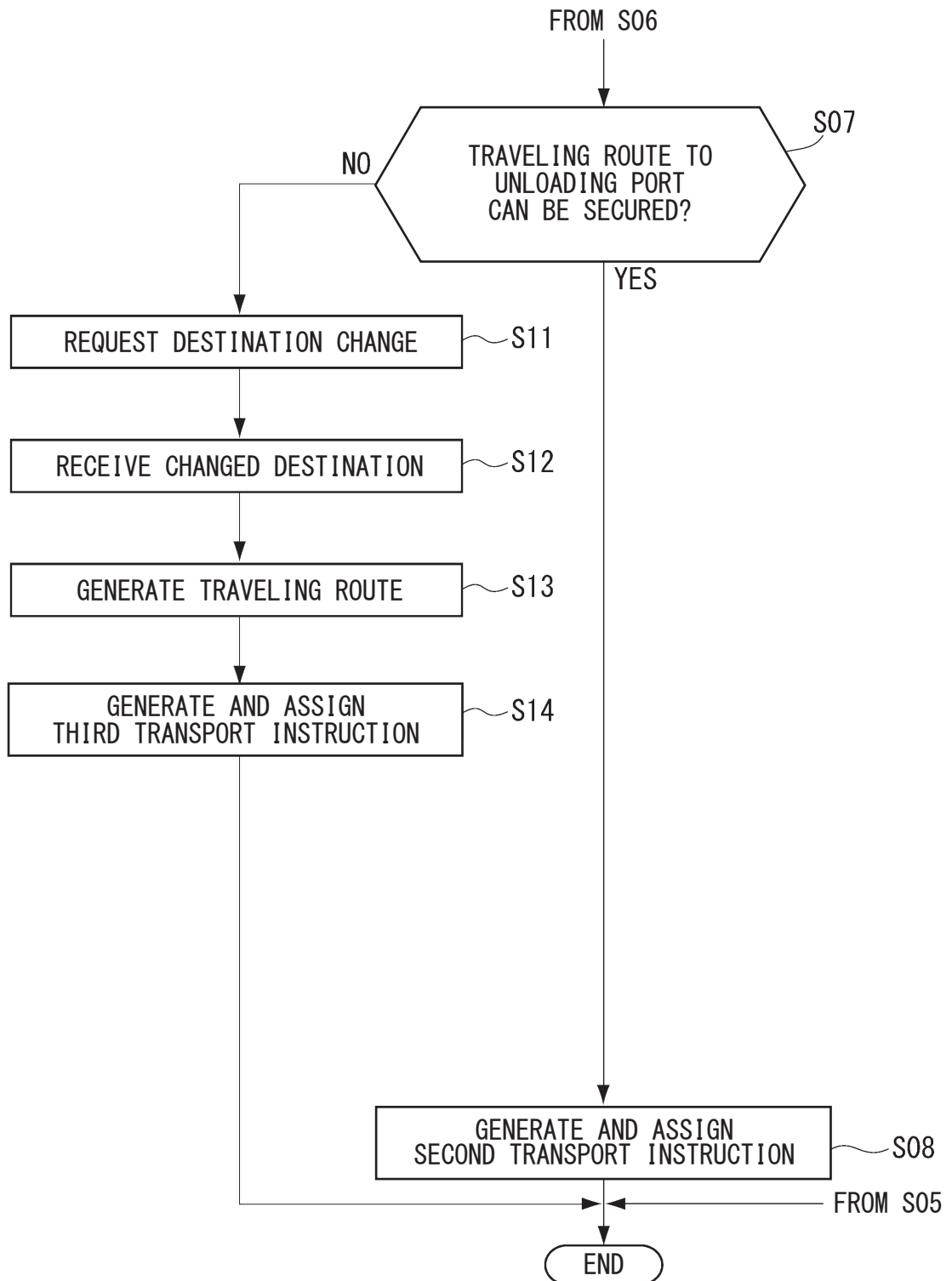


FIG. 9

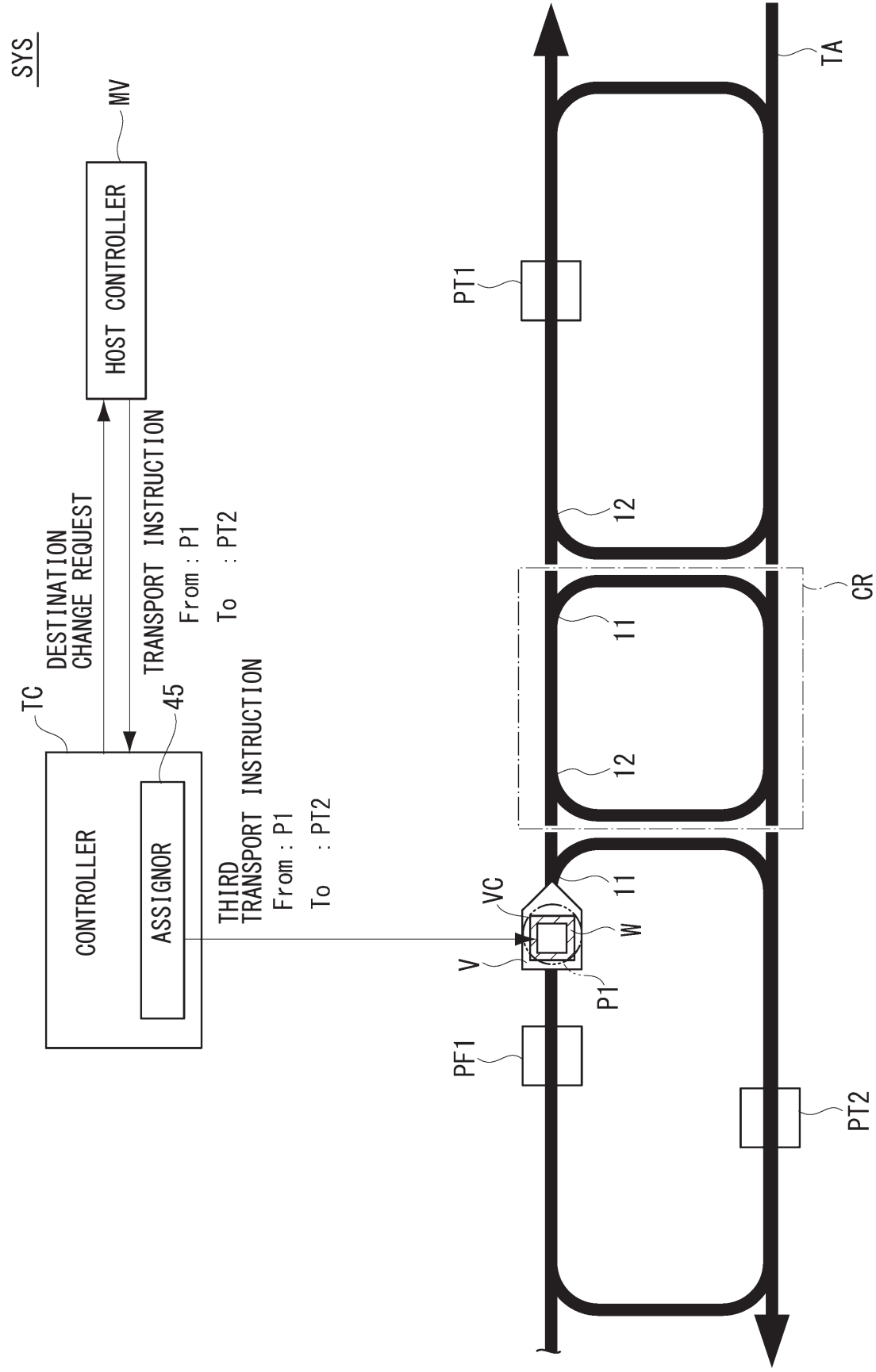


FIG. 10

SYS

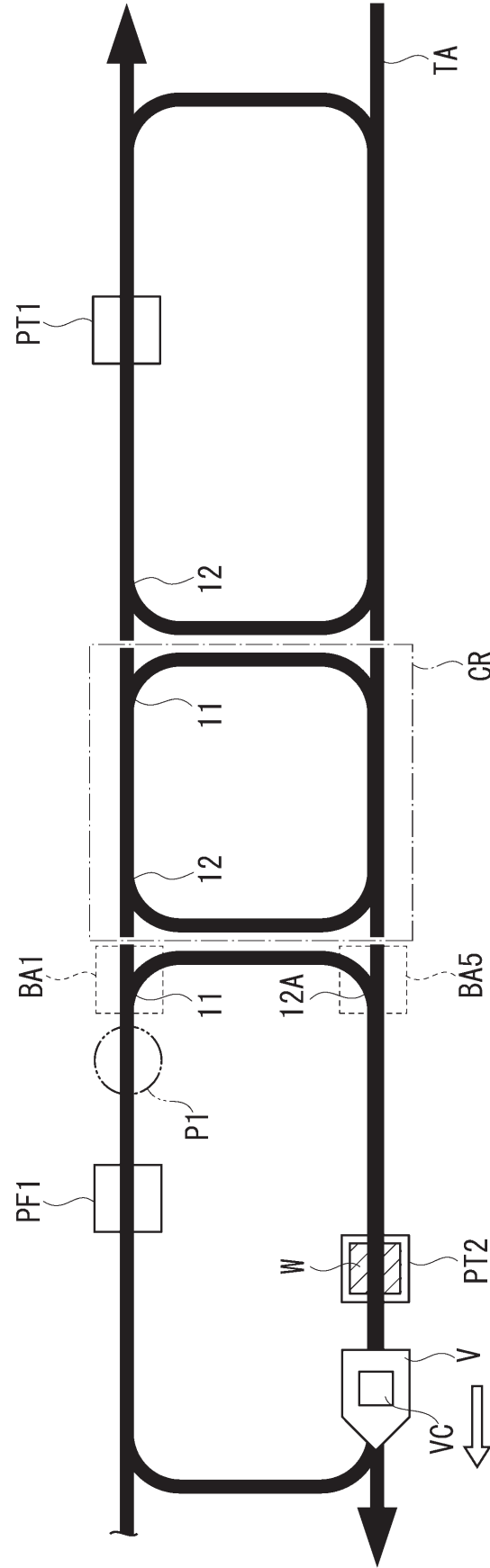


FIG. 11

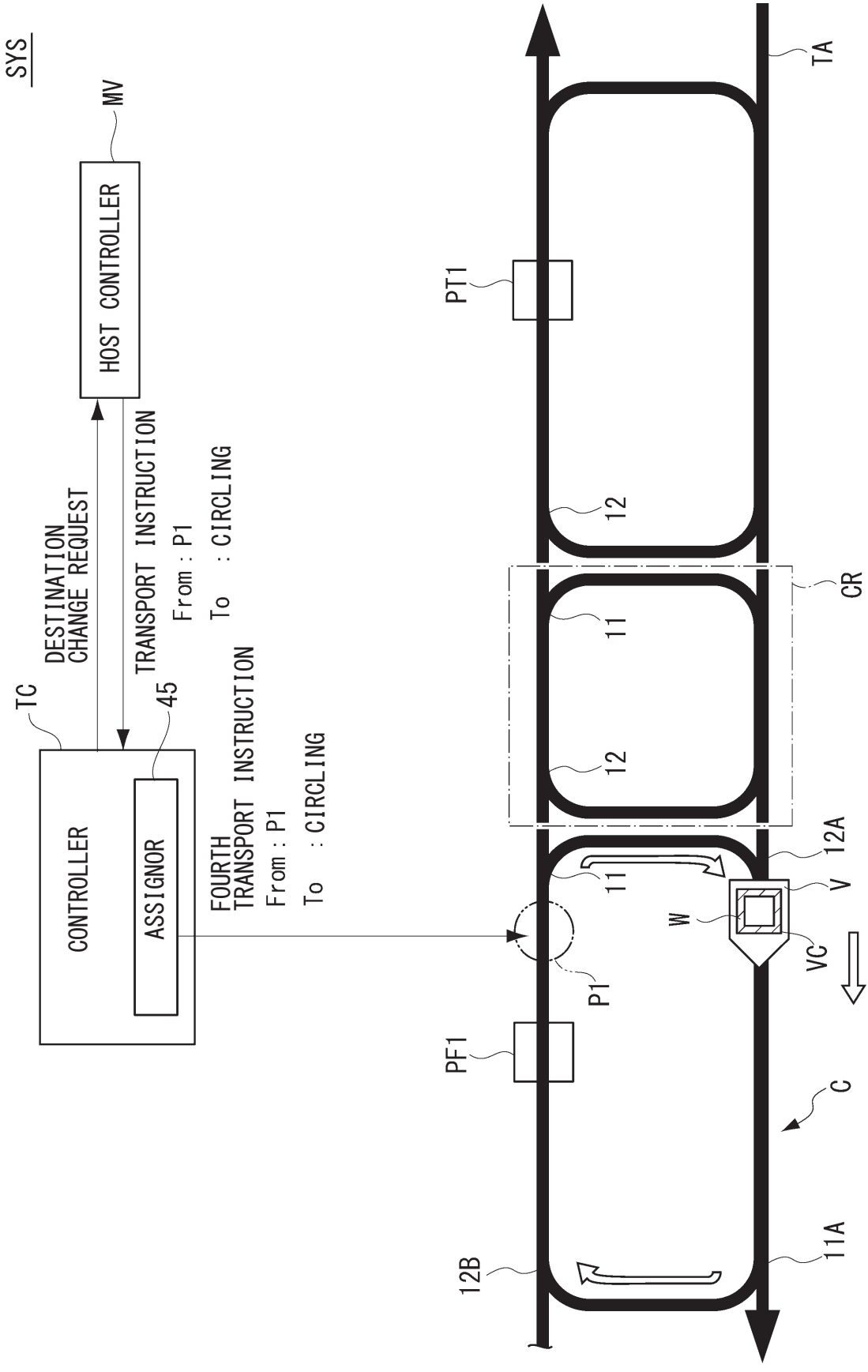


FIG. 12

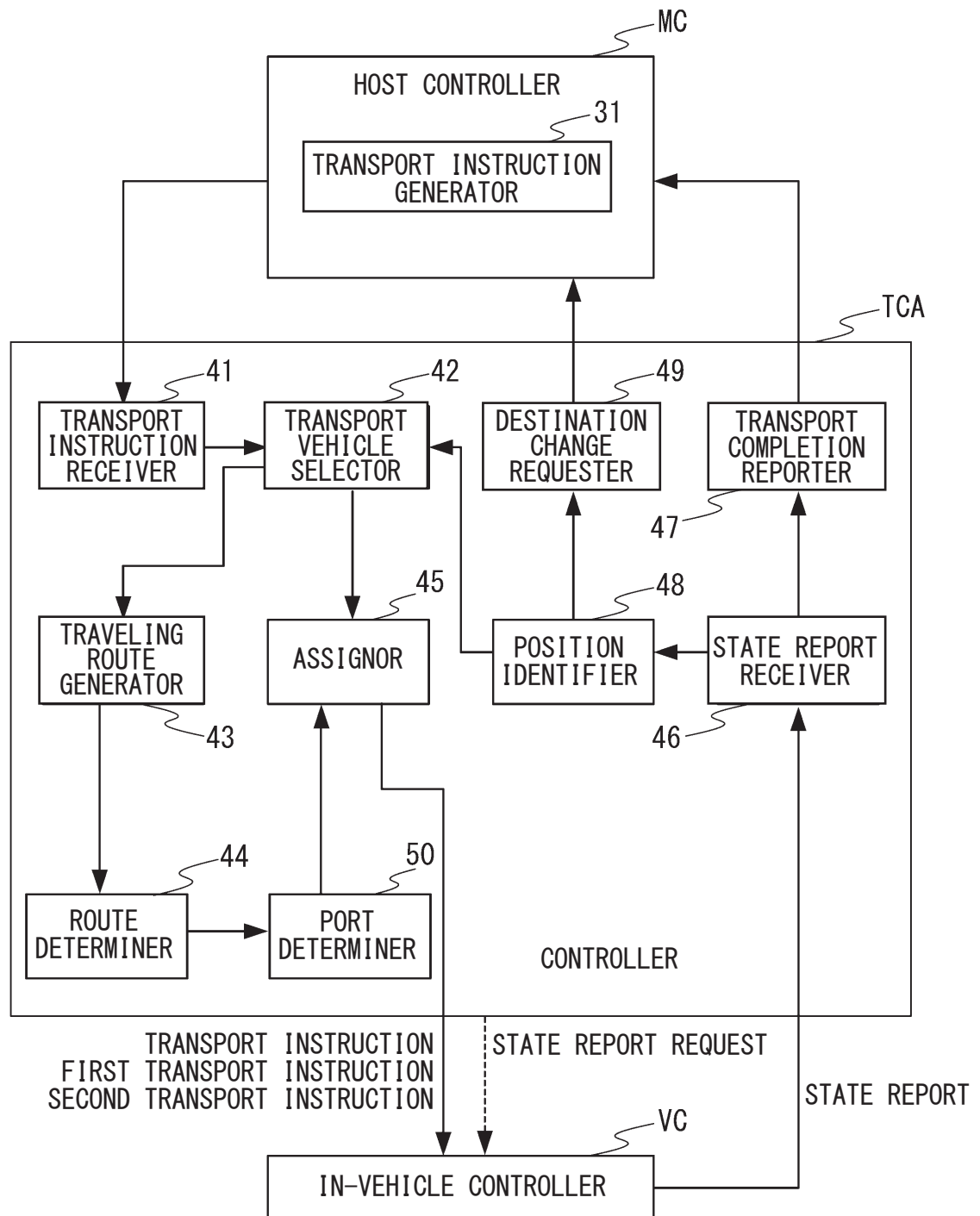


FIG. 13

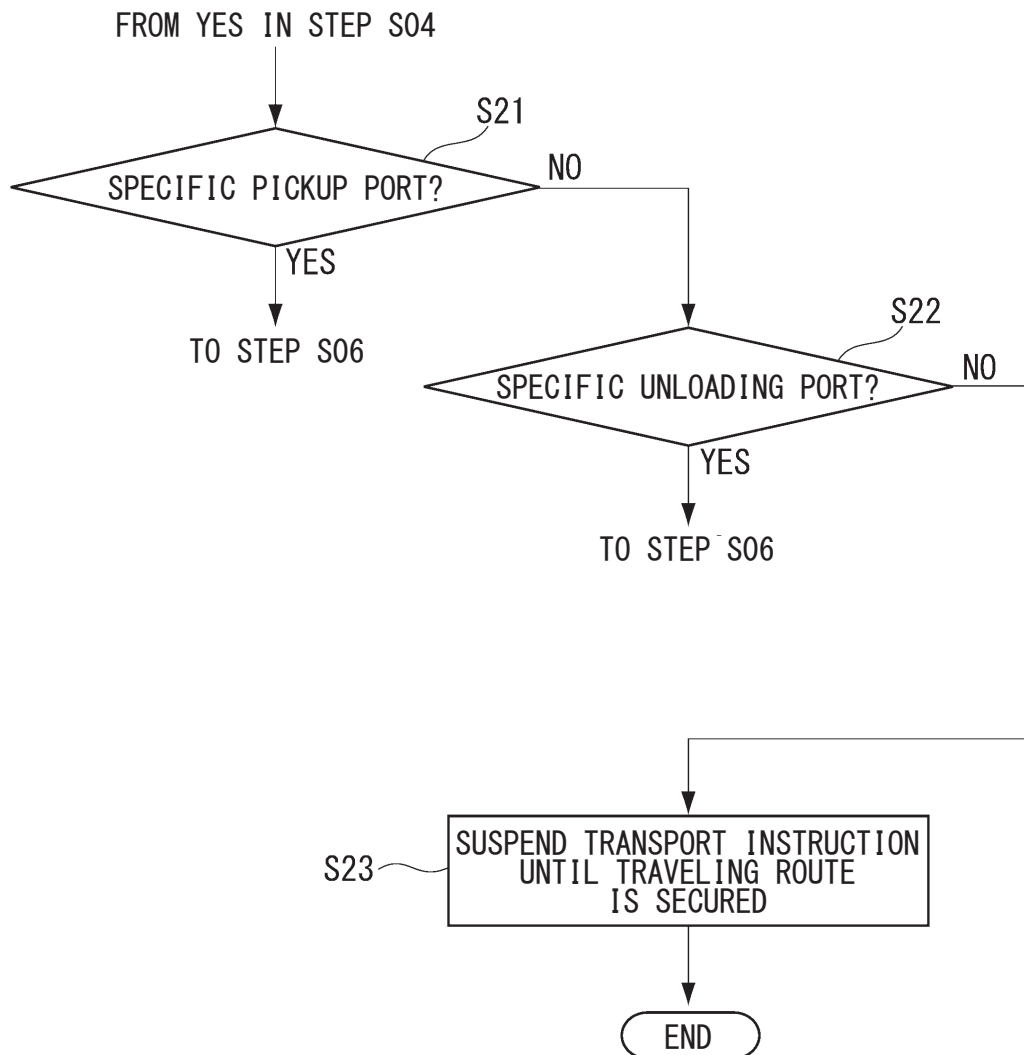


FIG. 14

| FROM TYPE                            | TO TYPE                           | FROM → TO ROUTE<br>AVAILABLE    | FROM → TO ROUTE<br>UNAVAILABLE        |
|--------------------------------------|-----------------------------------|---------------------------------|---------------------------------------|
| PROCESSING<br>APPARATUS<br>LOAD PORT | PROCESSING APPARATUS<br>LOAD PORT | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
|                                      | STOCKER LOAD PORT                 | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
|                                      | BUFFER                            | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
| STOCKER<br>LOAD PORT                 | PROCESSING APPARATUS<br>LOAD PORT | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
|                                      | STOCKER LOAD PORT                 | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
|                                      | BUFFER                            | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
| BUFFER                               | PROCESSING APPARATUS<br>LOAD PORT | ASSIGN<br>TRANSPORT INSTRUCTION | ASSIGN FIRST<br>TRANSPORT INSTRUCTION |
|                                      | STOCKER LOAD PORT                 | ASSIGN<br>TRANSPORT INSTRUCTION | SUSPEND<br>TRANSPORT INSTRUCTION      |
|                                      | BUFFER                            | ASSIGN<br>TRANSPORT INSTRUCTION | SUSPEND<br>TRANSPORT INSTRUCTION      |

FIG. 15

