

## DRAWINGS

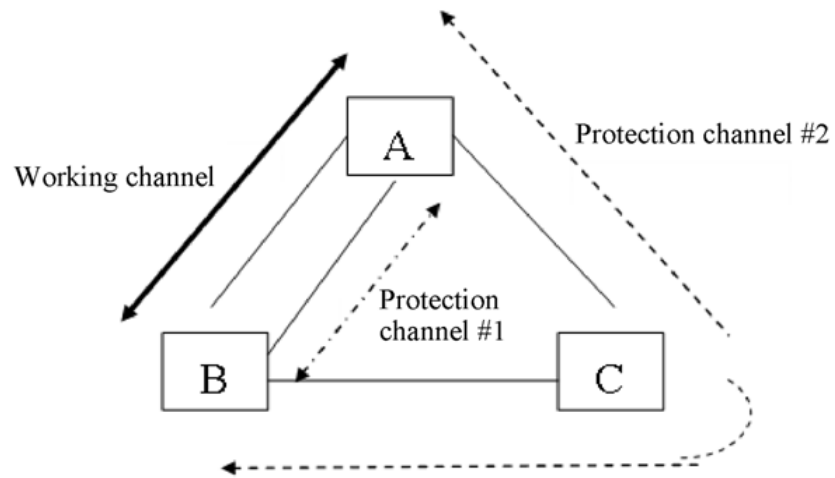


FIG. 1

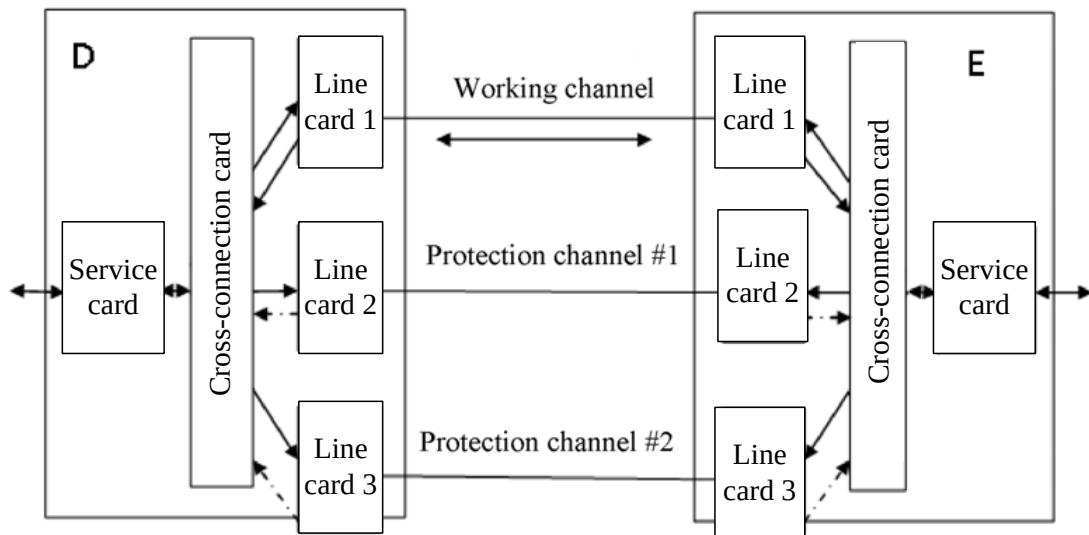


FIG. 2

FIG. 4

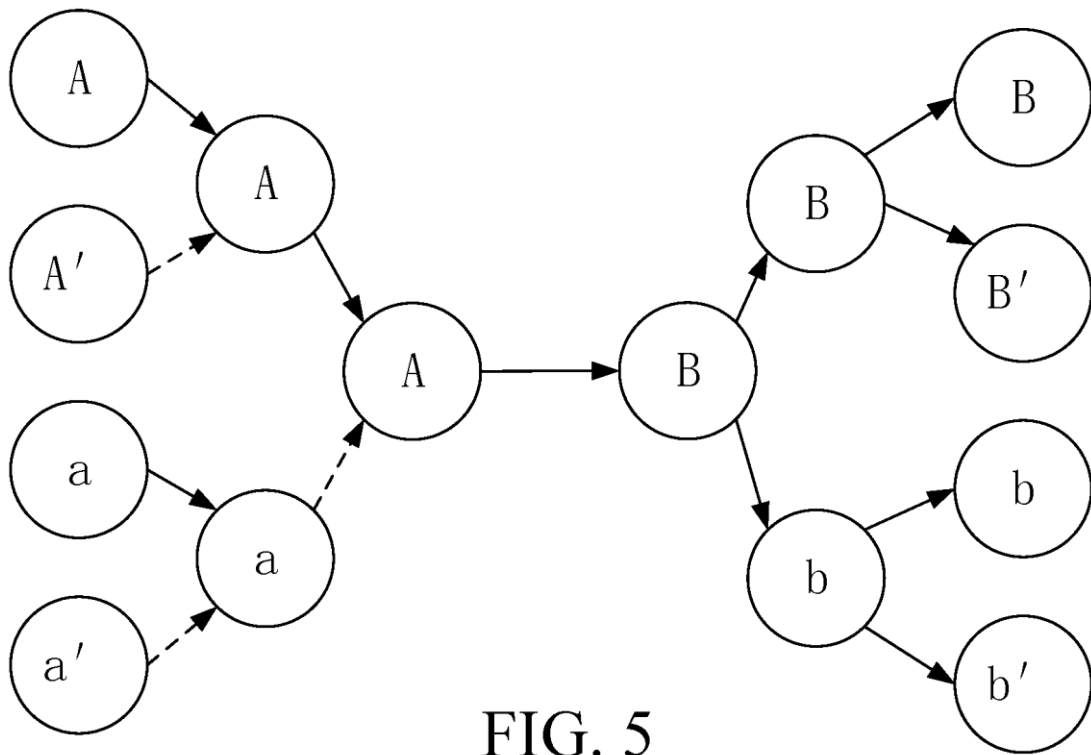


FIG. 5

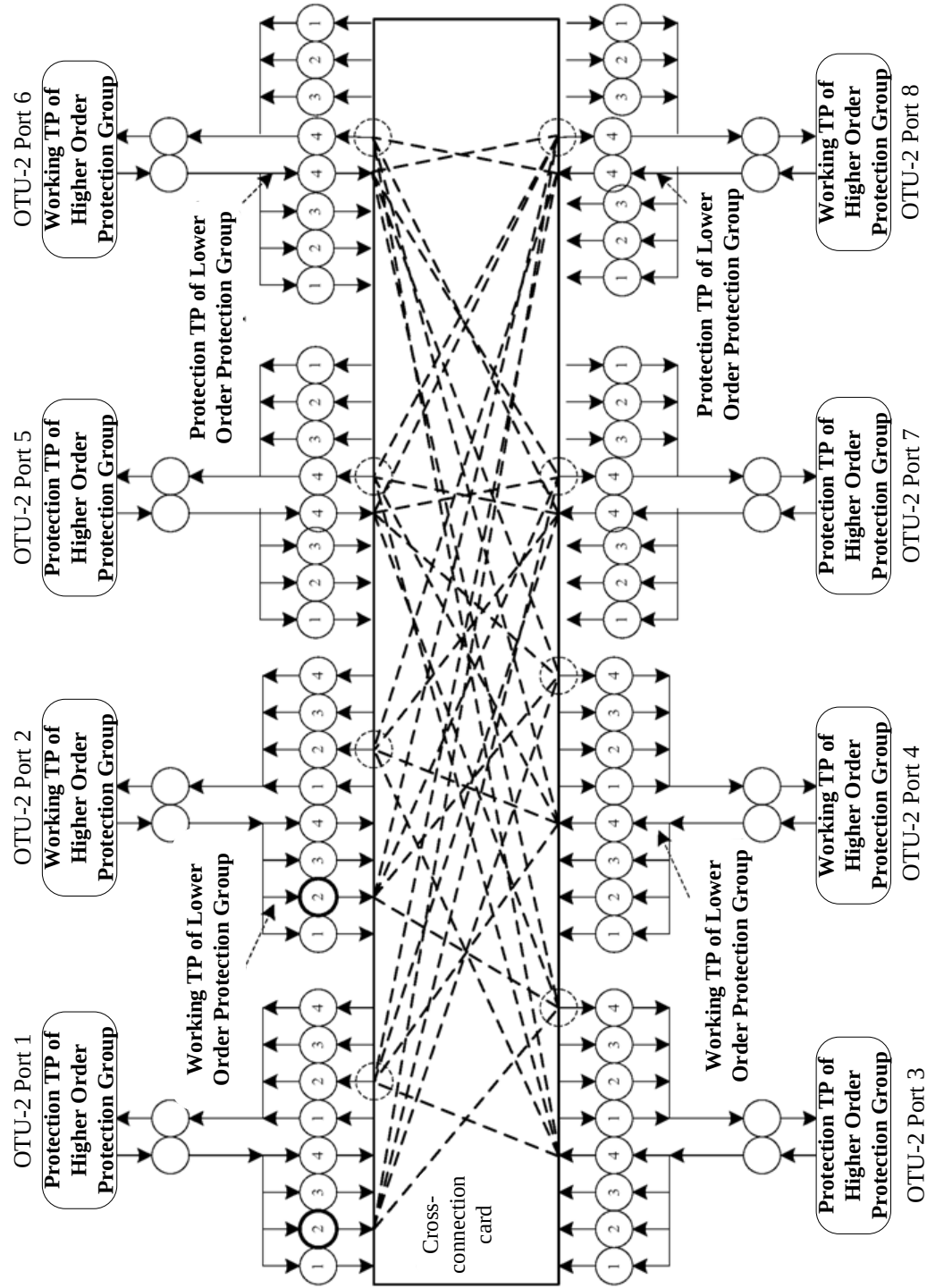


FIG. 6

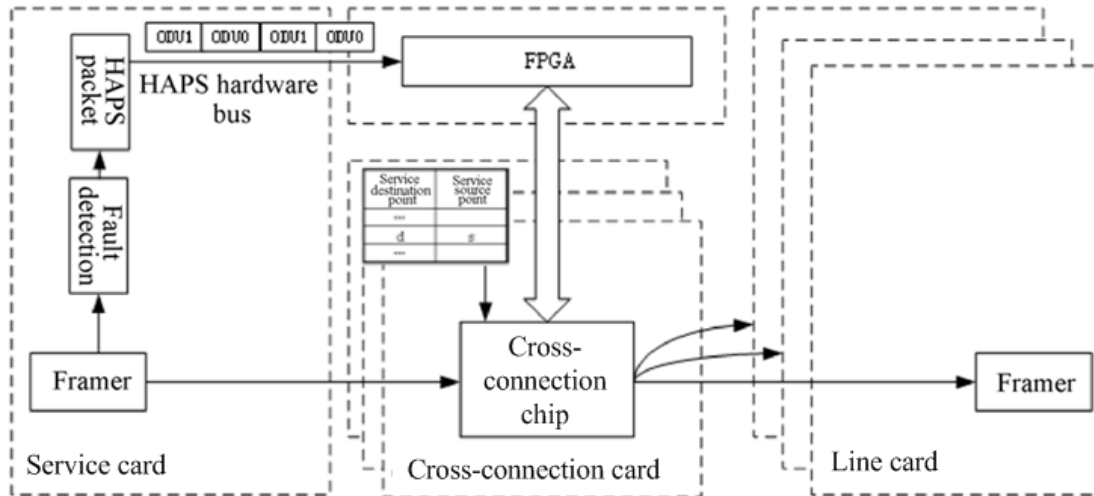


FIG. 7

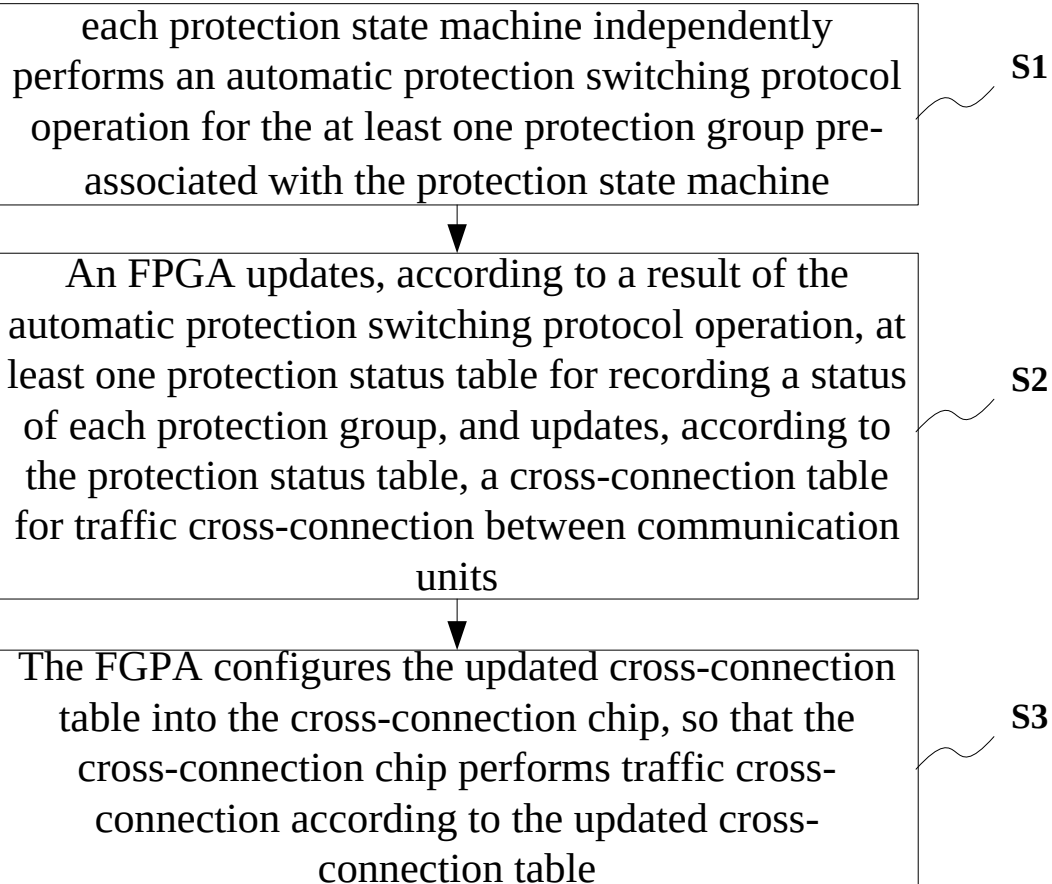


FIG.8

| Cross-connection No. | Source point | Destination point |
|----------------------|--------------|-------------------|
| 1                    | A            | B                 |
| 2                    | B            | A                 |
| 3                    |              |                   |
|                      |              |                   |

FIG. 9

| Lower order protection group No. | Working channel | Protection channel | Switching status   |
|----------------------------------|-----------------|--------------------|--------------------|
| 1                                | A               | a                  | Working channel    |
| 2                                | B               | b                  | Protection channel |
| 3                                | .....           | .....              | .....              |
| 4                                | .....           | .....              | .....              |

FIG. 10

| Higher order protection group No. | Working channel | Protection channel | Switching status   |
|-----------------------------------|-----------------|--------------------|--------------------|
| 1                                 | A               | A'                 | Working channel    |
| 2                                 | a               | a'                 | Protection channel |
| 3                                 | B               | B'                 | Protection channel |
| 4                                 | b               | b'                 | Working channel    |

FIG. 11

| Cross-connection table |              | Lower order protection status table |                 |                    |                    | Higher order protection status table |                 |                    |                  | Operation result        |                    |
|------------------------|--------------|-------------------------------------|-----------------|--------------------|--------------------|--------------------------------------|-----------------|--------------------|------------------|-------------------------|--------------------|
| Destination point      | Source point | Lower order protection group No.    | Working channel | Protection channel | Switching status   | Higher order protection group No.    | Working channel | Protection channel | Switching status | Logic destination point | Logic source point |
| A                      | B            | 1                                   | A               | a                  | Working channel    | 1                                    | A               | A'                 | Working channel  | A                       | b                  |
| .....                  | .....        | 2                                   | B               | b                  | Protection channel | 4                                    | b               | b'                 | Working channel  | .....                   | .....              |

FIG. 12