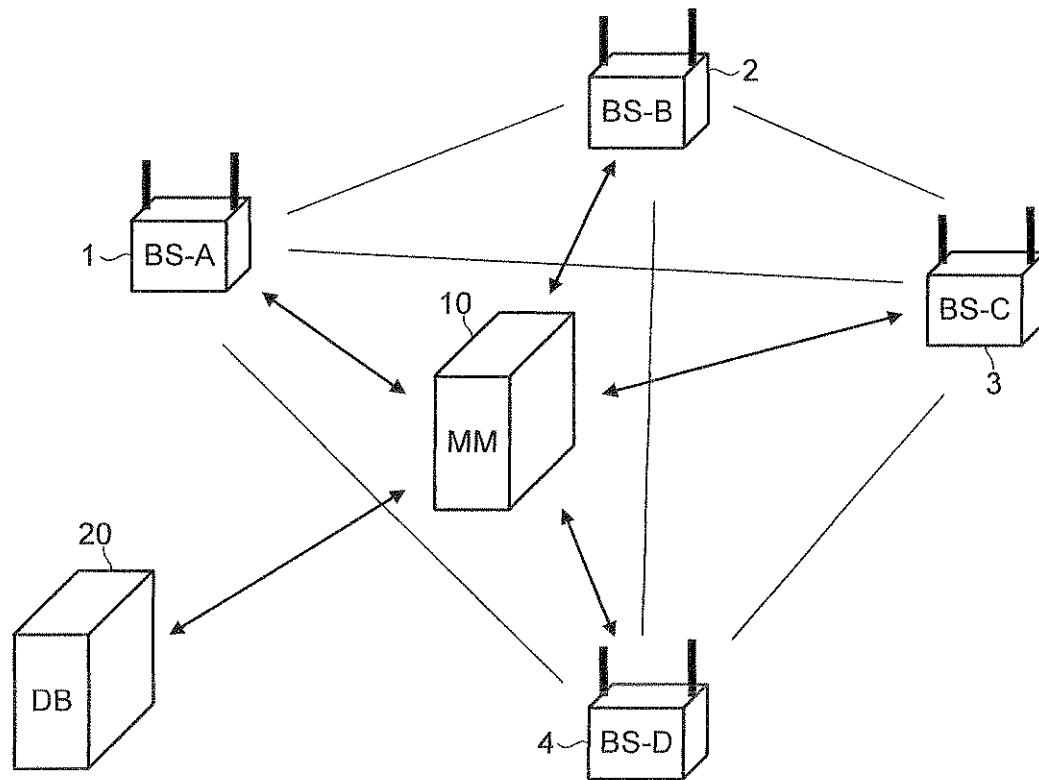


FIG. 1



—— LINK THAT CAN BE ESTABLISHED

FIG. 2

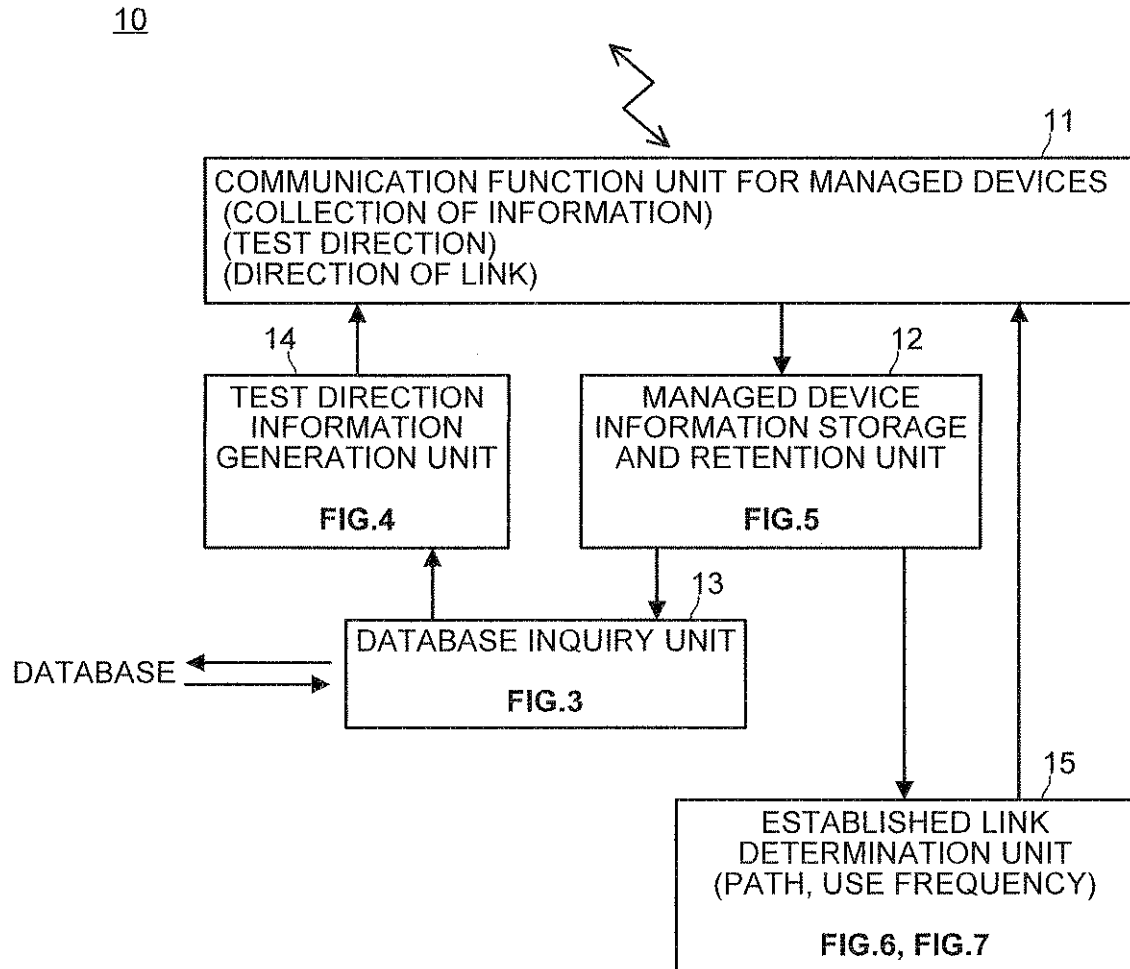


FIG. 3

| MANAGED DEVICE | AVAILABLE (EFFECTIVE) FREQUENCY                |
|----------------|------------------------------------------------|
| A              | a (A PLURALITY OF FREQUENCIES SOMETIMES EXIST) |
| B              | b (SAME AS ABOVE)                              |
| C              | c (SAME AS ABOVE)                              |
| D              | d (SAME AS ABOVE)                              |

FIG. 4

| LINK PAIR                                                                                     | PAIR AVAILABLE FREQUENCY                              |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------|
| A-B                                                                                           | $(a \cap b)_1, (a \cap b)_2, \dots, (a \cap b)_{nAB}$ |
| A-C                                                                                           | $(a \cap c)_1, (a \cap c)_2, \dots, (a \cap c)_{nAC}$ |
| A-D                                                                                           | $(a \cap d)_1, (a \cap d)_2, \dots, (a \cap d)_{nAD}$ |
| B-C                                                                                           | $(b \cap c)_1, (b \cap c)_2, \dots, (b \cap c)_{nBC}$ |
| B-D                                                                                           | $(b \cap d)_1, (b \cap d)_2, \dots, (b \cap d)_{nBD}$ |
| C-D                                                                                           | $(c \cap d)_1, (c \cap d)_2, \dots, (c \cap d)_{nCD}$ |
| $({}_nC_2 \text{ PAIRS})$<br>6 PAIRS AT $n = 4$<br>10 PAIRS AT $n = 5$<br>15 PAIRS AT $n = 6$ |                                                       |

FIG. 5

| LINK PAIR | PAIR AVAILABLE FREQUENCY                              | PAIR COMMUNICATION QUALITY           |
|-----------|-------------------------------------------------------|--------------------------------------|
| A-B       | $(a \cap b)_1, (a \cap b)_2, \dots, (a \cap b)_{nAB}$ | $Q_{AB1}, Q_{AB2}, \dots, Q_{ABnAB}$ |
| A-C       | $(a \cap c)_1, (a \cap c)_2, \dots, (a \cap c)_{nAC}$ | $Q_{AC1}, Q_{AC2}, \dots, Q_{ACnAC}$ |
| A-D       | $(a \cap d)_1, (a \cap d)_2, \dots, (a \cap d)_{nAD}$ | $Q_{AD1}, Q_{AD2}, \dots, Q_{ADnAD}$ |
| B-C       | $(b \cap c)_1, (b \cap c)_2, \dots, (b \cap c)_{nBC}$ | $Q_{BC1}, Q_{BC2}, \dots, Q_{BCnBC}$ |
| B-D       | $(b \cap d)_1, (b \cap d)_2, \dots, (b \cap d)_{nBD}$ | $Q_{BD1}, Q_{BD2}, \dots, Q_{BDnBD}$ |
| C-D       | $(c \cap d)_1, (c \cap d)_2, \dots, (c \cap d)_{nCD}$ | $Q_{CD1}, Q_{CD2}, \dots, Q_{CDnCD}$ |

FIG. 6

| LINK PAIR | BEST PAIR<br>AVAILABLE FREQUENCY | BEST PAIR<br>COMMUNICATION QUALITY |
|-----------|----------------------------------|------------------------------------|
| A-B       | $(a \cap b) *$                   | $Q_{AB*}$                          |
| A-C       | $(a \cap c) *$                   | $Q_{AC*}$                          |
| A-D       | $(a \cap d) *$                   | $Q_{AD*}$                          |
| B-C       | $(b \cap c) *$                   | $Q_{BC*}$                          |
| B-D       | $(b \cap d) *$                   | $Q_{BD*}$                          |
| C-D       | $(c \cap d) *$                   | $Q_{CD*}$                          |

FIG. 7

| COMBINATION PAIR          | CANDIDATE PATH (BOLD OBLIQUE TYPE:<br>SELECTED PATH [= USE PATH]) |
|---------------------------|-------------------------------------------------------------------|
| A-B                       | <b>A-B</b> , A-C-B, A-D-B, A-C-D-B, A-D-C-B                       |
| A-C                       | A-C, <b>A-B-C</b> , A-D-C, A-B-D-C, A-D-B-C                       |
| A-D                       | A-D, <b>A-B-D</b> , A-C-D, A-B-C-D, A-C-B-D                       |
| B-C                       | <b>B-C</b> , B-A-C, B-D-C, B-A-D-C, B-D-A-C                       |
| B-D                       | <b>B-D</b> , B-A-D, B-C-D, B-A-C-D, B-C-A-D                       |
| C-D                       | <b>C-D</b> , C-A-D, C-B-D, C-A-B-D, C-B-A-D                       |
| $({}_nC_2 \text{ PAIRS})$ | $(i=0 \sum_{(n-2)}^{n-2} C_i \cdot i! \text{ PATHS EACH})$        |
| 6 PAIRS AT $n = 4$        | 5 PATHS AT $n = 4$ EACH                                           |
| 10 PAIRS AT $n = 5$       | 16 PATHS AT $n = 5$ EACH                                          |
| 15 PAIRS AT $n = 6$       | 65 PATHS AT $n = 6$ EACH                                          |

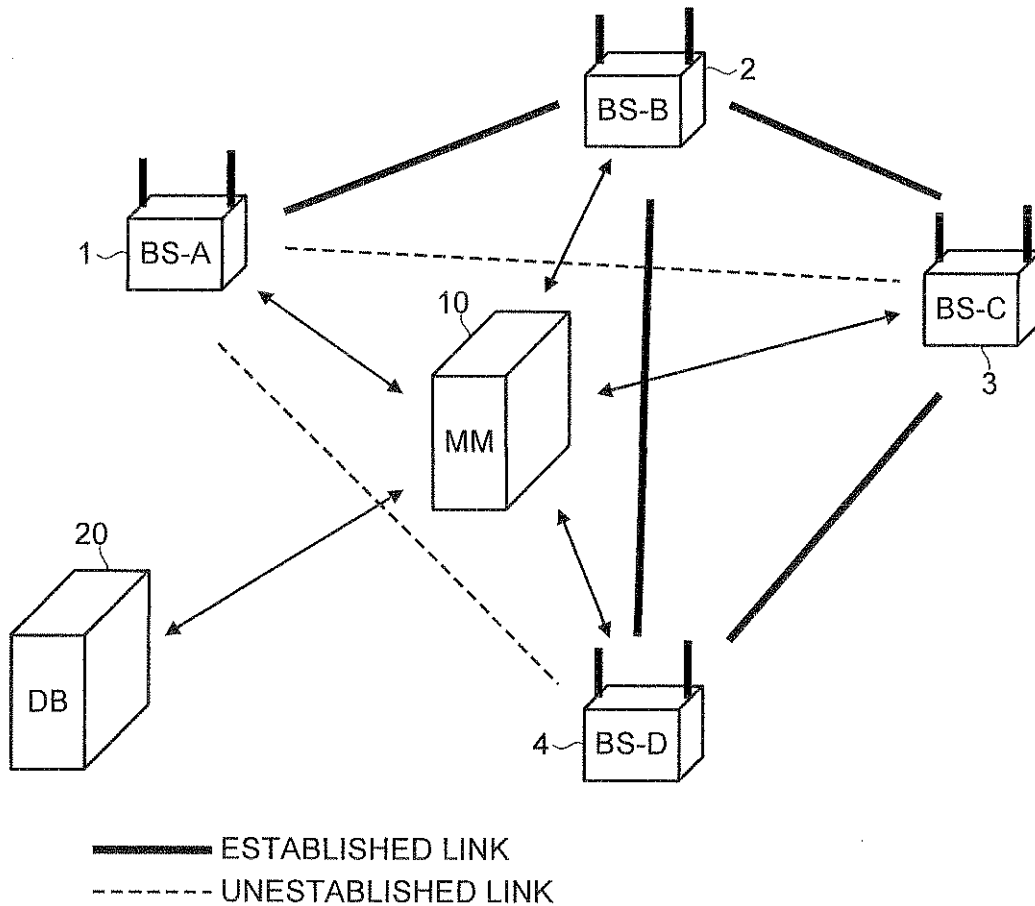


FIG. 8

| COMBINATION PAIR | CANDIDATE PATH (BOLD OBLIQUE TYPE:<br>FOLLOWING SELECTED PATH<br>[= FOLLOWING USE PATH]) |
|------------------|------------------------------------------------------------------------------------------|
| A-B              | <b>A-B</b> , A-C-B, A-D-B, A-C-D-B, A-D-C-B                                              |
| A-C              | A-C, <b>A-B-C</b> , A-D-C, A-B-D-C, A-D-B-C                                              |
| A-D              | <b>A-D</b> , A-B-D, A-C-D, A-B-C-D, A-C-B-D                                              |
| B-C              | <b>B-C</b> , B-A-C, B-D-C, B-A-D-C, B-D-A-C                                              |
| B-D              | B-D, <b>B-A-D</b> , B-C-D, B-A-C-D, B-C-A-D                                              |
| C-D              | C-D, C-A-D, C-B-D, C-A-B-D, <b>C-B-A-D</b>                                               |

