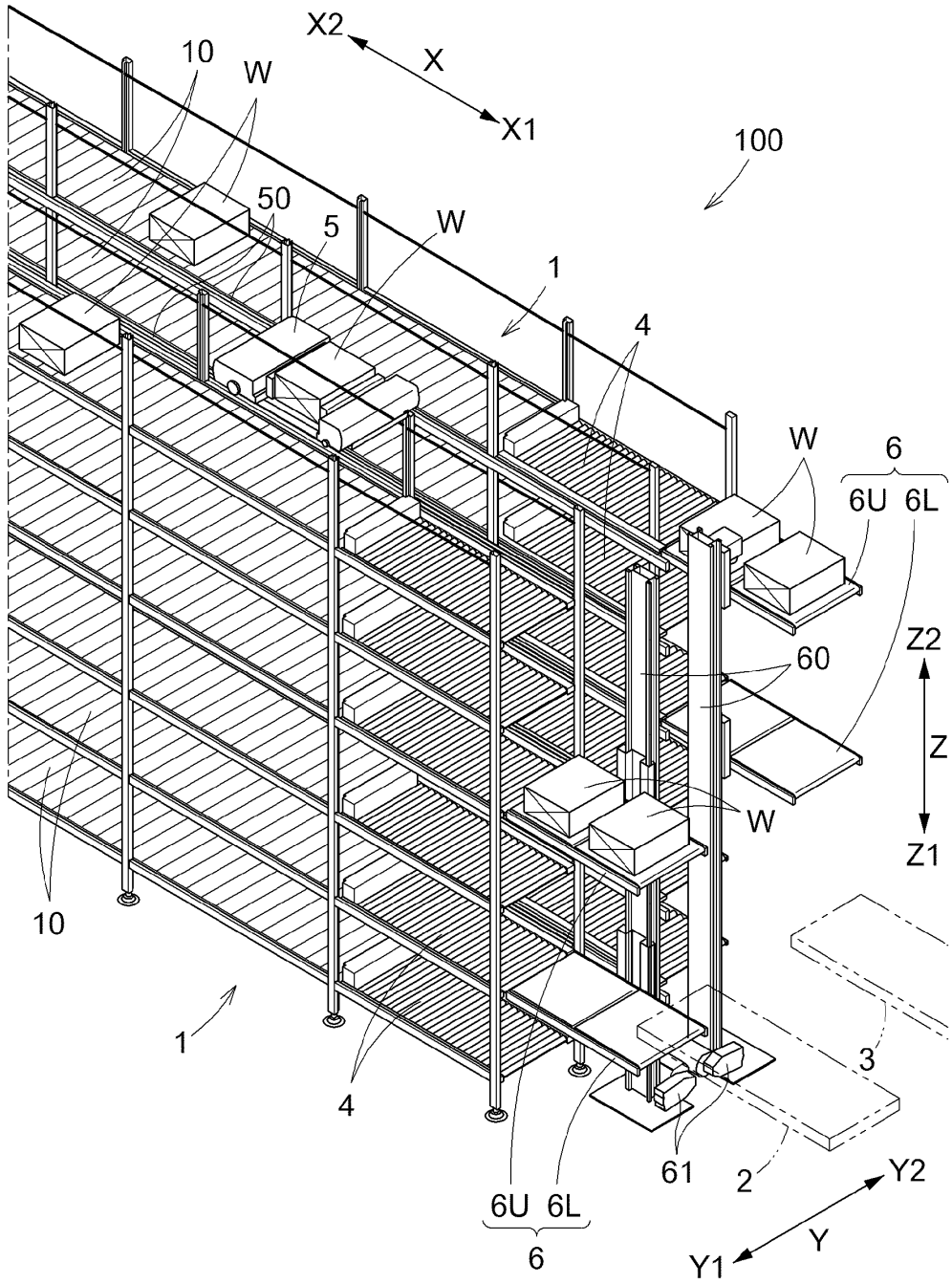
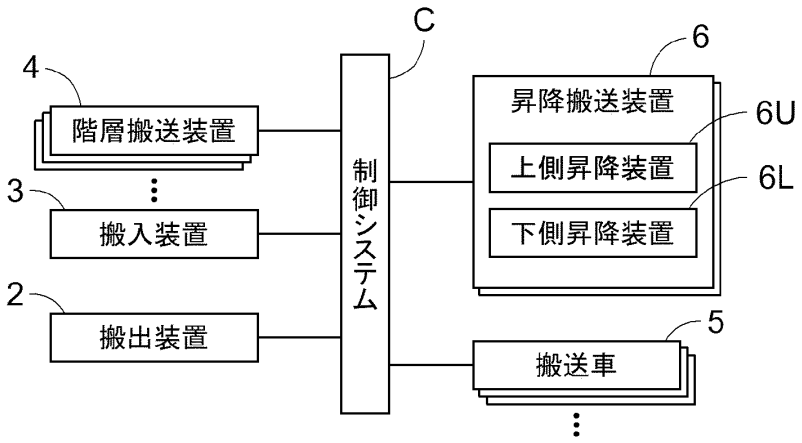
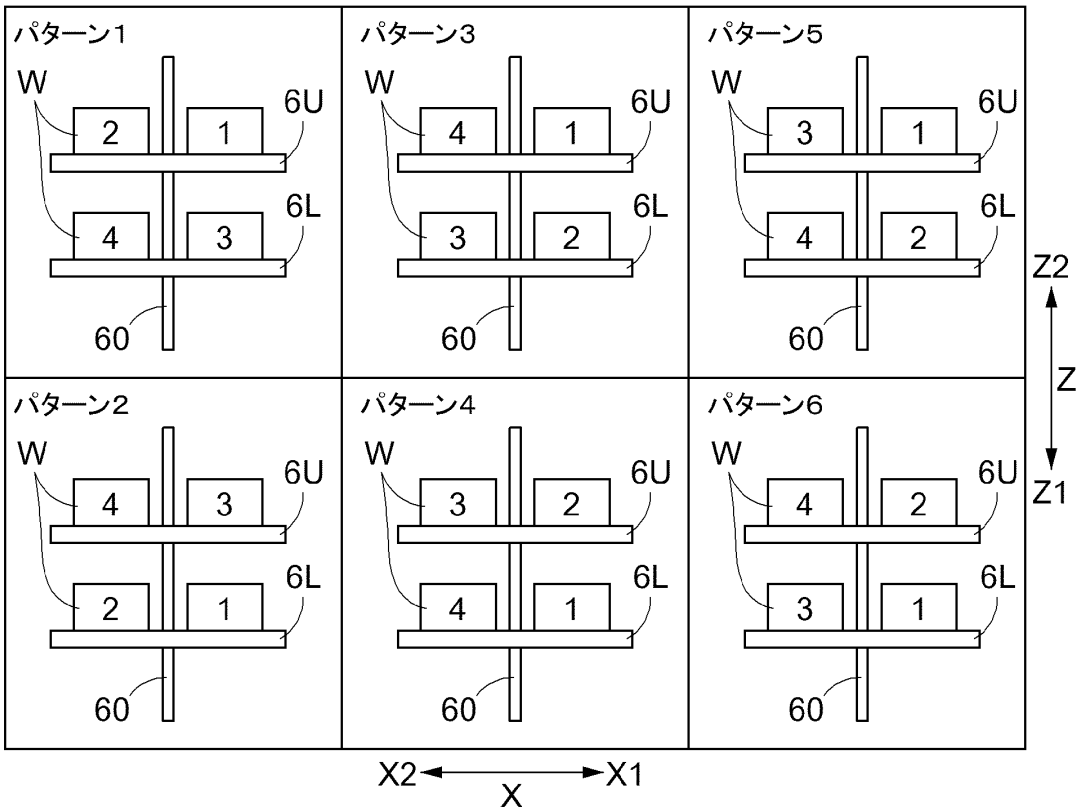
[図1]



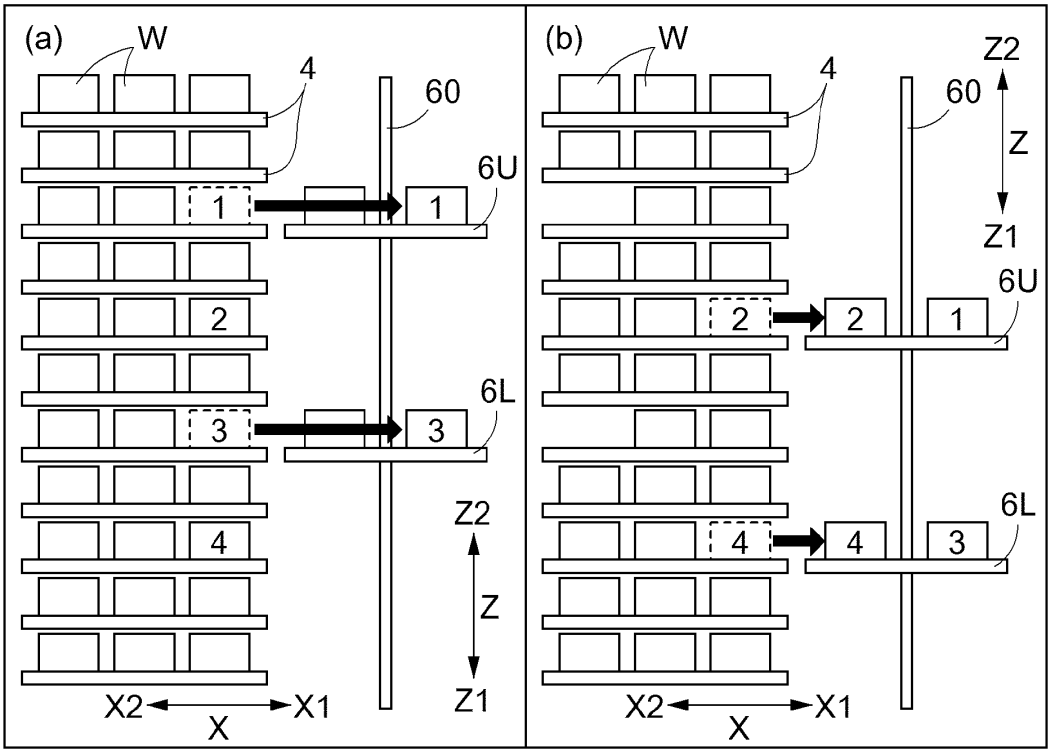
[図2]


C
4
階層搬送装置
3
搬入装置
2
搬出装置
制御システム
6
昇降搬送装置
6U
上側昇降装置
6L
下側昇降装置
5
搬送車

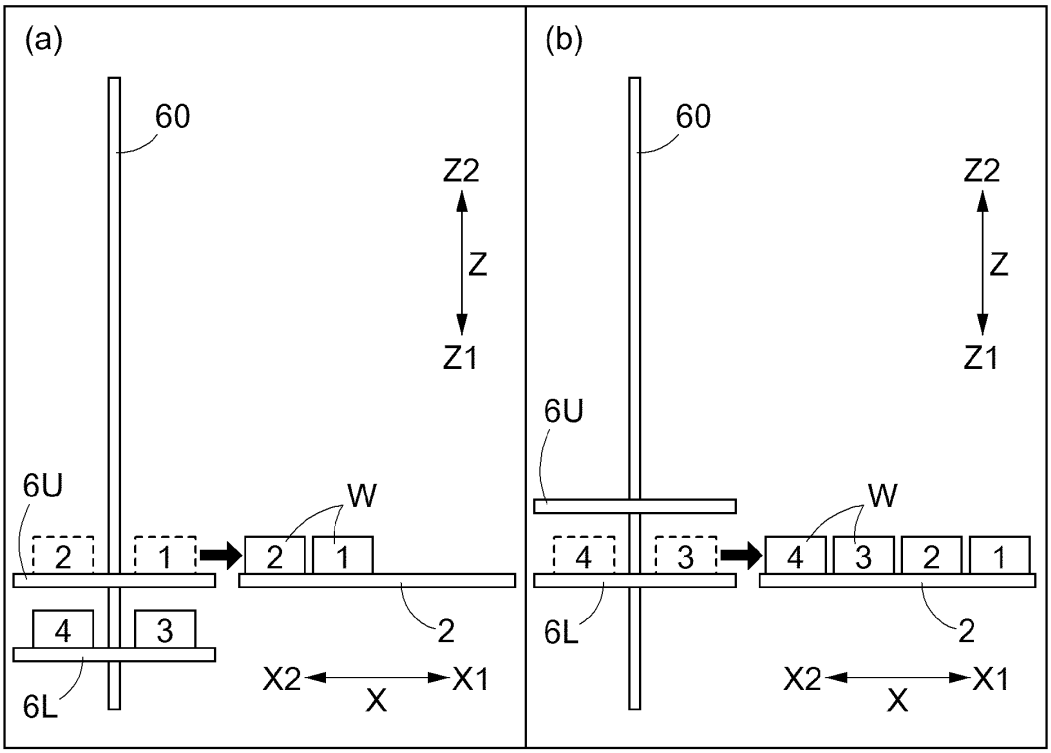
[図3]


パターン1
パターン3
パターン5
パターン2
パターン4
パターン6
W
6U
6L
60
Z2
Z
Z1
X2
X
X1

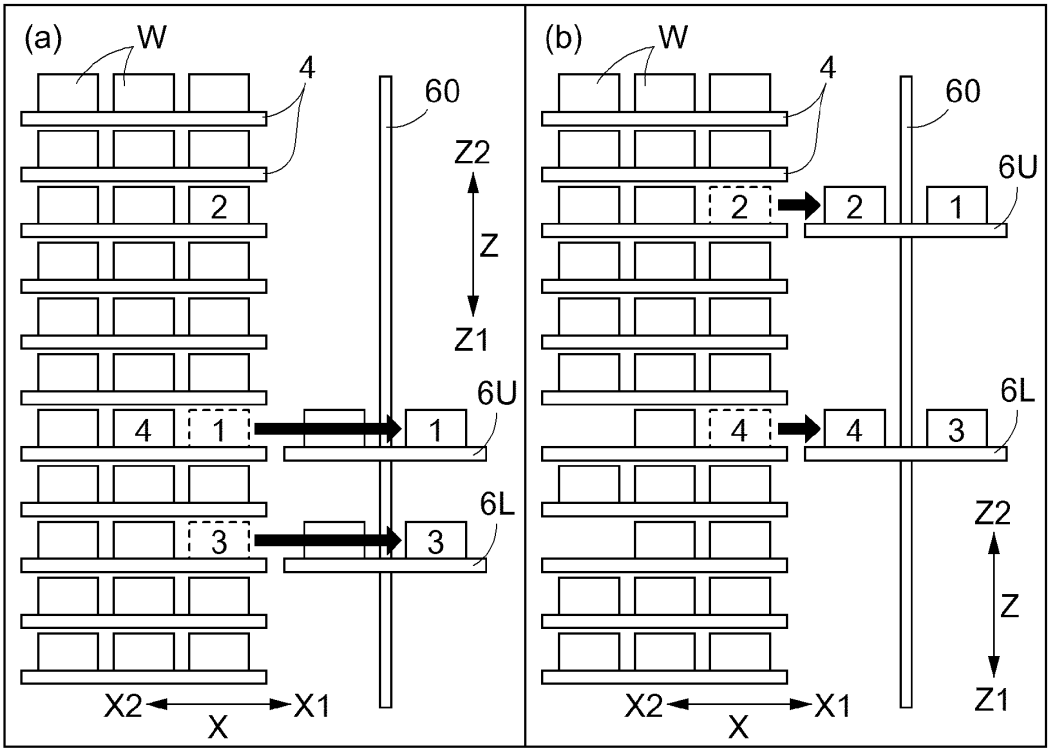
[図4]


(a)
W
4
60
6U
1
1
2
6L
3
3
4
Z2
Z
Z1
X2
X
X1
(b)
W
4
60
Z2
Z
Z1
6U
2
2
1
6L
4
4
3
X2
X
X1

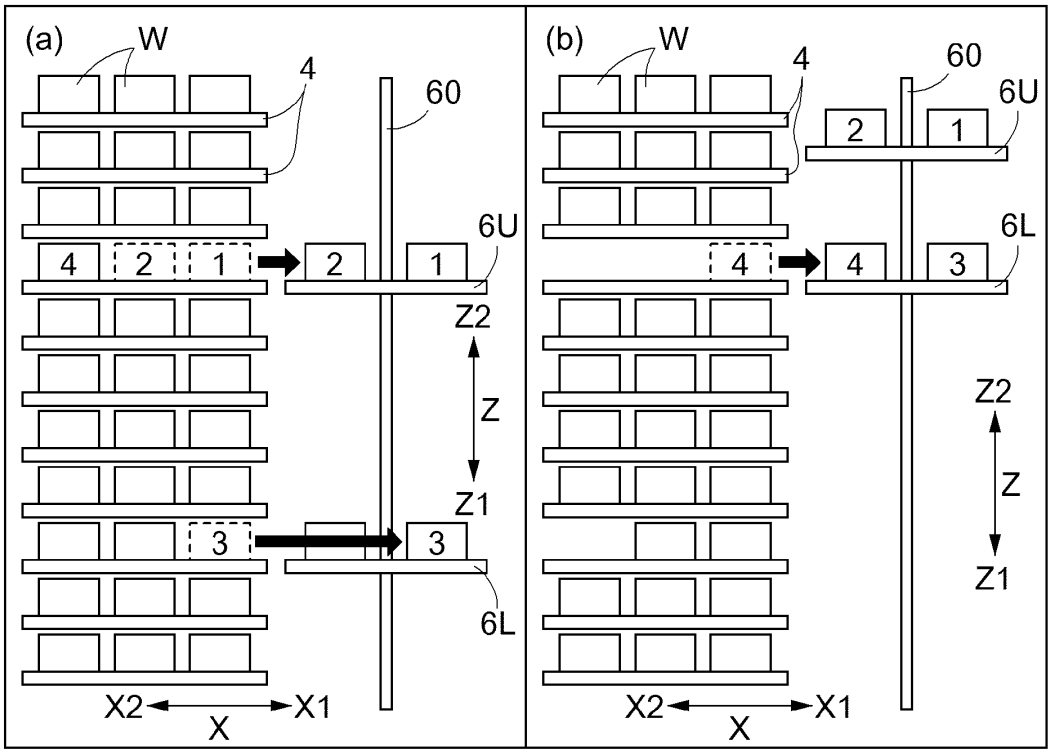
[図5]


(a)
60
Z2
Z
Z1
6U
2
1
W
2
1
4
3
2
6L
X2
X
X1
(b)
60
Z2
Z
Z1
6U
4
3
W
4
3
2
1
6L
2
X2
X
X1

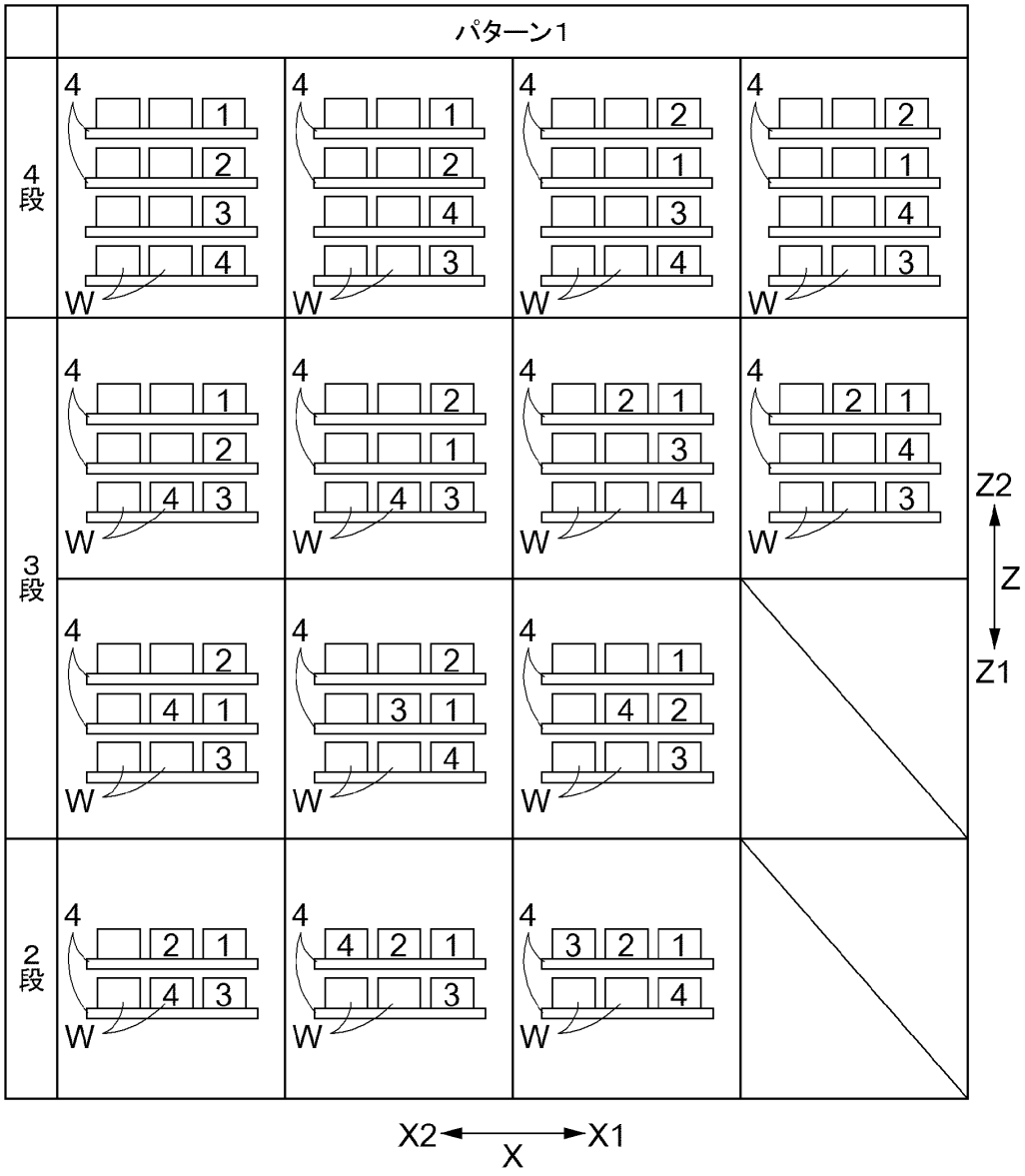
[図6]


(a)
W
4
60
Z2
Z
Z1
2
4
1
6U
1
6L
3
3
X2
X1
X
(b)
W
4
60
6U
2
2
1
4
4
3
6L
Z2
Z
Z1
X2
X1
X

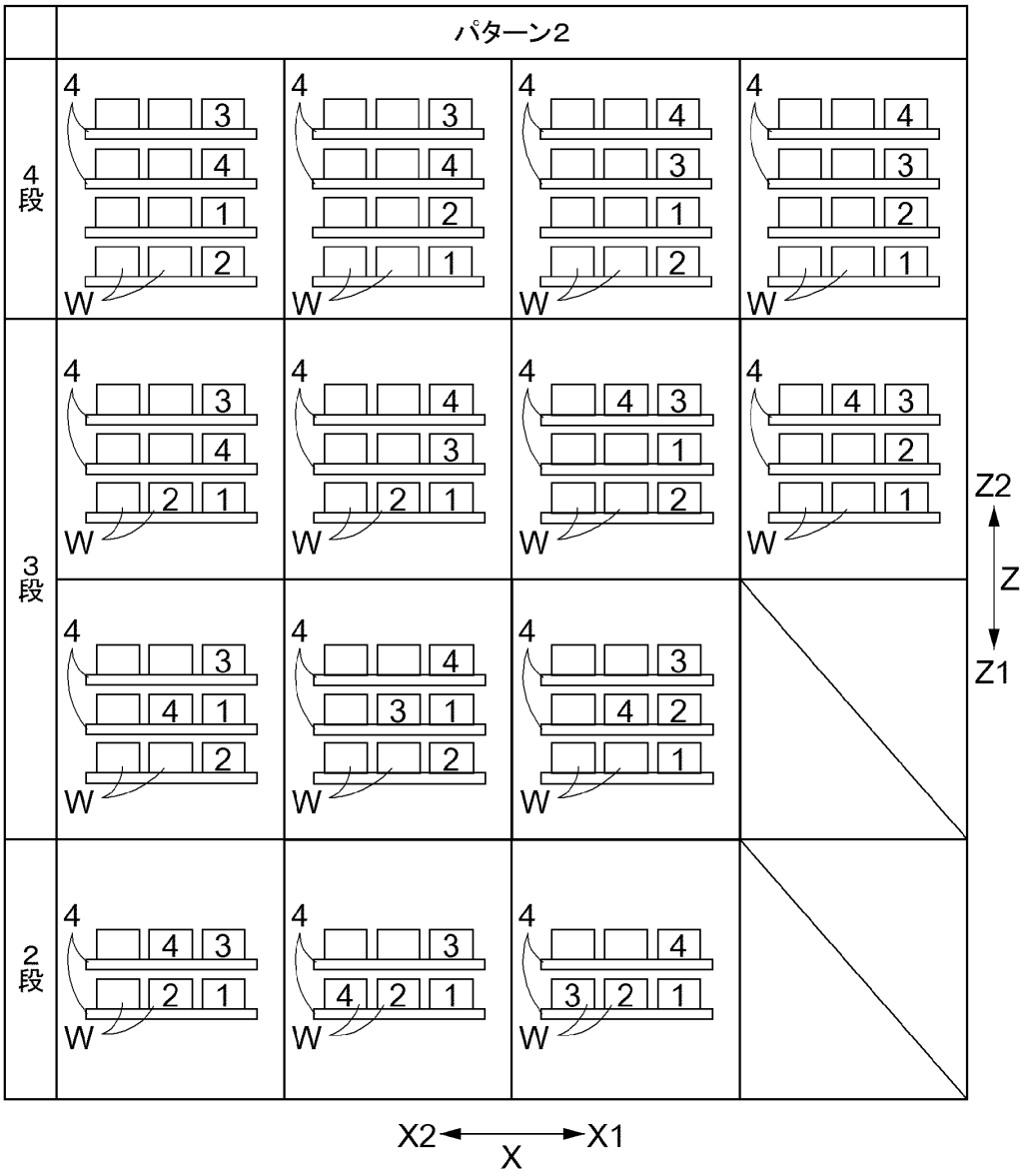
[図7]


(a)
W
4
60
6U
4
2
1
2
1
Z2
Z
Z1
3
3
6L
X2
X1
X
(b)
W
4
60
6U
2
1
6L
4
4
3
Z2
Z
Z1
X2
X1
X

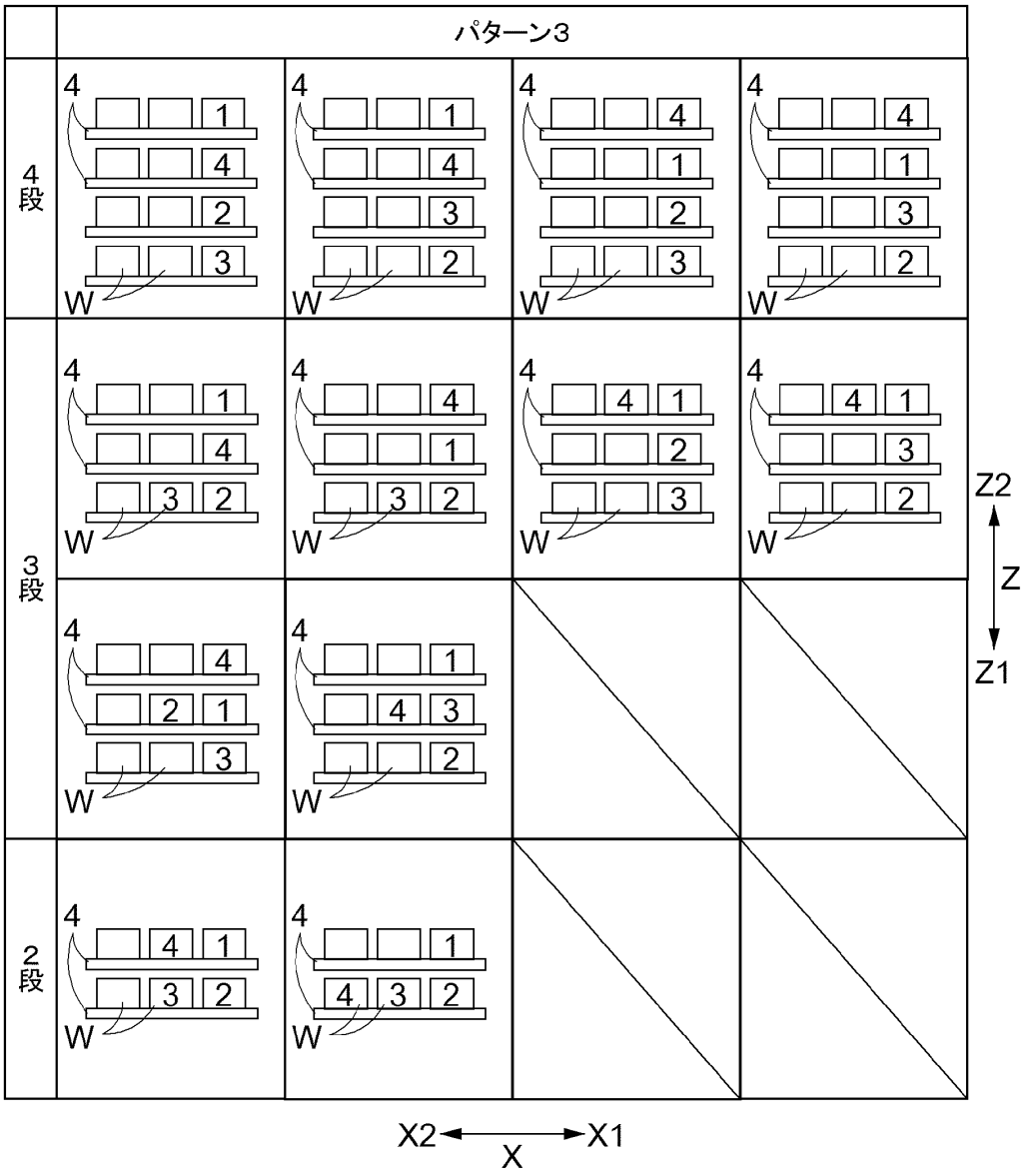
[図8]



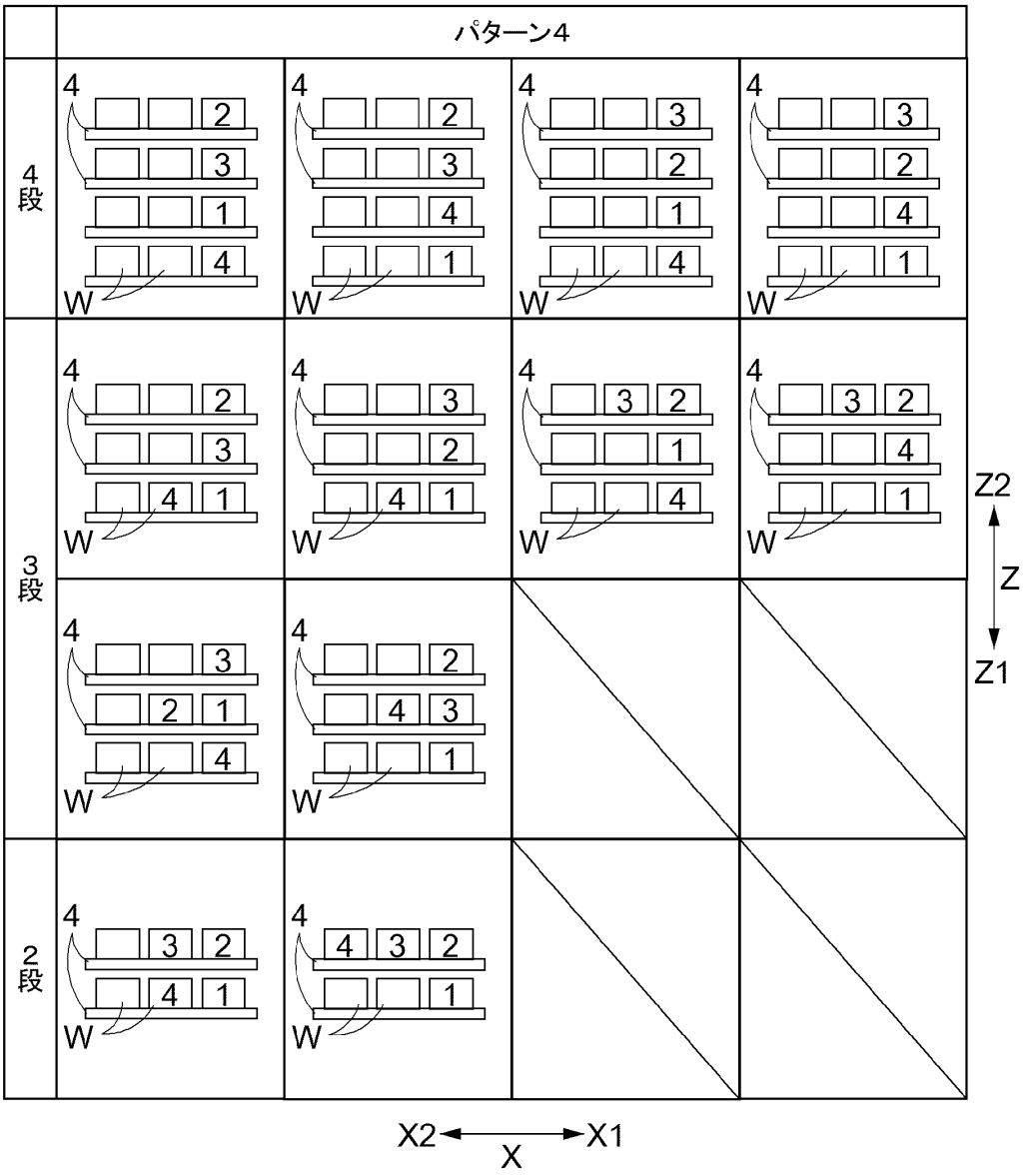
[図9]



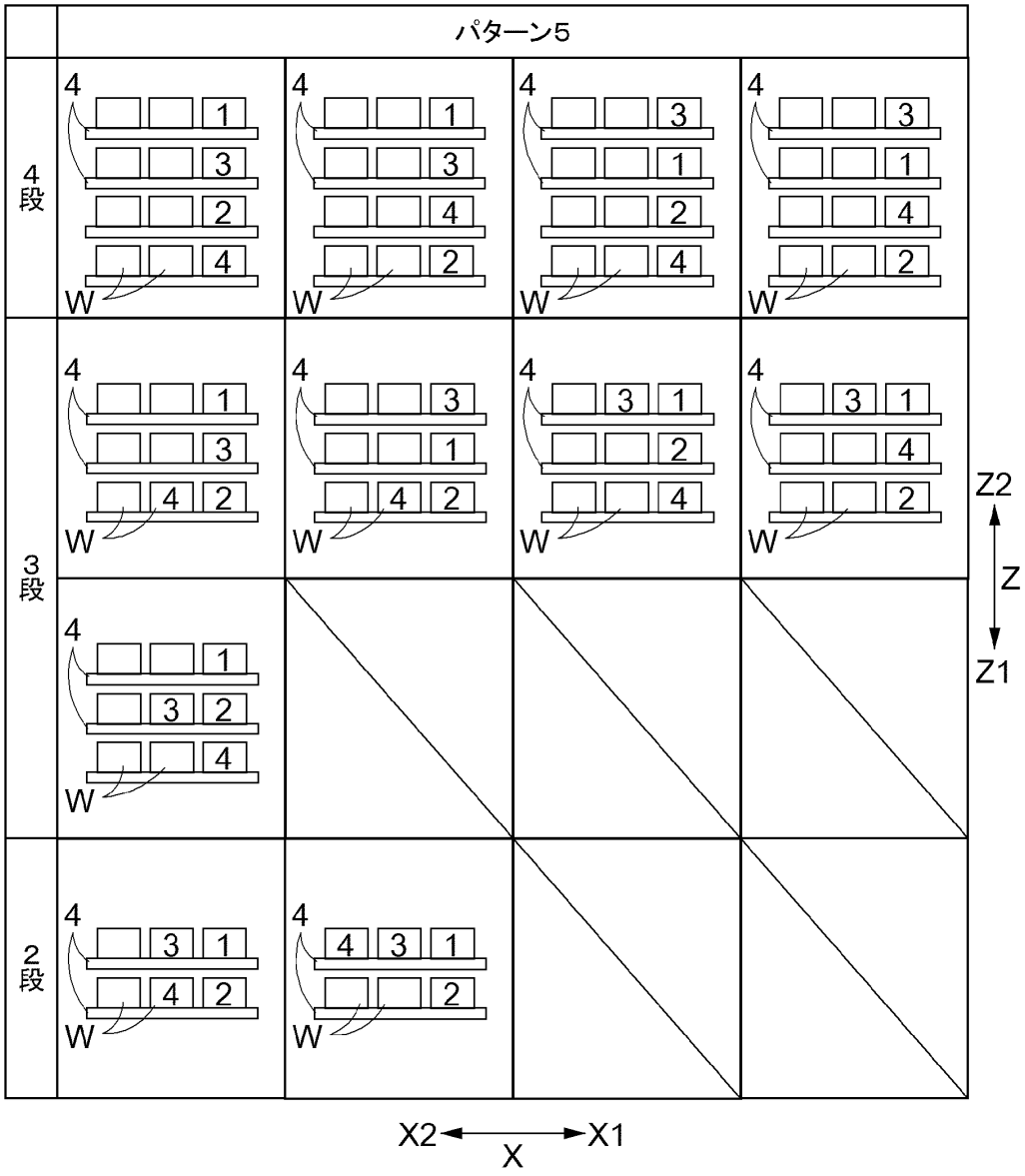
[図10]



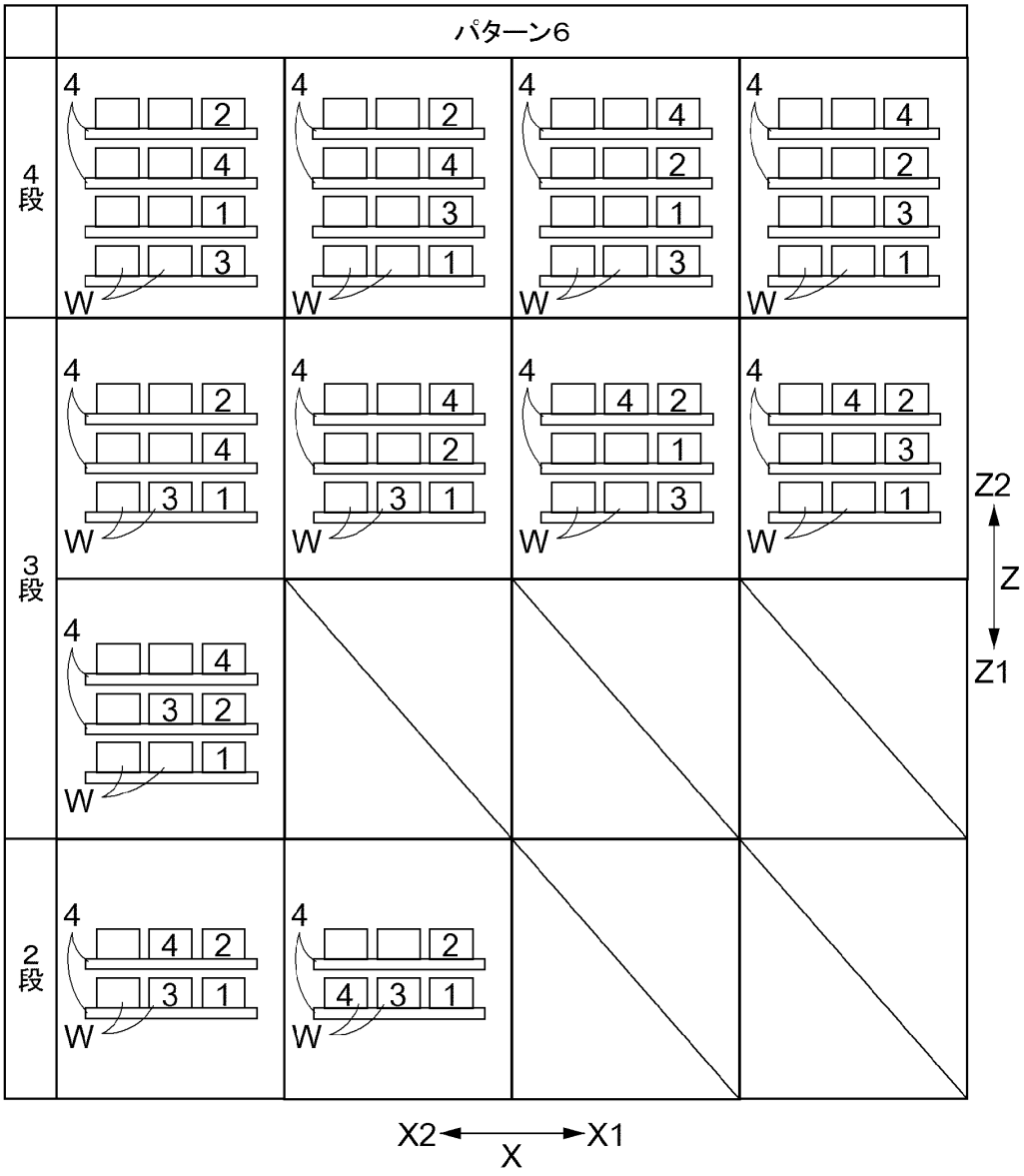
[図11]



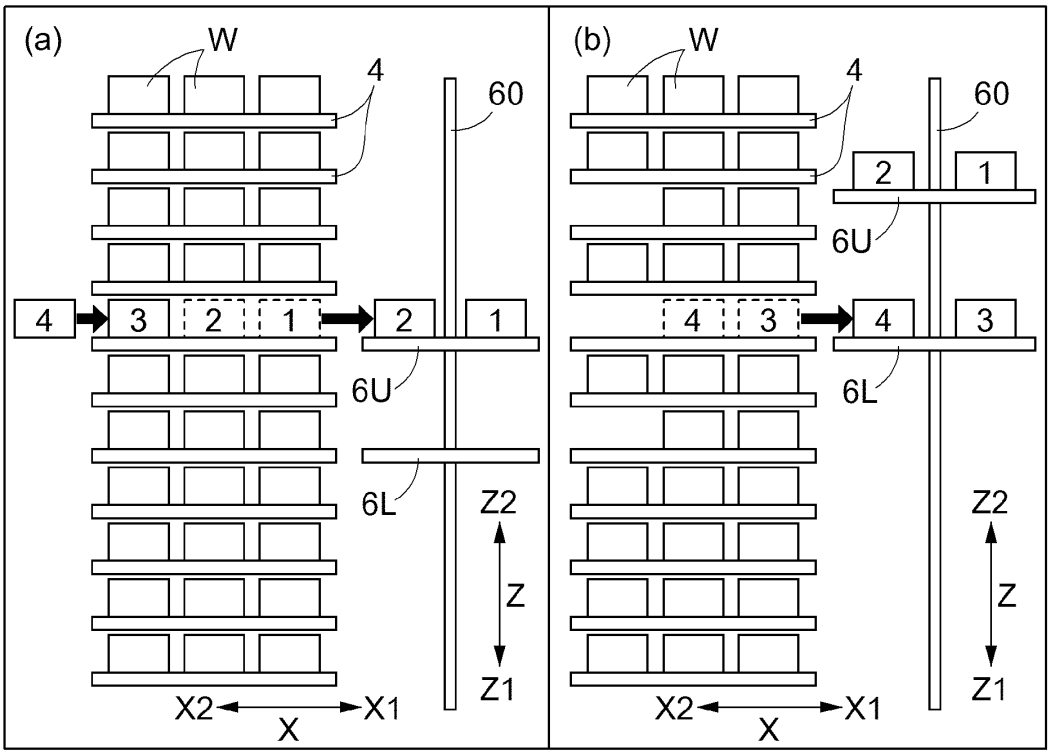
[図12]



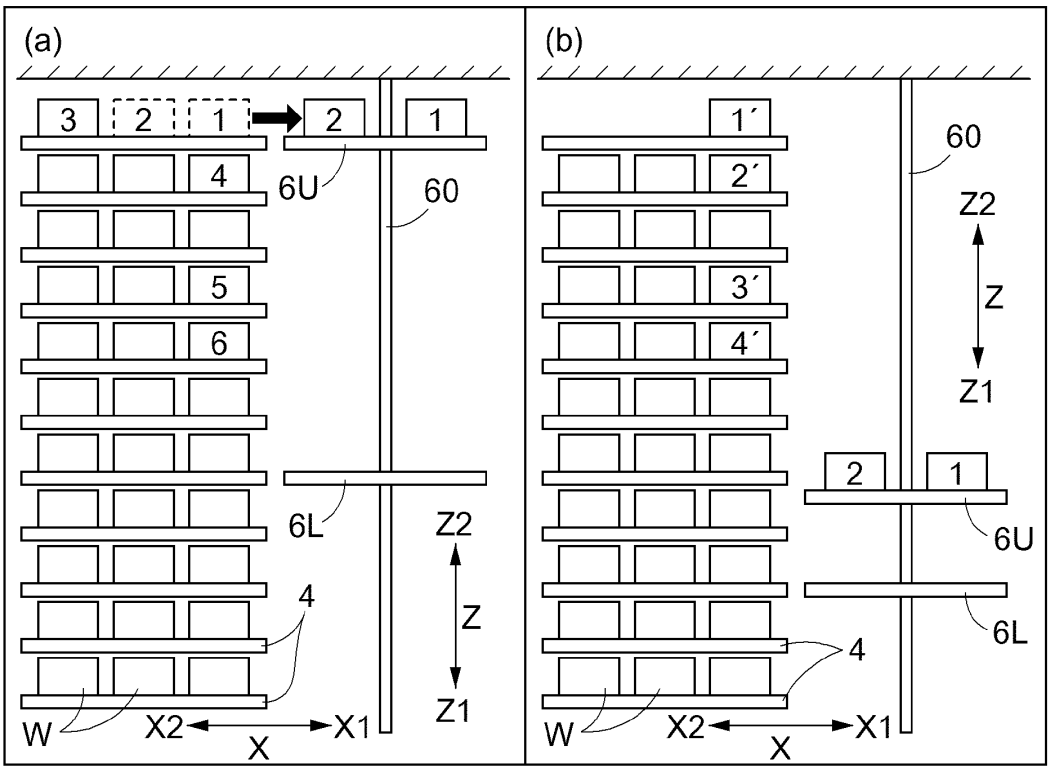
[図13]



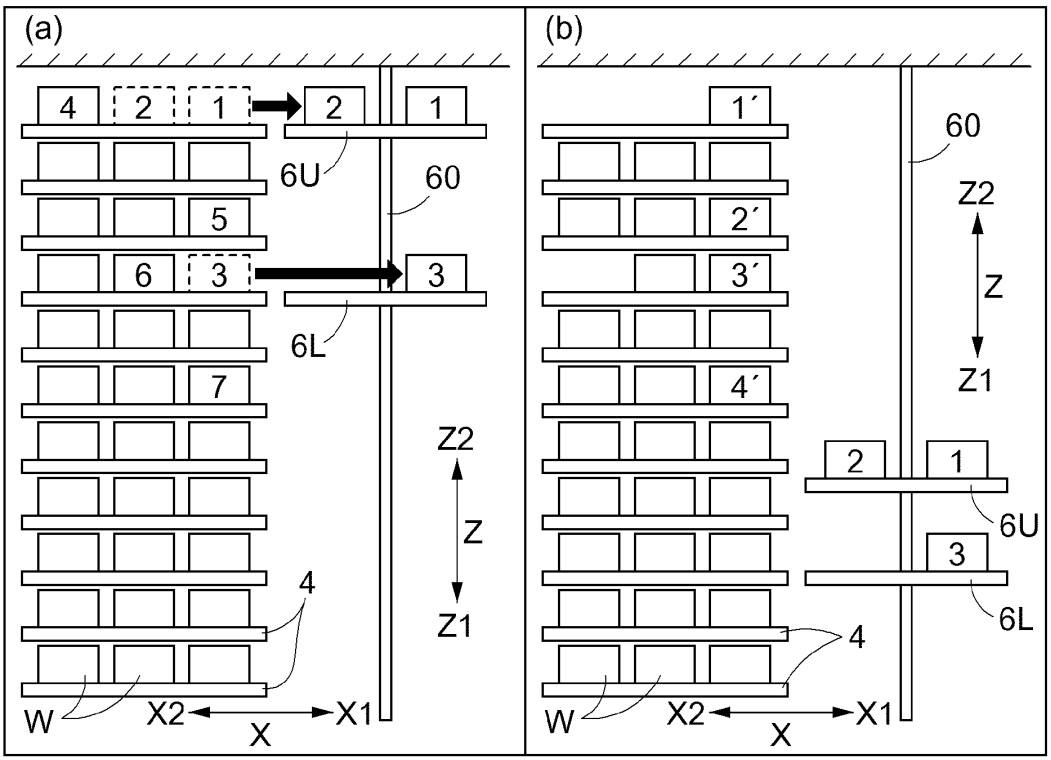
[図14]


(a)
W
4
60
4
3
2
1
2
1
6U
6L
Z2
Z
Z1
X2
X1
X
(b)
W
4
60
2
1
6U
4
3
4
3
6L
Z2
Z
Z1
X2
X1
X

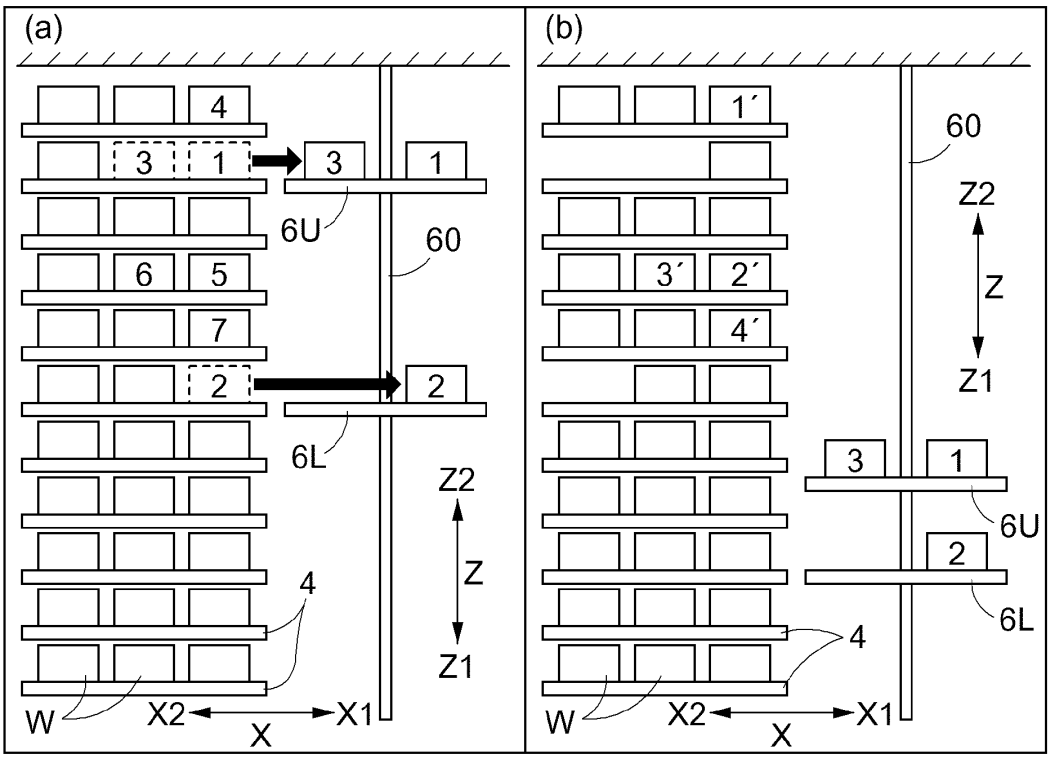
[図15]


(a)
3
2
1
2
1
4
6U
60
5
6
6L
Z2
Z
Z1
4
W
X2
X1
X
(b)
1´
60
2´
Z2
Z
3´
4´
Z1
2
1
6U
6L
4
W
X2
X1
X

[図16]


(a)
(b)
4
2
1
2
1
6U
60
5
6
3
3
6L
7
Z2
Z
Z1
4
W
X2
X
X1
1´
2´
3´
4´
Z2
Z
Z1
2
1
6U
3
6L
4
W
X2
X
X1

[図17]


(a)
(b)
4
3
1
3
1
6U
60
6
5
7
2
2
6L
Z2
Z
Z1
4
W
X2
X
X1
1´
3´
2´
4´
60
Z2
Z
Z1
3
1
6U
2
6L
4
W
X2
X
X1