FIG.1

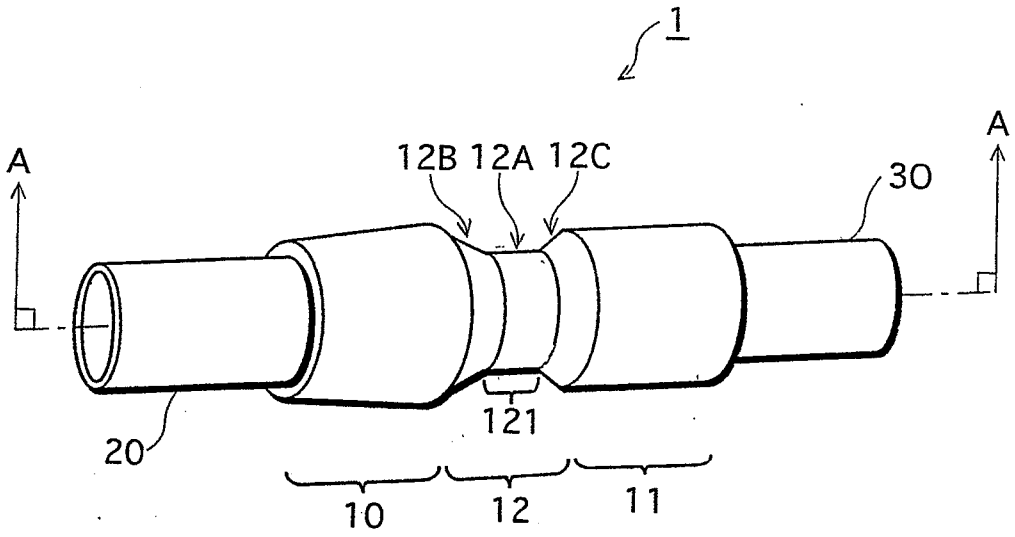


FIG.2

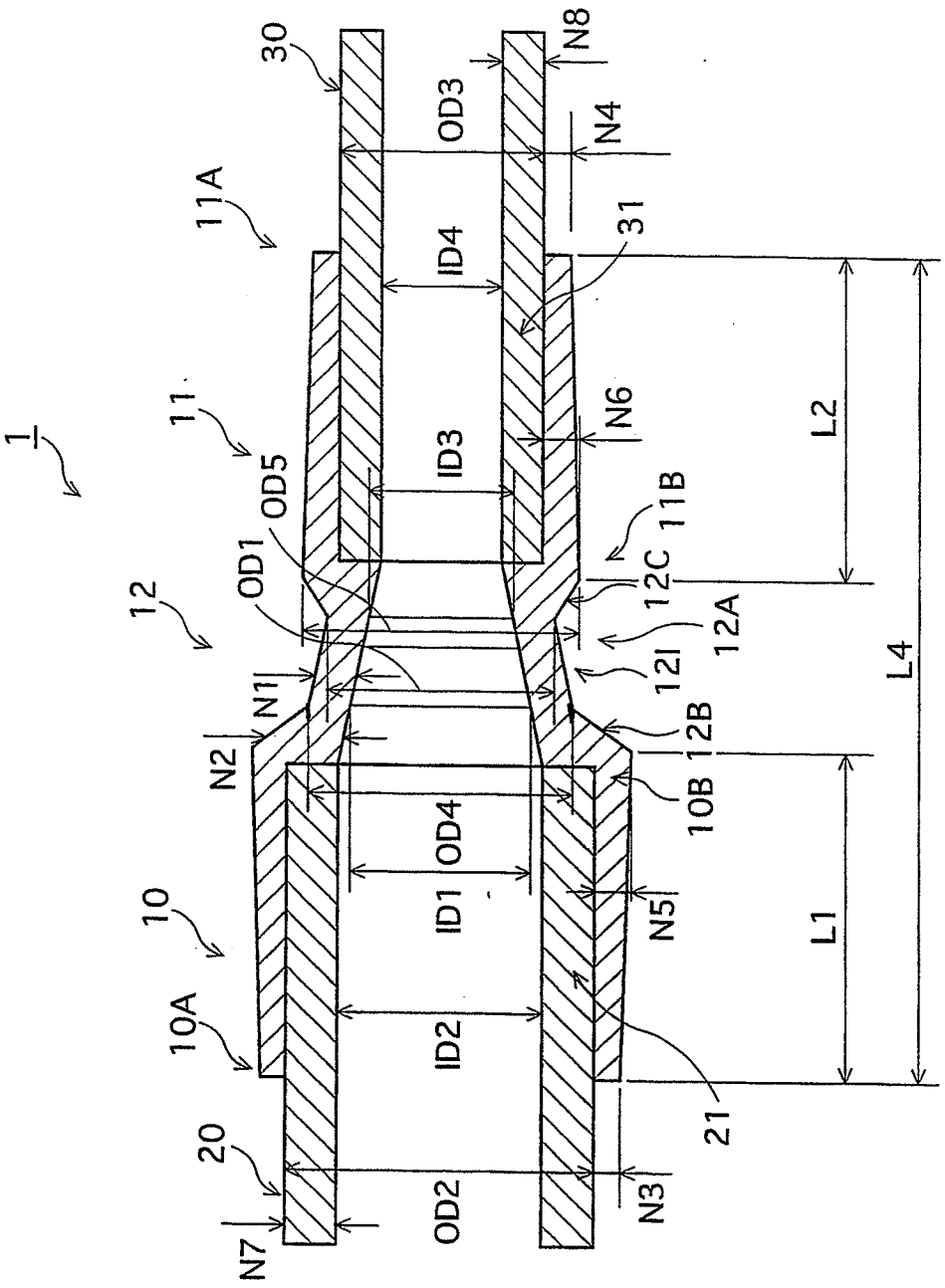

1
10
10A
11
11A
11B
12
12A
12B
12C
12I
20
21
30
31
10B
OD1
OD2
OD3
OD4
OD5
ID1
ID2
ID3
ID4
N1
N2
N3
N4
N5
N6
N7
N8
L1
L2
L4

FIG.3

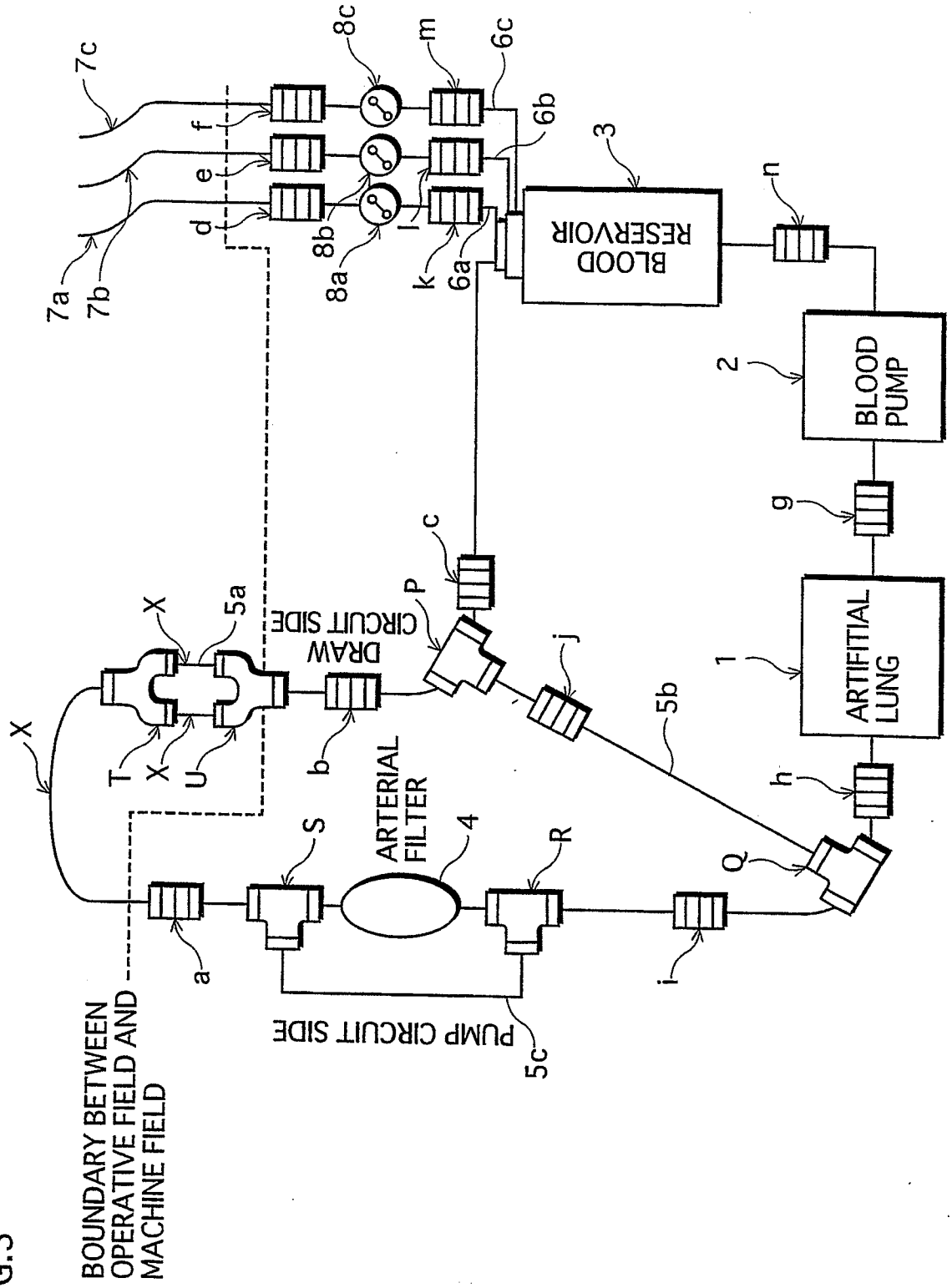

BOUNDARY BETWEEN OPERATIVE FIELD AND MACHINE FIELD
PUMP CIRCUIT SIDE
5c
ARTERIAL FILTER
4
DRAW CIRCUIT SIDE
5a
5b
BLOOD RESERVOIR
3
BLOOD PUMP
2
ARTIFITIAL LUNG
1
7a
7b
7c
8a
8b
8c
6a
6b
6c
a
b
c
d
e
f
g
h
i
j
k
l
m
n
P
Q
R
S
T
U
X

FIG.4A

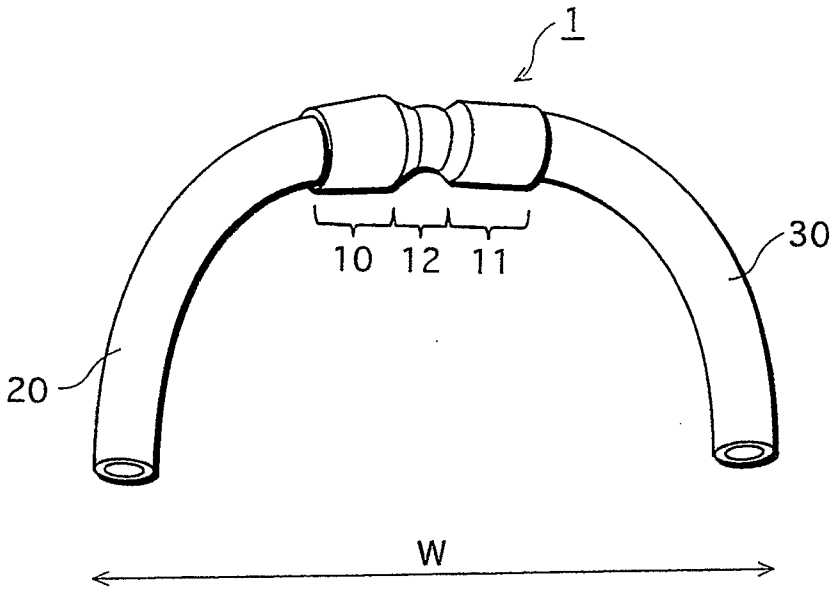


FIG.4B

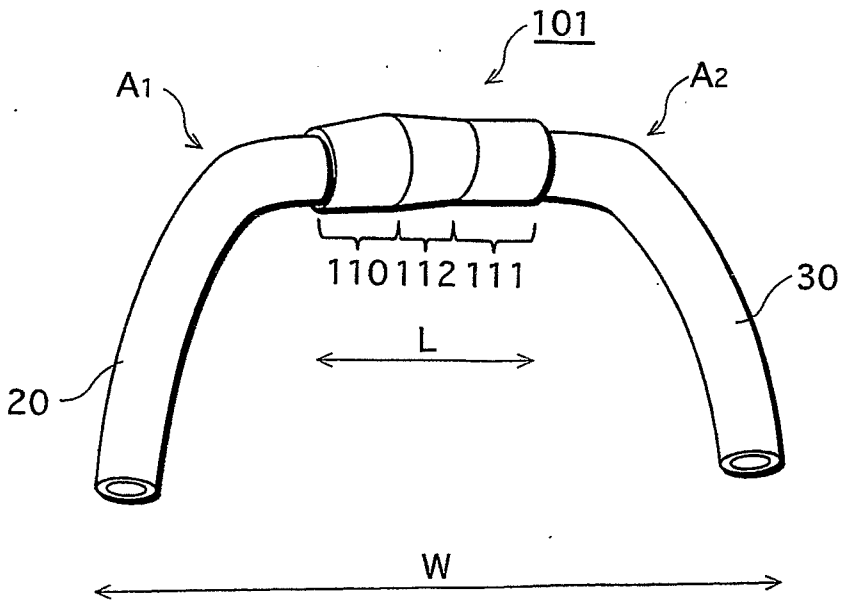


FIG.5A

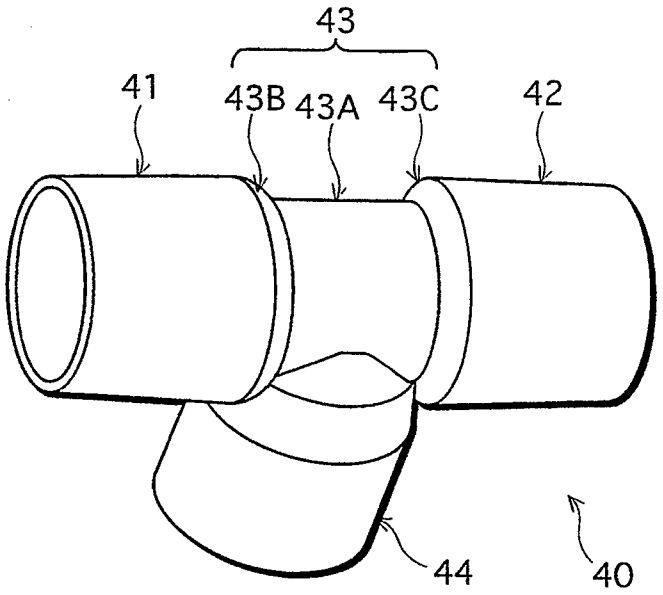


FIG.5B

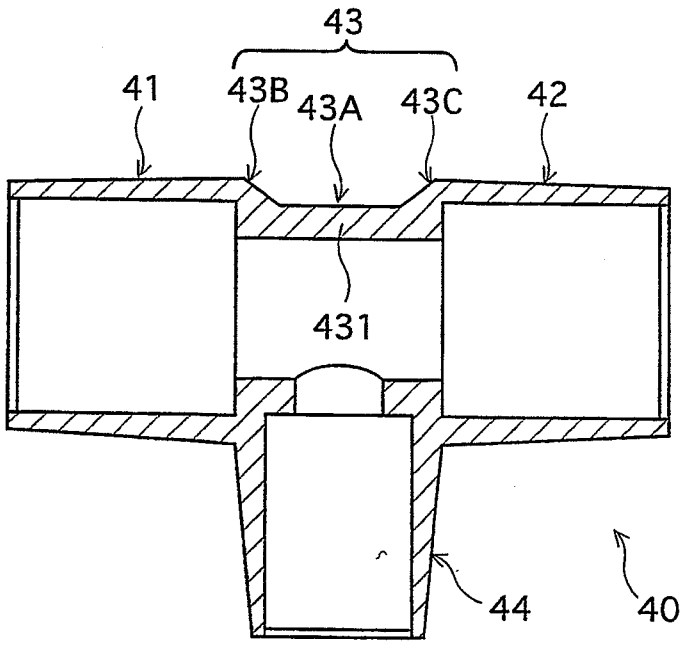


FIG.6A

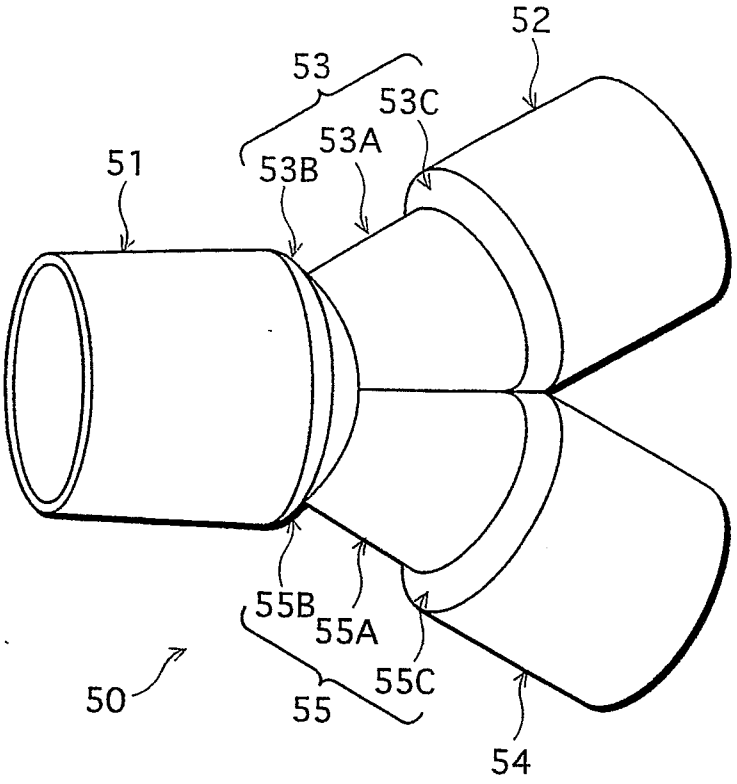

52
53
53C
53A
51
53B
55B
55A
55C
55
50
54

FIG.6B

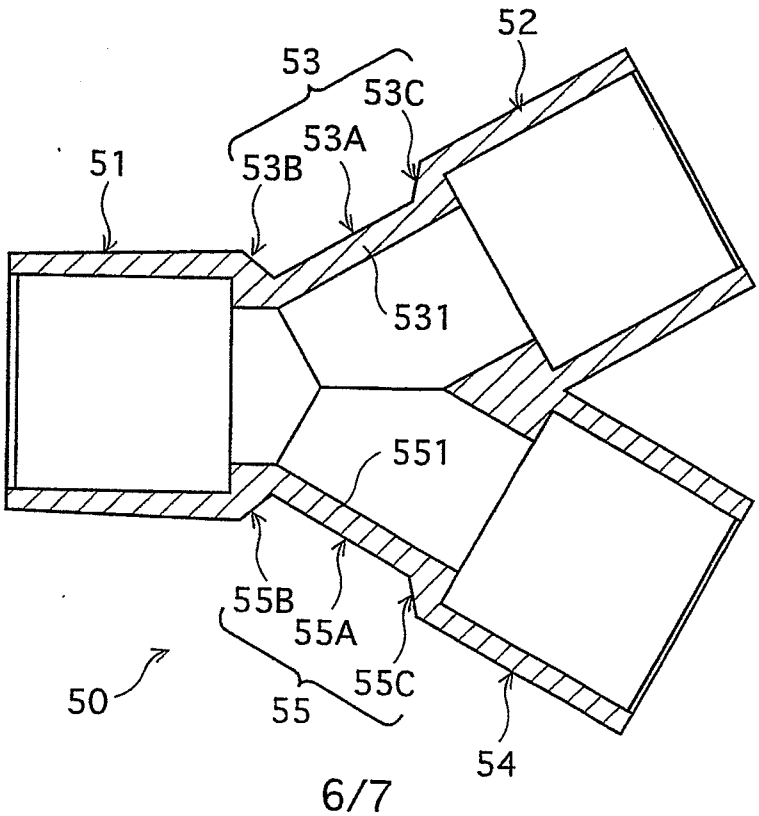
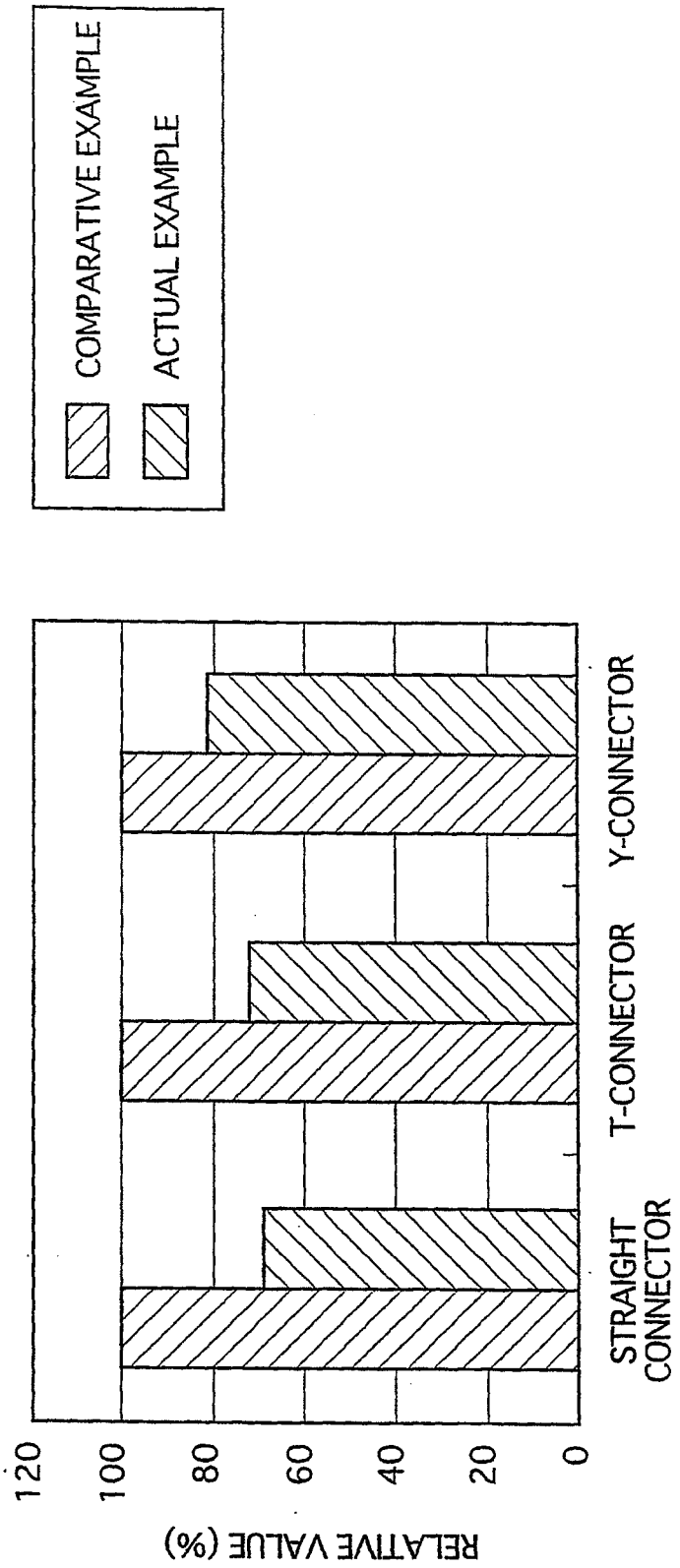

52
53
53C
53A
51
53B
531
551
55B
55A
55C
55
50
54

FIG.7


COMPARATIVE EXAMPLE
ACTUAL EXAMPLE
RELATIVE VALUE (%)
120
100
80
60
40
20
0
STRAIGHT CONNECTOR
T-CONNECTOR
Y-CONNECTOR