

Fig. 1

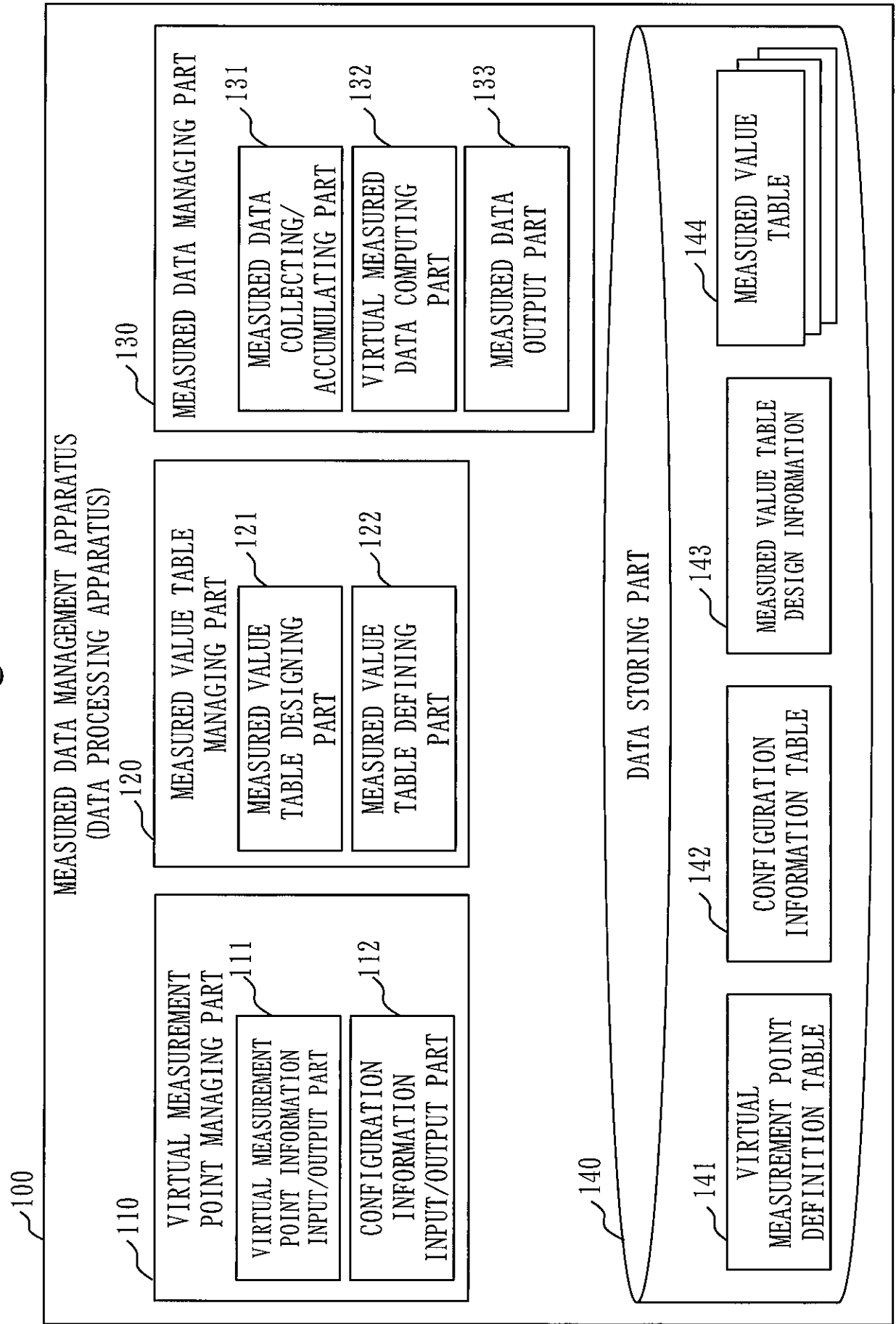


Fig. 2

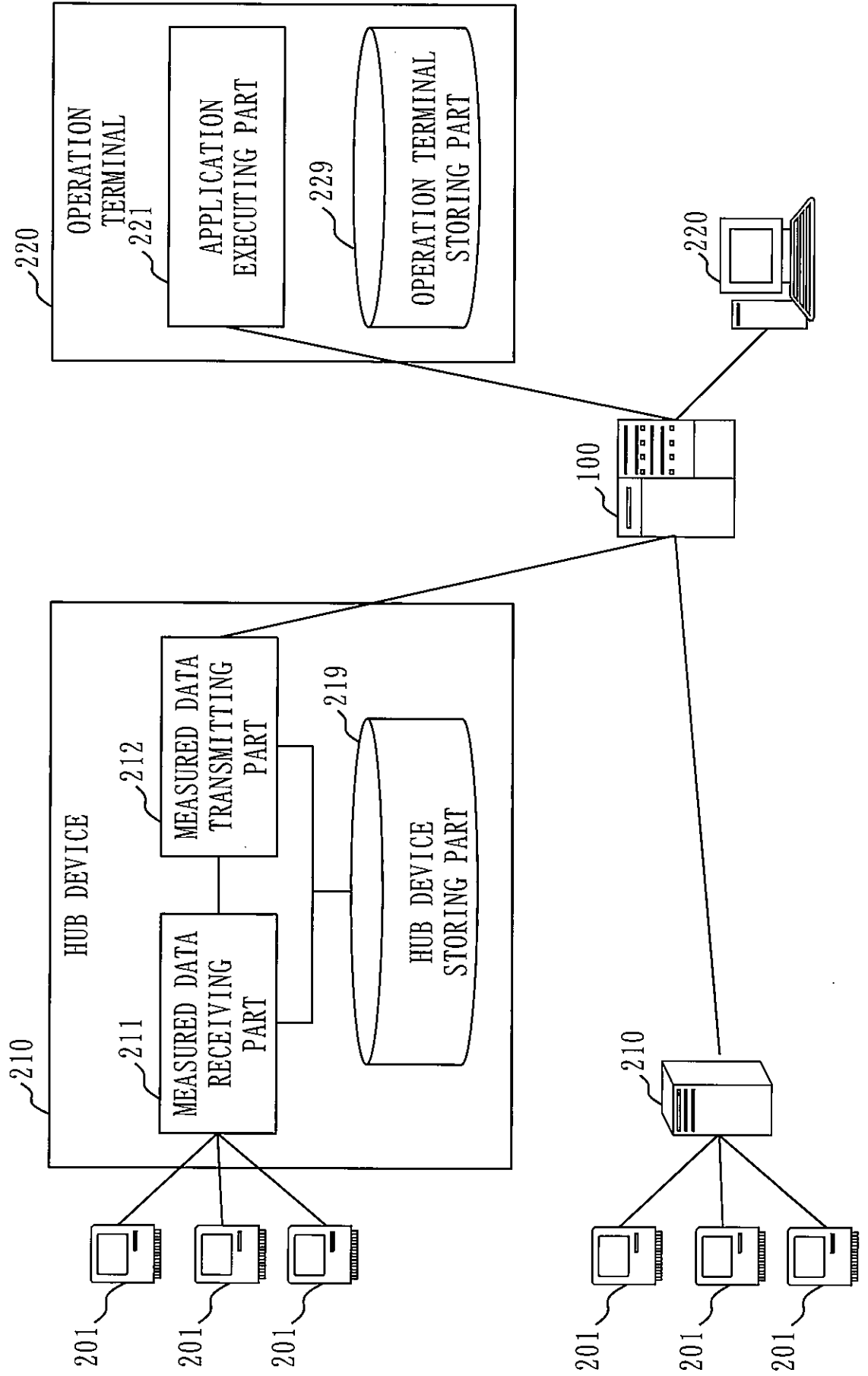


Fig. 3

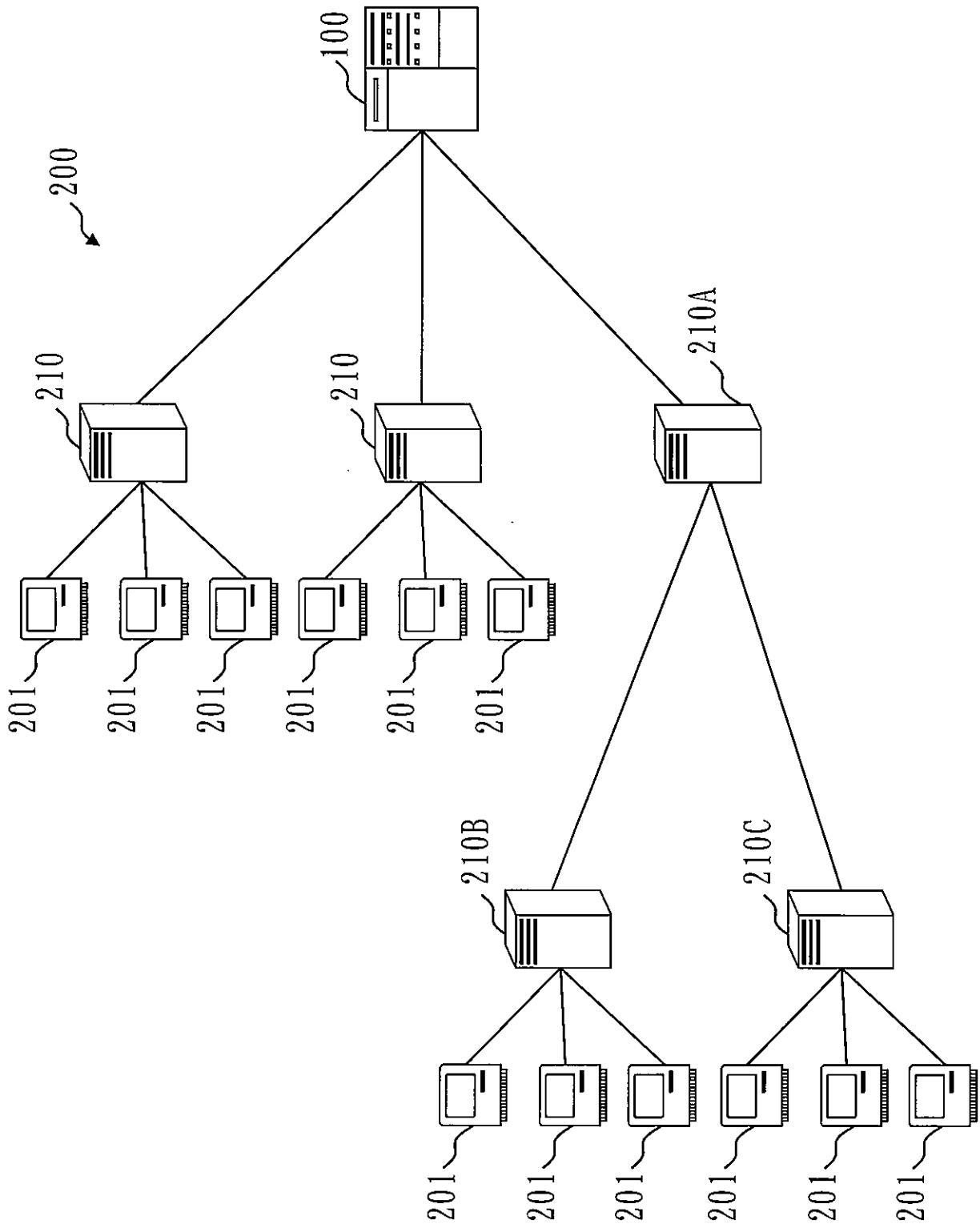


Fig. 4

400		
401		
\$1	2013/04/01 18:00:00.000	16.2
	402	403

Fig. 5

144 ↗

ROW NUMBER	MEASUREMENT TIME	MEASURED VALUE 1	MEASURED VALUE 2	MEASURED VALUE 3	MEASURED VALUE 4	...	MEASURED VALUE 1000
1	2013/04/01 18 : 00 : 00.000	16.2	5.4	1	100.1	...	-0.3
2	2013/04/01 18 : 00 : 00.100	16.0	4.9	0	100.1	...	-0.9
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
100	2013/04/01 18 : 00 : 01.000	16.7	4.7	1	102.3	...	-0.3
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
501	502	503A	503B	503C	503D	503E	503E

Fig. 6

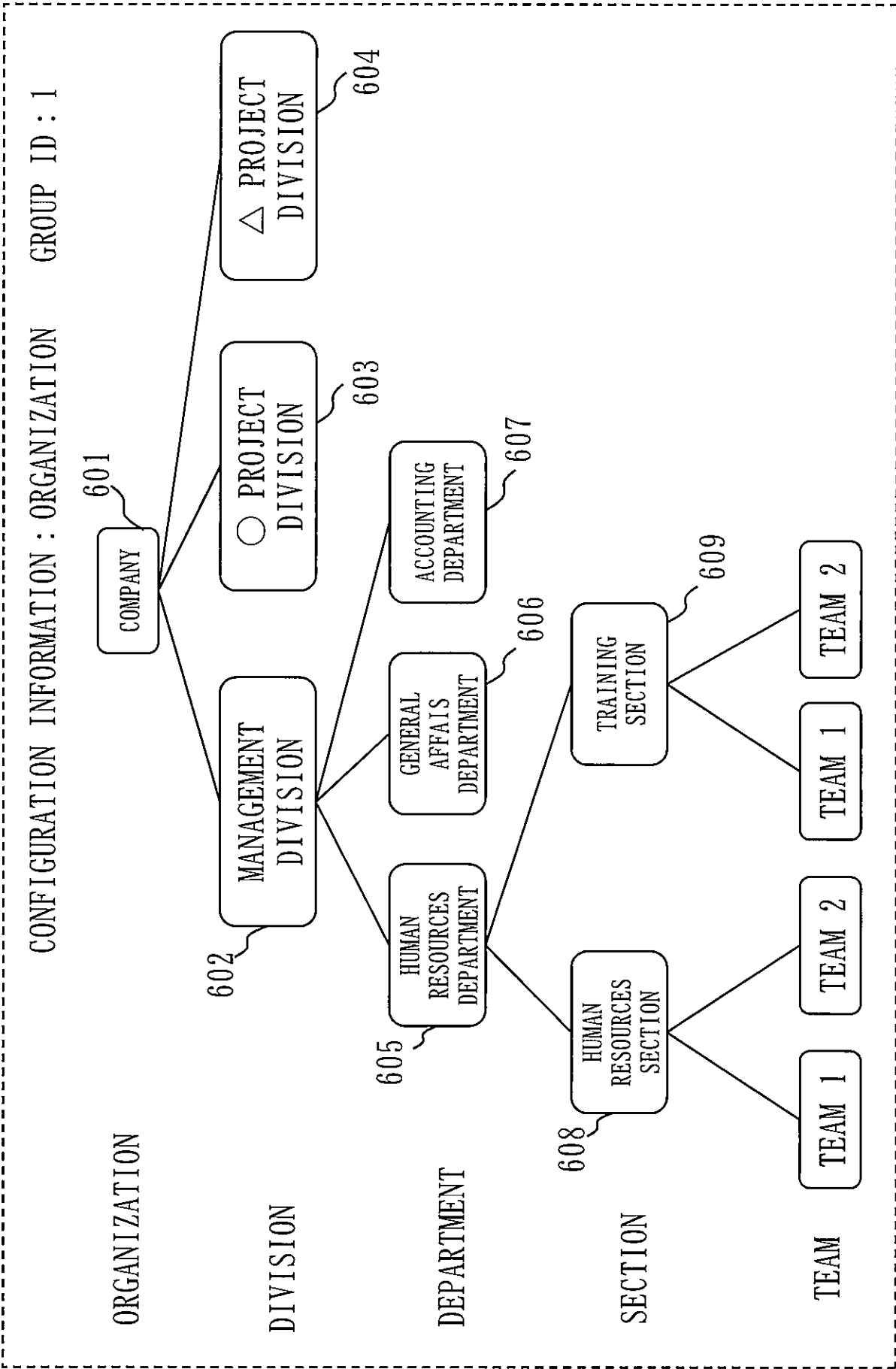


Fig. 7

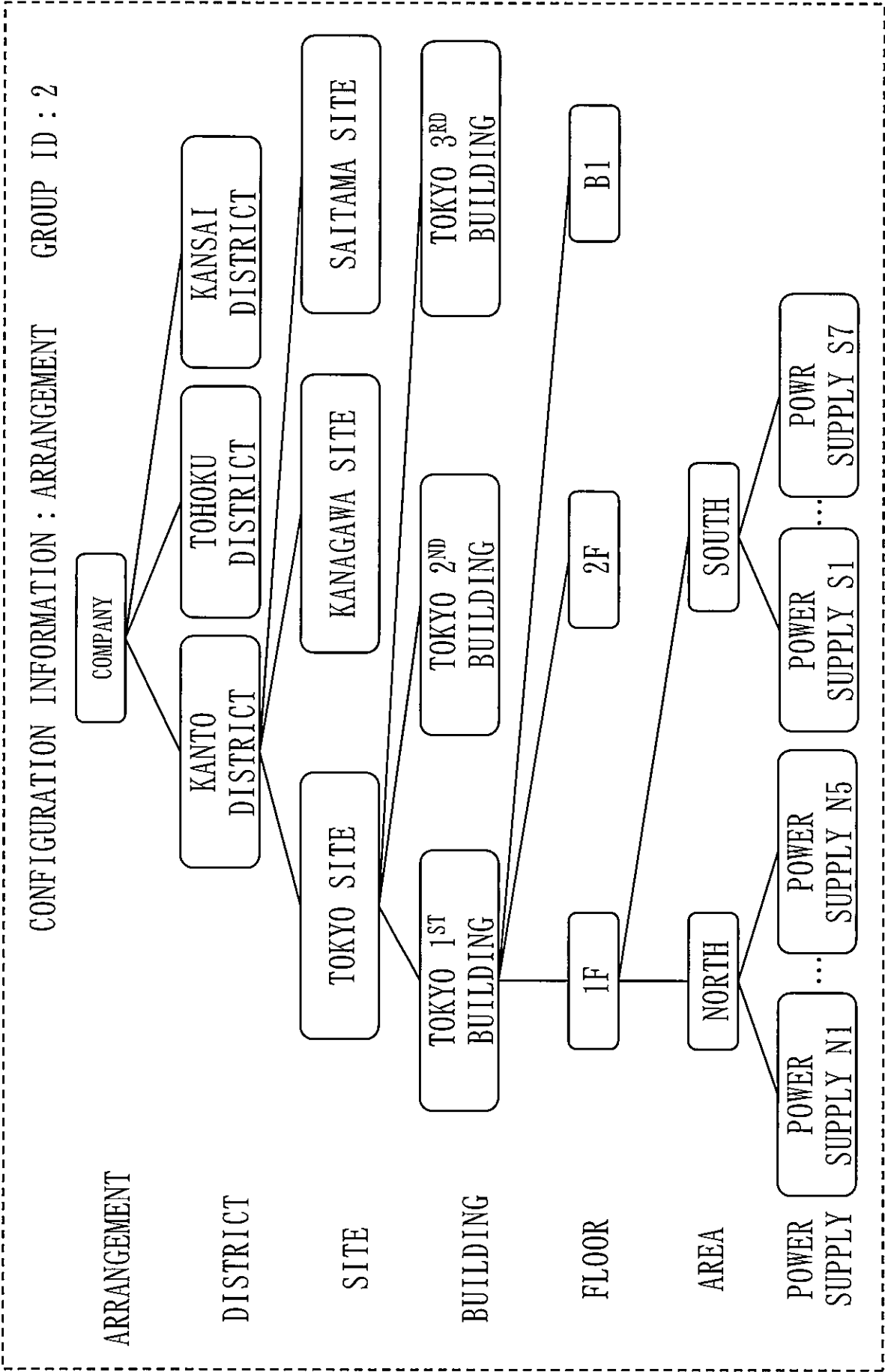


Fig. 8

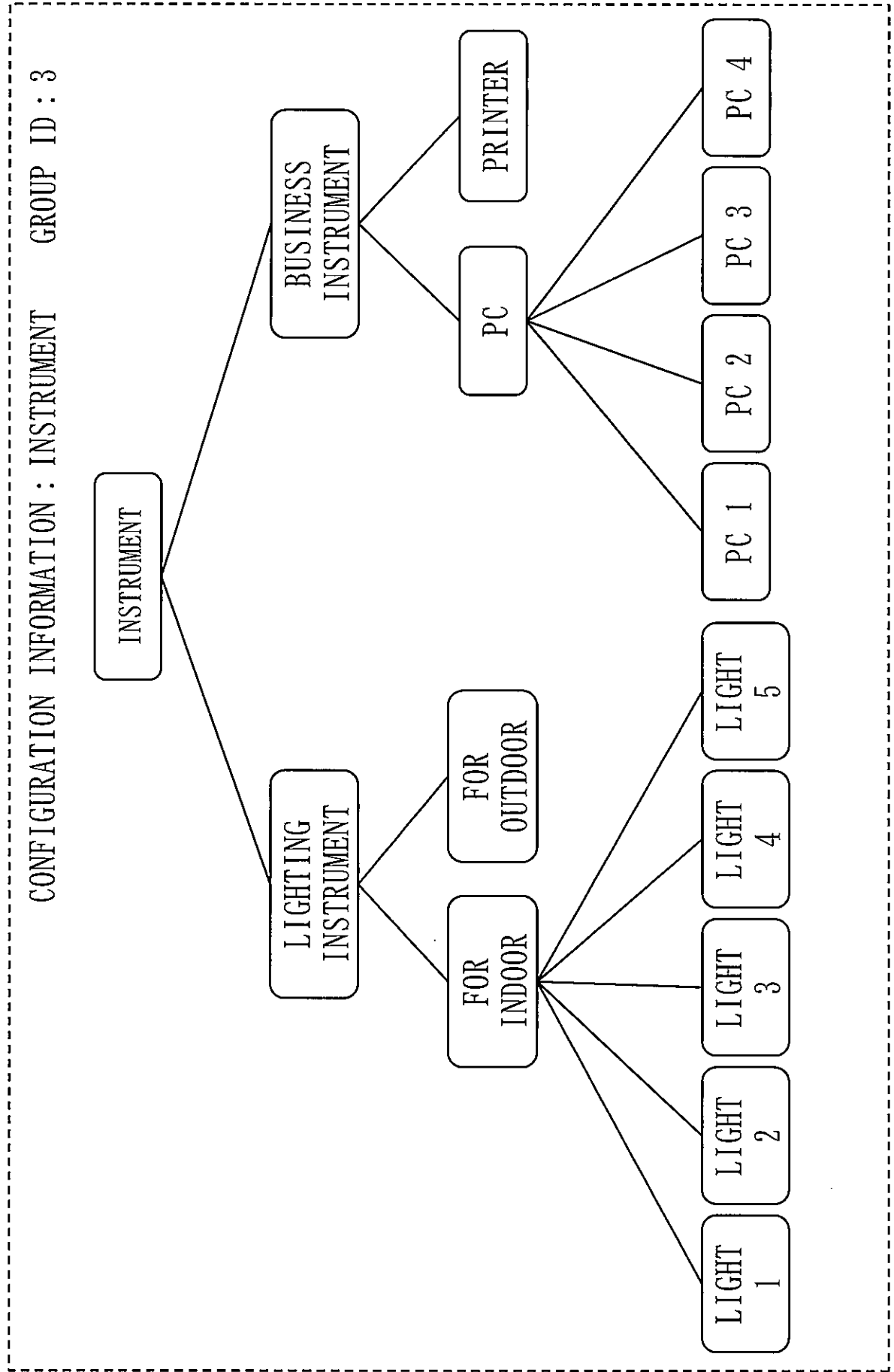


Fig. 9

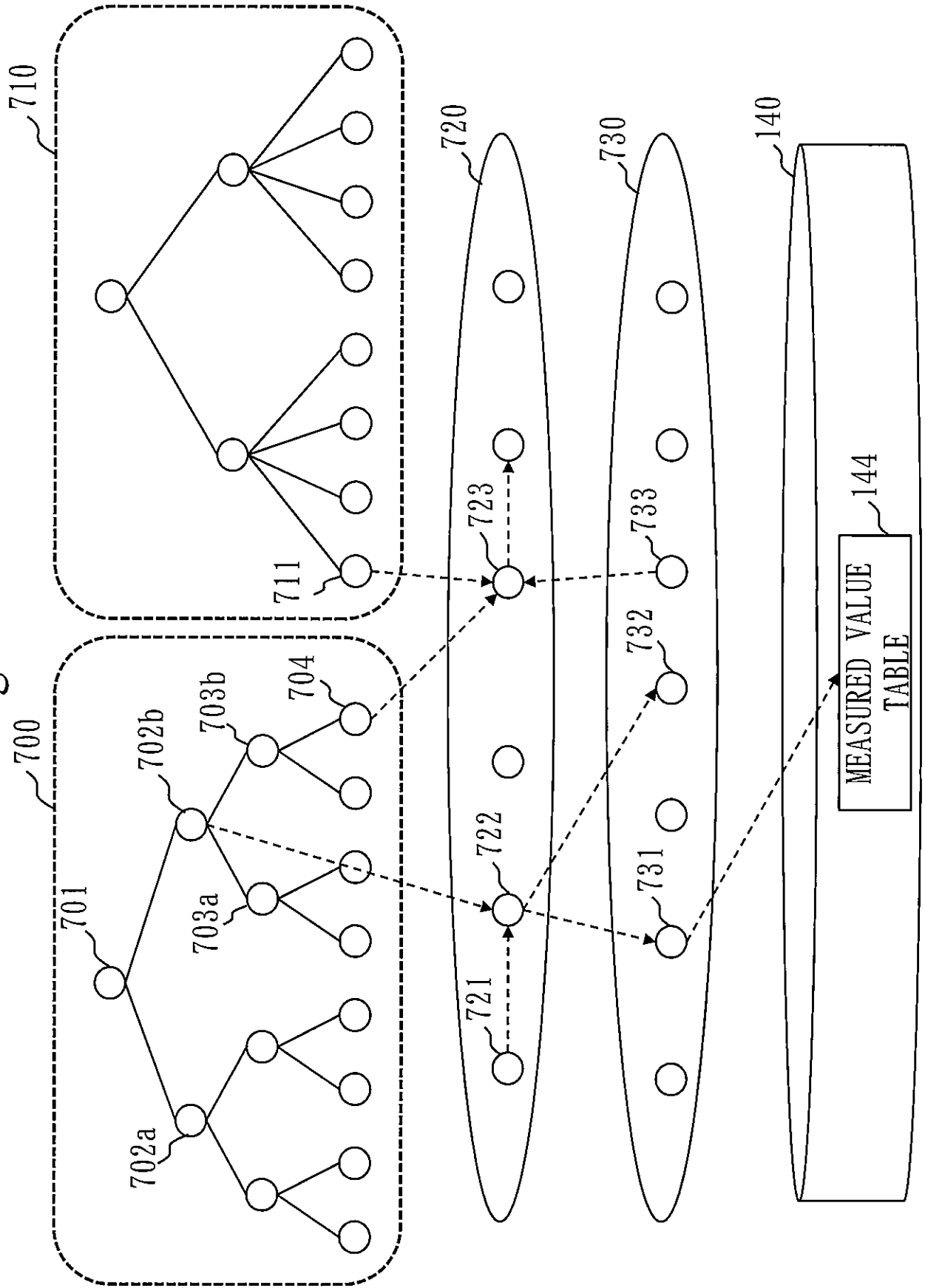


Fig. 10

142

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
1	null	1	1	#1	COMPANY
2	1	1	2	#2	MANAGEMENT DIVISION
3	2	1	3	#3	HUMAN RESOURCES DEPARTMENT
4	3	1	4	#4	HUMAN RESOURCES SECTION
⋮	⋮	⋮	⋮	⋮	⋮
10	1	1	2	#10	○ PROJECT DIVISION
⋮	⋮	⋮	⋮	⋮	⋮
201	200	2	4	#201	TOKYO 1ST BUILDING
202	201	2	5	#202	1F
203	202	2	6	#203	NORTH
204	202	2	6	#204	SOUTH
⋮	⋮	⋮	⋮	⋮	⋮

801

802

803

804

805

806

Fig. 11

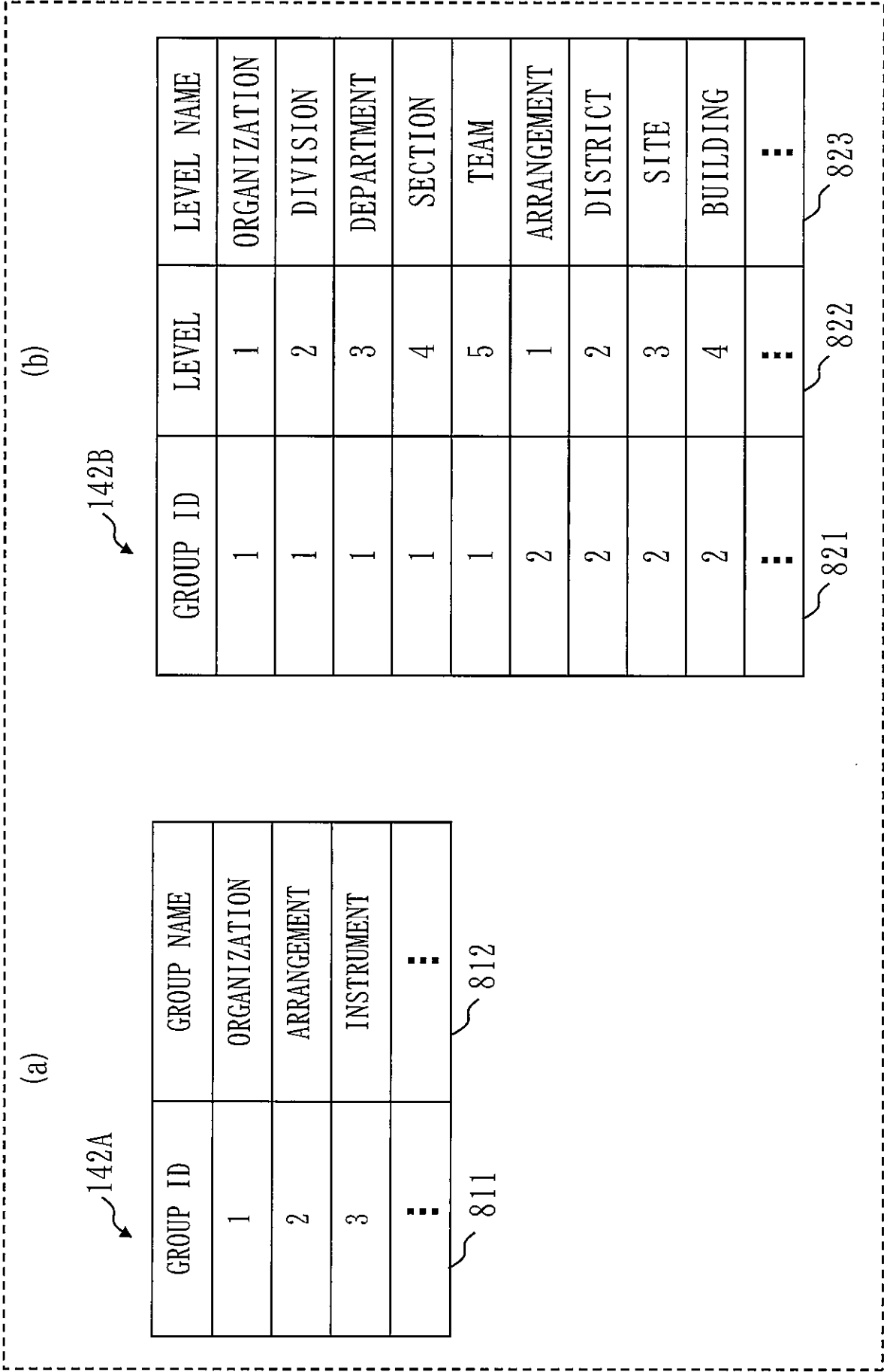


Fig. 12

141

VIRTUAL MEASUREMENT POINT ID	VIRTUAL MEASUREMENT POINT NAME	VIRTUAL MEASUREMENT POINT DEFINITION	SUBSTITUTE MEASUREMENT POINT FLAG
#1	POWER AT WHOLE COMPANY	#2+#10+#20、%1	1
#2	POWER AT MANAGEMENT DIVISION	#202+#210+#220、%2	1
#3	POWER AT HUMAN RESOURCES DEPARTMENT	#202	0
#4	POWER AT HUMAN RESOURCES SECTION	#202×0.6	0
⋮	⋮	⋮	⋮
#10	POWER AT ○ PROJECT DIVISION	#302+#310+#320	0
#20	POWER AT △ PROJECT DIVISION	#402+#410+#420	0
⋮	⋮	⋮	⋮
#201	POWER TRANSFORMER FACILITY OF TOKYO 1 ST BUILDING	\$1	0
#202	1F DISTRIBUTION PANEL	\$2	0
#203	NORTH DISTRIBUTION PANEL	\$3、%3	1
#204	SOUTH DISTRIBUTION PANEL	\$4、%4	1
⋮	⋮	⋮	⋮

904

903

902

901

Fig. 13

143 : MEASURED VALUE TABLE DESIGN INFORMATION

MEASUREMENT POINT ID	DB SERVER NAME	DATABASE NAME	TABLE NAME	COLUMN NAME	DATA TYPE
\$1	DB Server_1	E_CONSUMP	SENSOR_1	MEASURED VALUE 1	NUMERICAL VALUE
\$2	DB Server_1	E_CONSUMP	SENSOR_1	MEASURED VALUE 2	NUMERICAL VALUE
\$3	DB Server_1	E_CONSUMP	SENSOR_1	MEASURED VALUE 3	NUMERICAL VALUE
\$4	DB Server_1	E_CONSUMP	SENSOR_1	MEASURED VALUE 4	NUMERICAL VALUE
⋮	⋮	⋮	⋮	⋮	⋮
\$101	DB Server_2	E_CONSUMP	SENSOR_4	MEASURED VALUE 1	NUMERICAL VALUE
\$102	DB Server_2	E_CONSUMP	SENSOR_4	MEASURED VALUE 2	BIT
\$103	DB Server_2	E_CONSUMP	SENSOR_4	MEASURED VALUE 3	CHARACTER STRING
⋮	⋮	⋮	⋮	⋮	⋮
%1	DB Server_2	E_CONSUMP	SENSOR_9	MEASURED VALUE 1	NUMERICAL VALUE
%2	DB Server_2	E_CONSUMP	SENSOR_9	MEASURED VALUE 2	NUMERICAL VALUE
%3	DB Server_2	E_CONSUMP	SENSOR_9	MEASURED VALUE 3	NUMERICAL VALUE
%4	DB Server_2	E_CONSUMP	SENSOR_9	MEASURED VALUE 4	NUMERICAL VALUE

1001 1002 1003 1004 1005 1006

Fig. 14

143A

SUBSTITUTE MEASUREMENT POINT ID	SUBSTITUTE MEASUREMENT POINT DEFINITION
% 1	
% 2	
% 3	\$ 3
% 4	\$ 4
⋮	⋮

1011 1012

Fig. 15

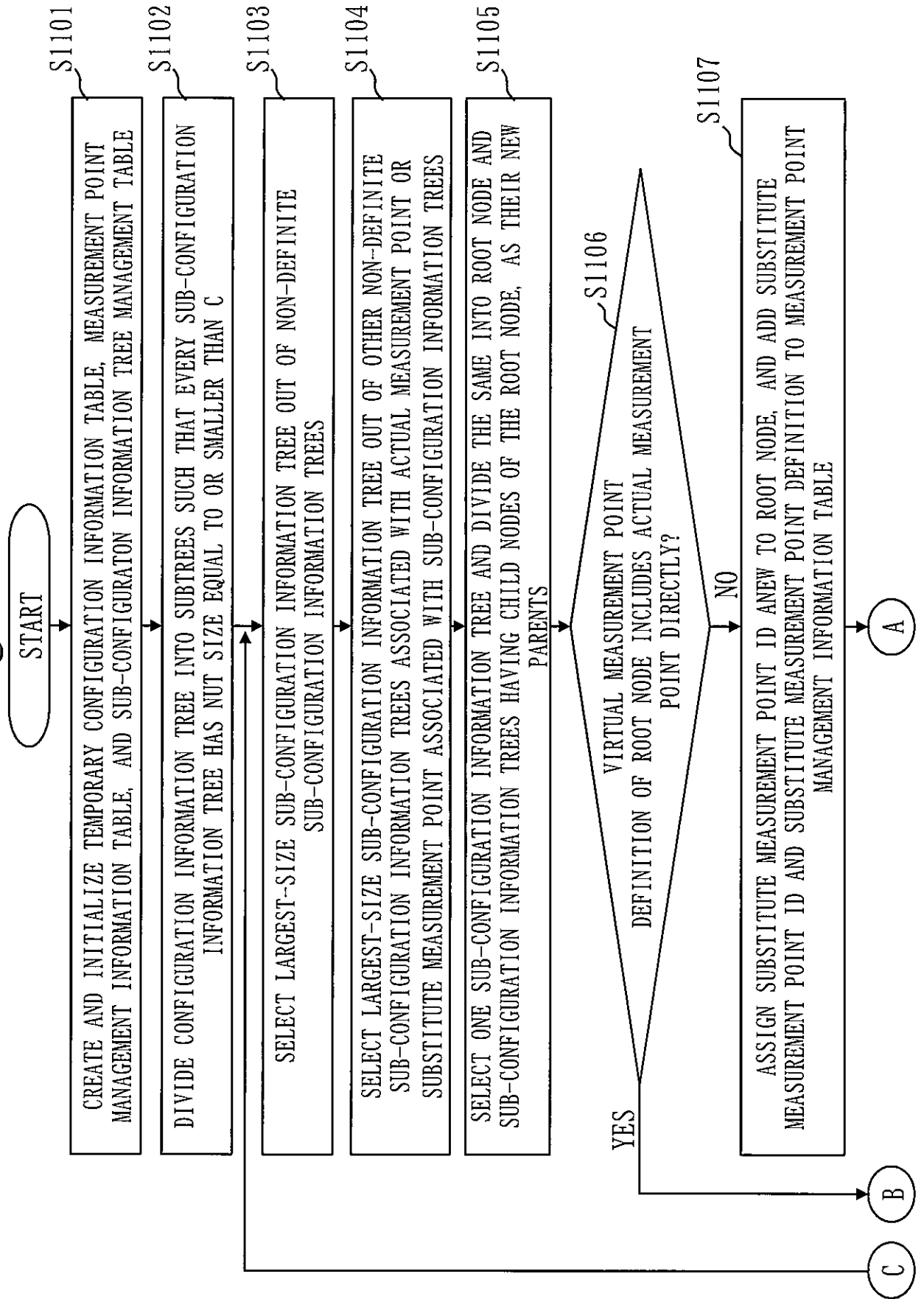


Fig. 16

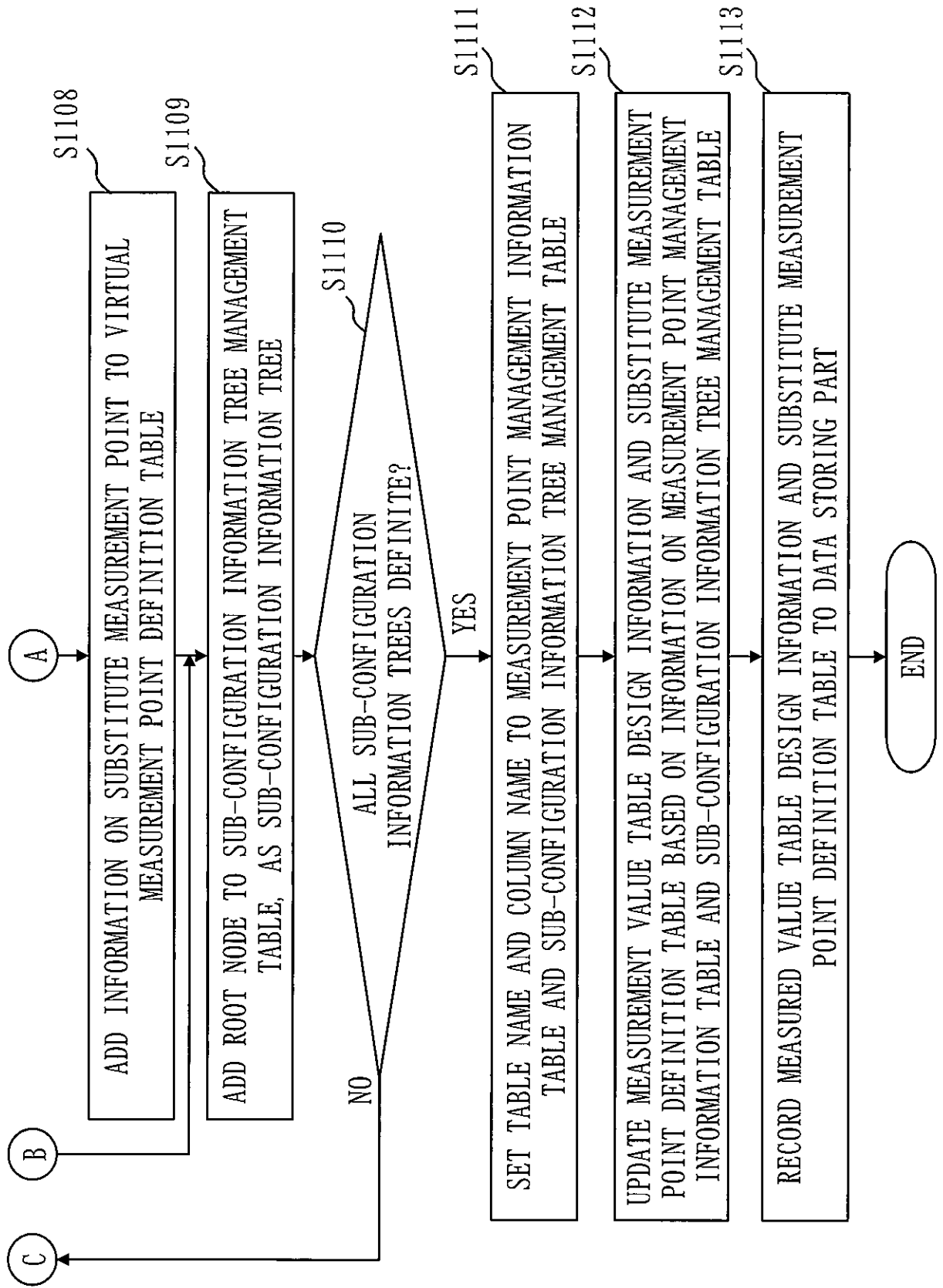


Fig. 17

1200

MEASUREMENT POINT ID	OWN NODE ID	ROOT NODE ID	COLUMN NAME	SUBSTITUTE MEASUREMENT POINT DEFINITION
\$ 1	201	1		
\$ 2	202	1		
⋮	⋮	⋮	⋮	⋮
% 1		1		
% 2		1		
% 3		1		\$3
% 4		1		\$4

Fig. 18

1210 ↗

SUB- CONFIGURATION INFORMATION TREE ID	ROOT NODE ID	SUB-CONFIGURATION INFORMATION TREE GROUP ID	DEFINITE FLAG	DB SERVER NAME	DATABASE NAME	TABLE NAME
1	1	1	0	null	null	null
2	100	2	0	null	null	null
⋮	⋮		⋮	⋮	⋮	⋮

1211
1212
1213
1214
1215
1216
1217

Fig. 19

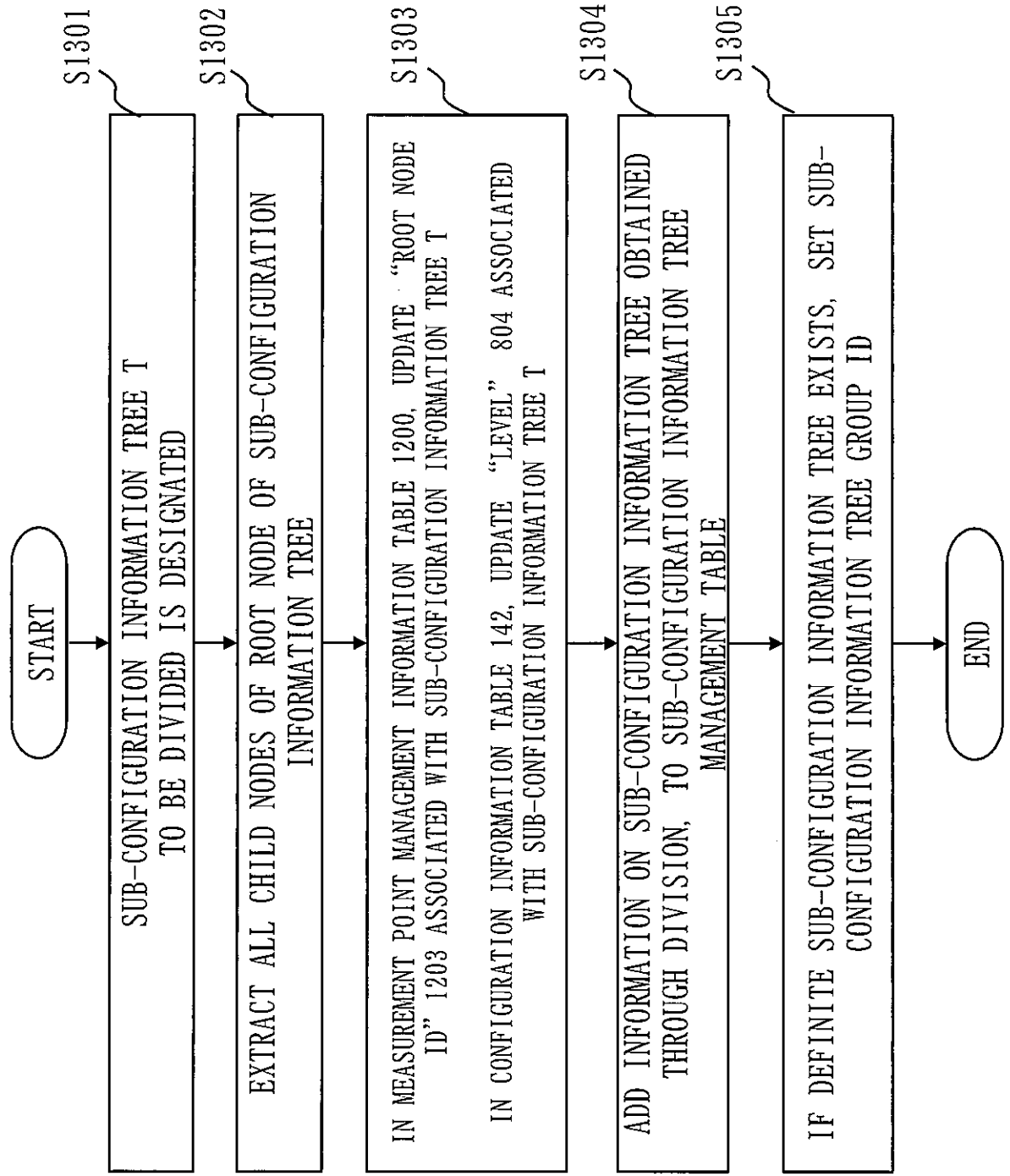


Fig. 20

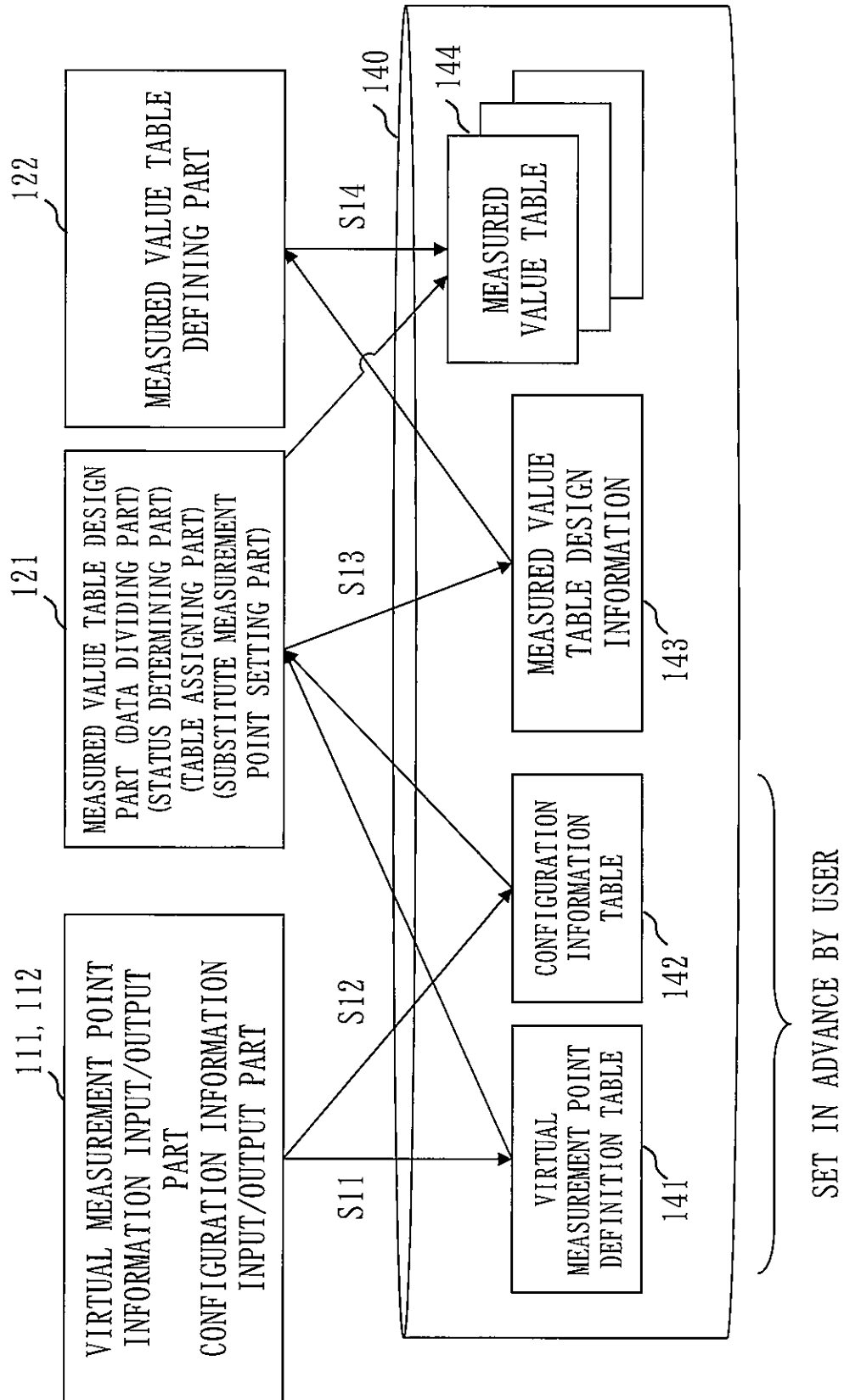


Fig. 21

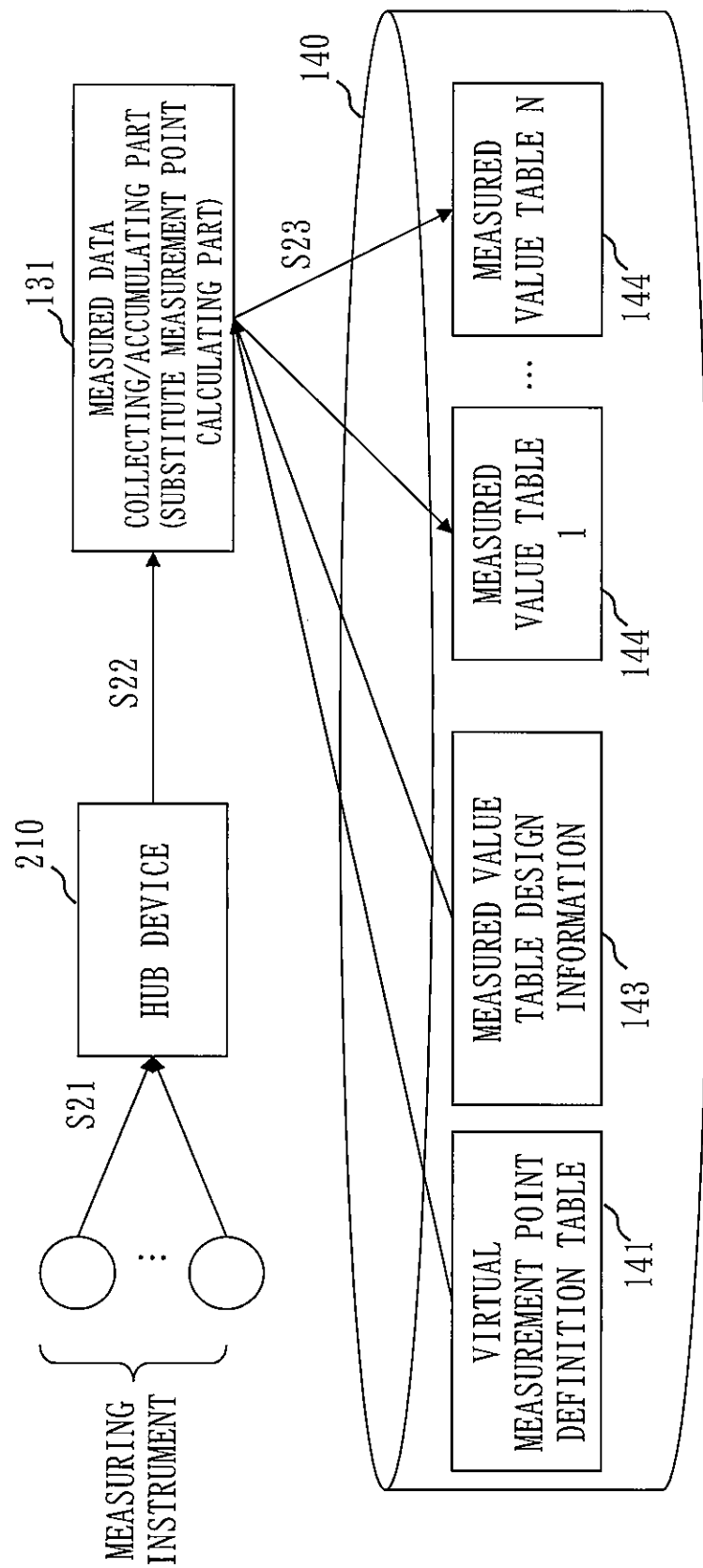


Fig. 22

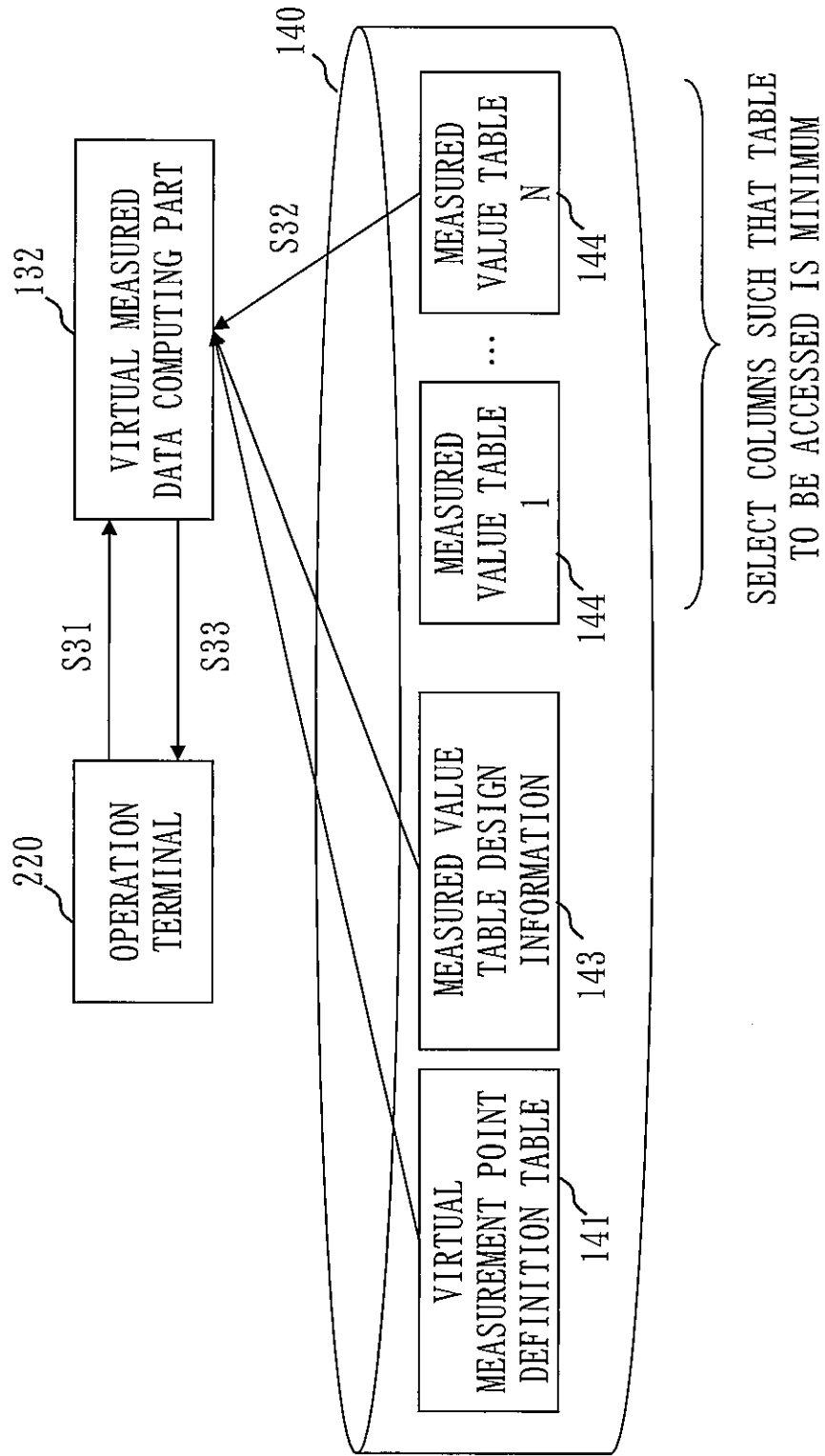


Fig. 24

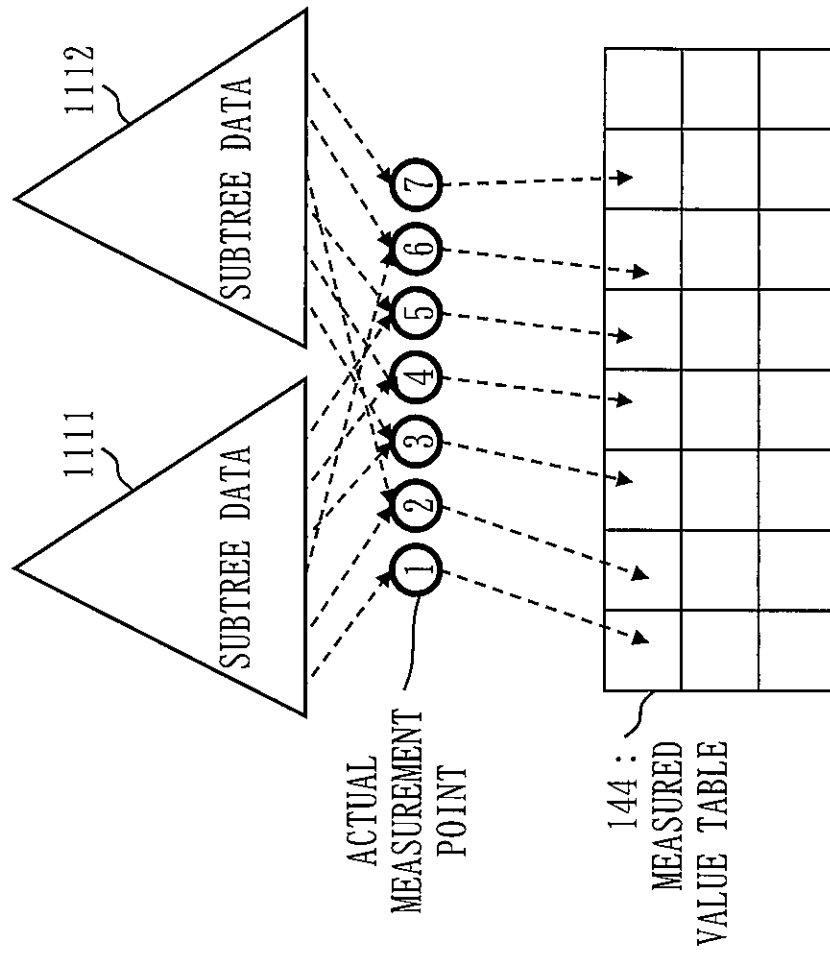


Fig. 25

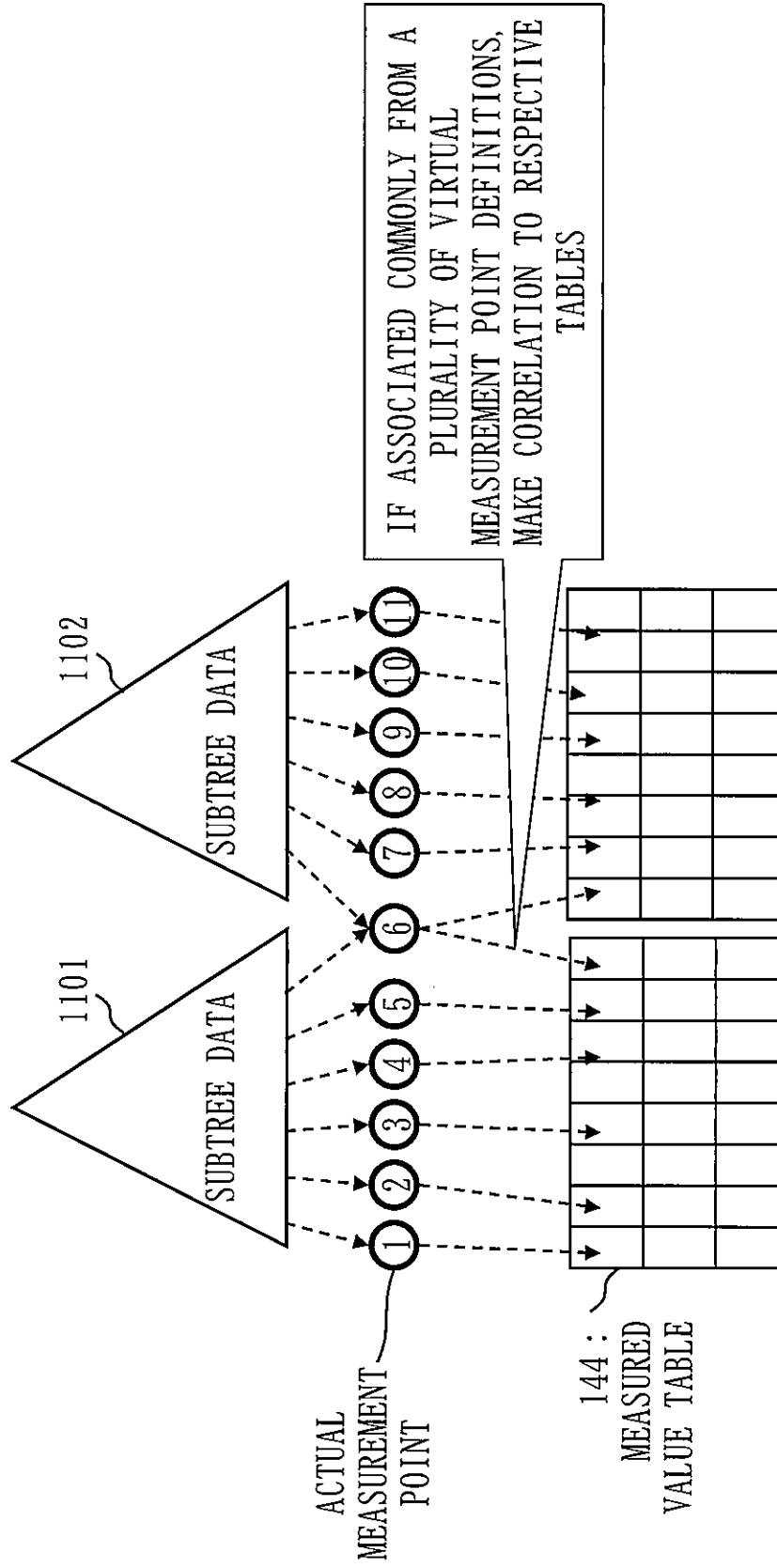


Fig. 26

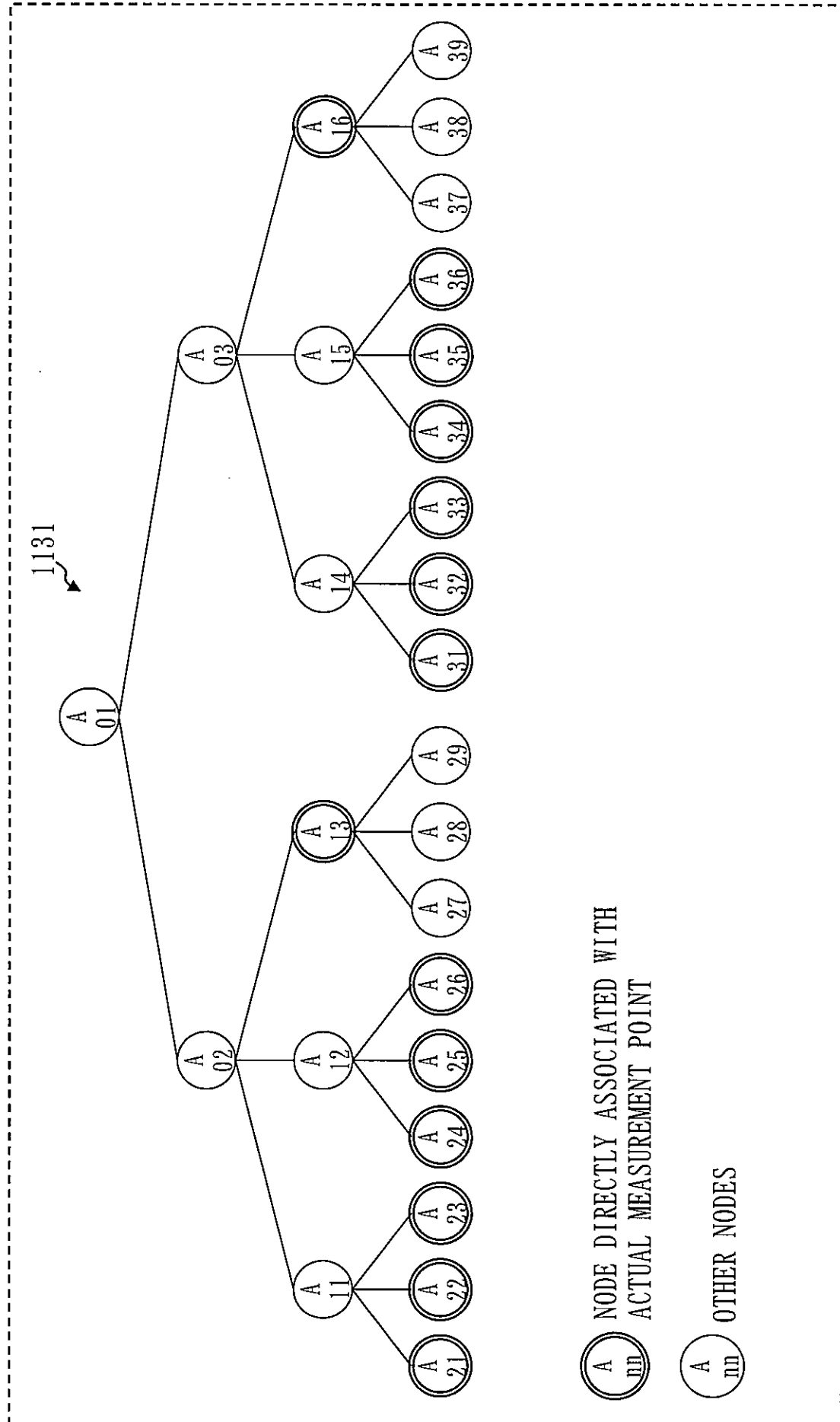


Fig. 27

CONFIGURATION INFORMATION TABLE 142 (FOR GROUP ID=1)

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
1	null	1	1	#1	A01
2	1	1	2	#2	A02
3	1	1	2	#3	A03
11	2	1	3	#11	A11
12	2	1	3	#12	A12
13	2	1	3	#13	A13
14	3	1	3	#14	A14
15	3	1	3	#15	A15
16	3	1	3	#16	A16
21	11	1	4	#21	A21
22	11	1	4	#22	A22
23	11	1	4	#23	A23
24	12	1	4	#24	A24
25	12	1	4	#25	A25
26	12	1	4	#26	A26
27	13	1	4	#27	A27
28	13	1	4	#28	A28
29	13	1	4	#29	A29
31	14	1	4	#31	A31
32	14	1	4	#32	A32
33	14	1	4	#33	A33
34	15	1	4	#34	A34
35	15	1	4	#35	A35
36	15	1	4	#36	A36
37	16	1	4	#37	A37
38	16	1	4	#38	A38
39	16	1	4	#39	A39

Fig. 28

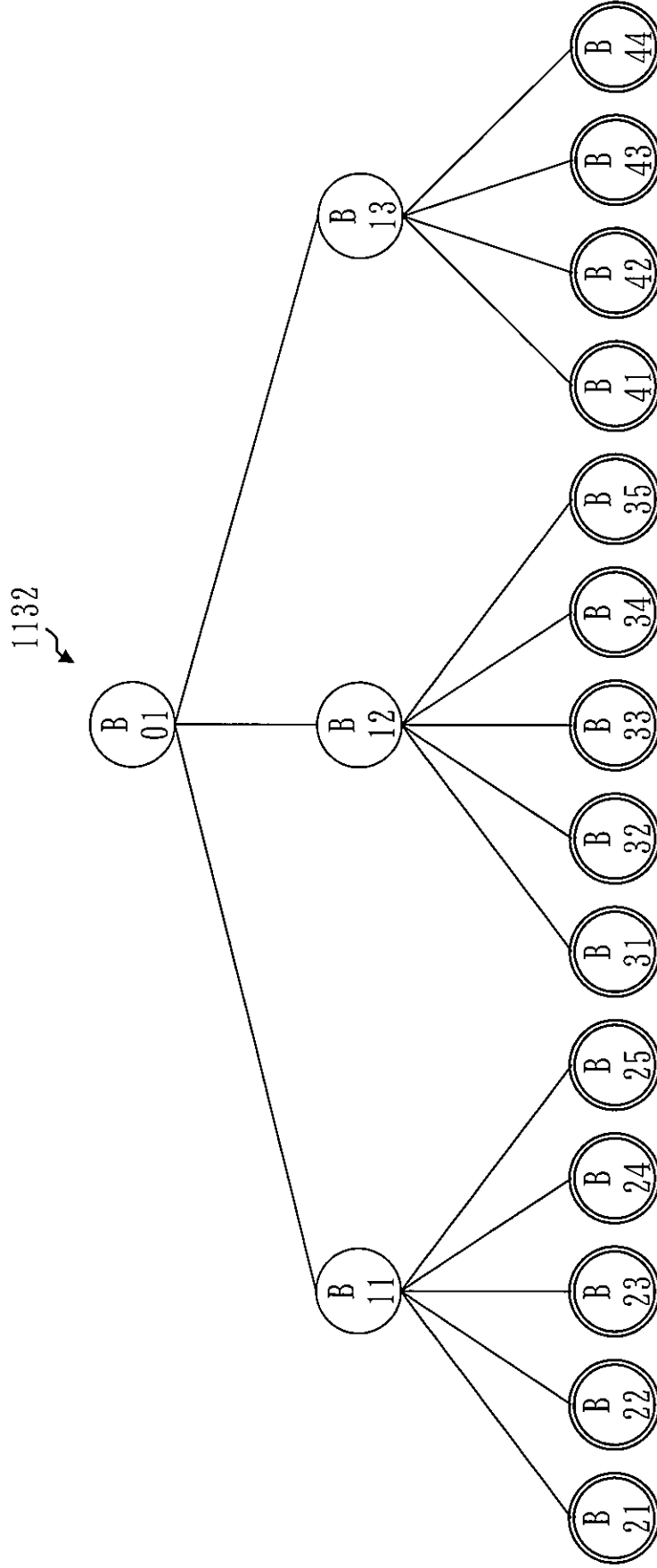


Fig. 29

CONFIGURATION INFORMATION TABLE 142 (FOR GROUP ID=2)

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
101	null	2	1	#101	B01
111	101	2	2	#111	B11
112	101	2	2	#112	B12
113	101	2	2	#113	B13
121	111	2	3	#121	B21
122	111	2	3	#122	B22
123	111	2	3	#123	B23
124	111	2	3	#124	B24
125	111	2	3	#125	B25
131	112	2	3	#131	B31
132	112	2	3	#132	B32
133	112	2	3	#133	B33
134	112	2	3	#134	B34
135	112	2	3	#135	B35
141	113	2	3	#141	B41
142	113	2	3	#142	B42
143	113	2	3	#143	B43
144	113	2	3	#144	B44

Fig. 30

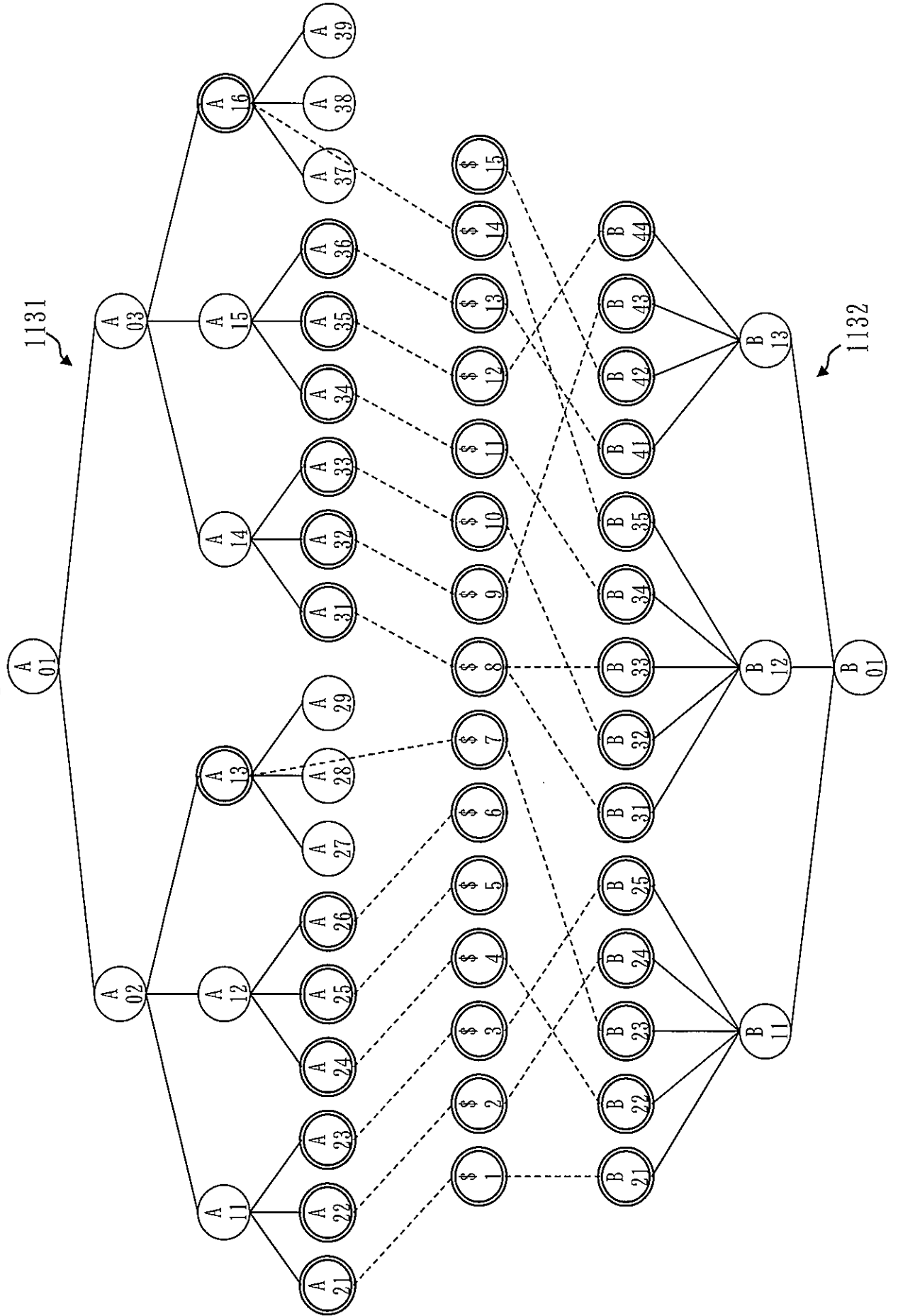


Fig. 31

VIRTUAL MEASUREMENT POINT DEFINITION TABLE

VIRTUAL MEASUREMENT POINT ID	VIRTUAL MEASUREMENT POINT NAME	VIRTUAL MEASUREMENT POINT DEFINITION	SUBSTITUTE MEASUREMENT POINT FLAG
#1	A01	#2+#3	0
#2	A02	#11+#12+#13	0
#3	A03	#14+#15+#16	0
#11	A11	#21+#22+#23	0
#12	A12	#24+#25+#26	0
#13	A13	\$7	0
#14	A14	#31+#32+#33	0
#15	A15	#34+#35+#36	0
#16	A16	\$14	0
#21	A21	\$1	0
#22	A22	\$2	0
#23	A23	\$3	0
#24	A24	\$4	0
#25	A25	\$5	0
#26	A26	\$6	0
#27	A27	#13/2	0
#28	A28	#13/4	0
#29	A29	#13/4	0
#31	A31	\$8	0
#32	A32	\$9	0
#33	A33	\$10	0
#34	A34	\$11	0
#35	A35	\$12	0
#36	A36	\$13	0
#37	A37	#16/2	0
#38	A38	#16/4	0
#39	A39	#16/4	0

Fig. 32

VIRTUAL MEASUREMENT POINT DEFINITION TABLE

VIRTUAL MEASUREMENT POINT ID	VIRTUAL MEASUREMENT POINT NAME	VIRTUAL MEASUREMENT POINT DEFINITION	SUBSTITUTE MEASUREMENT POINT FLAG
#101	B01	#111+#112+#113	0
#111	B11	#121+#122+#123+#124+#125	0
#112	B12	#131+#132+#133+#134+#135	0
#113	B13	#141+#142+#143+#144	0
#121	B21	\$1	0
#122	B22	\$4	0
#123	B23	\$7	0
#124	B24	\$2	0
#125	B25	\$3	0
#131	B31	\$8	0
#132	B32	\$10	0
#133	B33	\$8	0
#134	B34	\$11	0
#135	B35	\$14	0
#141	B41	\$13	0
#142	B42	\$15	0
#143	B43	\$9	0
#144	B44	\$12	0

Fig. 33

TEMPORARY CONFIGURATION INFORMATION TABLE

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
1	null	1	1	#1	A01
2	1	1	2	#2	A02
3	1	1	2	#3	A03
11	2	1	3	#11	A11
12	2	1	3	#12	A12
13	2	1	3	#13	A13
14	3	1	3	#14	A14
15	3	1	3	#15	A15
16	3	1	3	#16	A16
21	11	1	4	#21	A21
22	11	1	4	#22	A22
23	11	1	4	#23	A23
24	12	1	4	#24	A24
25	12	1	4	#25	A25
26	12	1	4	#26	A26
27	13	1	4	#27	A27
28	13	1	4	#28	A28
29	13	1	4	#29	A29
31	14	1	4	#31	A31
32	14	1	4	#32	A32
33	14	1	4	#33	A33
34	15	1	4	#34	A34
35	15	1	4	#35	A35
36	15	1	4	#36	A36
37	16	1	4	#37	A37
38	16	1	4	#38	A38
39	16	1	4	#39	A39

Fig. 34

TEMPORARY CONFIGURATION INFORMATION TABLE

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
101	null	2	1	#101	B01
111	101	2	2	#111	B11
112	101	2	2	#112	B12
113	101	2	2	#113	B13
121	111	2	3	#121	B21
122	111	2	3	#122	B22
123	111	2	3	#123	B23
124	111	2	3	#124	B24
125	111	2	3	#125	B25
131	112	2	3	#131	B31
132	112	2	3	#132	B32
133	112	2	3	#133	B33
134	112	2	3	#134	B34
135	112	2	3	#135	B35
141	113	2	3	#141	B41
142	113	2	3	#142	B42
143	113	2	3	#143	B43
144	113	2	3	#144	B44

Fig. 35

MEASUREMENT POINT MANAGEMENT INFORMATION TABLE

MEASUREMENT POINT ID	OWN NODE ID	ROOT NODE ID	COLUMN NAME	SUBSTITUTE MEASUREMENT POINT DEFINITION
\$1	21, 121	1, 101		
\$2	22, 131	1, 101		
\$3	23, 141	1, 101		
\$4	24, 122	1, 101		
\$5	25	1		
\$6	26	1		
\$7	13, 123	1, 101		
\$8	31, 133	1, 101		
\$9	32, 143	1, 101		
\$10	33, 124	1, 101		
\$11	34, 134	1, 101		
\$12	35, 144	1, 101		
\$13	36, 125	1, 101		
\$14	16, 135	1, 101		
\$15	142	101		

Fig. 37

TEMPORARY CONFIGURATION INFORMATION TABLE

NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
1	null	1	1	#1	A01
2	1	1	1	#2	A02
3	1	1	1	#3	A03
11	2	1	2	#11	A11
12	2	1	2	#12	A12
13	2	1	2	#13	A13
14	3	1	2	#14	A14
15	3	1	2	#15	A15
16	3	1	2	#16	A16
21	11	1	3	#21	A21
22	11	1	3	#22	A22
23	11	1	3	#23	A23
24	12	1	3	#24	A24
25	12	1	3	#25	A25
26	12	1	3	#26	A26
27	13	1	3	#27	A27
28	13	1	3	#28	A28
29	13	1	3	#29	A29
31	14	1	3	#31	A31
32	14	1	3	#32	A32
33	14	1	3	#33	A33
34	15	1	3	#34	A34
35	15	1	3	#35	A35
36	15	1	3	#36	A36
37	16	1	3	#37	A37
38	16	1	3	#38	A38
39	16	1	3	#39	A39

Fig. 38

MEASUREMENT POINT MANAGEMENT INFORMATION TABLE

MEASUREMENT POINT ID	OWN NODE ID	ROOT NODE ID	COLUMN NAME	SUBSTITUTE MEASUREMENT POINT DEFINITION
\$1	21, 121	2, 101		
\$2	22, 131	2, 101		
\$3	23, 141	2, 101		
\$4	24, 122	2, 101		
\$5	25	1		
\$6	26	1		
\$7	13, 123	2, 101		
\$8	31, 133	3, 101		
\$9	32, 143	3, 101		
\$10	33, 124	3, 101		
\$11	34, 134	3, 101		
\$12	35, 144	3, 101		
\$13	36, 125	3, 101		
\$14	16, 135	3, 101		
\$15	142	101		

Fig. 40

TEMPORARY CONFIGURATION INFORMATION TABLE					
NODE ID	PARENT ID	GROUP ID	LEVEL	VIRTUAL MEASUREMENT POINT ID	NODE NAME
101	null	2	1	#101	B01
111	101	2	1	#111	B11
112	101	2	1	#112	B12
113	101	2	1	#113	B13
121	111	2	2	#121	B21
122	111	2	2	#122	B22
123	111	2	2	#123	B23
124	111	2	2	#124	B24
125	111	2	2	#125	B25
131	112	2	2	#131	B31
132	112	2	2	#132	B32
133	112	2	2	#133	B33
134	112	2	2	#134	B34
135	112	2	2	#135	B35
141	113	2	2	#141	B41
142	113	2	2	#142	B42
143	113	2	2	#143	B43
144	113	2	2	#144	B44

Fig. 41

MEASUREMENT POINT MANAGEMENT INFORMATION TABLE				
MEASUREMENT POINT ID	OWN NODE ID	ROOT NODE ID	COLUMN NAME	SUBSTITUTE MEASUREMENT POINT DEFINITION
\$1	21, 121	2, 111		
\$2	22, 131	2, 112		
\$3	23, 141	2, 113		
\$4	24, 122	2, 111		
\$5	25	1		
\$6	26	1		
\$7	13, 123	2, 111		
\$8	31, 133	3, 112		
\$9	32, 143	3, 113		
\$10	33, 124	3, 111		
\$11	34, 134	3, 112		
\$12	35, 144	3, 113		
\$13	36, 125	3, 111		
\$14	16, 135	3, 112		
\$15	142	101		

Fig. 44

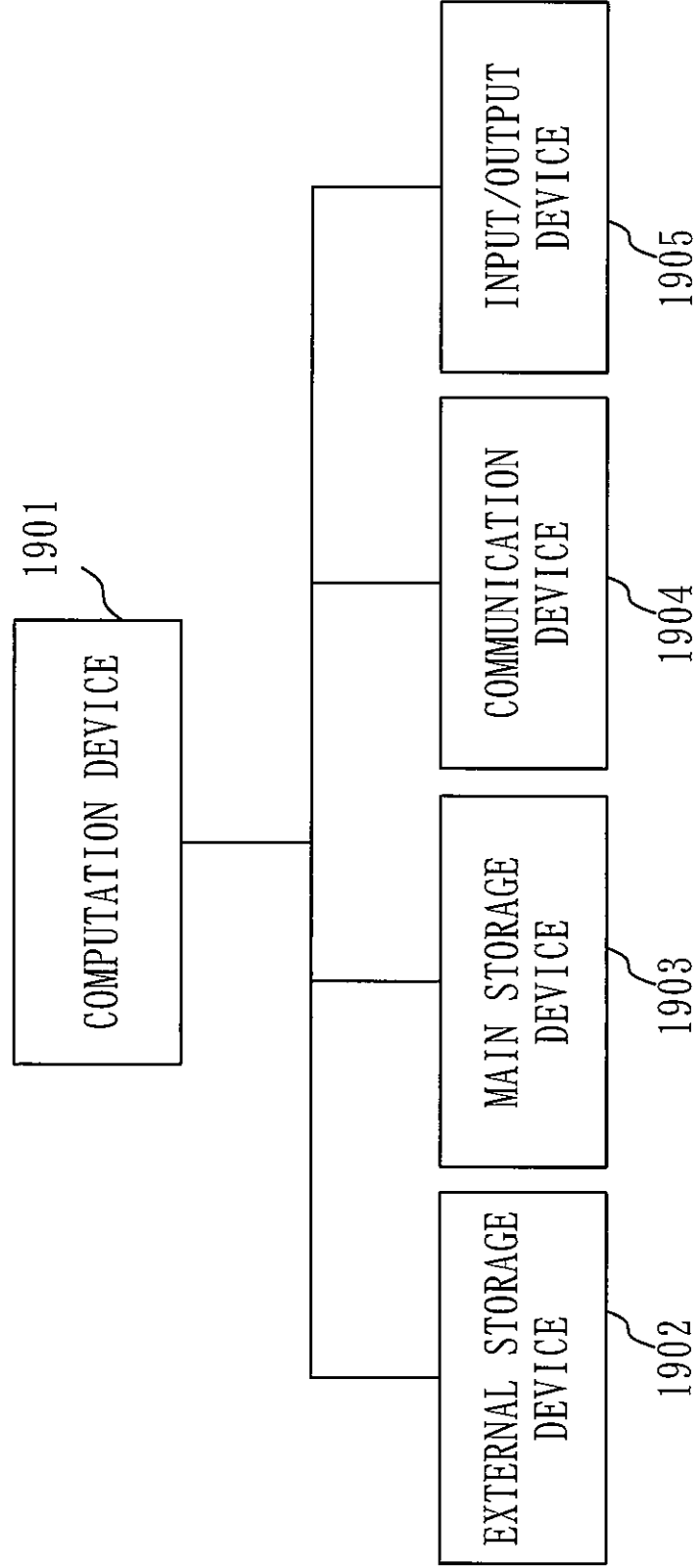


Fig. 45

VIRTUAL MEASUREMENT POINT DEFINITION TABLE

VIRTUAL MEASUREMENT POINT ID	VIRTUAL MEASUREMENT POINT NAME	VIRTUAL MEASUREMENT POINT DEFINITION	SUBSTITUTE MEASUREMENT POINT FLAG
#1	A01	#2+#3, %1	1
#2	A02	#11+#12+#13, %2	1
#3	A03	#14+#15+#16, %3	1
#11	A11	#21+#22+#23	0
#12	A12	#24+#25+#26	0
#13	A13	\$7	0
#14	A14	#31+#32+#33	0
#15	A15	#34+#35+#36	0
#16	A16	\$14	0
#21	A21	\$1	0
#22	A22	\$2	0
#23	A23	\$3	0
#24	A24	\$4	0
#25	A25	\$5	0
#26	A26	\$6	0
#27	A27	#13/2	0
#28	A28	#13/4	0
#29	A29	#13/4	0
#31	A31	\$8	0
#32	A32	\$9	0
#33	A33	\$10	0
#34	A34	\$11	0
#35	A35	\$12	0
#36	A36	\$13	0
#37	A37	#16/2	0
#38	A38	#16/4	0
#39	A39	#16/4	0

Fig. 46

VIRTUAL MEASUREMENT POINT DEFINITION TABLE

VIRTUAL MEASUREMENT POINT ID	VIRTUAL MEASUREMENT POINT NAME	VIRTUAL MEASUREMENT POINT DEFINITION	SUBSTITUTE MEASUREMENT POINT FLAG
#101	B01	#111+#112+#113, %4	1
#111	B11	#121+#122+#123+#124+#125, %5	1
#112	B12	#131+#132+#133+#134+#135, %6	1
#113	B13	#141+#142+#143+#144, %7	1
#121	B21	\$1	0
#122	B22	\$4	0
#123	B23	\$7	0
#124	B24	\$2	0
#125	B25	\$3	0
#131	B31	\$8	0
#132	B32	\$10	0
#133	B33	\$8	0
#134	B34	\$11	0
#135	B35	\$14	0
#141	B41	\$13	0
#142	B42	\$15	0
#143	B43	\$9	0
#144	B44	\$12	0

Fig. 47

MEASUREMENT POINT MANAGEMENT INFORMATION TABLE

MEASUREMENT POINT ID	OWN NODE ID	ROOT NODE ID	COLUMN NAME	SUBSTITUTE MEASUREMENT POINT DEFINITION
\$1	21, 121	2, 111		
\$2	22, 131	2, 112		
\$3	23, 141	2, 113		
\$4	24, 122	2, 111		
\$5	25	1		
\$6	26	1		
\$7	13, 123	2, 111		
\$8	31, 133	3, 112		
\$9	32, 143	3, 113		
\$10	33, 124	3, 111		
\$11	34, 134	3, 112		
\$12	35, 144	3, 113		
\$13	36, 125	3, 111		
\$14	16, 135	3, 112		
\$15	142	101		
%1	1	1	null	\$1+\$2+\$3+\$4+\$5+\$6+\$7+\$8+\$9 +\$10+\$11+\$12+\$13+\$14
%2	101	101	null	\$1+\$2+\$3+\$4+\$7+\$8+\$9 +\$10+\$11+\$12+\$13+\$14+\$15
%3	2	2	null	\$1+\$2+\$3+\$4+\$5+\$6+\$7
%4	3	3	null	\$8+\$9+\$10+\$11+\$12+\$13+\$14
%5	111	111	null	\$1+\$2+\$3+\$4+\$7
%6	112	112	null	\$8+\$10+\$11+\$14
%7	113	113	null	\$9+\$12+\$13+\$15

Fig. 48

STEPS OF DERIVING SUBSTITUTE MEASUREMENT POINT DEFINITION
FOR SUBSTITUTE MEASUREMENT POINT %1

```
#2+#3
↓
(#11+#12+#13) + ( #14+#15+#16)
↓
((#21+#22+#23) + (#24+#25+#26) + ($7) ) + ((#31+#32+#33) + (#34+#35+#36) + ($14) )
↓
(( $1+$2+$3) + ($4+$5+$6) + ($7) ) + ( ($8+$9+$10) + ($11+$12+$13) + ($14) )
↓
$1+$2+$3+$4+$5+$6+$7+$8+$9+$10+$11+$12+$13+$14
```