

(19) (KR)
(12) (B1)

(21) 10 - 1997 - 0054014 (65) 1998 - 0063534
(22) 1997 10 21 (43) 1998 10 07

(30) 96 - 350186 1996 12 27 (JP)

(73) 가 가

1 7 12

(74)

(54) LSI

, CAD

가 . ,

2

LSI ,

1

2 LSI

3 2

4 3

5

6

7

8 H -

9 H - , H -

10 H - , H

11 H -

12 H -

13 H -

14 H -

15 H -

16 H -

17

18 (trunk system)

19

20

H -

21

22

23

1 : LSI 2 :
3 : / 120 :

130 - 1 130 - 6 :

$$140 = 1 \quad 140 = 6 \quad \dots$$

, LSI CAD (Computer Aided Design) LSI , LSI

LSI CAD
가 ()
LSI ,
가 ,

, 18 21 LSI L

18 19 " " . 18 19 ,
 (4) (" ") LSI (1) LSI /
 (3) (가) (2)
18 , / (3) (5 - 1) (5 - 2) (5 - 1)
" ") (4) . 가
(5 - 2) (4) , 가 (4)
 가 . 19 , (8 - 1) (8 - 4)
 (4) (4) . 19

$$+ \frac{(8-1)}{4} \cdot \frac{(8-4)}{6} \cdot \dots \cdot \frac{(7)}{1} \cdot \frac{(6)}{1} \cdot \dots \cdot \frac{(1)}{1}$$

가 . 22 23

, " " (20 - 1) (20 - 2) 22 (2)
 . (20 - 1) (20 - 2) , 22 CPU
 , (4) 22 L
 . 가

$$23, \quad (20 - 3) / (3) \quad (21)$$

$$(20 - 3) / (3) \quad (21),$$

$$(20 - 3), \quad .$$

, LSI 가

H -

가

가

H -

H -

가

(aligning)

가

가

가

1

CAD

, S0 ,

가
가

S0

가

가

),

가

가

, 6 가 ,
 가 가 (151), 가 (152) , #1 #6 ,
 가 3 #1 가 (151) 가 (153) , 가 3
 #6 가 (152) 가 (154) .
 . (163) (164) - (153) (154)
 . (163) (164) 가 (153) (154)
 . 가 (153) (154) () (가 (151), (152)
 , #1 #6 3) (163) (164)
 가 . , 가 (153) (154) 4
 (165) (165)

(120)

, #1 #6 - 가 S7
 , , - S1
 . , , - S4 S6
 가

, #1 #6 , S8 . , H .
· · , S2 S3
· · ,
가

LSI

, () 가 S9
S2

, S10 , 가 가 , #1 #6
(1) 가 (, S0 S9)
S6 . 가 (,), 가 , #1 #6 S6

가 . , (324)
가 12 (325)

가 . , 3

, , 13 , 가 y 가 $x (= 4y)$ (353)
H - (350) H - , , (351), (352)
(354) 가 . , , , ,
x (353) (350) H - , , , , (355) 가
, (354) , 3 , , , , (351), (352)
, , , , , , , , (356)
, , , , , , , , (357) 가 14

11 14 x y 가 $x = y$ (n 1)
. , , , , , , ,
y = 2x , 15 (365) 가 y = 4x , 16
(375) 가

, H - #1 #6 , ,
가 , , , S1 , ,
가 , , , , , , ,

, , , , , , ,
, 3 , , , , , ,
3 , , , , , , ,
(140 - 1) 2 , , ,
(130 - 2) , , ,
(130 - 2) 4 , , ,
(140 - 1) 1 , , ,

, S2 , , , , , , ,

S6 S8 , , , , , , ,

가 , , , , , , ,

CAD , , , , , , , CPU

, 17 CAD , , (505), (507), (509),
(503)

(511), (513), (515), . . . (505), S0
 , S7 - , S9 (503)
 (515) . . . (507) S2 S3
 , (507) , (505) , (515)
 (517) . . . (509) , S4, S5, S6 S8 ,
 (507) (515)
 (509) , (505) , (515)
 . . . (511) S6 S8
 (511) , (505) , (515)
 . . . (513) S10
 S1 S9 , 17 ,
 S9 ,
 가 (505) S1 S9

가 가

가

가

H -

H -

, H -

(57)

1.

LSI

가 LSI

;

;

;

,

,

;

;

,

LSI

2.

1

,

, H -

LSI

3.

2

,

 2^n

가

H -

;

H -
LSI

4.

1 ,

,

LSI

5.

4 ,

, H -

LSI

6.

5 ,

 2^n 가

H -

;

H -
LSI

7.

1 ,

LSI

8.

7 ,

H -

LSI

9.

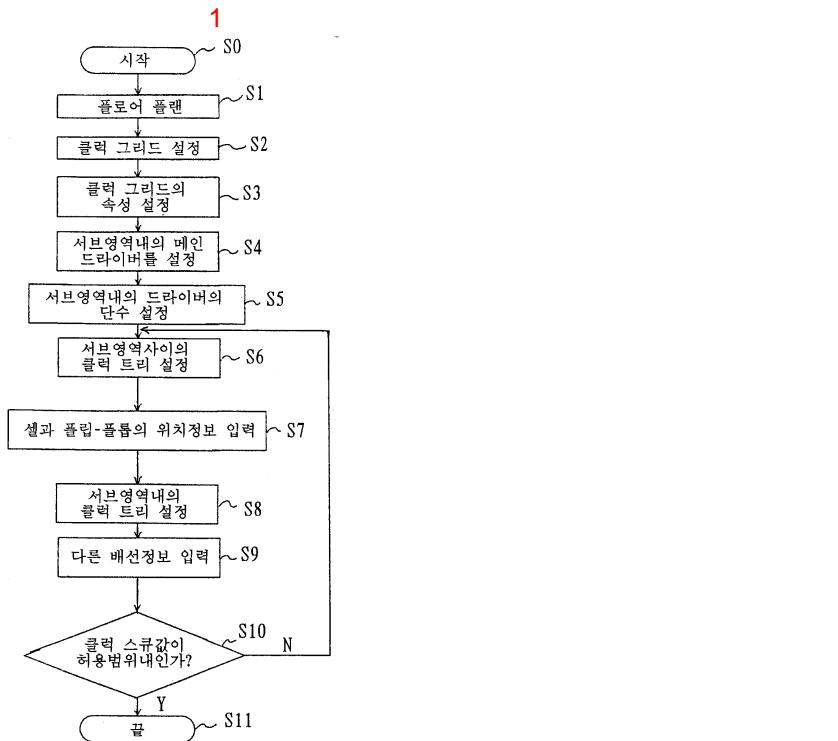
8 ,

 2^n 가

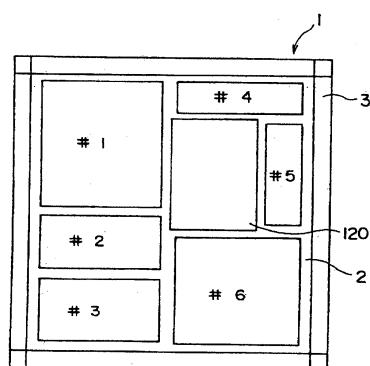
H -

;

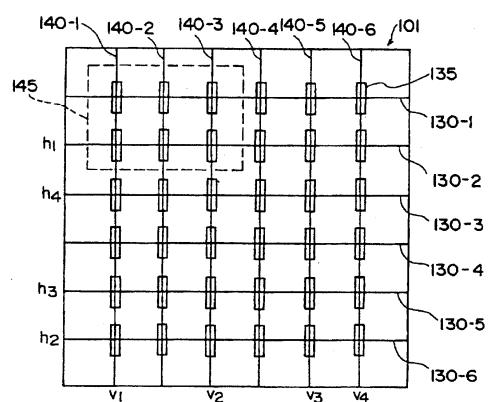
H -
LSI



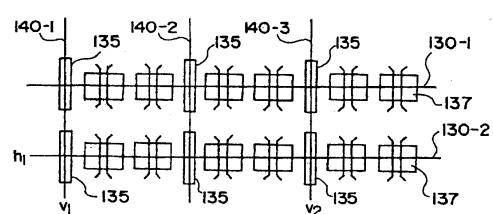
2



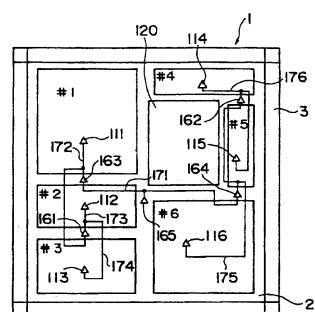
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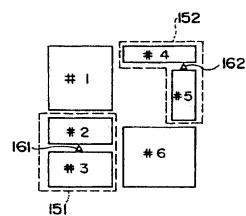
4



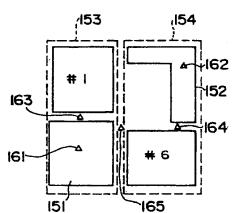
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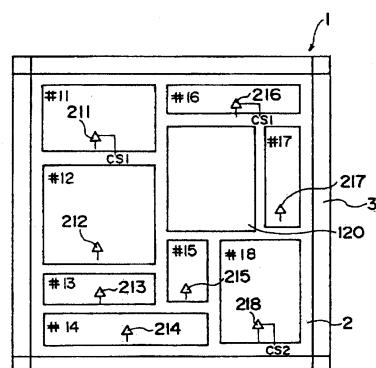
6a



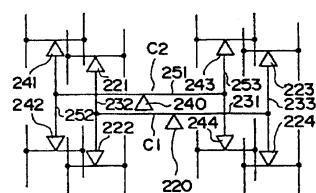
6b



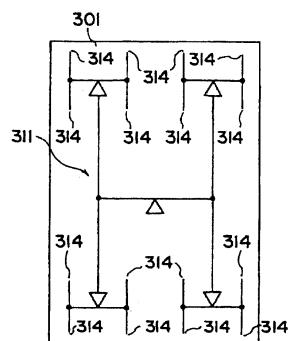
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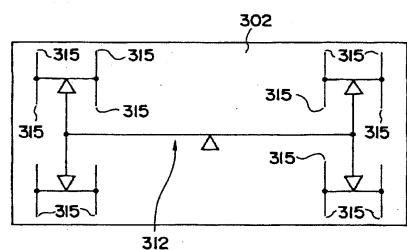
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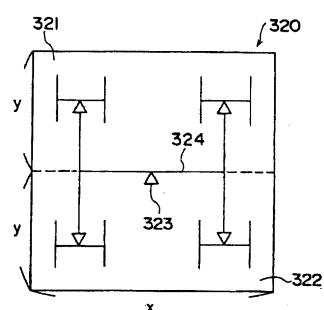
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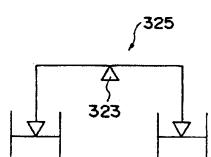
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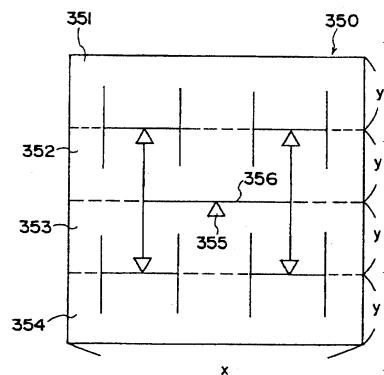
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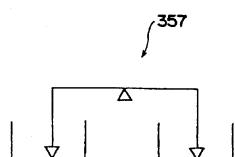
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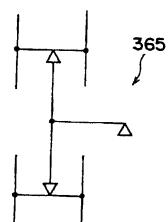
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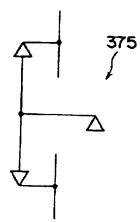
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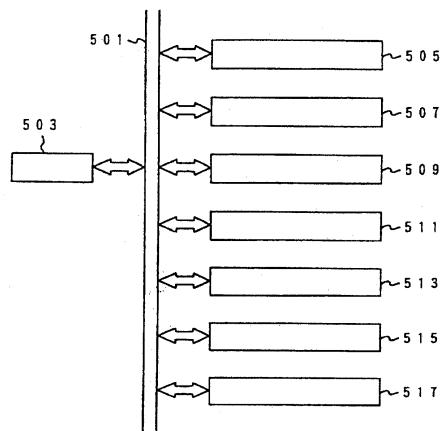
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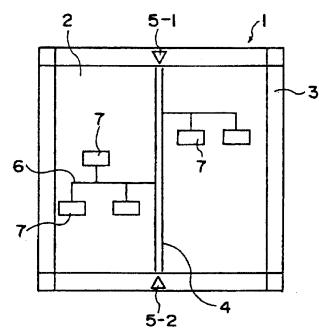
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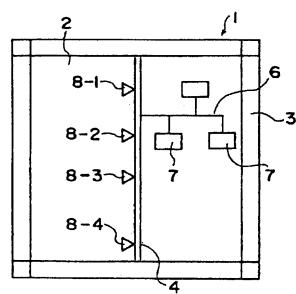
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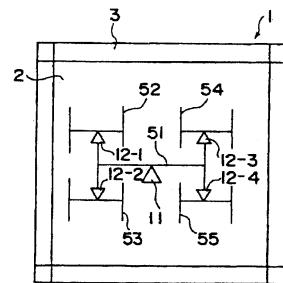
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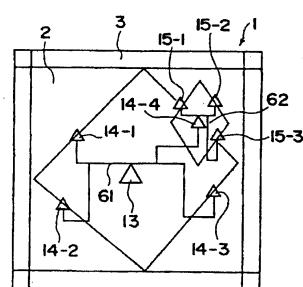
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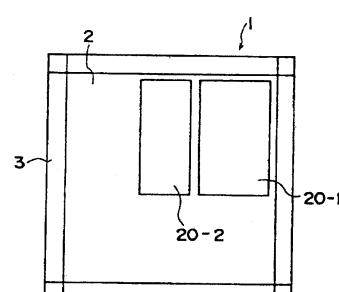
20



21



22



23

