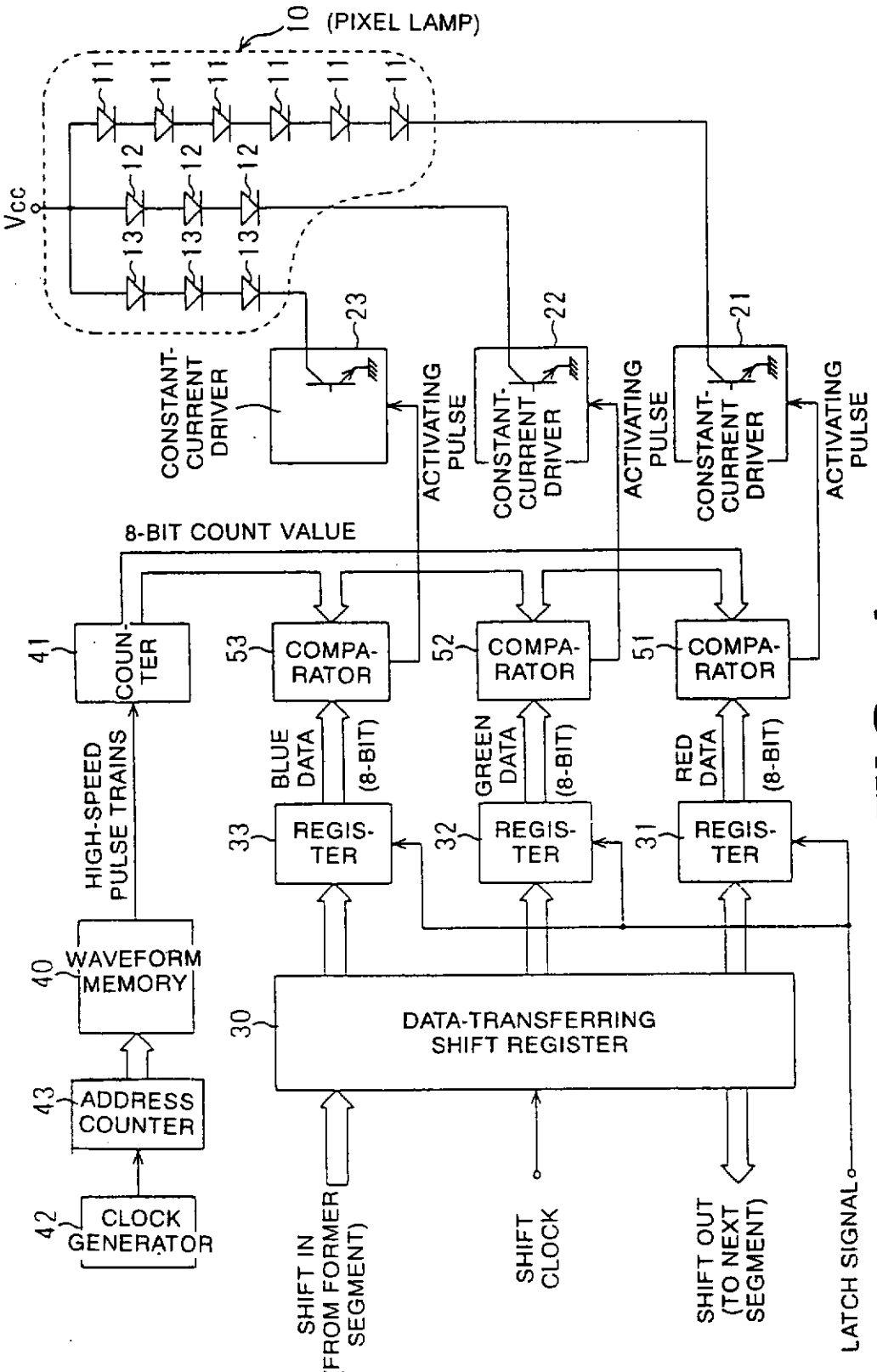

10 (PIXEL LAMP)
11
12
13
Vcc
23
22
21
CONSTANT-CURRENT DRIVER
ACTIVATING PULSE
8-BIT COUNT VALUE
41 COUNTER
53 COMPARATOR
52 COMPARATOR
51 COMPARATOR
BLUE DATA (8-BIT)
GREEN DATA (8-BIT)
RED DATA (8-BIT)
33 REGISTER
32 REGISTER
31 REGISTER
HIGH-SPEED PULSE TRAINS
40 WAVEFORM MEMORY
43 ADDRESS COUNTER
42 CLOCK GENERATOR
30 DATA-TRANSFERRING SHIFT REGISTER
SHIFT IN (FROM FORMER SEGMENT)
SHIFT CLOCK
SHIFT OUT (TO NEXT SEGMENT)
LATCH SIGNAL

FIG. 1

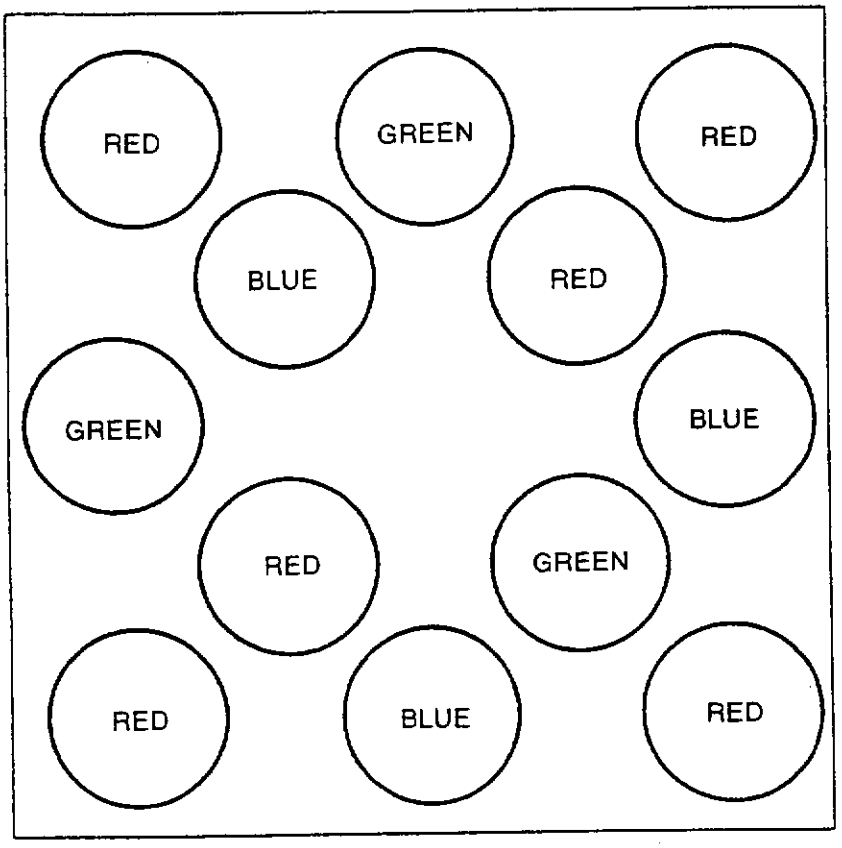


FIG. 2

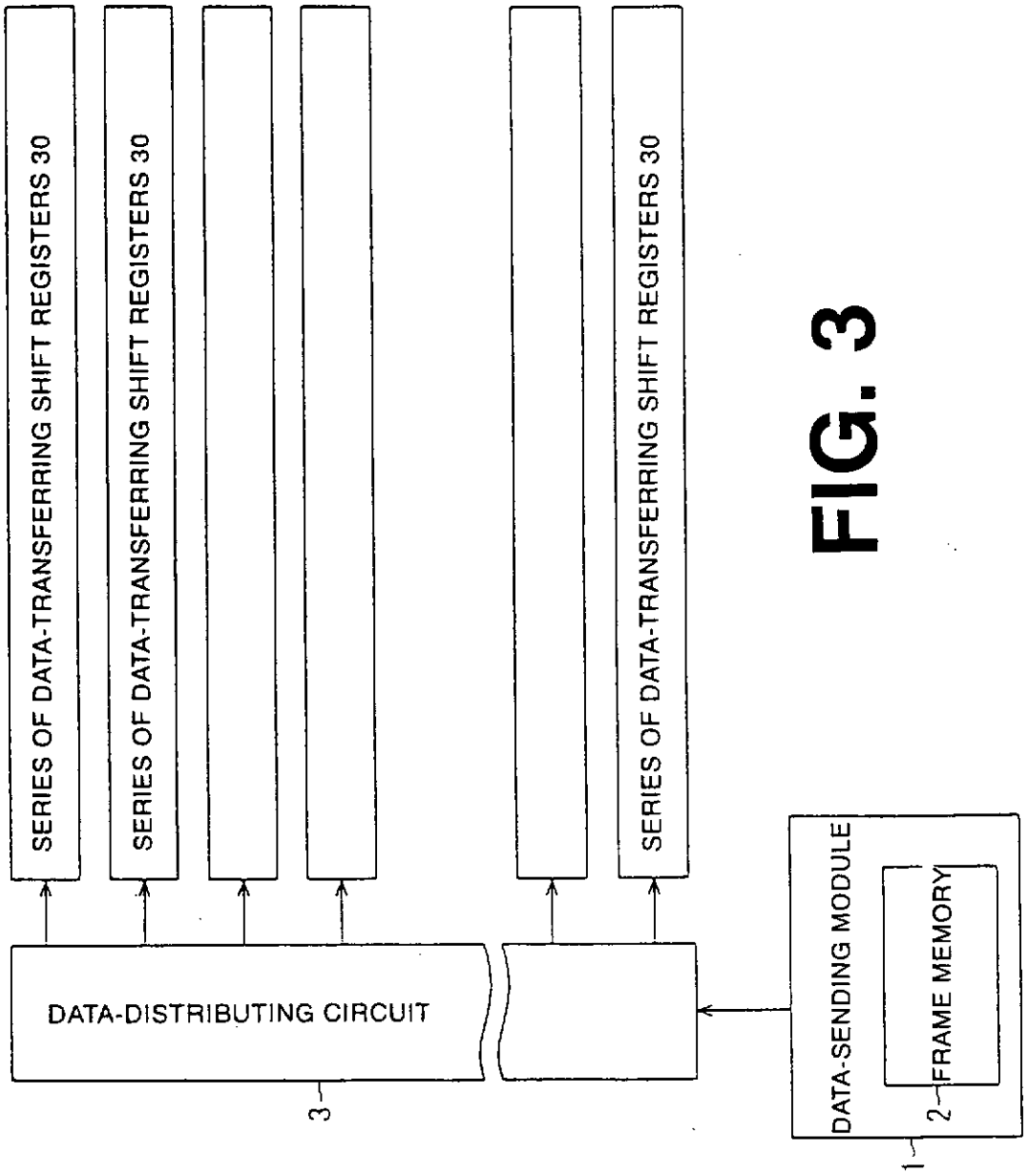

SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
DATA-DISTRIBUTING CIRCUIT
3
DATA-SENDING MODULE
FRAME MEMORY
2
1

FIG. 3

FIG. 4

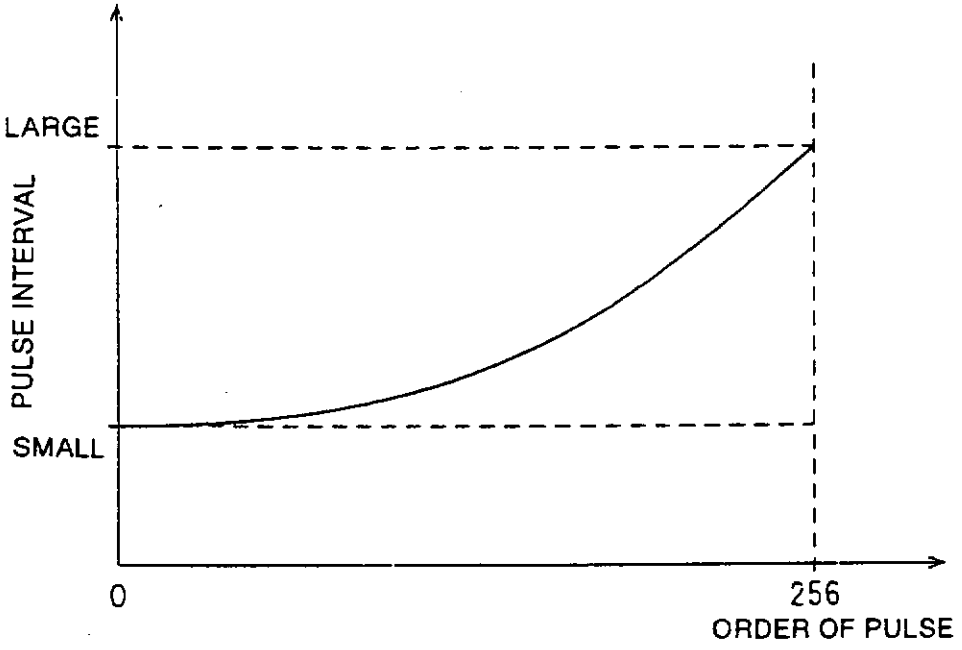
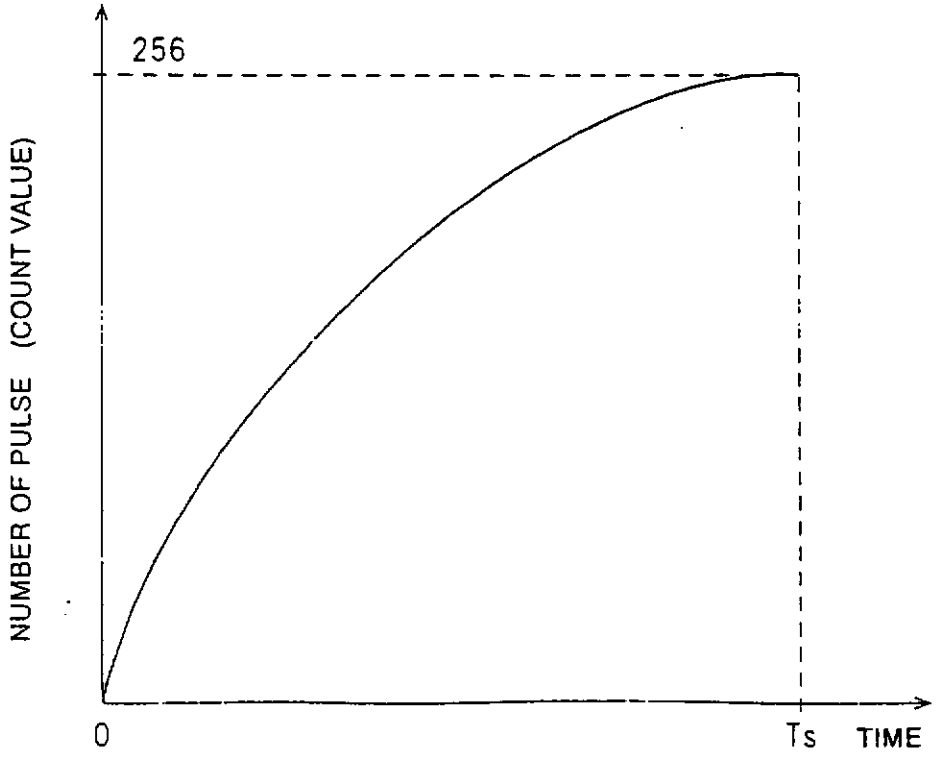

LARGE
PULSE INTERVAL
SMALL
0
256
ORDER OF PULSE

FIG. 5


256
NUMBER OF PULSE (COUNT VALUE)
0
Ts
TIME

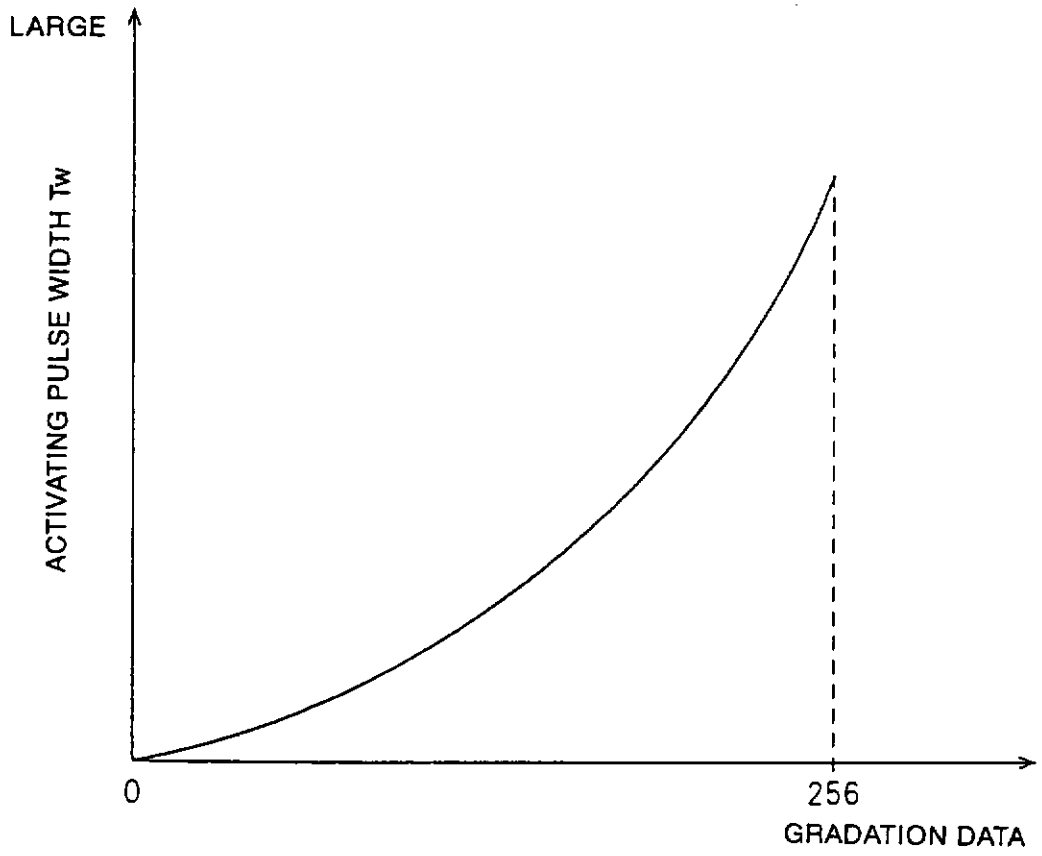


FIG. 6

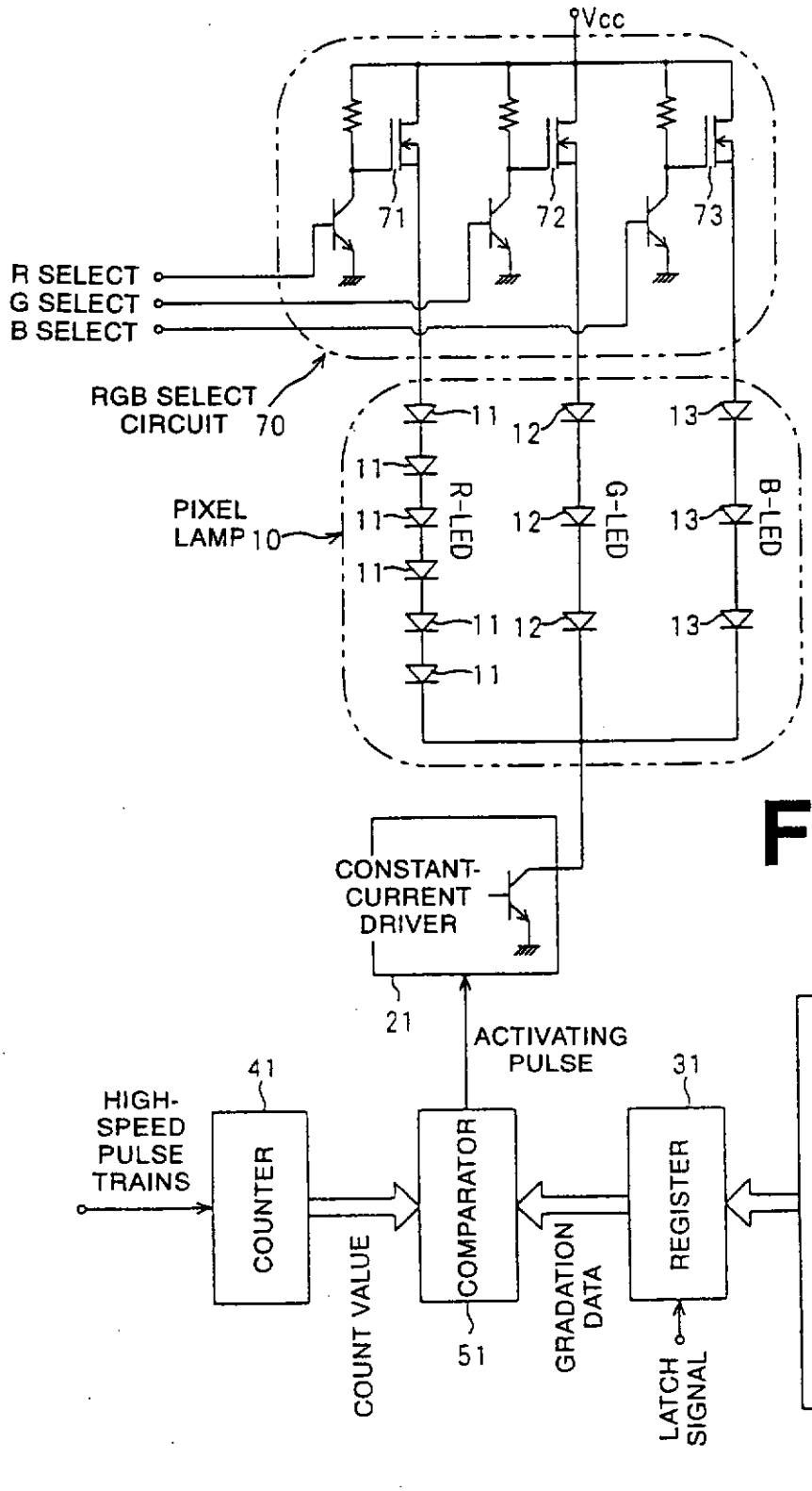

Vcc
71
72
73
R SELECT
G SELECT
B SELECT
RGB SELECT CIRCUIT 70
PIXEL LAMP 10
11
12
13
R-LED
G-LED
B-LED
CONSTANT-CURRENT DRIVER
21
ACTIVATING PULSE
41
31
HIGH-SPEED PULSE TRAINS
COUNTER
COMPARATOR
REGISTER
DATA-TRANSFERRING SHIFT REGISTER
SHIFT IN (FROM FORMER SEGMENT)
SHIFT CLOCK
SHIFT OUT (TO NEXT SEGMENT)
COUNT VALUE
GRADATION DATA
LATCH SIGNAL
51
30

FIG. 7

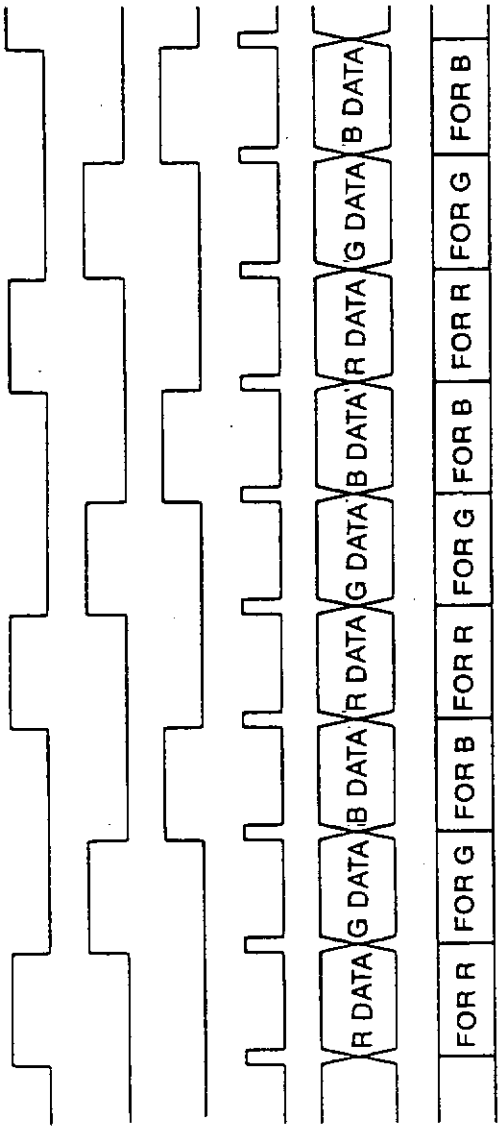

R SELECT SIGNAL
G SELECT SIGNAL
B SELECT SIGNAL
LATCH SIGNAL
LATCH OUTPUT DATA
R DATA
G DATA
B DATA
R DATA
G DATA
B DATA
R DATA
G DATA
B DATA
HIGH-SPEED PULSE TRAINS
FOR R
FOR G
FOR B
FOR R
FOR G
FOR B
FOR R
FOR G
FOR B

FIG. 8