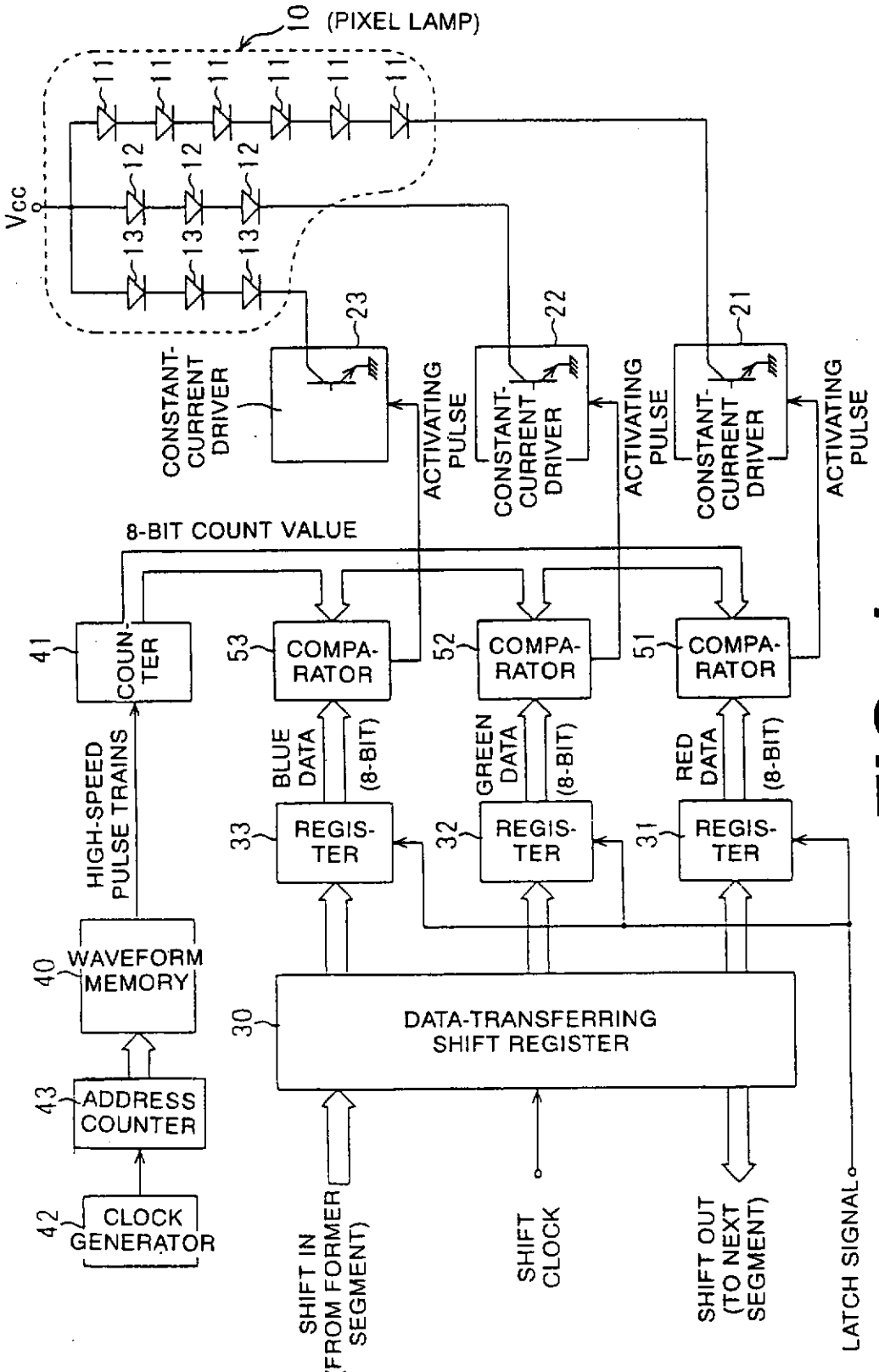

10
(PIXEL LAMP)
11
12
13
Vcc
8
23
22
21
CONSTANT-CURRENT DRIVER
ACTIVATING PULSE
8-BIT COUNT VALUE
41
COUN-TER
53
52
51
COMPA-RATOR
BLUE DATA
GREEN DATA
RED DATA
(8-BIT)
33
32
31
REGIS-TER
HIGH-SPEED PULSE TRAINS
40
WAVEFORM MEMORY
30
DATA-TRANSFERRING SHIFT REGISTER
43
ADDRESS COUNTER
42
CLOCK GENERATOR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

FIG. 1

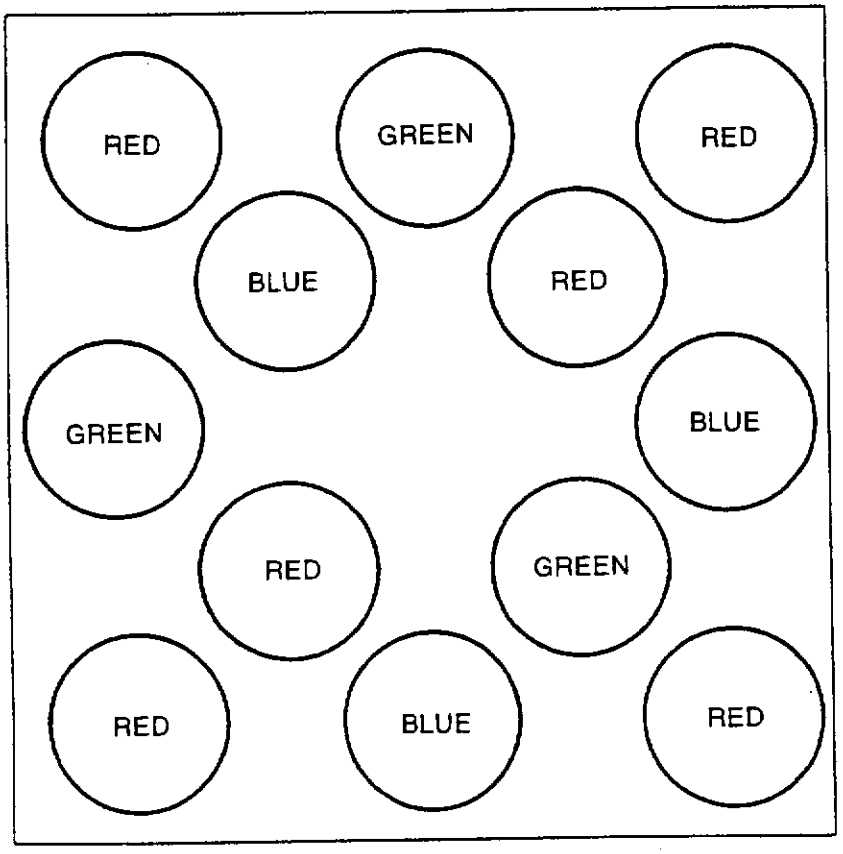


FIG. 2

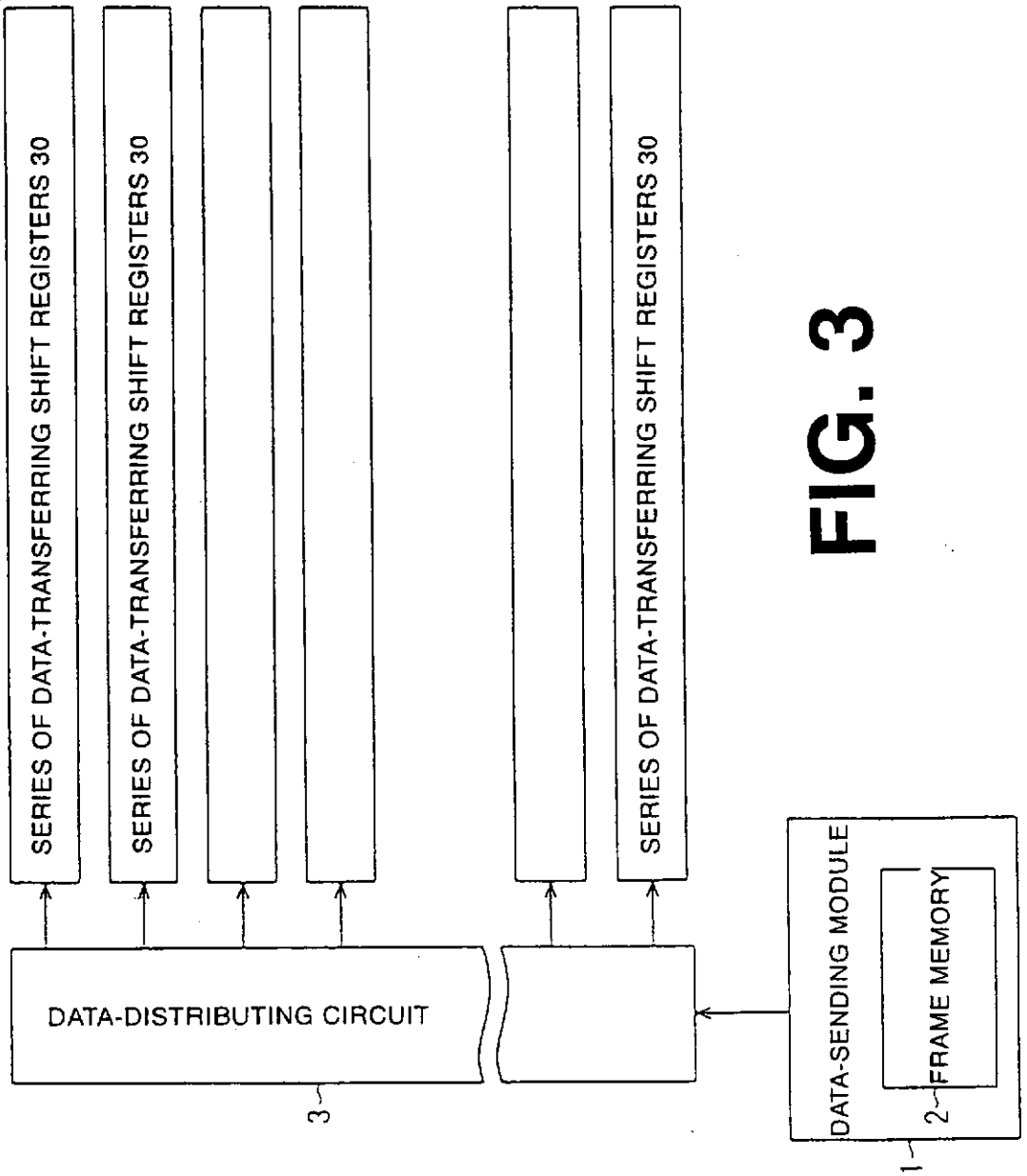

SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
SERIES OF DATA-TRANSFERRING SHIFT REGISTERS 30
DATA-DISTRIBUTING CIRCUIT
3
DATA-SENDING MODULE
FRAME MEMORY
2
1

FIG. 3

FIG. 4

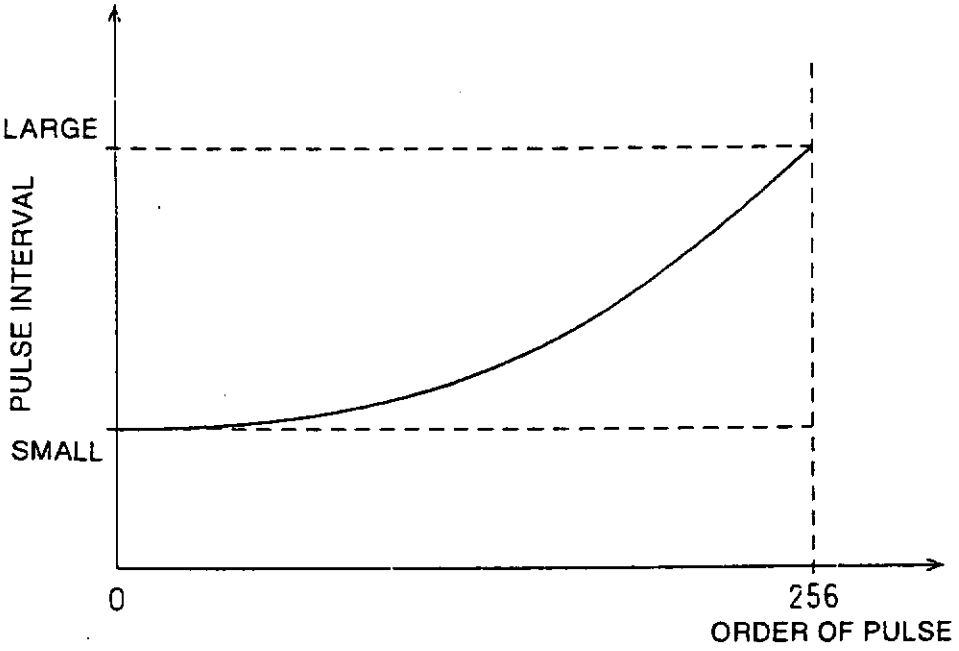
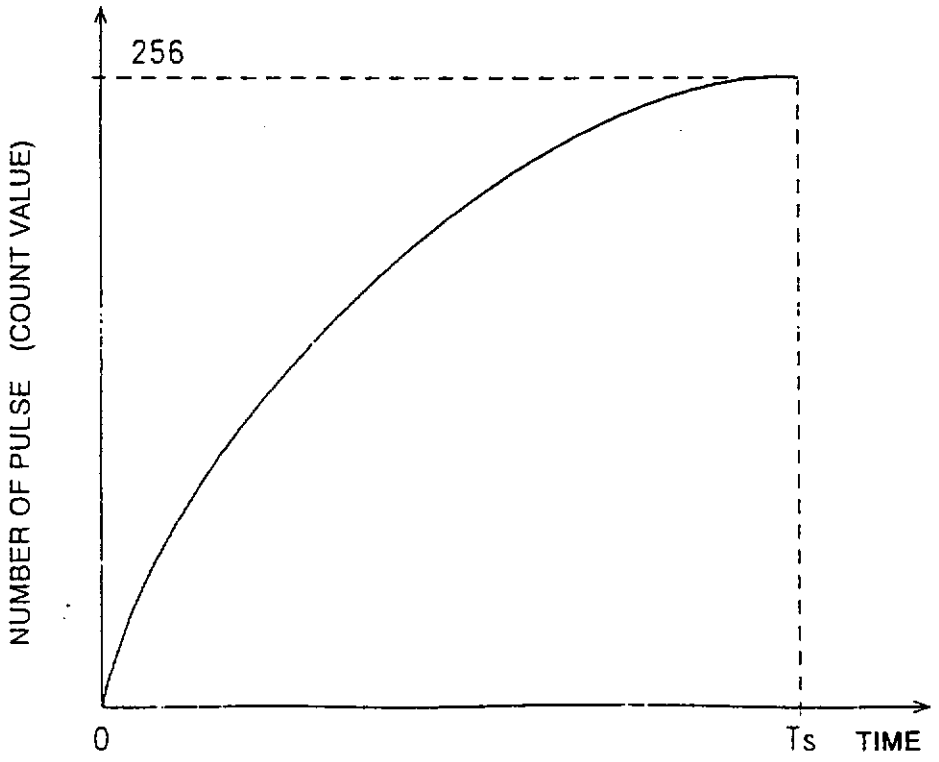

LARGE
PULSE INTERVAL
SMALL
0
256
ORDER OF PULSE

FIG. 5


256
NUMBER OF PULSE (COUNT VALUE)
0
Ts
TIME

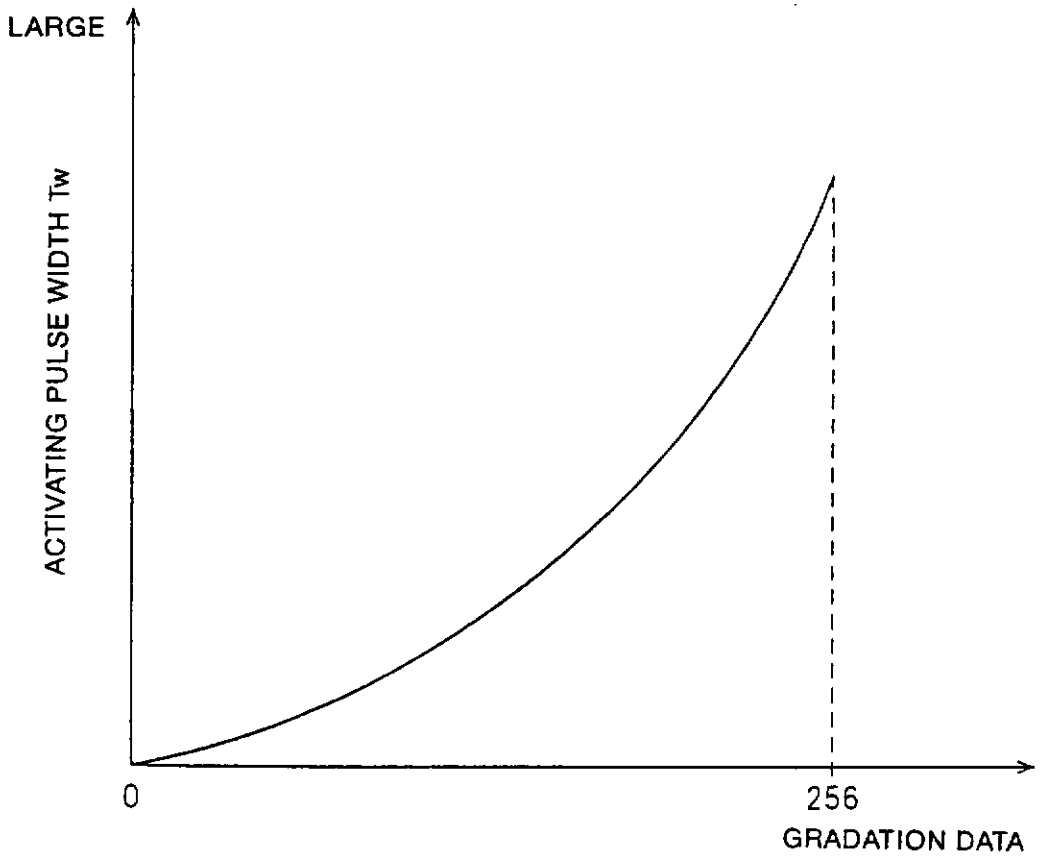


FIG. 6

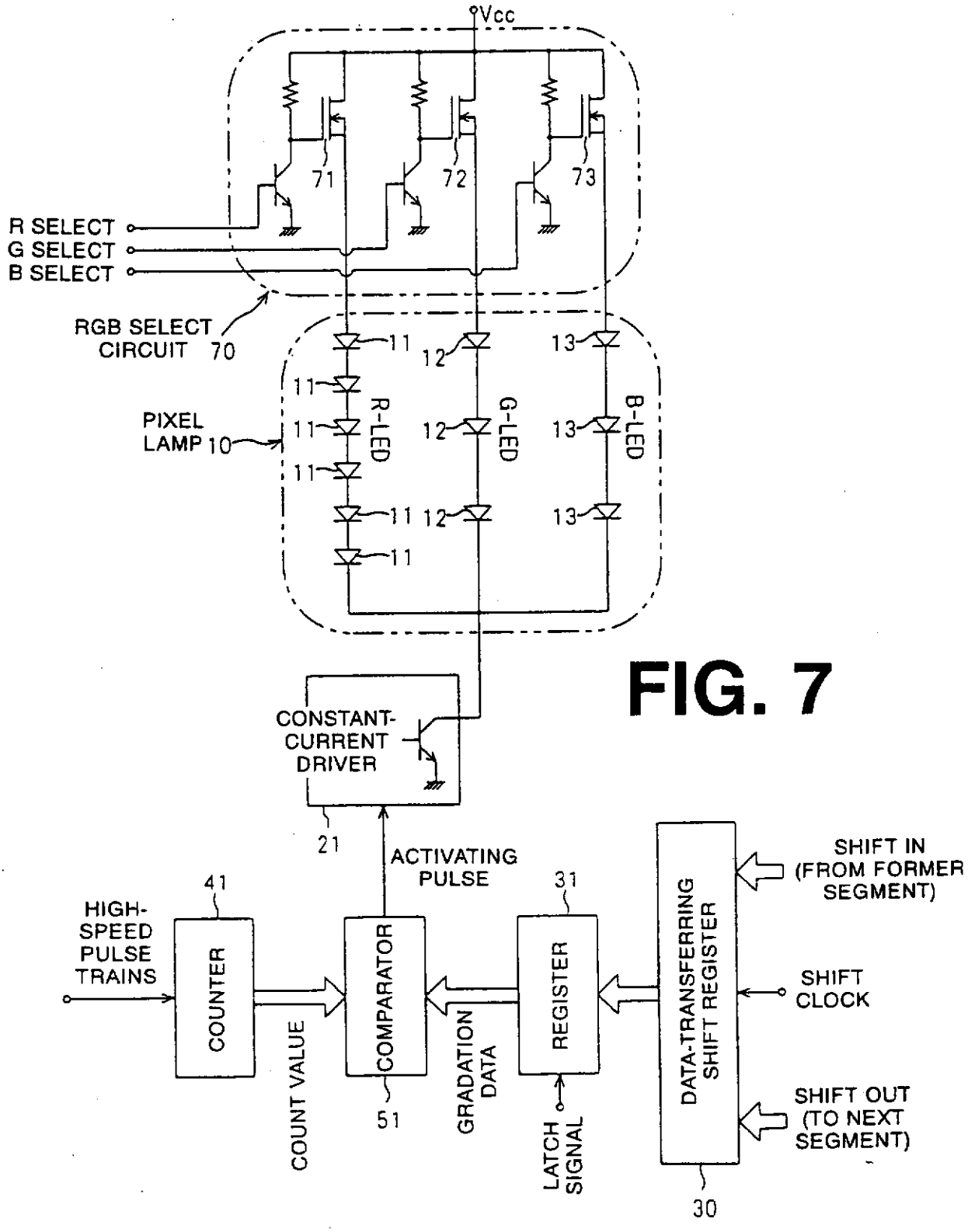

Vcc
71
72
73
R SELECT
G SELECT
B SELECT
RGB SELECT CIRCUIT 70
PIXEL LAMP 10
11
12
13
R-LED
G-LED
B-LED
CONSTANT-CURRENT DRIVER
21
ACTIVATING PULSE
41
31
HIGH-SPEED PULSE TRAINS
COUNTER
COMPARATOR
REGISTER
DATA-TRANSFERRING SHIFT REGISTER
SHIFT IN (FROM FORMER SEGMENT)
SHIFT CLOCK
SHIFT OUT (TO NEXT SEGMENT)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

FIG. 7

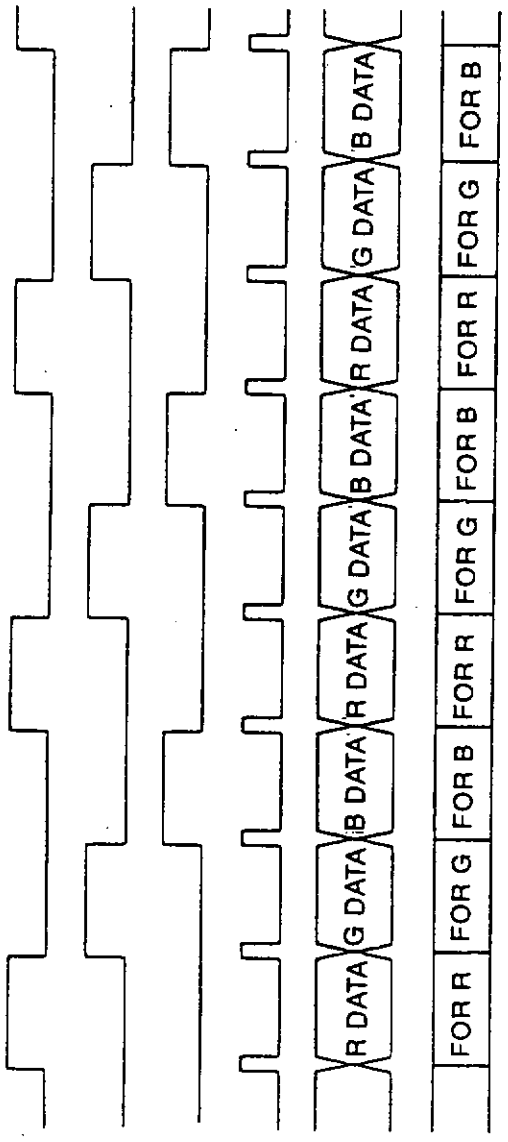

R SELECT SIGNAL
G SELECT SIGNAL
B SELECT SIGNAL
LATCH SIGNAL
LATCH OUTPUT DATA
HIGH-SPEED PULSE TRAINS
R DATA
G DATA
B DATA
FOR R
FOR G
FOR B

FIG. 8