

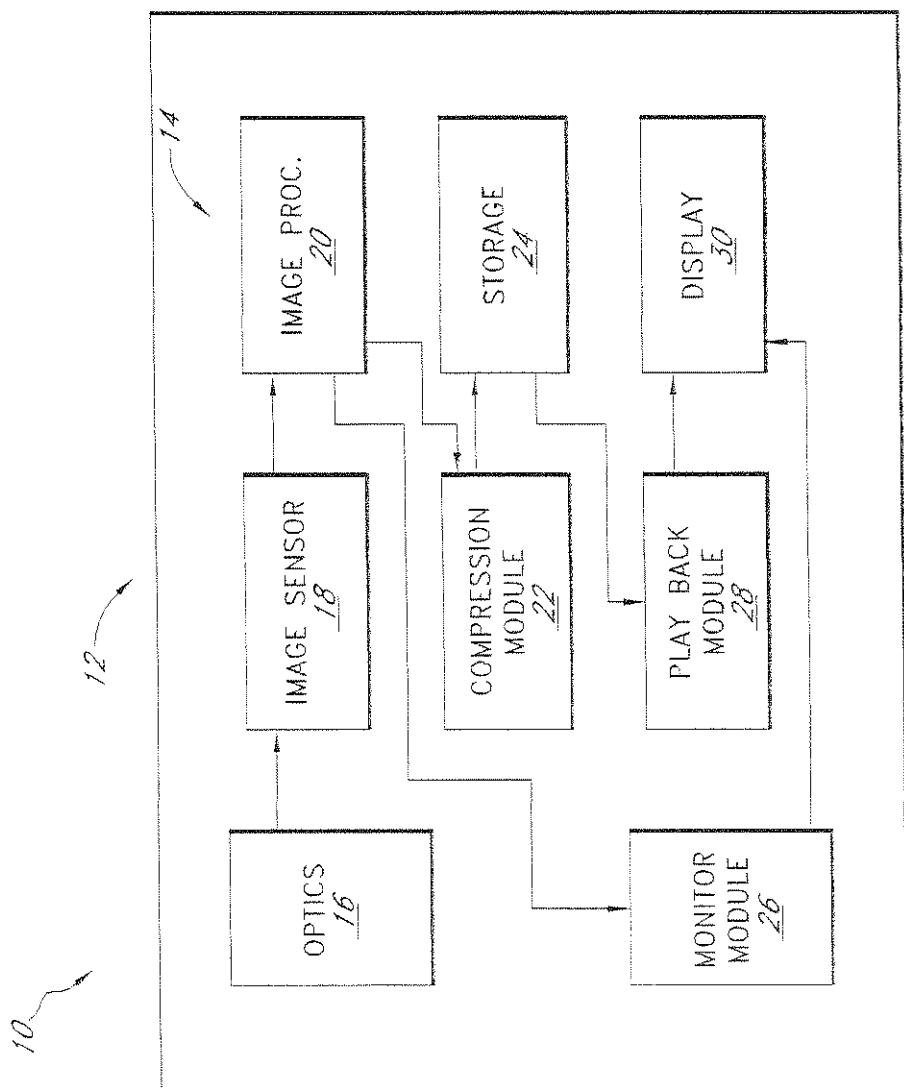


FIG. 1

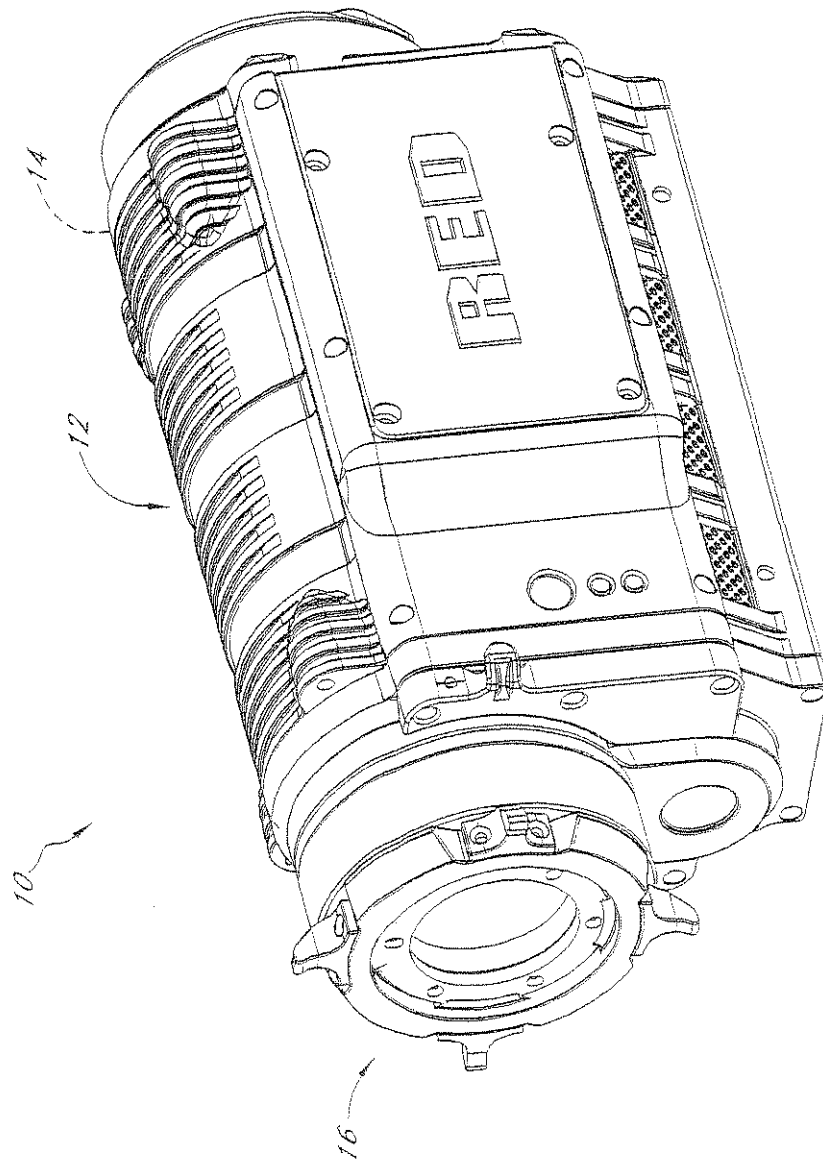


FIG. 2

|       | $n-3$         | $n-2$         | $n-1$         | $n$         | $n+1$         | $n+2$         | $n+3$         | $n+4$         |
|-------|---------------|---------------|---------------|-------------|---------------|---------------|---------------|---------------|
| $n-3$ | $B_{m-3,n-3}$ | $C_{m-2,n-3}$ | $B_{m-1,n-3}$ | $C_{m,n-3}$ | $B_{m+1,n-3}$ | $C_{m+2,n-3}$ | $B_{m+3,n-3}$ | $C_{m+4,n-3}$ |
| $n-2$ | $C_{m-3,n-2}$ | $R_{m-2,n-2}$ | $C_{m-1,n-2}$ | $R_{m,n-2}$ | $C_{m+1,n-2}$ | $R_{m+2,n-2}$ | $C_{m+3,n-2}$ | $R_{m+4,n-2}$ |
| $n-1$ | $B_{m-3,n-1}$ | $C_{m-2,n-1}$ | $B_{m-1,n-1}$ | $C_{m,n-1}$ | $B_{m+1,n-1}$ | $C_{m+2,n-1}$ | $B_{m+3,n-1}$ | $C_{m+4,n-1}$ |
| $n$   | $C_{m-3,n}$   | $R_{m-2,n}$   | $C_{m-1,n}$   | $R_{m,n}$   | $C_{m+1,n}$   | $R_{m+2,n}$   | $C_{m+3,n}$   | $R_{m+4,n}$   |
| $n+1$ | $B_{m-3,n+1}$ | $C_{m-2,n+1}$ | $B_{m-1,n+1}$ | $C_{m,n+1}$ | $B_{m+1,n+1}$ | $C_{m+2,n+1}$ | $B_{m+3,n+1}$ | $C_{m+4,n+1}$ |
| $n+2$ | $C_{m-3,n+2}$ | $R_{m-2,n+2}$ | $C_{m-1,n+2}$ | $R_{m,n+2}$ | $C_{m+1,n+2}$ | $R_{m+2,n+2}$ | $C_{m+3,n+2}$ | $R_{m+4,n+2}$ |
| $n+3$ | $B_{m-3,n+3}$ | $C_{m-2,n+3}$ | $B_{m-1,n+3}$ | $C_{m,n+3}$ | $B_{m+1,n+3}$ | $C_{m+2,n+3}$ | $B_{m+3,n+3}$ | $C_{m+4,n+3}$ |
| $n+4$ | $C_{m-3,n+4}$ | $R_{m-2,n+4}$ | $C_{m-1,n+4}$ | $R_{m,n+4}$ | $C_{m+1,n+4}$ | $R_{m+2,n+4}$ | $C_{m+3,n+4}$ | $R_{m+4,n+4}$ |

FIG. 3

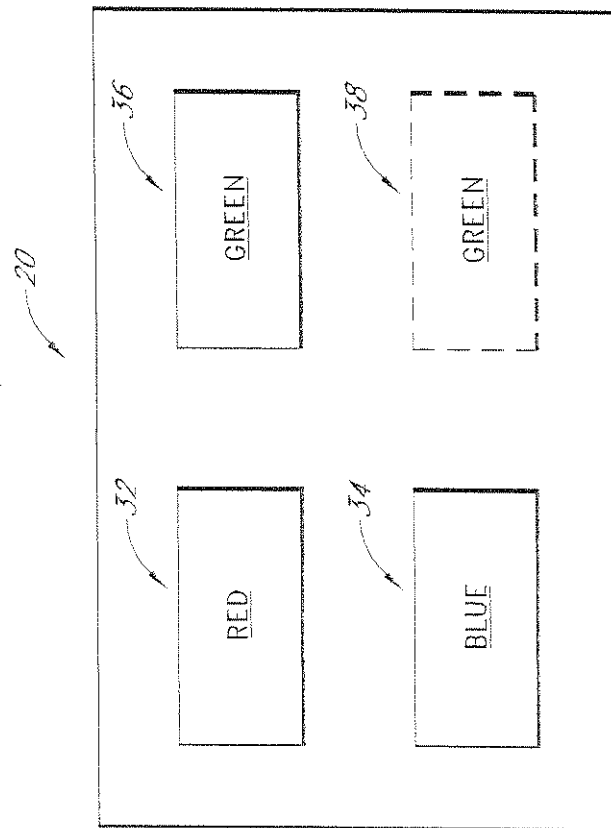


FIG. 4

|       | $m-3$         | $m-2$         | $m-1$         | $m$         | $m+1$         | $m+2$         | $m+3$         | $m+4$         |
|-------|---------------|---------------|---------------|-------------|---------------|---------------|---------------|---------------|
| $n-3$ |               | $G_{m-2,n-3}$ |               | $G_{m,n-3}$ |               | $G_{m+2,n-3}$ |               | $G_{m+4,n-3}$ |
| $n-2$ | $G_{m-3,n-2}$ |               | $G_{m-1,n-2}$ |             | $G_{m+1,n-2}$ |               | $G_{m+3,n-2}$ |               |
| $n-1$ |               | $G_{m-2,n-1}$ |               | $G_{m,n-1}$ |               | $G_{m+2,n-1}$ |               | $G_{m+4,n-1}$ |
| $n$   | $G_{m-3,n}$   |               | $G_{m-1,n}$   |             | $G_{m+1,n}$   |               | $G_{m+3,n}$   |               |
| $n+1$ |               | $G_{m-2,n+1}$ |               | $G_{m,n+1}$ |               | $G_{m+2,n+1}$ |               | $G_{m+4,n+1}$ |
| $n+2$ | $G_{m-3,n+2}$ |               | $G_{m-1,n+2}$ |             | $G_{m+1,n+2}$ |               | $G_{m+3,n+2}$ |               |
| $n+3$ |               | $G_{m-2,n+3}$ |               | $G_{m,n+3}$ |               | $G_{m+2,n+3}$ |               | $G_{m+4,n+3}$ |
| $n+4$ | $G_{m-3,n+4}$ |               | $G_{m-1,n+4}$ |             | $G_{m+1,n+4}$ |               | $G_{m+3,n+4}$ |               |

FIG. 5

|       | $m-3$         | $m-2$ | $m-1$         | $m$ | $m+1$         | $m+2$ | $m+3$         | $m+4$ |
|-------|---------------|-------|---------------|-----|---------------|-------|---------------|-------|
| $n-3$ |               |       |               |     |               |       |               |       |
| $n-2$ | $C_{m-3,n-2}$ |       | $C_{m-1,n-2}$ |     | $C_{m+1,n-2}$ |       | $C_{m+3,n-2}$ |       |
| $n-1$ |               |       |               |     |               |       |               |       |
| $n$   | $C_{m-3,n}$   |       | $C_{m-1,n}$   |     | $C_{m+1,n}$   |       | $C_{m+3,n}$   |       |
| $n+1$ |               |       |               |     |               |       |               |       |
| $n+2$ | $C_{m-3,n+2}$ |       | $C_{m-1,n+2}$ |     | $C_{m+1,n+2}$ |       | $C_{m+3,n+2}$ |       |
| $n+3$ |               |       |               |     |               |       |               |       |
| $n+4$ | $C_{m-3,n+4}$ |       | $C_{m-1,n+4}$ |     | $C_{m+1,n+4}$ |       | $C_{m+3,n+4}$ |       |

FIG. 6

|               |             |               |               |
|---------------|-------------|---------------|---------------|
| $G_{m-2,n-3}$ | $G_{m,n-3}$ | $G_{m+2,n-3}$ | $G_{m+4,n-3}$ |
| $G_{m-2,n-1}$ | $G_{m,n-1}$ | $G_{m+2,n-1}$ | $G_{m+4,n-1}$ |
| $G_{m-2,n+1}$ | $G_{m,n+1}$ | $G_{m+2,n+1}$ | $G_{m+4,n+1}$ |
| $G_{m-2,n+3}$ | $G_{m,n+3}$ | $G_{m+2,n+3}$ | $G_{m+4,n+3}$ |

GREEN 1

|               |               |               |               |
|---------------|---------------|---------------|---------------|
| $G_{m-3,n-2}$ | $G_{m-1,n-2}$ | $G_{m+1,n-2}$ | $G_{m+3,n-2}$ |
| $G_{m-3,n}$   | $G_{m-1,n}$   | $G_{m+1,n}$   | $G_{m+3,n}$   |
| $G_{m-3,n+2}$ | $G_{m-1,n+2}$ | $G_{m+1,n+2}$ | $G_{m+3,n+2}$ |
| $G_{m-3,n+4}$ | $G_{m-1,n+4}$ | $G_{m+1,n+4}$ | $G_{m+3,n+4}$ |

GREEN 2

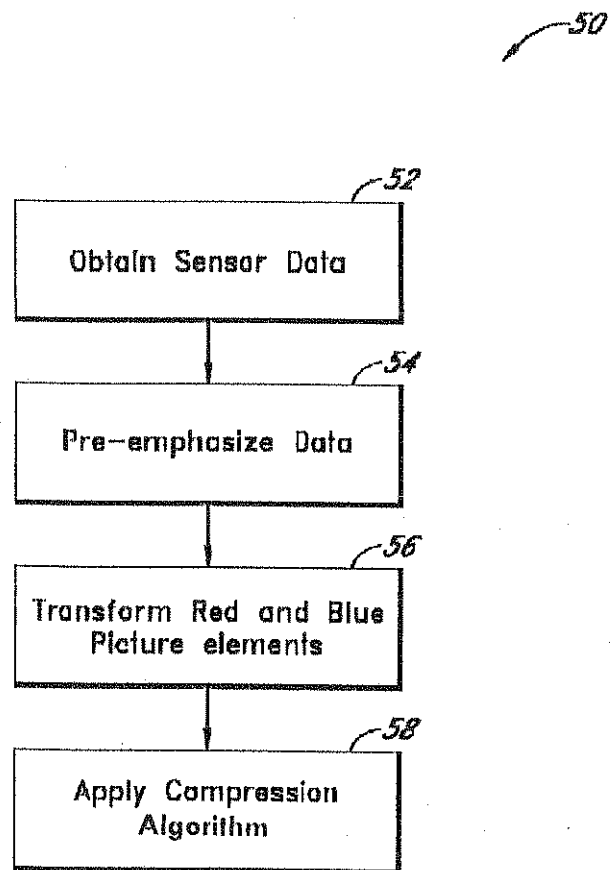
|               |               |               |               |
|---------------|---------------|---------------|---------------|
| $B_{m-3,n-3}$ | $B_{m-1,n-3}$ | $B_{m+1,n-3}$ | $B_{m+3,n-3}$ |
| $B_{m-3,n-1}$ | $B_{m-1,n-1}$ | $B_{m+1,n-1}$ | $B_{m+3,n-1}$ |
| $B_{m-3,n+1}$ | $B_{m-1,n+1}$ | $B_{m+1,n+1}$ | $B_{m+3,n+1}$ |
| $B_{m-3,n+3}$ | $B_{m-1,n+3}$ | $B_{m+1,n+3}$ | $B_{m+3,n+3}$ |

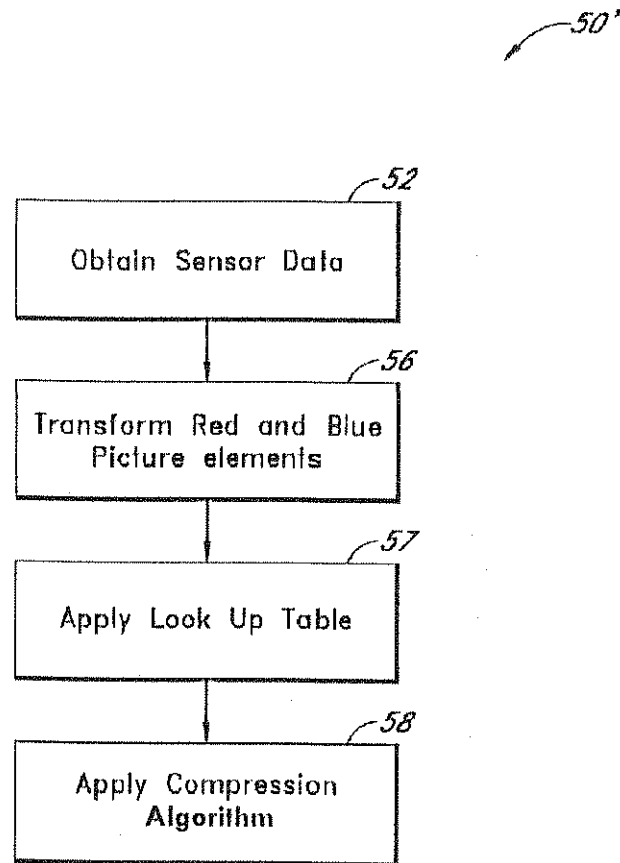
BLUE

|               |             |               |               |
|---------------|-------------|---------------|---------------|
| $R_{m-2,n-2}$ | $R_{m,n-2}$ | $R_{m+2,n-2}$ | $R_{m+4,n-2}$ |
| $R_{m-2,n}$   | $R_{m,n}$   | $R_{m+2,n}$   | $R_{m+4,n}$   |
| $R_{m-2,n+2}$ | $R_{m,n+2}$ | $R_{m+2,n+2}$ | $R_{m+4,n+2}$ |
| $R_{m-2,n+4}$ | $R_{m,n+4}$ | $R_{m+2,n+4}$ | $R_{m+4,n+4}$ |

RED

FIG. 7

*FIG. 8*

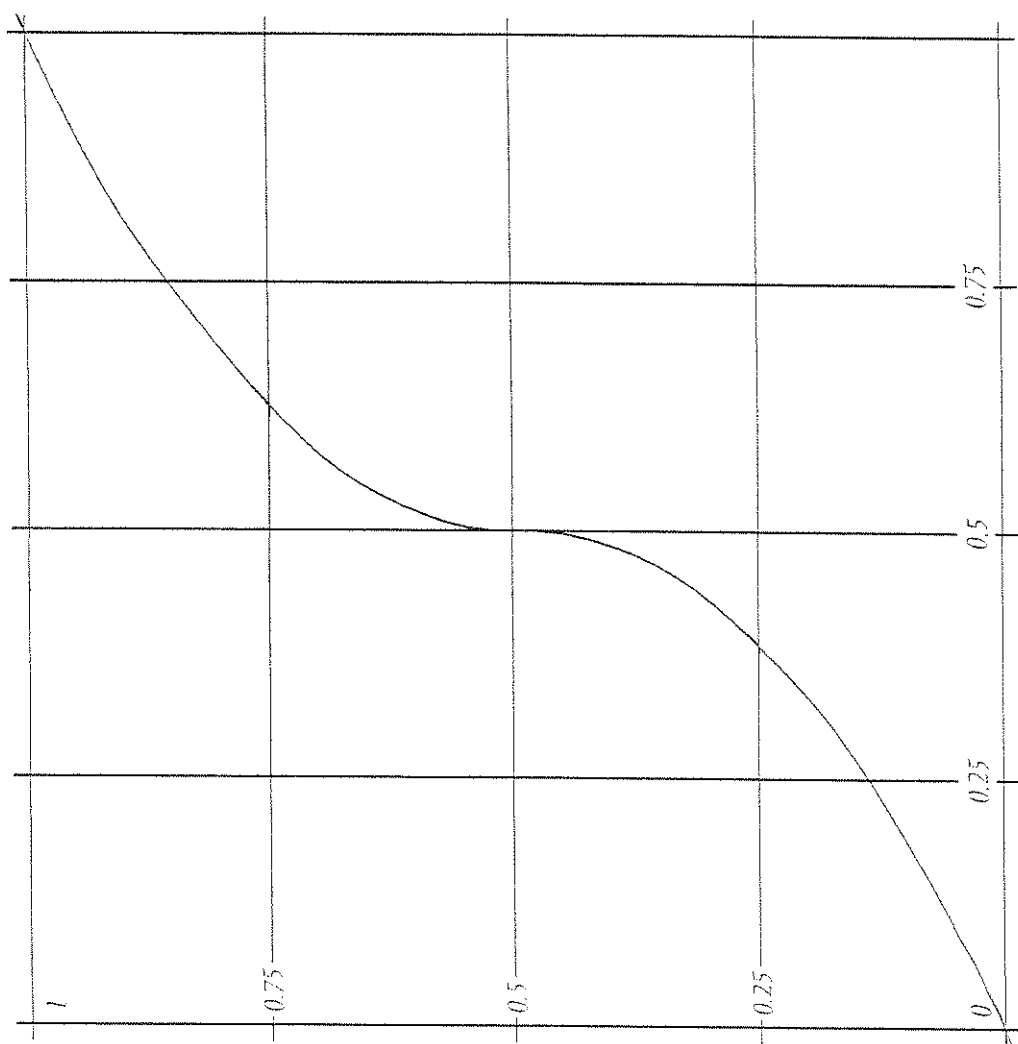
*FIG. 8A*

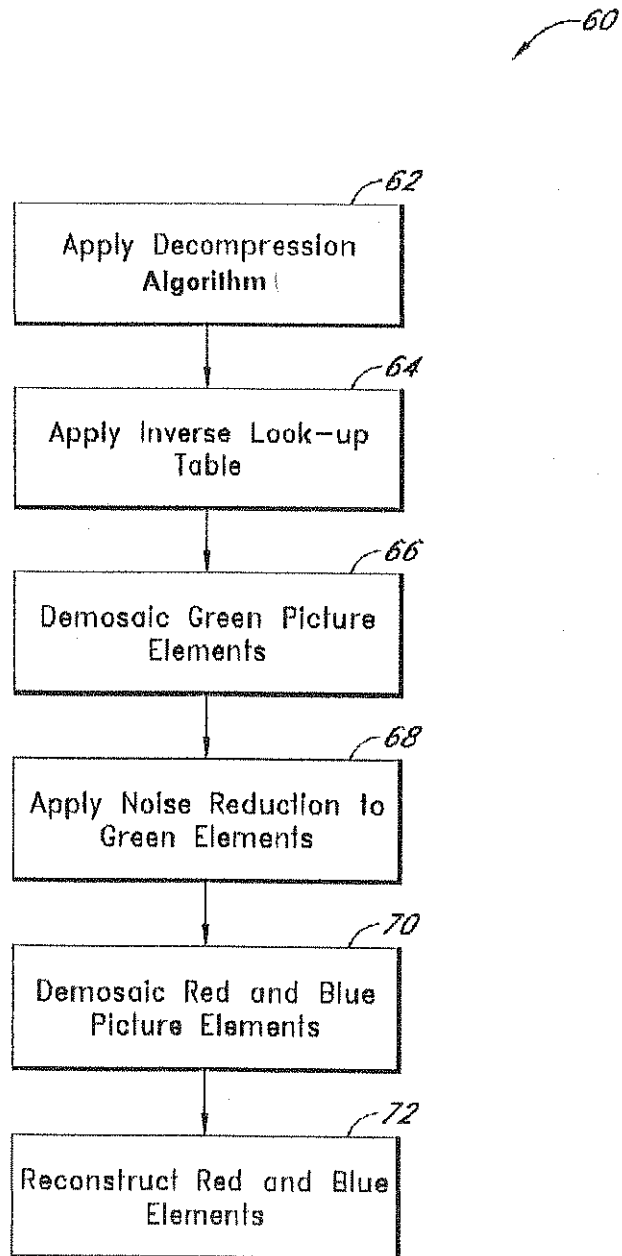
|  |                                                                                            |  |  |
|--|--------------------------------------------------------------------------------------------|--|--|
|  |                                                                                            |  |  |
|  |                                                                                            |  |  |
|  | $B'_{m,l,n,l} =$ $B_{m,l,n,l} +$ $(G_{m,l,n,2} + G_{m,n,l} +$ $G_{m,l,n} + G_{m,2,n,l})/4$ |  |  |
|  |                                                                                            |  |  |

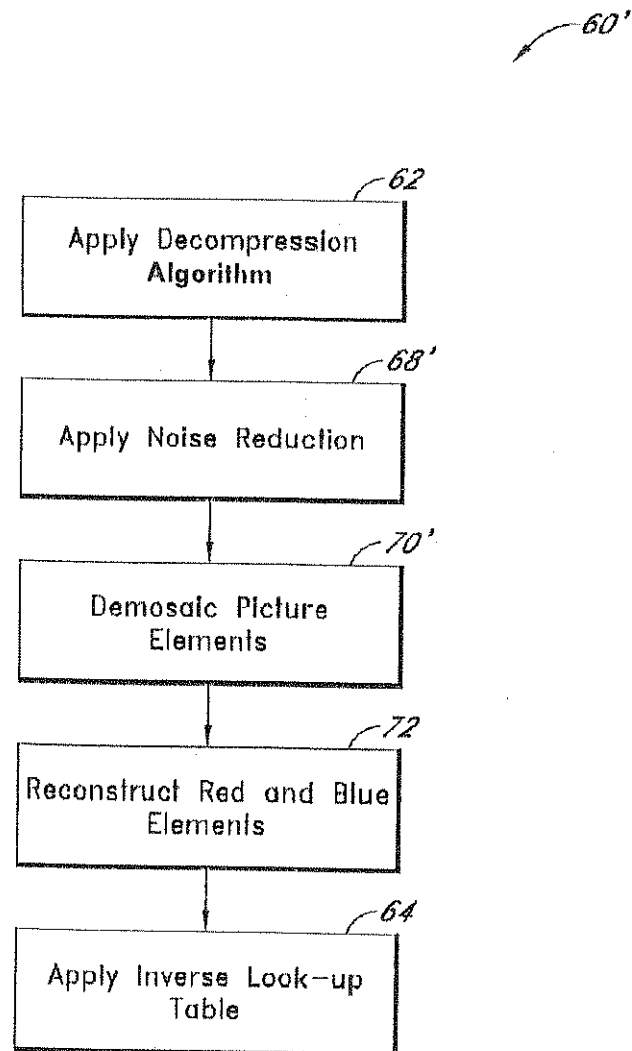
FIG. 9

|  |                                                                                                 |  |  |
|--|-------------------------------------------------------------------------------------------------|--|--|
|  |                                                                                                 |  |  |
|  |                                                                                                 |  |  |
|  | $R_{m,2,n,2}^1 =$ $R_{m,2,n,2} =$ $(G_{m,2,n,3} + G_{m,1,n,2} +$ $G_{m,2,n,1} + G_{m,3,n,2})/4$ |  |  |
|  |                                                                                                 |  |  |

FIG. 10

*FIG. 11*

*FIG. 12*

*FIG. 12A*

|       | $m-3$          | $m-2$          | $m-1$          | $m$          | $m+1$          | $m+2$          | $m+3$          | $m+4$          |
|-------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|----------------|
| $n-3$ | $DC_{m-3,n-3}$ | $G_{m-2,n-3}$  | $DC_{m-1,n-3}$ | $G_{m,n-3}$  | $DC_{m+1,n-3}$ | $G_{m+2,n-3}$  | $DC_{m+3,n-3}$ | $G_{m+4,n-3}$  |
| $n-2$ | $G_{m-3,n-2}$  | $DC_{m-2,n-2}$ | $G_{m-1,n-2}$  | $DC_{m,n-2}$ | $G_{m+1,n-2}$  | $DC_{m+2,n-2}$ | $G_{m+3,n-2}$  | $DC_{m+4,n-2}$ |
| $n-1$ | $DC_{m-3,n-1}$ | $G_{m-2,n-1}$  | $DC_{m-1,n-1}$ | $G_{m,n-1}$  | $DC_{m+1,n-1}$ | $G_{m+2,n-1}$  | $DC_{m+3,n-1}$ | $G_{m+4,n-1}$  |
| $n$   | $G_{m-3,n}$    | $DC_{m-2,n}$   | $G_{m-1,n}$    | $DC_{m,n}$   | $G_{m+1,n}$    | $DC_{m+2,n}$   | $G_{m+3,n}$    | $DC_{m+4,n}$   |
| $n+1$ | $DC_{m-3,n+1}$ | $G_{m-2,n+1}$  | $DC_{m-1,n+1}$ | $G_{m,n+1}$  | $DC_{m+1,n+1}$ | $G_{m+2,n+1}$  | $DC_{m+3,n+1}$ | $G_{m+4,n+1}$  |
| $n+2$ | $G_{m-3,n+2}$  | $DC_{m-2,n+2}$ | $G_{m-1,n+2}$  | $DC_{m,n+2}$ | $G_{m+1,n+2}$  | $DC_{m+2,n+2}$ | $G_{m+3,n+2}$  | $DC_{m+4,n+2}$ |
| $n+3$ | $DC_{m-3,n+3}$ | $G_{m-2,n+3}$  | $DC_{m-1,n+3}$ | $G_{m,n+3}$  | $DC_{m+1,n+3}$ | $G_{m+2,n+3}$  | $DC_{m+3,n+3}$ | $G_{m+4,n+3}$  |
| $n+4$ | $G_{m-3,n+4}$  | $DC_{m-2,n+4}$ | $G_{m-1,n+4}$  | $DC_{m,n+4}$ | $G_{m+1,n+4}$  | $DC_{m+2,n+4}$ | $G_{m+3,n+4}$  | $DC_{m+4,n+4}$ |

FIG. 13

|       | $m-3$          | $m-2$          | $m-1$          | $m$          | $m+1$          | $m+2$          | $m+3$          | $m+4$          |
|-------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|----------------|
| $n-3$ | $DC_{m-3,n-3}$ | $DC_{m-2,n-3}$ | $DC_{m-1,n-3}$ | $DC_{m,n-3}$ | $DC_{m+1,n-3}$ | $DC_{m+2,n-3}$ | $DC_{m+3,n-3}$ | $DC_{m+4,n-3}$ |
| $n-2$ | $G_{m-3,n-2}$  | $DC_{m-2,n-2}$ | $G_{m-1,n-2}$  | $DC_{m,n-2}$ | $G_{m+1,n-2}$  | $DC_{m+2,n-2}$ | $G_{m+3,n-2}$  | $DC_{m+4,n-2}$ |
| $n-1$ | $DC_{m-3,n-1}$ | $DC_{m-2,n-1}$ | $DC_{m-1,n-1}$ | $DC_{m,n-1}$ | $DC_{m+1,n-1}$ | $DC_{m+2,n-1}$ | $DC_{m+3,n-1}$ | $DC_{m+4,n-1}$ |
| $n$   | $G_{m-3,n}$    | $DC_{m-2,n}$   | $G_{m-1,n}$    | $DC_{m,n}$   | $G_{m+1,n}$    | $DC_{m+2,n}$   | $G_{m+3,n}$    | $DC_{m+4,n}$   |
| $n+1$ | $DC_{m-3,n+1}$ | $DC_{m-2,n+1}$ | $DC_{m-1,n+1}$ | $DC_{m,n+1}$ | $DC_{m+1,n+1}$ | $DC_{m+2,n+1}$ | $DC_{m+3,n+1}$ | $DC_{m+4,n+1}$ |
| $n+2$ | $G_{m-3,n+2}$  | $DC_{m-2,n+2}$ | $G_{m-1,n+2}$  | $DC_{m,n+2}$ | $G_{m+1,n+2}$  | $DC_{m+2,n+2}$ | $G_{m+3,n+2}$  | $DC_{m+4,n+2}$ |
| $n+3$ | $DC_{m-3,n+3}$ | $DC_{m-2,n+3}$ | $DC_{m-1,n+3}$ | $DC_{m,n+3}$ | $DC_{m+1,n+3}$ | $DC_{m+2,n+3}$ | $DC_{m+3,n+3}$ | $DC_{m+4,n+3}$ |
| $n+4$ | $G_{m-3,n+4}$  | $DC_{m-2,n+4}$ | $G_{m-1,n+4}$  | $DC_{m,n+4}$ | $G_{m+1,n+4}$  | $DC_{m+2,n+4}$ | $G_{m+3,n+4}$  | $DC_{m+4,n+4}$ |

FIG. 14

|       | $m-3$         | $m-2$ | $m-1$         | $m$ | $m+1$         | $m+2$ | $m+3$         | $m+4$ |
|-------|---------------|-------|---------------|-----|---------------|-------|---------------|-------|
| $n-3$ | $B_{m-3,n-3}$ |       | $B_{m-1,n-3}$ |     | $B_{m+1,n-3}$ |       | $B_{m+3,n-3}$ |       |
| $n-2$ |               |       |               |     |               |       |               |       |
| $n-1$ | $B_{m-3,n-1}$ |       | $B_{m-1,n-1}$ |     | $B_{m+1,n-1}$ |       | $B_{m+3,n-1}$ |       |
| $n$   |               |       |               |     |               |       |               |       |
| $n+1$ | $B_{m-3,n+1}$ |       | $B_{m-1,n+1}$ |     | $B_{m+1,n+1}$ |       | $B_{m+3,n+1}$ |       |
| $n+2$ |               |       |               |     |               |       |               |       |
| $n+3$ | $B_{m-3,n+3}$ |       | $B_{m-1,n+3}$ |     | $B_{m+1,n+3}$ |       | $B_{m+3,n+3}$ |       |
| $n+4$ |               |       |               |     |               |       |               |       |

FIG. 15

|       | $m-3$          | $m-2$          | $m-1$          | $m$          | $m+1$          | $m+2$          | $m+3$          | $m+4$          |
|-------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|----------------|
| $n-3$ | $B_{m-3,n-3}$  | $DB_{m-2,n-3}$ | $B_{m-1,n-3}$  | $DB_{m,n-3}$ | $B_{m+1,n-3}$  | $DB_{m+2,n-3}$ | $B_{m+3,n-3}$  | $DB_{m+4,n-3}$ |
| $n-2$ | $DB_{m-3,n-2}$ | $DB_{m-2,n-2}$ | $DB_{m-1,n-2}$ | $DB_{m,n-2}$ | $DB_{m+1,n-2}$ | $DB_{m+2,n-2}$ | $DB_{m+3,n-2}$ | $DB_{m+4,n-2}$ |
| $n-1$ | $B_{m-3,n-1}$  | $DB_{m-2,n-1}$ | $B_{m-1,n-1}$  | $DB_{m,n-1}$ | $B_{m+1,n-1}$  | $DB_{m+2,n-1}$ | $B_{m+3,n-1}$  | $DB_{m+4,n-1}$ |
| $n$   | $DB_{m-3,n}$   | $DB_{m-2,n}$   | $DB_{m-1,n}$   | $DB_{m,n}$   | $DB_{m+1,n}$   | $DB_{m+2,n}$   | $DB_{m+3,n}$   | $DB_{m+4,n}$   |
| $n+1$ | $B_{m-3,n+1}$  | $DB_{m-2,n+1}$ | $B_{m-1,n+1}$  | $DB_{m,n+1}$ | $B_{m+1,n+1}$  | $DB_{m+2,n+1}$ | $B_{m+3,n+1}$  | $DB_{m+4,n+1}$ |
| $n+2$ | $DB_{m-3,n+2}$ | $DB_{m-2,n+2}$ | $DB_{m-1,n+2}$ | $DB_{m,n+2}$ | $DB_{m+1,n+2}$ | $DB_{m+2,n+2}$ | $DB_{m+3,n+2}$ | $DB_{m+4,n+2}$ |
| $n+3$ | $B_{m-3,n+3}$  | $DB_{m-2,n+3}$ | $B_{m-1,n+3}$  | $DB_{m,n+3}$ | $B_{m+1,n+3}$  | $DB_{m+2,n+3}$ | $B_{m+3,n+3}$  | $DB_{m+4,n+3}$ |
| $n+4$ | $DB_{m-3,n+4}$ | $DB_{m-2,n+4}$ | $DB_{m-1,n+4}$ | $DB_{m,n+4}$ | $DB_{m+1,n+4}$ | $DB_{m+2,n+4}$ | $DB_{m+3,n+4}$ | $DB_{m+4,n+4}$ |

FIG. 16