

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
H04N 7/28

(11)  
(43)

2001 - 0111740  
2001 12 20

(21) 10 - 2000 - 0032388  
(22) 2000 06 13

(71)

3 416

(72)

270 - 1

가 302

725

가 203

(74)

:

(54)

가

6

1

2 1

- 3 1
- 4 1
- 5 1
- 6
- 7 6
- 8 6
- 9

TV

1

1 (background), (110) (object) 2 / (covered/uncovered) (change)

(120) (block matching algorithm)

3

3 (Y)  $(f_{t2})$   $(x_{t2}, y_{t2})$  가  $N \times N$  가  $(f_{t1})$   $(N + 2P) \times (N + 2P)$  가

1 MAD(mean absolute difference) , l 1 (x) (metric)

1

$$MAD = \frac{1}{N^2} \sum_{i=1}^N |f_{t1}(r_x+i, r_y+j) - f_{t2}(r_x+i+m, r_y+j+n)|$$

(search range) (m, n) 가 가

(130) (120) (refinement)

4 (smoothness)

(140) (110) (hole) 4  
 (140) (forward motion) (overlap) (hole)  
 (overlap) (hole)  
 (overlap) (hole)  
 (overlap) (hole)

(a)

(b) (a) 가 ;

(C) (b)

가 가 ;

가

6

6 (610), (620), (630)

6 (610)

가 (620) 가 (610)

(630) 가 (620) (630)

7 6 (610)

7 , f<sub>t1</sub> (previous frame) , f<sub>t2</sub> (current frame)  
 , f<sub>ti</sub> (interpolated frame)

7 (a) (b)

7 (a)  
 2:1 (decimation) (search range)  
 nge) (block matching algorithm: BMA) (forward MV)

7 (b)

(small search range)

(x<sub>ti</sub>, y<sub>ti</sub>) (B<sub>n</sub>) (B<sub>t1</sub>, B<sub>t2</sub>) (x<sub>ti</sub>, y<sub>ti</sub>) BMA 가 가

(f<sub>t1</sub>) (B<sub>t1</sub>) (D) (f<sub>t1</sub>) (B<sub>t2</sub>)

8 6 (620)

8 (current block) B(P) (candidate MV block) N<sub>i</sub>(P), l=1,.....8 D(·)

가 MAD(mean absolute difference)

DFD(displaced frame differences) 가 DFD

2

$$DFD(D) = \sum_{p \in B(p)} |f_{t1}(p-D) - f_{t2}(p+D)|$$

9 6 (630)

9 (630) 3 가

/ 가 (weight)

3

$$f_{ti}(p) = \frac{1}{2} [f_{t1}(p-D(B(p))) + f_{t2}(p-D(B(p)))]$$

가 .

(overlap) (hole)  
(panning) (zooming)

(57)

1.

(a) ;

(b) (a) 가 ;

(C) (b)

2.

1 , (a)

(a - 1) ;

(a - 2) (a - 1)

3.

2 , (a - 1)

;

4.

2 , (a - 2)

가 가

5.

1 , (b)

가 , 가

6.

1 , (b)

,  
가 ,

가

7.

1 , (c)

8.

1 , (c)

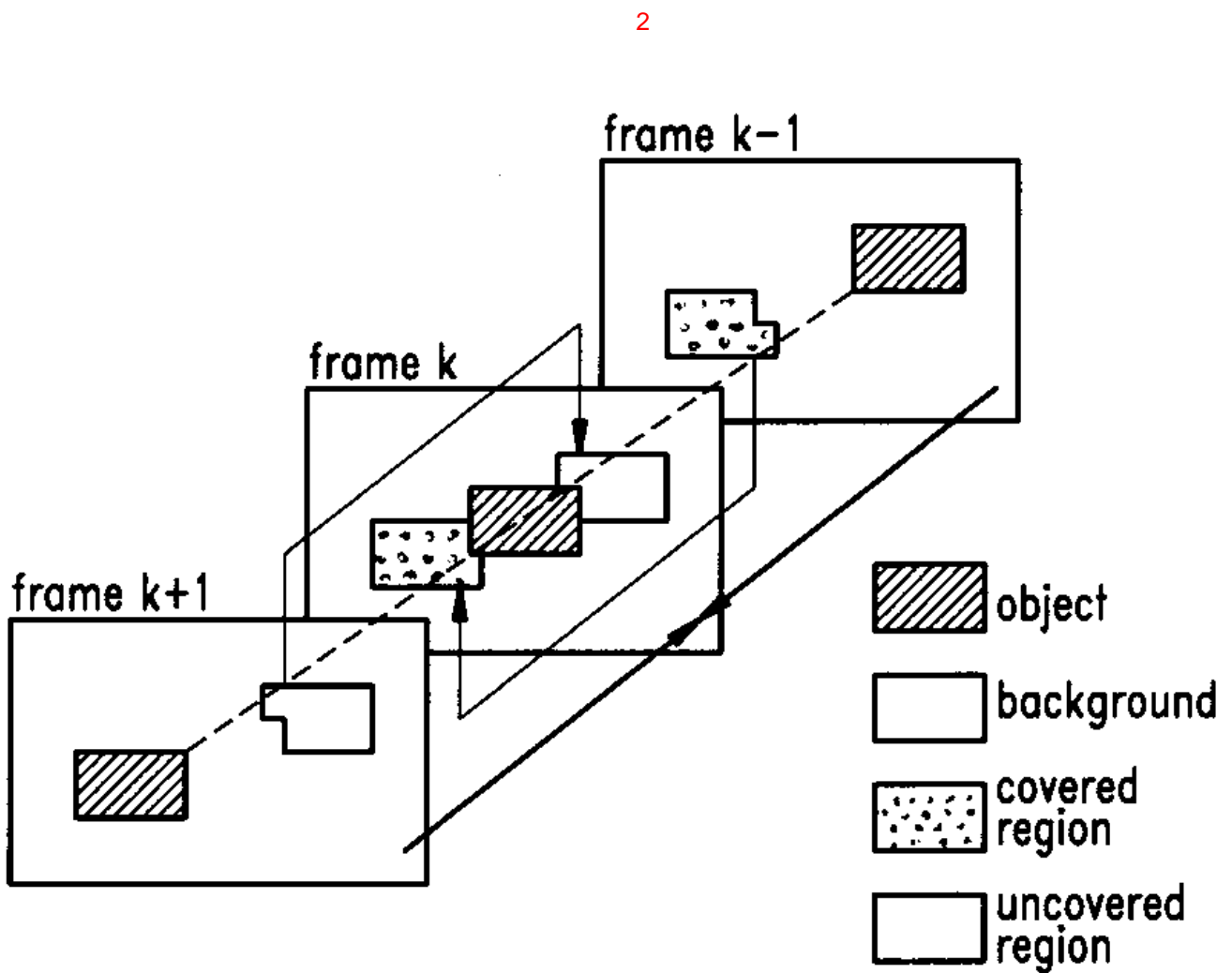
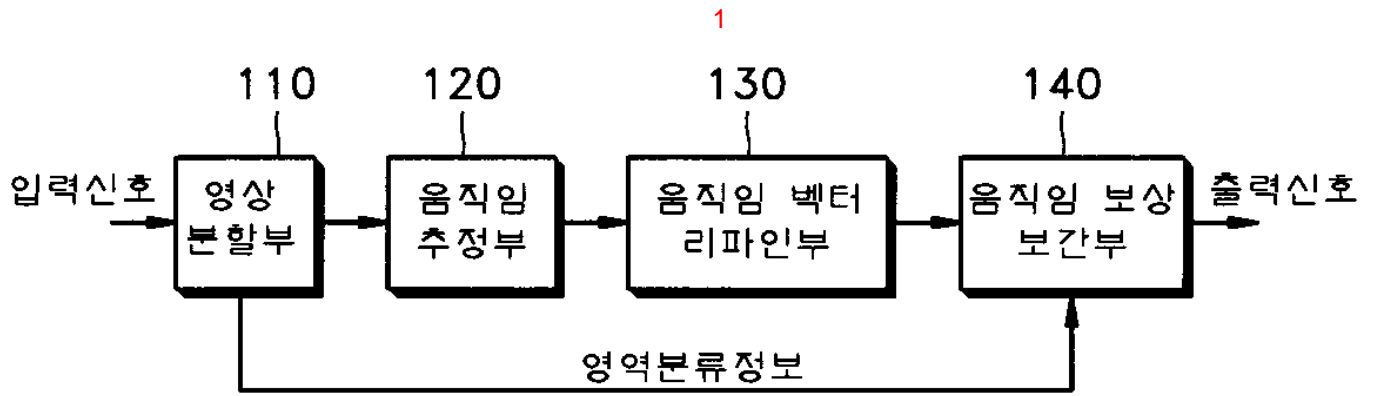
가

9.

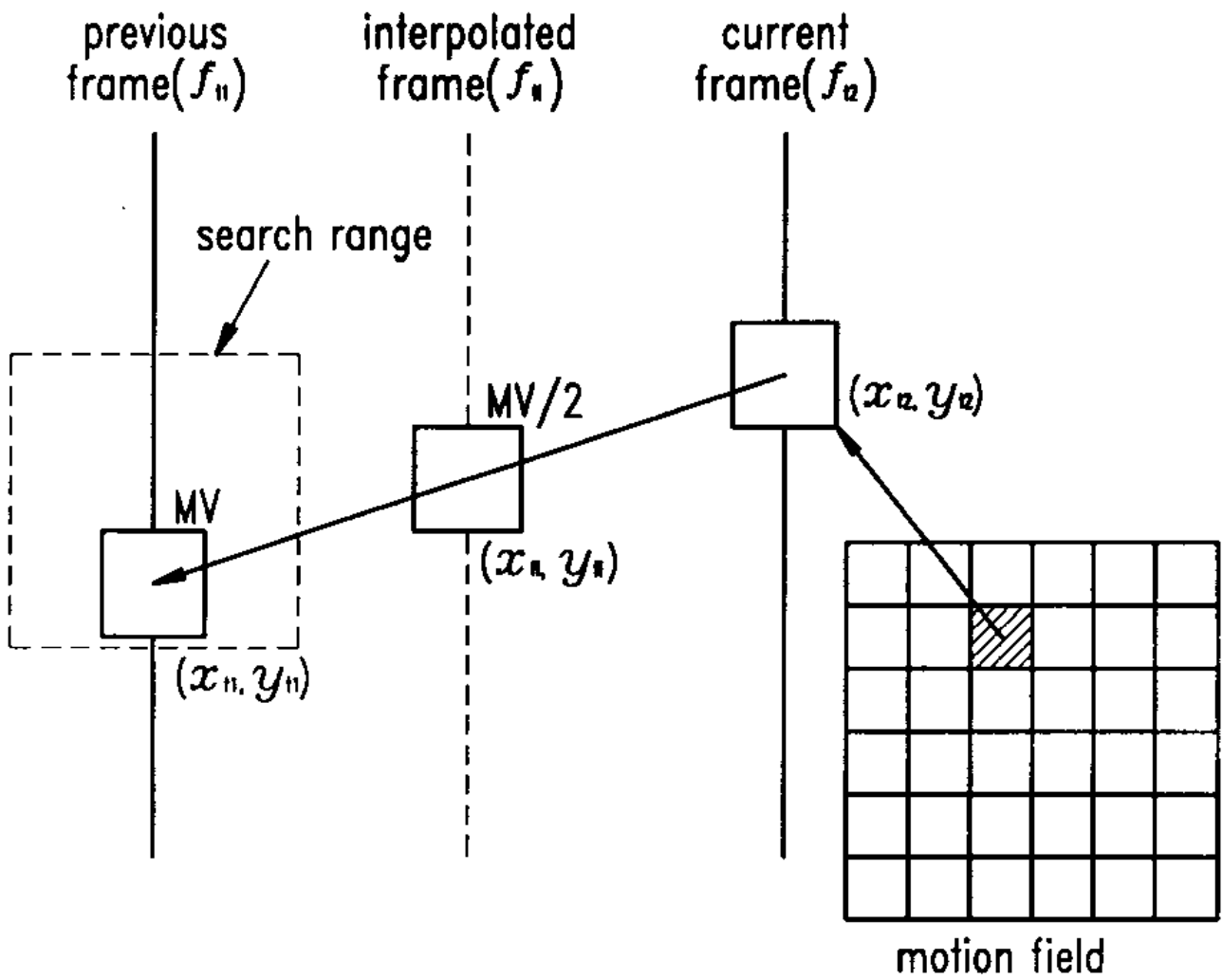
,  
,

;  
가 가  
;

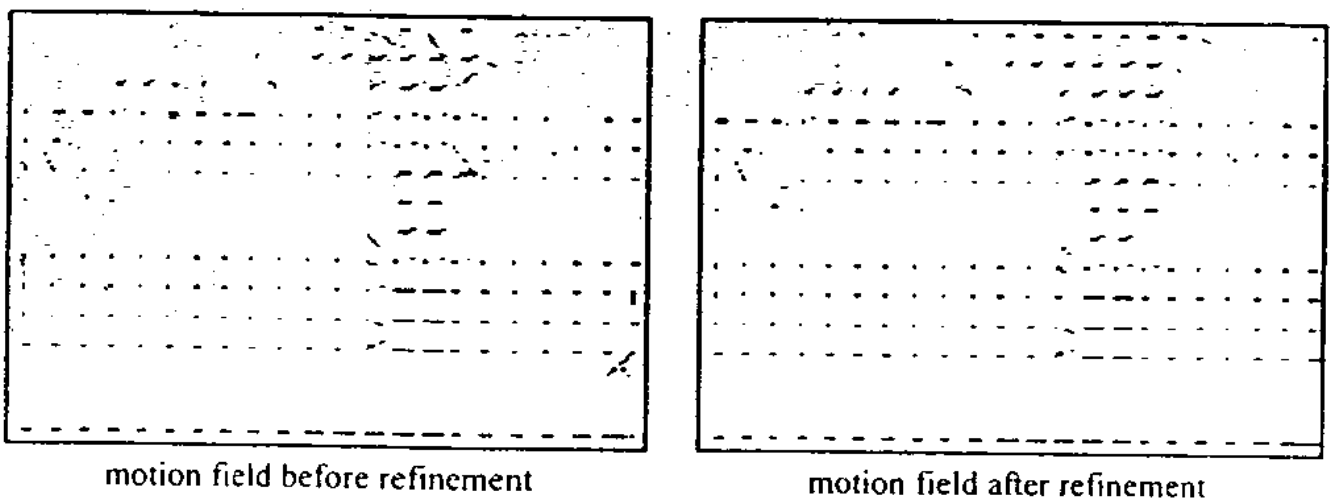
가



3

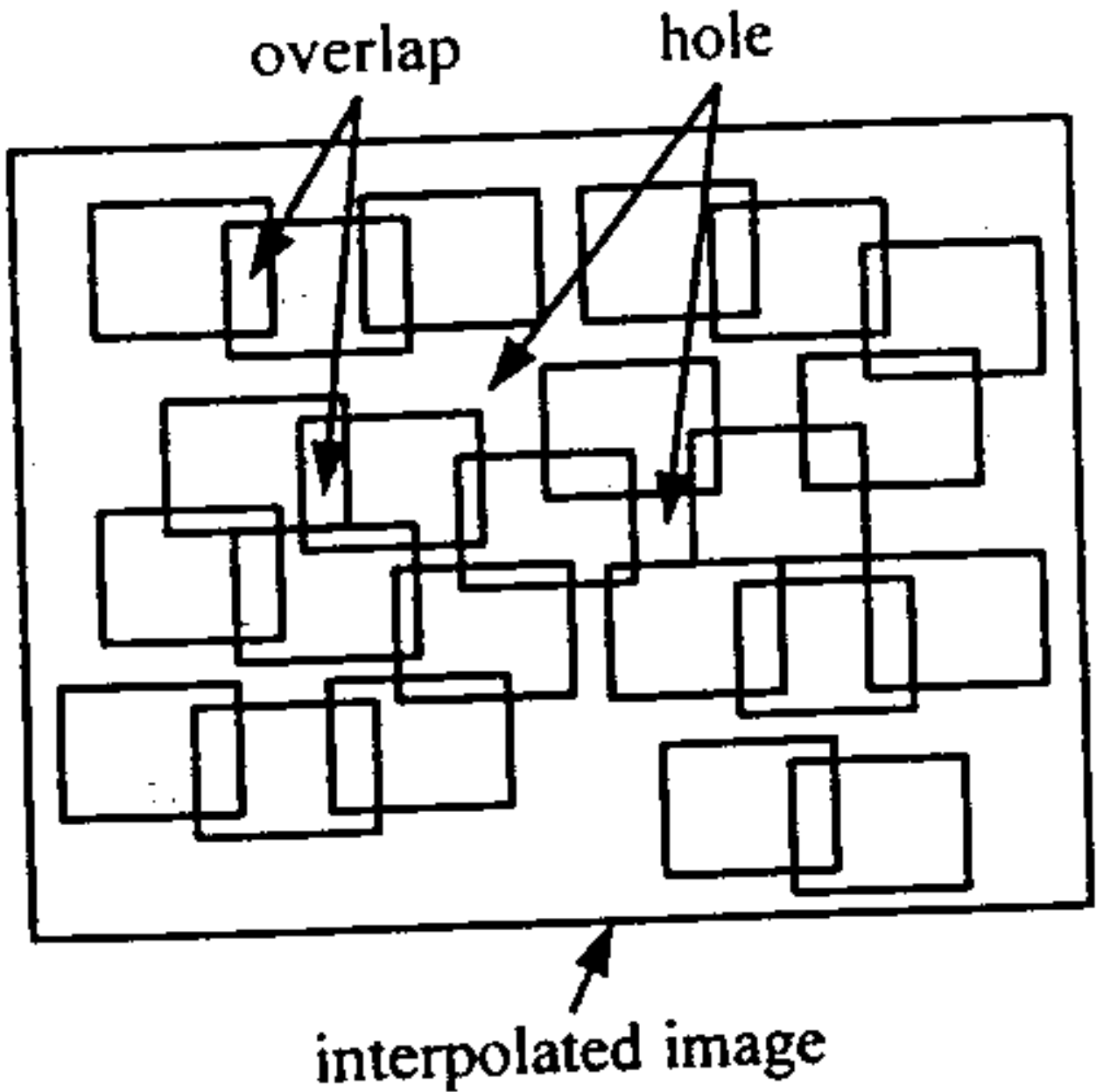


4

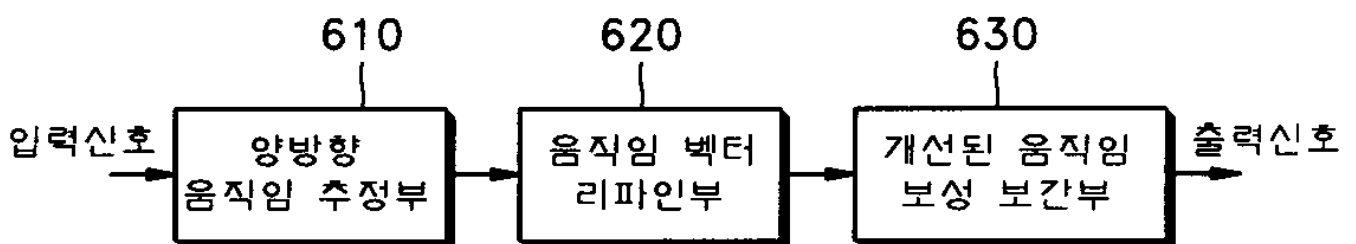




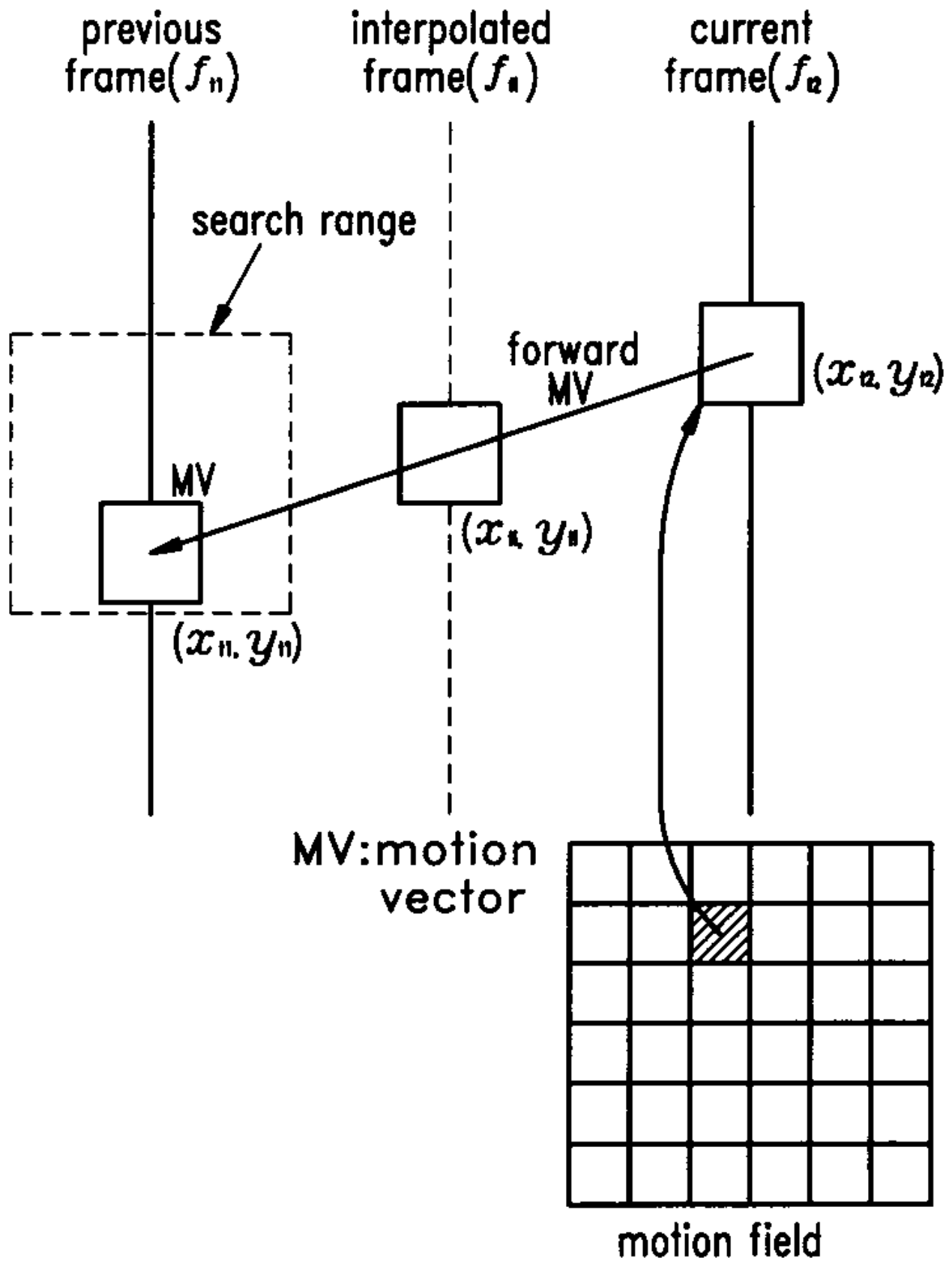
5



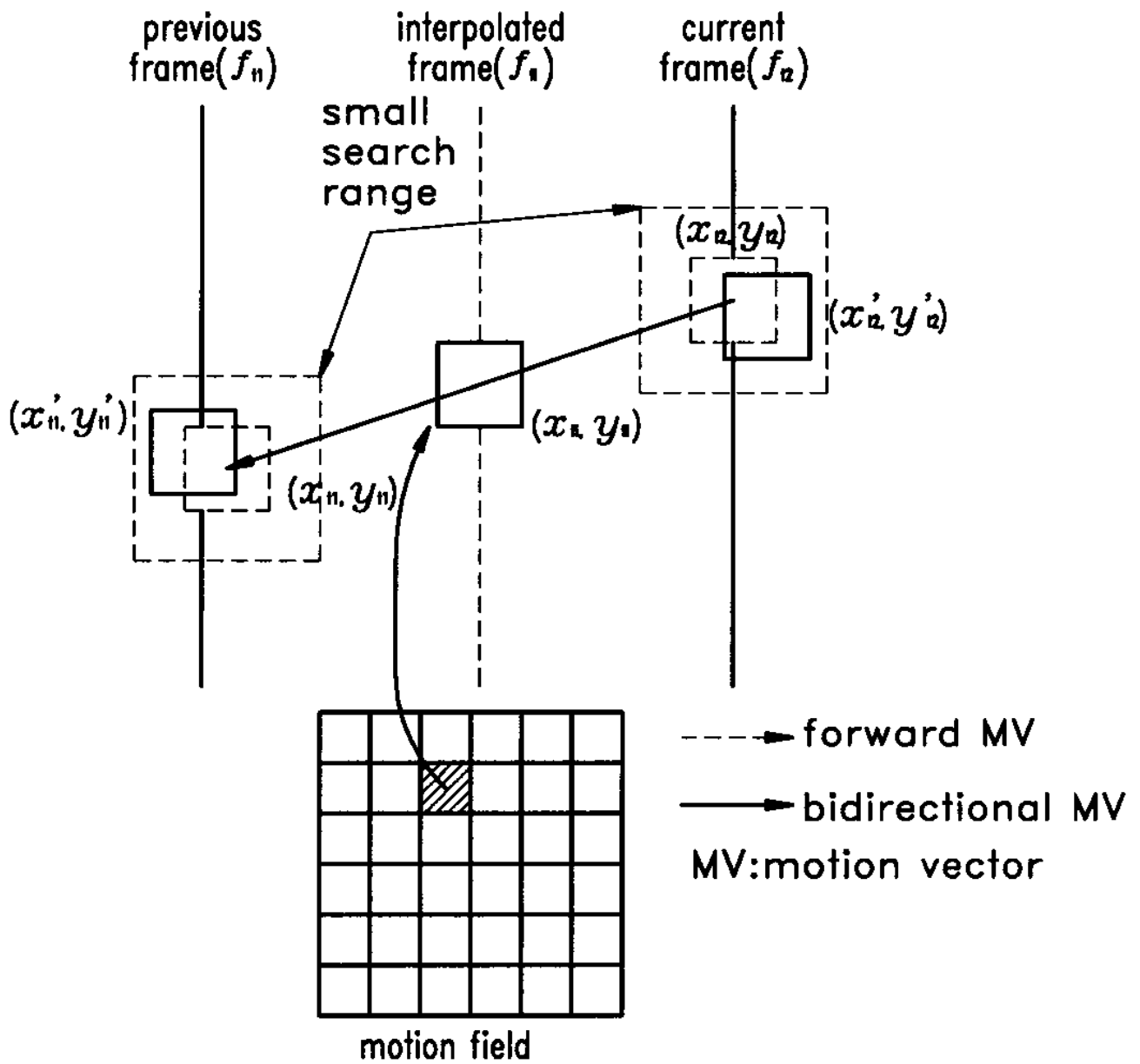
6



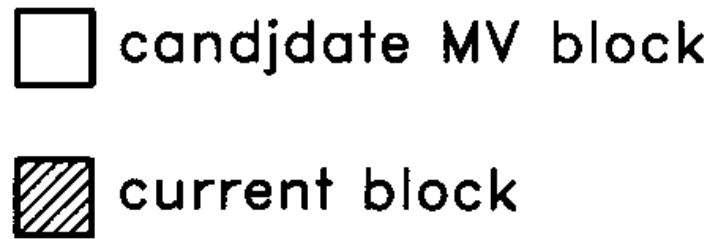
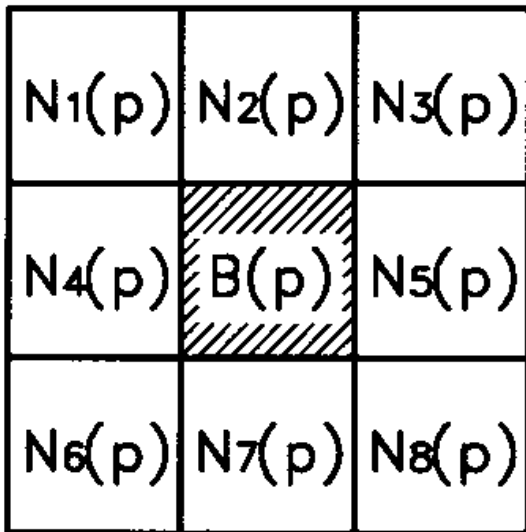
7a



7b



8



9

