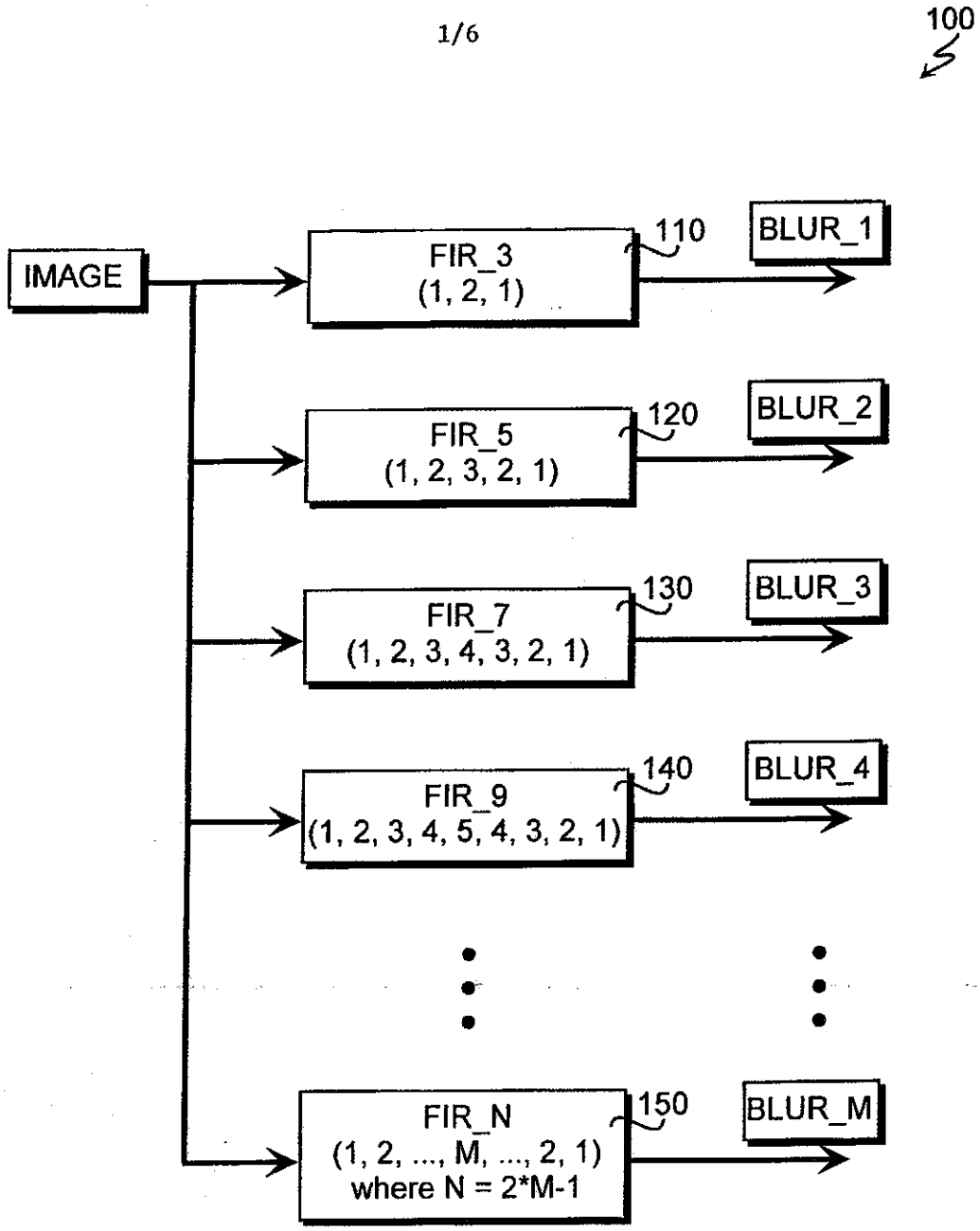

100
IMAGE
FIR_3
(1, 2, 1)
110
BLUR_1
FIR_5
(1, 2, 3, 2, 1)
120
BLUR_2
FIR_7
(1, 2, 3, 4, 3, 2, 1)
130
BLUR_3
FIR_9
(1, 2, 3, 4, 5, 4, 3, 2, 1)
140
BLUR_4
FIR_N
(1, 2, ..., M, ..., 2, 1)
where N = 2*M-1
150
BLUR_M

FIG. 1

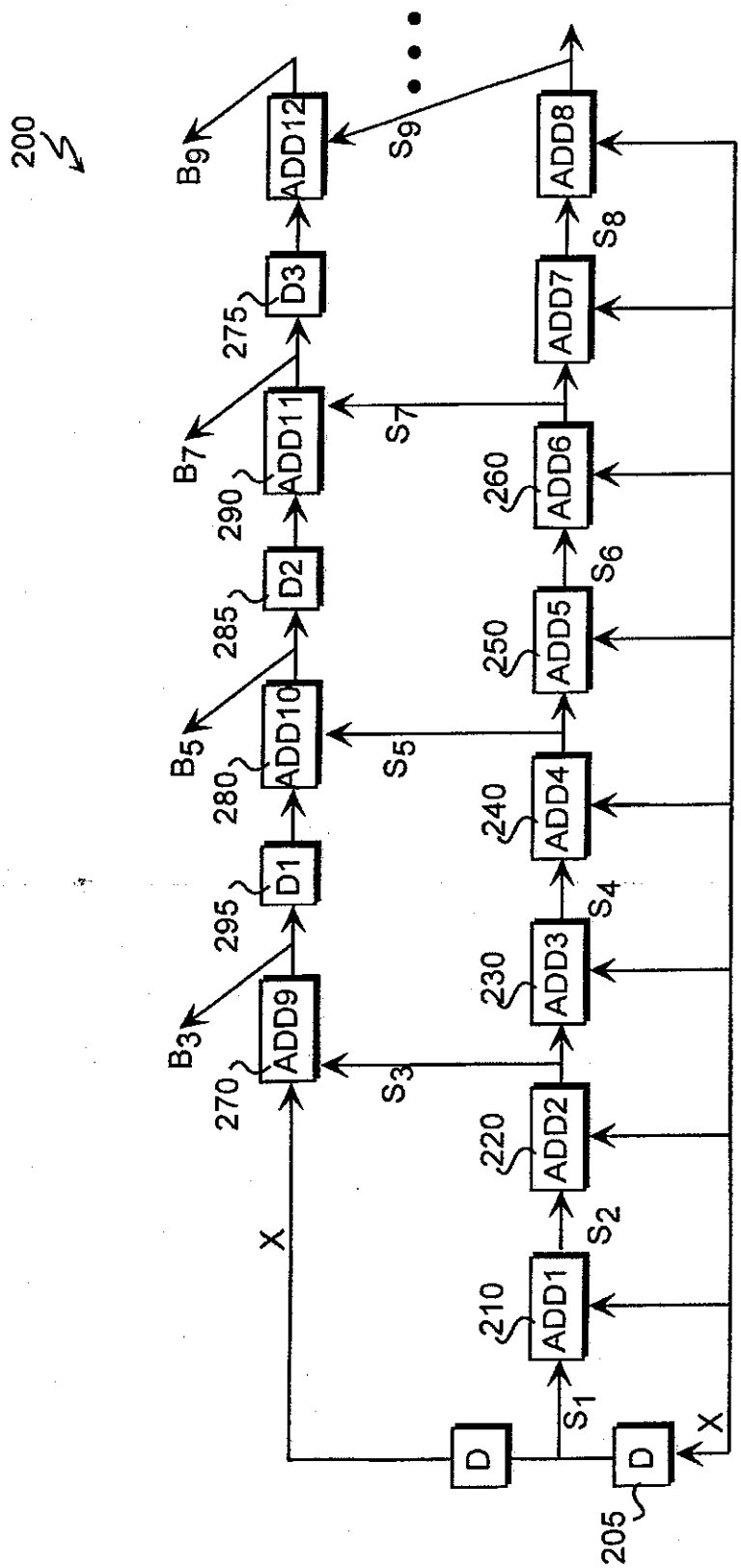

200
205
D
D
X
X
ADD1
ADD2
ADD3
ADD4
ADD5
ADD6
ADD7
ADD8
ADD9
ADD10
ADD11
ADD12
D1
D2
D3
210
220
230
240
250
260
270
280
290
295
275
285
S1
S2
S3
S4
S5
S6
S7
S8
S9
B3
B5
B7
B9

FIG. 2

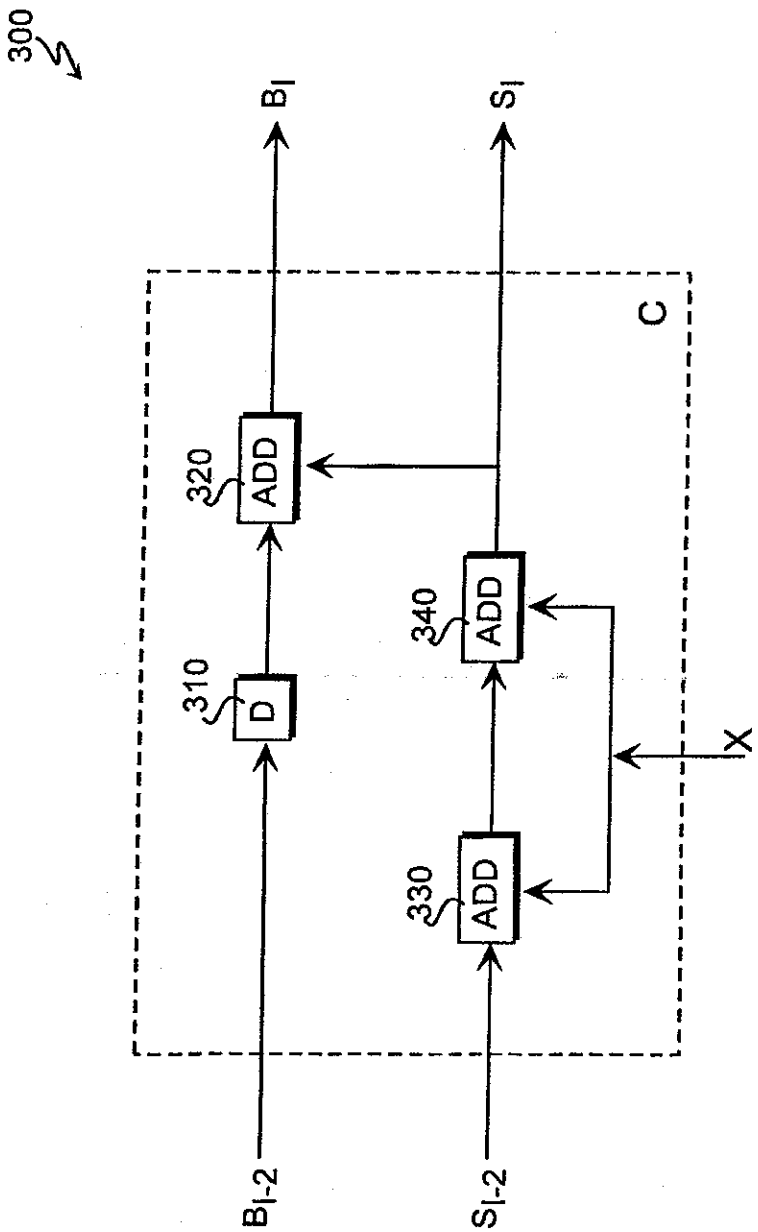


FIG. 3

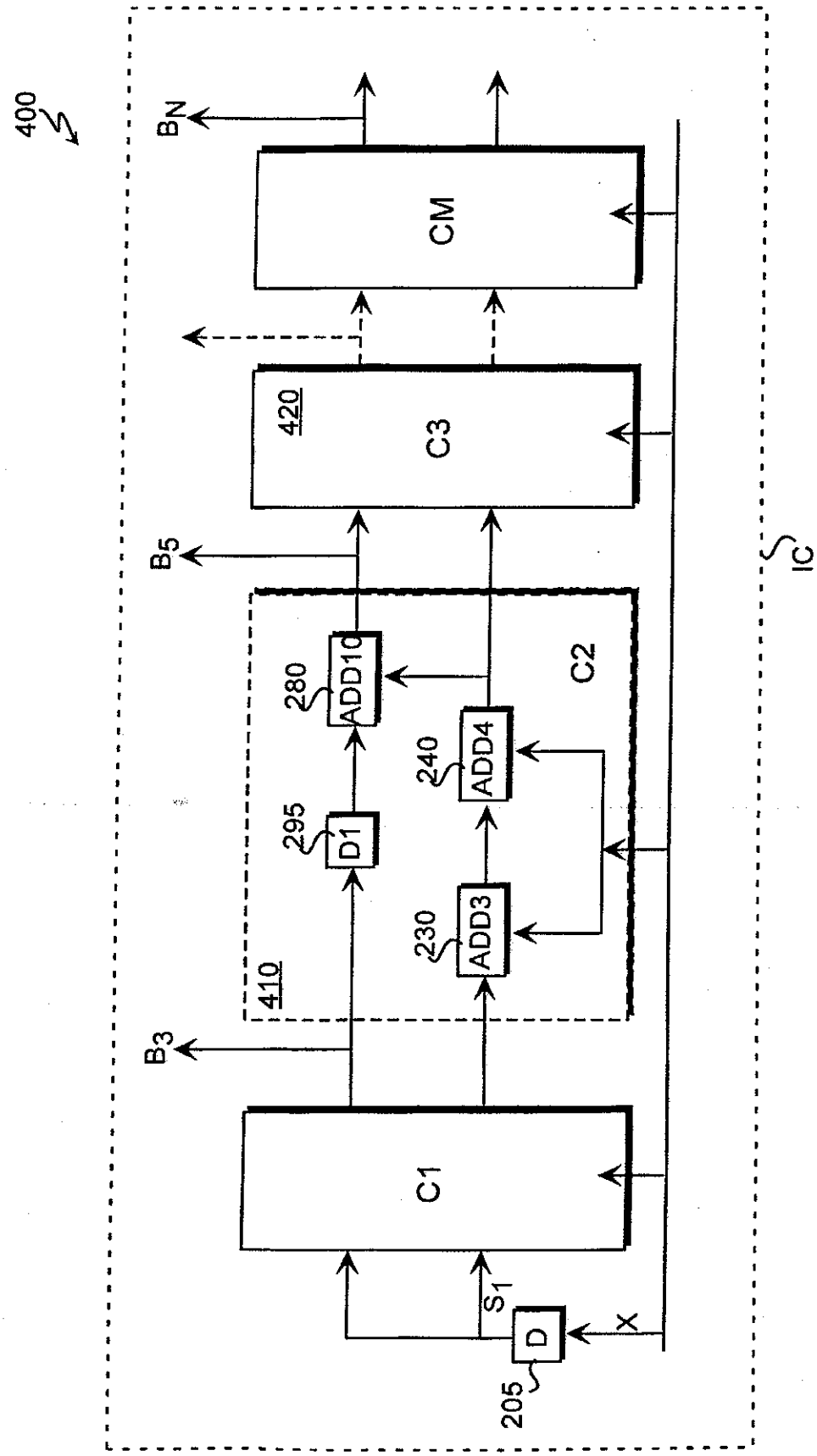

400
B_N
CM
420
C3
B_5
IC
280
ADD10
C2
240
ADD4
295
D1
230
ADD3
410
B_3
C1
S_1
D
X
205

FIG. 4

X= S_1	S_3 (B_3)	S_5 (B_5)	S_7 (B_7)
x_0	x_0	x_0	x_0
x_1	$s_0^3 = x_0 + x_1$ ($b_0^3 = x_0 + s_0^3 = 2x_0 + x_1$)	$x_0 + x_1$ (?)	$x_0 + x_1$ (?)
x_2	$s_1^3 = x_0 + x_1 + x_2$ ($b_1^3 = x_1 + s_1^3 = x_0 + 2x_1 + x_2$)	$s_0^5 = x_0 + x_1 + x_2$ ($b_0^5 = b_0^3 = s_0^5 = 3x_0 + 2x_1 + x_2$)	$x_0 + x_1 + x_2$ (?)
x_3	$s_2^3 = x_1 + x_2 + x_3$ ($b_2^3 = x_2 + s_2^3 = x_1 + 2x_2 + x_3$)	$s_1^5 = x_0 + x_1 + x_2 + x_3$ ($b_1^5 = b_1^3 = s_1^5 = 2x_0 + 3x_1 + 2x_2 + x_3$)	$s_0^7 = x_0 + x_1 + x_2 + x_3$ ($b_0^7 = b_0^5 + s_0^7$)
x_4	$s_3^3 = x_2 + x_3 + x_4$ ($b_3^3 = x_3 + s_3^3 = x_2 + 2x_3 + x_4$)	$x_0 + x_1 + x_2 + x_3 + x_4$ ($b_2^5 = b_2^3 = s_2^5 = x_0 + 2x_1 + 3x_2 + 2x_3 + x_4$)	$s_1^7 = x_0 + x_1 + x_2 + x_3 + x_4$ ($b_1^7 = b_1^5 + s_1^7$)
x_5	$s_4^3 = x_3 + x_4 + x_5$ ($b_4^3 = x_4 + s_4^3 = x_3 + 2x_4 + x_5$)	$x_1 + x_2 + x_3 + x_4 + x_5$ ($b_3^5 = b_3^3 = s_3^5 = x_1 + 2x_2 + 3x_3 + 2x_4 + x_5$)	$s_2^7 = x_0 + x_1 + x_2 + x_3 + x_4 + x_5$ ($b_2^7 = b_2^5 + s_2^7$)
x_6	$s_5^3 = x_4 + x_5 + x_6$ ($b_5^3 = x_5 + s_5^3 = x_4 + 2x_5 + x_6$)	$x_2 + x_3 + x_4 + x_5 + x_6$ ($b_4^5 = b_4^3 = s_4^5 = x_2 + 2x_3 + 3x_4 + 2x_5 + x_6$)	$x_0 + x_1 + x_2 + x_3 + x_4 + x_5 + x_6$ ($b_3^7 = b_3^5 + s_3^7$)
x_7	$s_6^3 = x_5 + x_6 + x_7$ ($b_6^3 = x_6 + s_6^3 = x_5 + 2x_6 + x_7$)	$x_3 + x_4 + x_5 + x_6 + x_7$ ($b_5^5 = b_5^3 = s_5^5 = x_3 + 2x_4 + 3x_5 + 2x_6 + x_7$)	$x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7$ ($b_4^7 = b_4^5 + s_4^7$)
x_8	$s_7^3 = x_6 + x_7 + x_8$ ($b_7^3 = x_7 + s_7^3 = x_6 + 2x_7 + x_8$)	$x_4 + x_5 + x_6 + x_7 + x_8$ ($b_6^5 = b_6^3 = s_6^5 = x_4 + 2x_5 + 3x_6 + 2x_7 + x_8$)	$x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8$ ($b_5^7 = b_5^5 + s_5^7$)
x_9	$s_8^3 = x_7 + x_8 + x_9$ ($b_8^3 = x_8 + s_8^3 = x_7 + 2x_8 + x_9$)	$x_5 + x_6 + x_7 + x_8 + x_9$ ($b_7^5 = b_7^3 = s_7^5 = x_5 + 2x_6 + 3x_7 + 2x_8 + x_9$)	$x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9$ ($b_6^7 = b_6^5 + s_6^7$)
x_{10}	$s_9^3 = x_8 + x_9 + x_{10}$ ($b_9^3 = x_9 + s_9^3 = x_8 + 2x_9 + x_{10}$)	$x_6 + x_7 + x_8 + x_9 + x_{10}$ ($b_8^5 = b_8^3 = s_8^5 = x_6 + 2x_7 + 3x_8 + 2x_9 + x_{10}$)	$x_4 + x_5 + x_6 + x_7 + x_8 + x_9 + x_{10}$ ($b_7^7 = b_7^5 + s_7^7$)

FIG. 5

X	S_2	S_3	S_4	S_5	S_6	S_7
x_0	x_0	x_0	x_0	x_0	x_0	x_0
x_1	$x_0 + x_1$	$x_0 + x_1$	$x_0 + x_1$	$x_0 + x_1$	$x_0 + x_1$	$x_0 + x_1$
x_2	$x_1 + x_2$	$x_0 + x_1 + x_2$	$x_0 + x_1 + x_2$	$x_0 + x_1 + x_2$	$x_0 + x_1 + x_2$	$x_0 + x_1 + x_2$
x_3	$x_2 + x_3$	$x_1 + x_2 + x_3$	$x_0 + \ldots + x_3$	$x_0 + x_1 + x_2 + x_3$	$x_0 + \ldots + x_3$	$x_0 + x_1 + x_2 + x_3$
x_4	$x_3 + x_4$	$x_2 + x_3 + x_4$	$x_1 + \ldots + x_4$	$x_0 + x_1 + x_2 + x_3 + x_4$	$x_0 + \ldots + x_4$	$x_0 + x_1 + x_2 + x_3 + x_4$
x_5	$x_4 + x_5$	$x_3 + x_4 + x_5$	$x_2 + \ldots + x_5$	$x_1 + x_2 + x_3 + x_4 + x_5$	$x_0 + \ldots + x_5$	$x_0 + x_1 + x_2 + x_3 + x_4 + x_5$
x_6	$x_5 + x_6$	$x_4 + x_5 + x_6$	$x_3 + \ldots + x_6$	$x_2 + x_3 + x_4 + x_5 + x_6$	$x_1 + \ldots + x_6$	$x_0 + x_1 + x_2 + x_3 + x_4 + x_5 + x_6$
x_7	$x_6 + x_7$	$x_5 + x_6 + x_7$	$x_4 + \ldots + x_7$	$x_3 + x_4 + x_5 + x_6 + x_7$	$x_2 + \ldots + x_7$	$x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7$
x_8	$x_7 + x_8$	$x_6 + x_7 + x_8$	$x_5 + \ldots + x_8$	$x_4 + x_5 + x_6 + x_7 + x_8$	$x_3 + \ldots + x_8$	$x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8$
x_9	$x_8 + x_9$	$x_7 + x_8 + x_9$	$x_6 + \ldots + x_9$	$x_5 + x_6 + x_7 + x_8 + x_9$	$x_4 + \ldots + x_9$	$x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9$
x_{10}	$x_9 + x_{10}$	$x_8 + x_9 + x_{10}$	$x_7 + \ldots + x_{10}$	$x_6 + x_7 + x_8 + x_9 + x_{10}$	$x_5 + \ldots + x_{10}$	$x_4 + x_5 + x_6 + x_7 + x_8 + x_9 + x_{10}$

FIG. 6