

FIG. 1

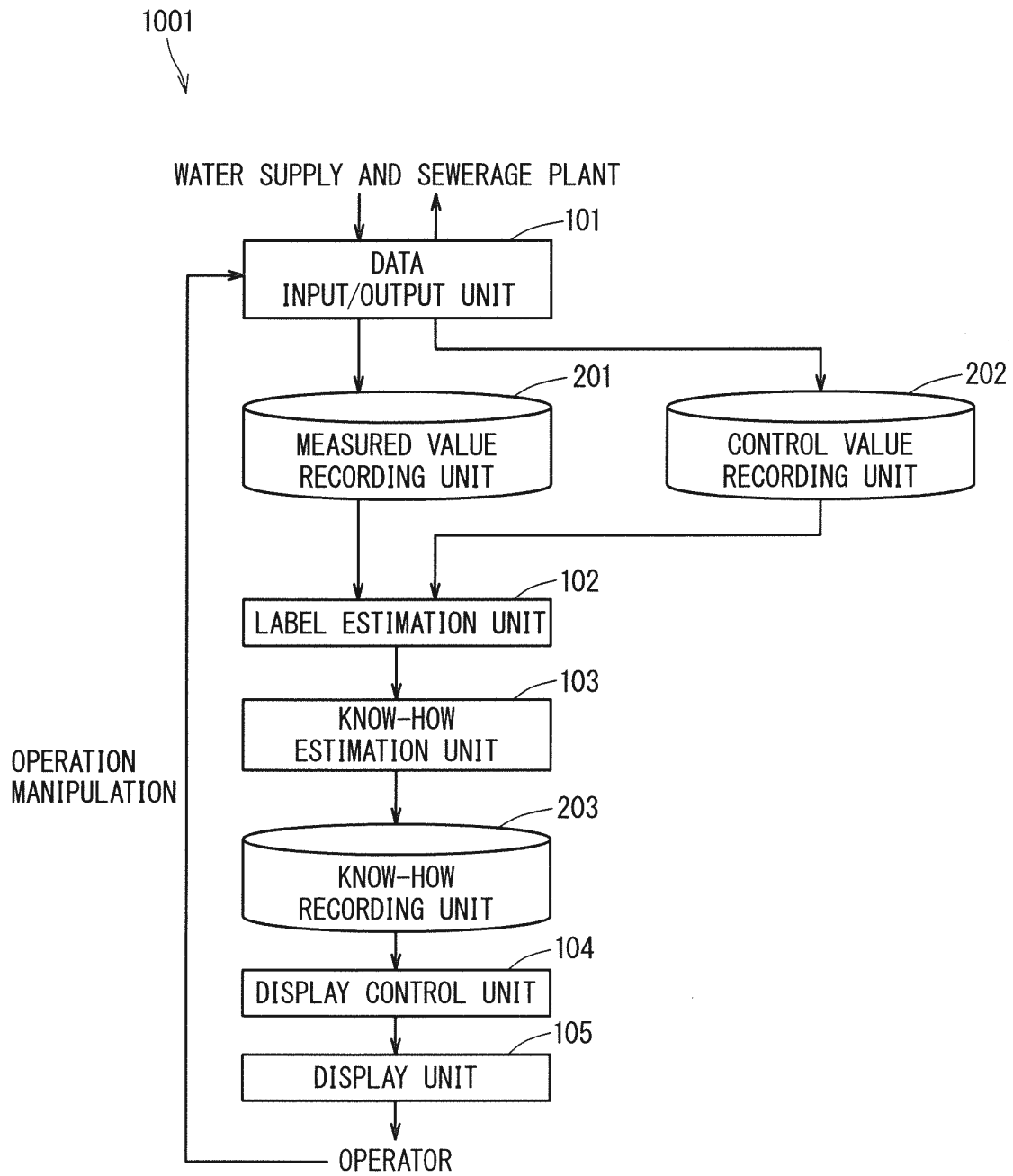


FIG. 2

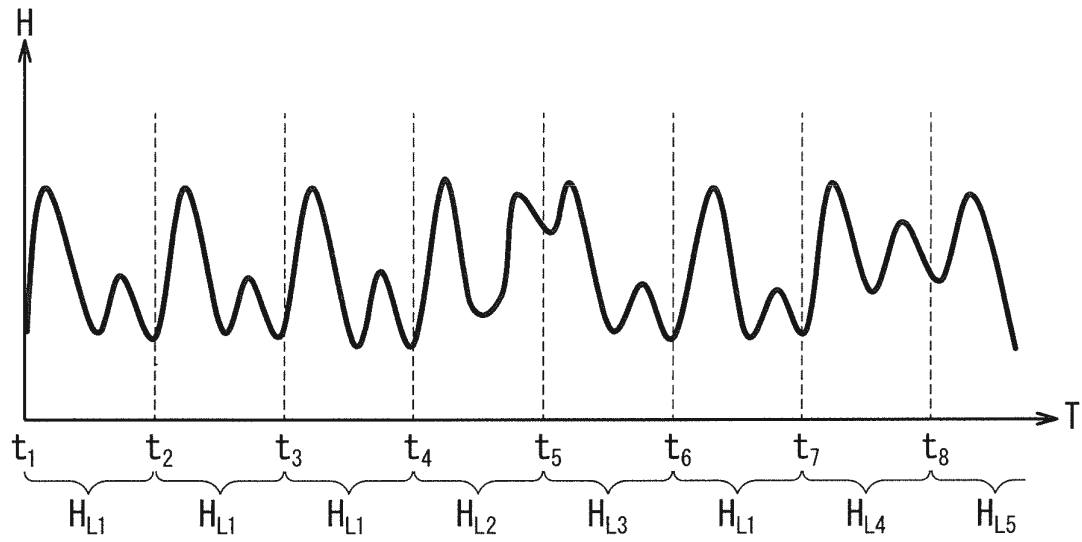


FIG. 3

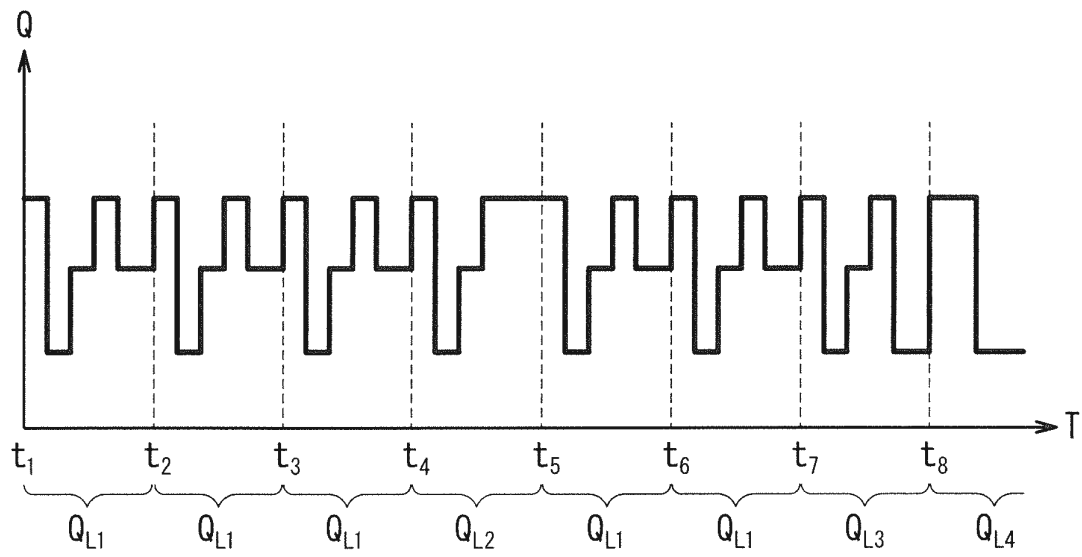


FIG. 4

T	H	LABEL FOR H	Q	LABEL FOR Q
t_1	h_{t1}	H_{L1}	q_{t1}	Q_{L1}
$\vdots$	$\vdots$		$\vdots$	
t_2	h_{t2}	H_{L1}	q_{t2}	Q_{L1}
$\vdots$	$\vdots$		$\vdots$	
t_3	h_{t3}	H_{L1}	q_{t3}	Q_{L1}
$\vdots$	$\vdots$		$\vdots$	
t_4	h_{t4}	H_{L2}	q_{t4}	Q_{L2}
$\vdots$	$\vdots$		$\vdots$	

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EVENT X	EVENT Y	$n(X_i \times Y_j)$	$p(Y X)$
$H_L = \{ H_{L1}, H_{L2}, H_{L3}, H_{L4}, H_{L5} \}$	$Q_L = \{ Q_{L1}, Q_{L2}, Q_{L3}, Q_{L4} \}$	$n(H_{L1} \times Q_{L1})$	$p(Q_L H_L) = n(H_{L1} \times Q_{L1}) / n(H_{L1})$
H_{L1}	Q_{L1}	$n(H_{L1} \times Q_{L1})$	$n(H_{L1} \times Q_{L1}) / n(H_{L1})$
H_{L1}	Q_{L2}	$n(H_{L1} \times Q_{L2})$	$n(H_{L1} \times Q_{L2}) / n(H_{L1})$
H_{L1}	Q_{L3}	$n(H_{L1} \times Q_{L3})$	$n(H_{L1} \times Q_{L3}) / n(H_{L1})$
H_{L1}	Q_{L4}	$n(H_{L1} \times Q_{L4})$	$n(H_{L1} \times Q_{L4}) / n(H_{L1})$
H_{L2}	Q_{L1}	$n(H_{L2} \times Q_{L1})$	$n(H_{L2} \times Q_{L1}) / n(H_{L2})$
H_{L2}	Q_{L2}	$n(H_{L2} \times Q_{L2})$	$n(H_{L2} \times Q_{L2}) / n(H_{L2})$
$\vdots$	$\vdots$	$\vdots$	$\vdots$
H_{L5}	Q_{L4}	$n(H_{L5} \times Q_{L4})$	$n(H_{L5} \times Q_{L4}) / n(H_{L5})$

FIG. 6

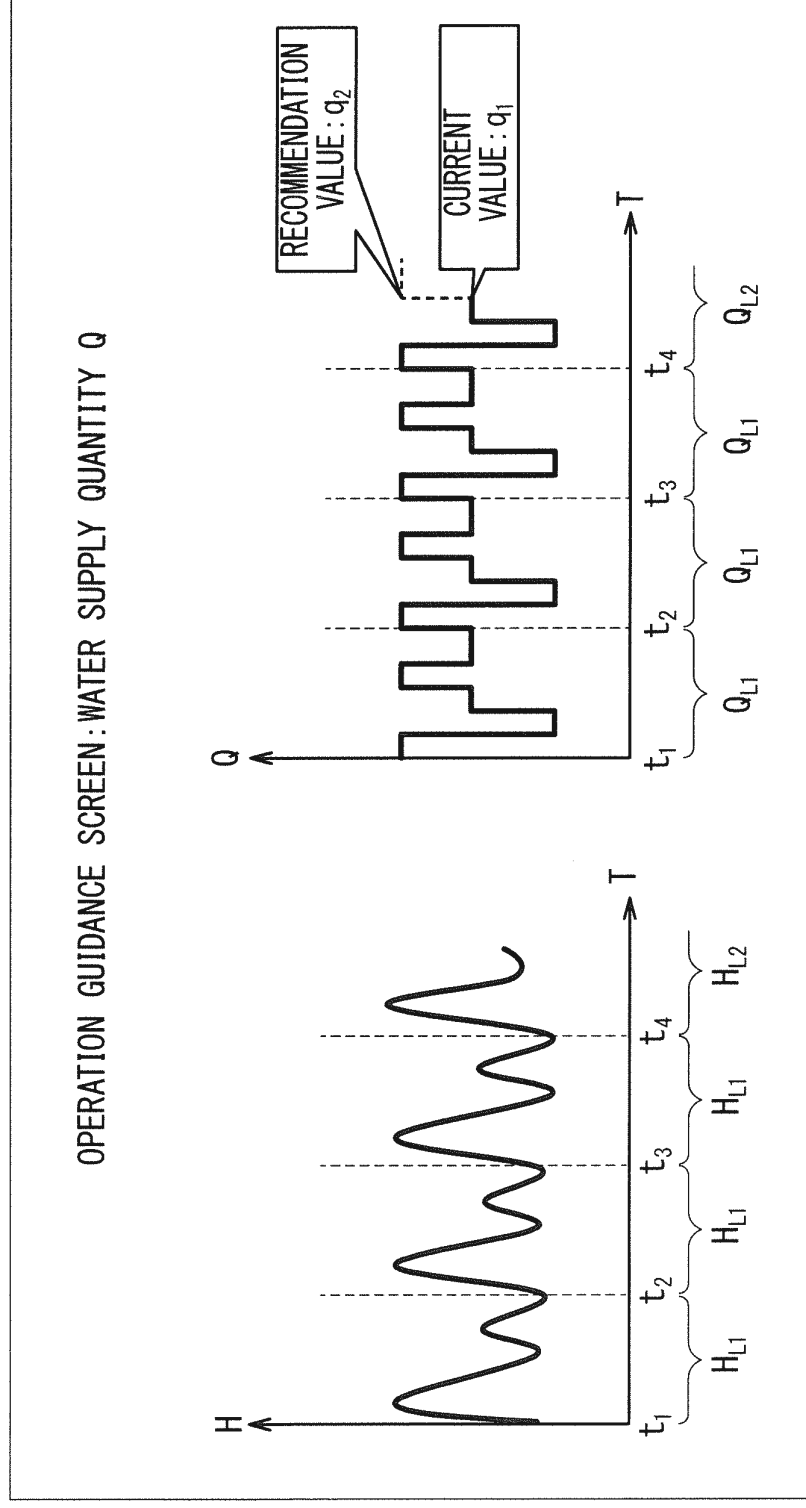


FIG. 7

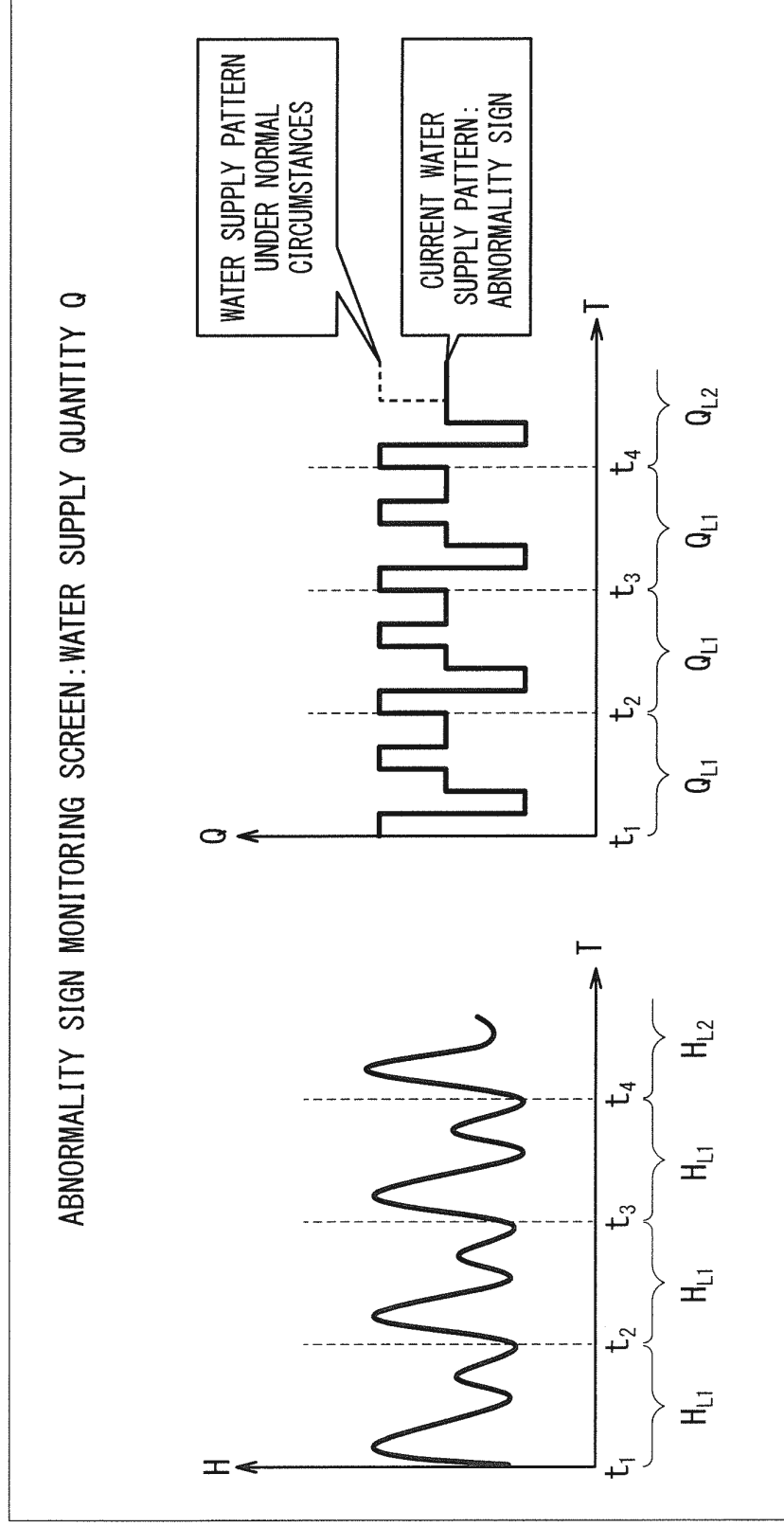


FIG. 8

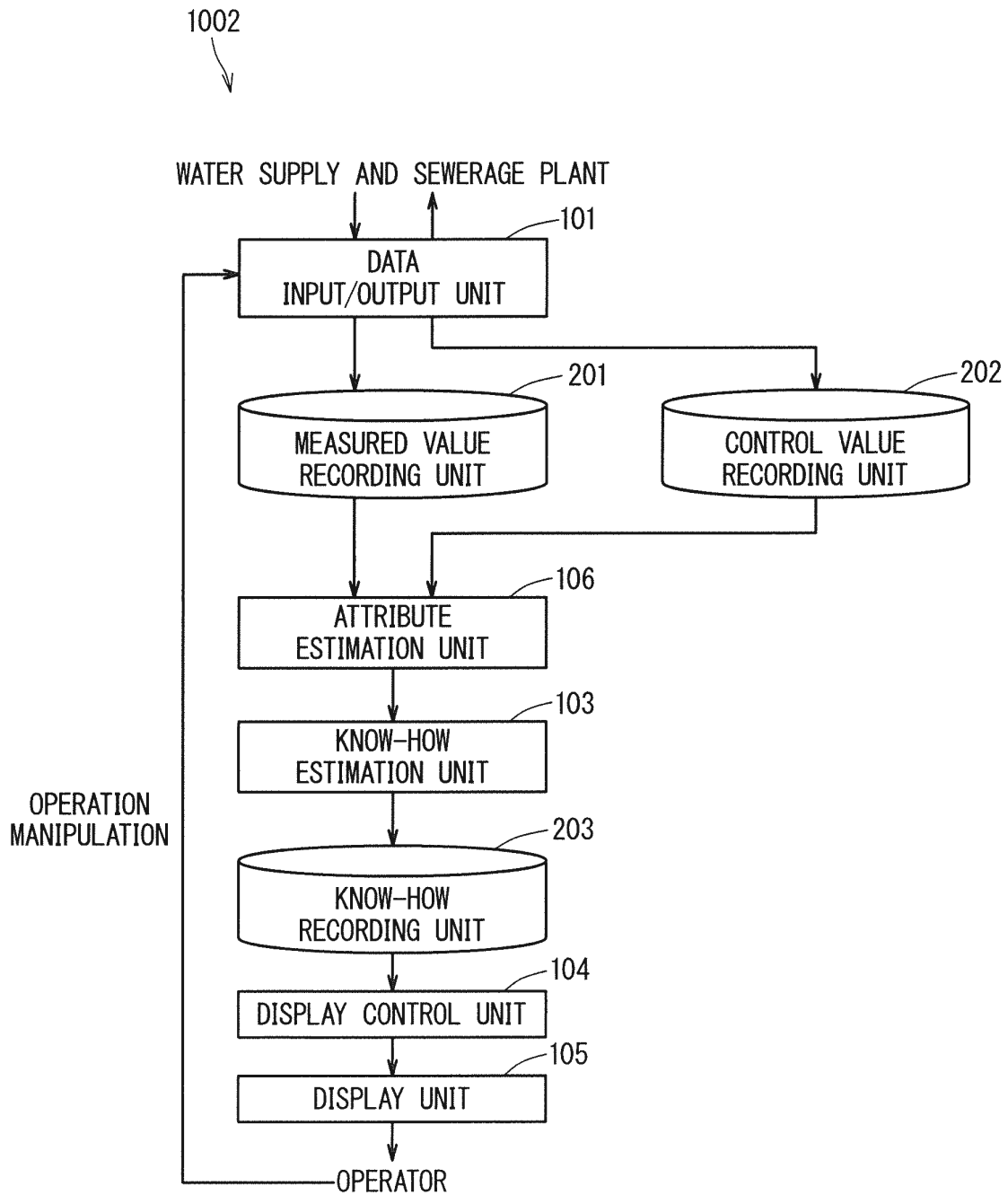


FIG. 9

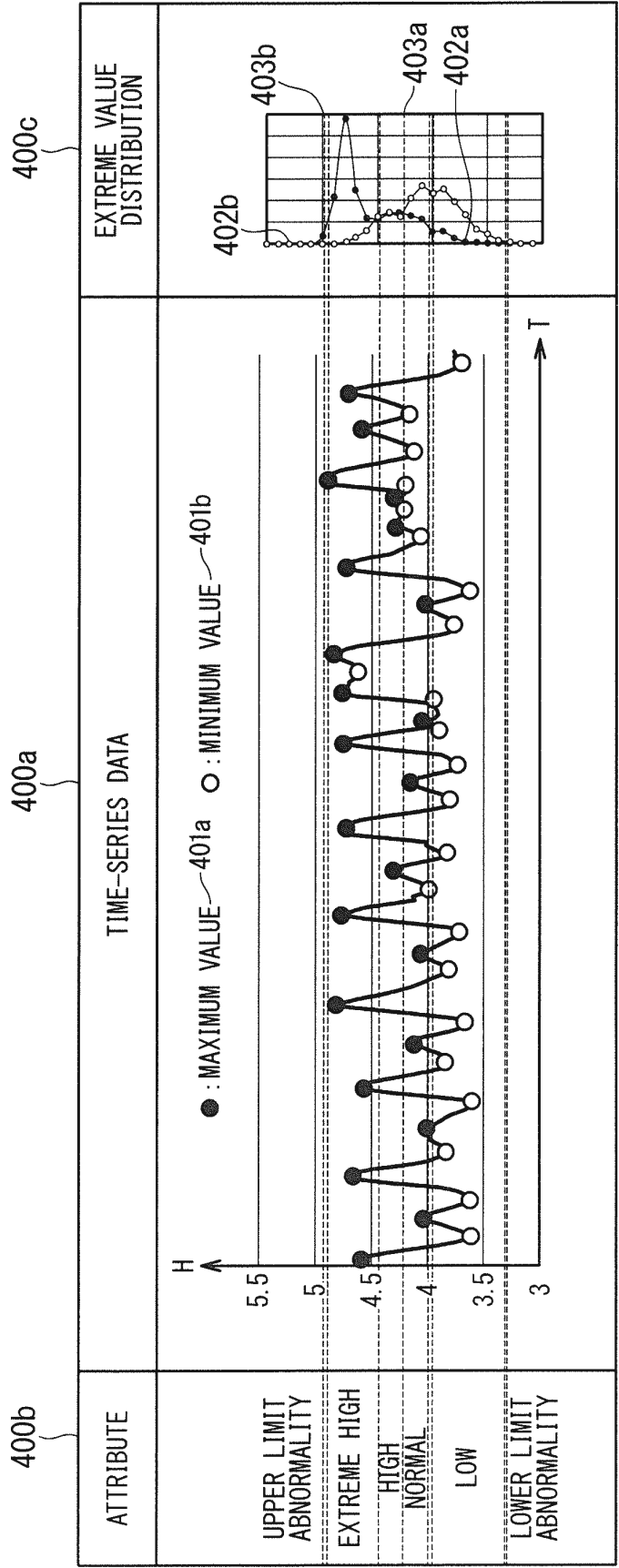


FIG. 10

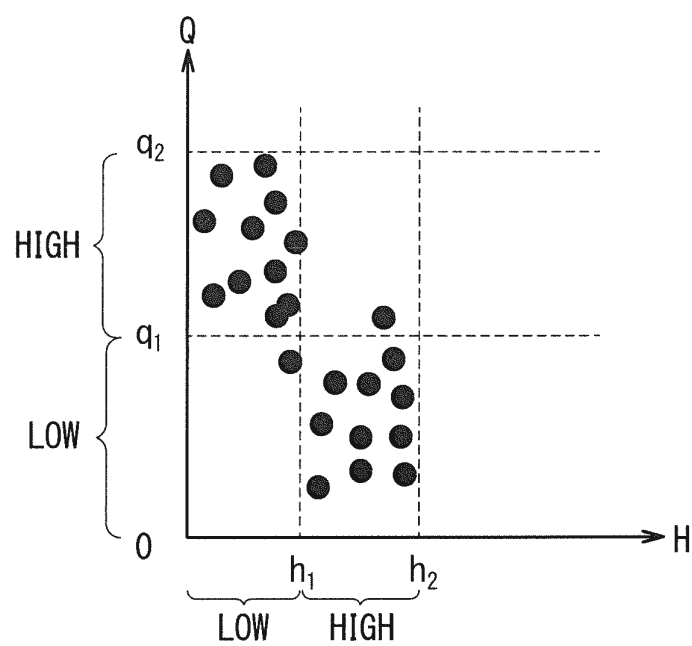


FIG. 11

EVENT X	EVENT Y	$n(X_i \times Y_j)$	$p(Y X)$
$H_A = \{H_{A1} = \text{LOW}, H_{A2} = \text{HIGH}\}$	$Q_A = \{Q_{A1} = \text{LOW}, Q_{A2} = \text{HIGH}\}$	$n(H_{A1} \times Q_{A1})$	$p(Q_A H_A) = n(H_{A1} \times Q_{A1}) / n(H_{A1})$
$H_{A1} = \text{LOW}$	$Q_{A1} = \text{LOW}$	$n(H_{A1} \times Q_{A1}) = 1$	$n(H_{A1} \times Q_{A1}) / n(H_{A1}) = 1/12$
$H_{A1} = \text{LOW}$	$Q_{A2} = \text{HIGH}$	$n(H_{A1} \times Q_{A2}) = 11$	$n(H_{A1} \times Q_{A2}) / n(H_{A1}) = 11/12$
$H_{A2} = \text{HIGH}$	$Q_{A1} = \text{LOW}$	$n(H_{A2} \times Q_{A1}) = 10$	$n(H_{A2} \times Q_{A1}) / n(H_{A2}) = 10/11$
$H_{A2} = \text{HIGH}$	$Q_{A2} = \text{HIGH}$	$n(H_{A2} \times Q_{A2}) = 1$	$n(H_{A2} \times Q_{A2}) / n(H_{A2}) = 1/11$

FIG. 12

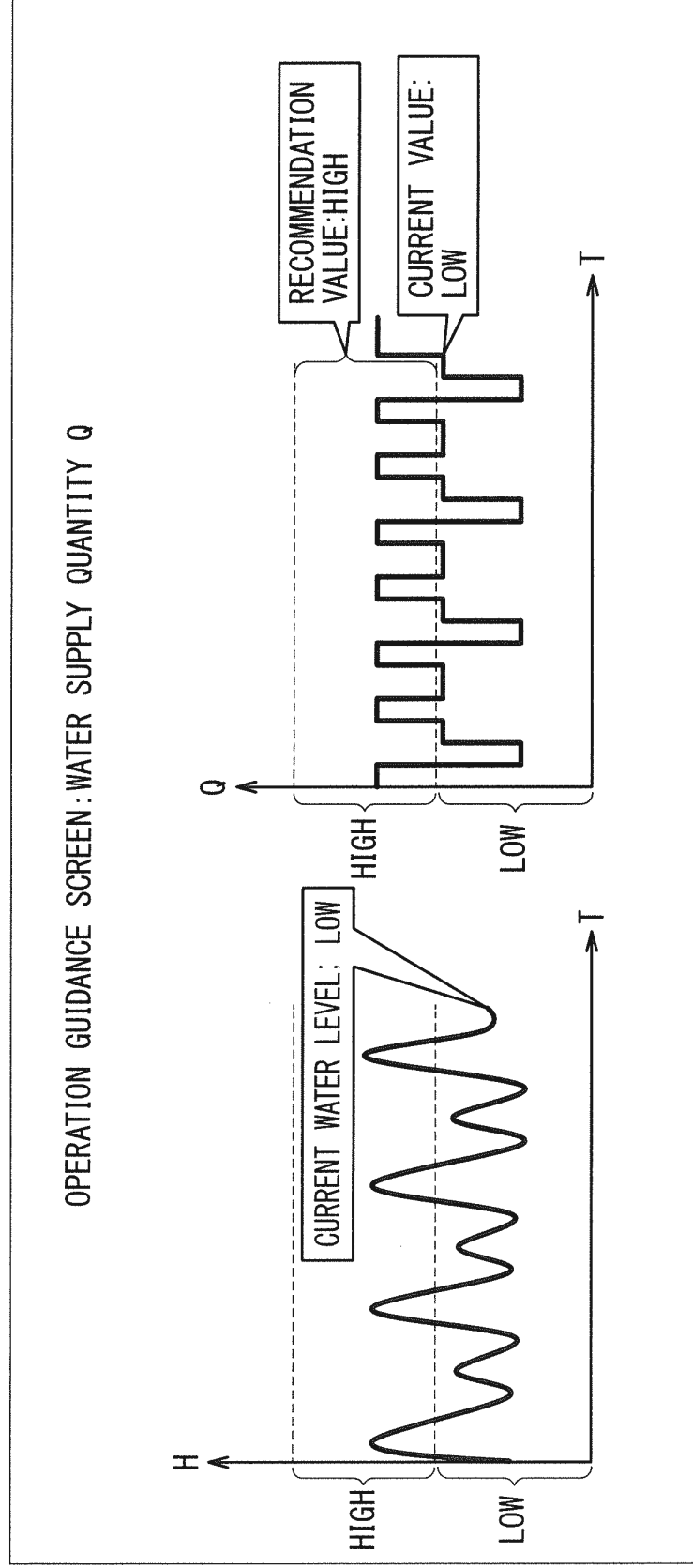


FIG. 13

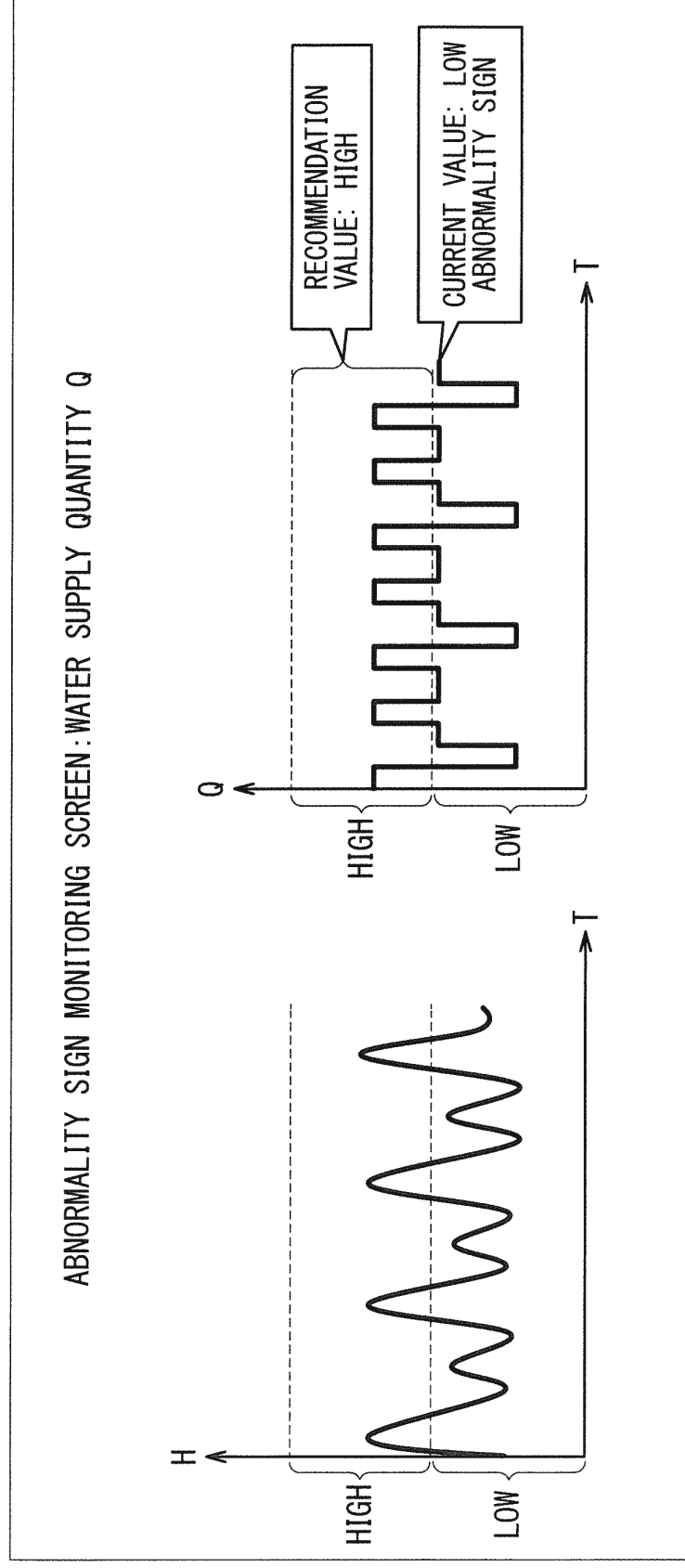


FIG. 14

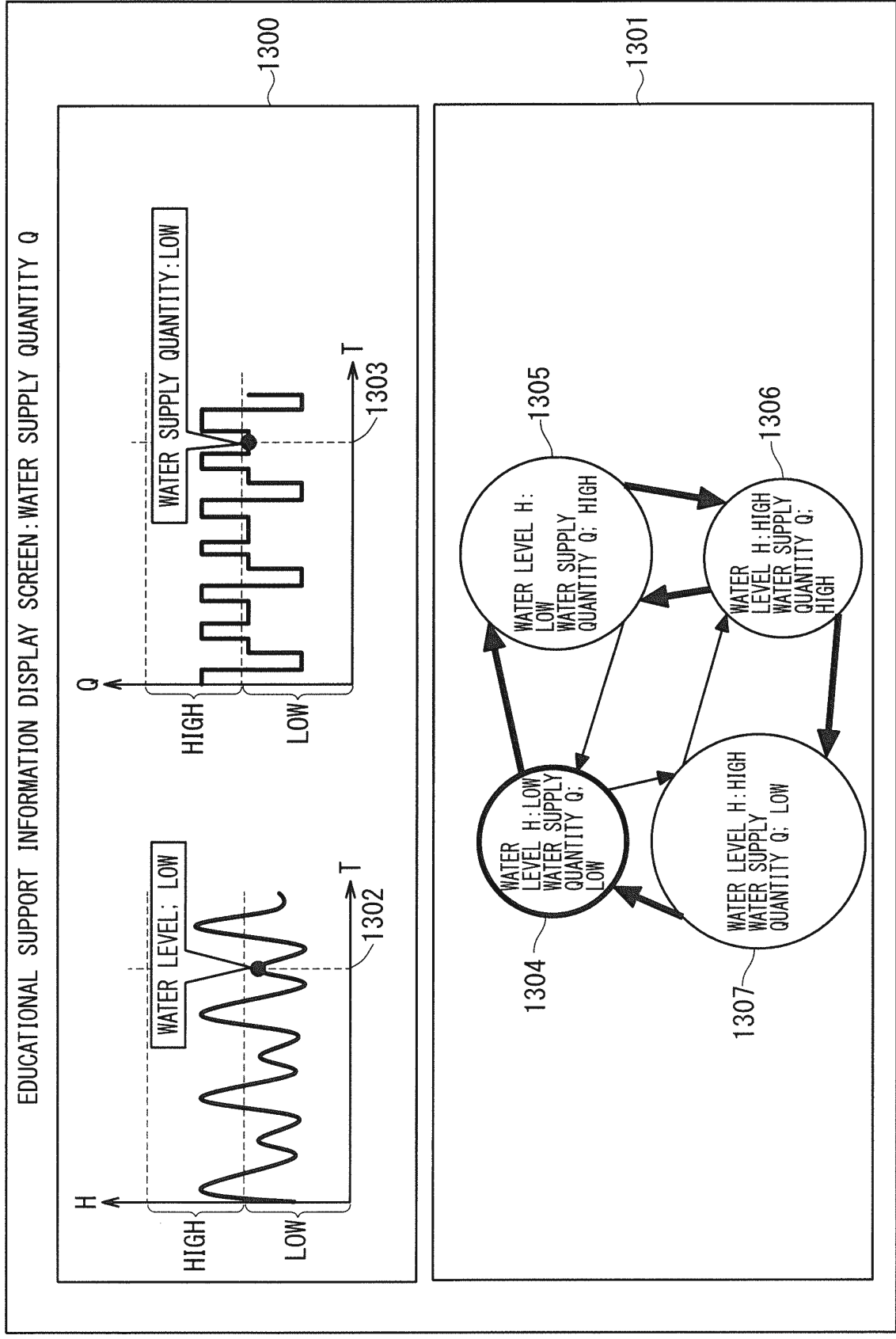


FIG. 15

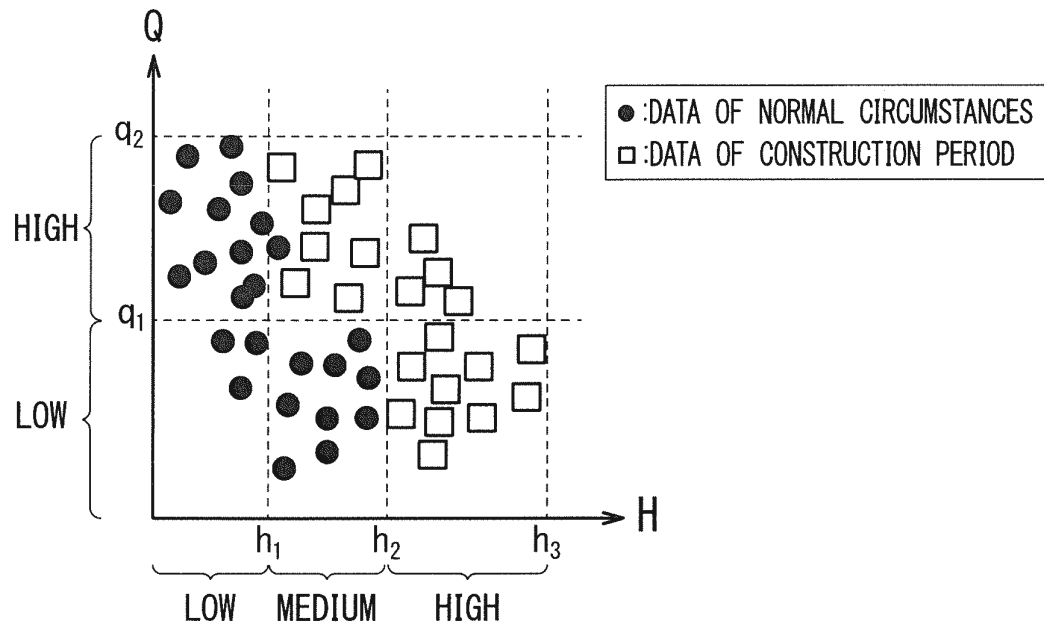


FIG. 16

EVENT X	EVENT Y	$n(X_i \times Y_j)$	$p(Y X)$
$H_A = \{H_{A1}(\text{LOW}), H_{A2}(\text{MEDIUM}), H_{A3}(\text{HIGH})\}$	$Q_A = \{Q_{A1}(\text{LOW}), Q_{A2}(\text{HIGH})\}$	$n(H_{A1} \times Q_{A1})$	$p(Q_A H_A) = n(H_{A1} \times Q_{A1}) / n(H_{A1})$
$H_{A1}(\text{LOW})$	$Q_{A1}(\text{LOW})$	$n(H_{A1} \times Q_{A1}) = 3$	$n(H_{A1} \times Q_{A1}) / n(H_{A1}) = 3/14$
$H_{A1}(\text{LOW})$	$Q_{A2}(\text{HIGH})$	$n(H_{A1} \times Q_{A2}) = 11$	$n(H_{A1} \times Q_{A2}) / n(H_{A1}) = 11/14$
$H_{A2}(\text{MEDIUM})$	$Q_{A1}(\text{LOW})$	$n(H_{A2} \times Q_{A1}) = 9$	$n(H_{A2} \times Q_{A1}) / n(H_{A2}) = 9/17$
$H_{A2}(\text{MEDIUM})$	$Q_{A2}(\text{HIGH})$	$n(H_{A2} \times Q_{A2}) = 8$	$n(H_{A2} \times Q_{A2}) / n(H_{A2}) = 8/17$
$H_{A3}(\text{HIGH})$	$Q_{A1}(\text{LOW})$	$n(H_{A3} \times Q_{A1}) = 10$	$n(H_{A3} \times Q_{A1}) / n(H_{A3}) = 10/14$
$H_{A3}(\text{HIGH})$	$Q_{A2}(\text{HIGH})$	$n(H_{A3} \times Q_{A2}) = 4$	$n(H_{A3} \times Q_{A2}) / n(H_{A3}) = 4/14$

FIG. 17

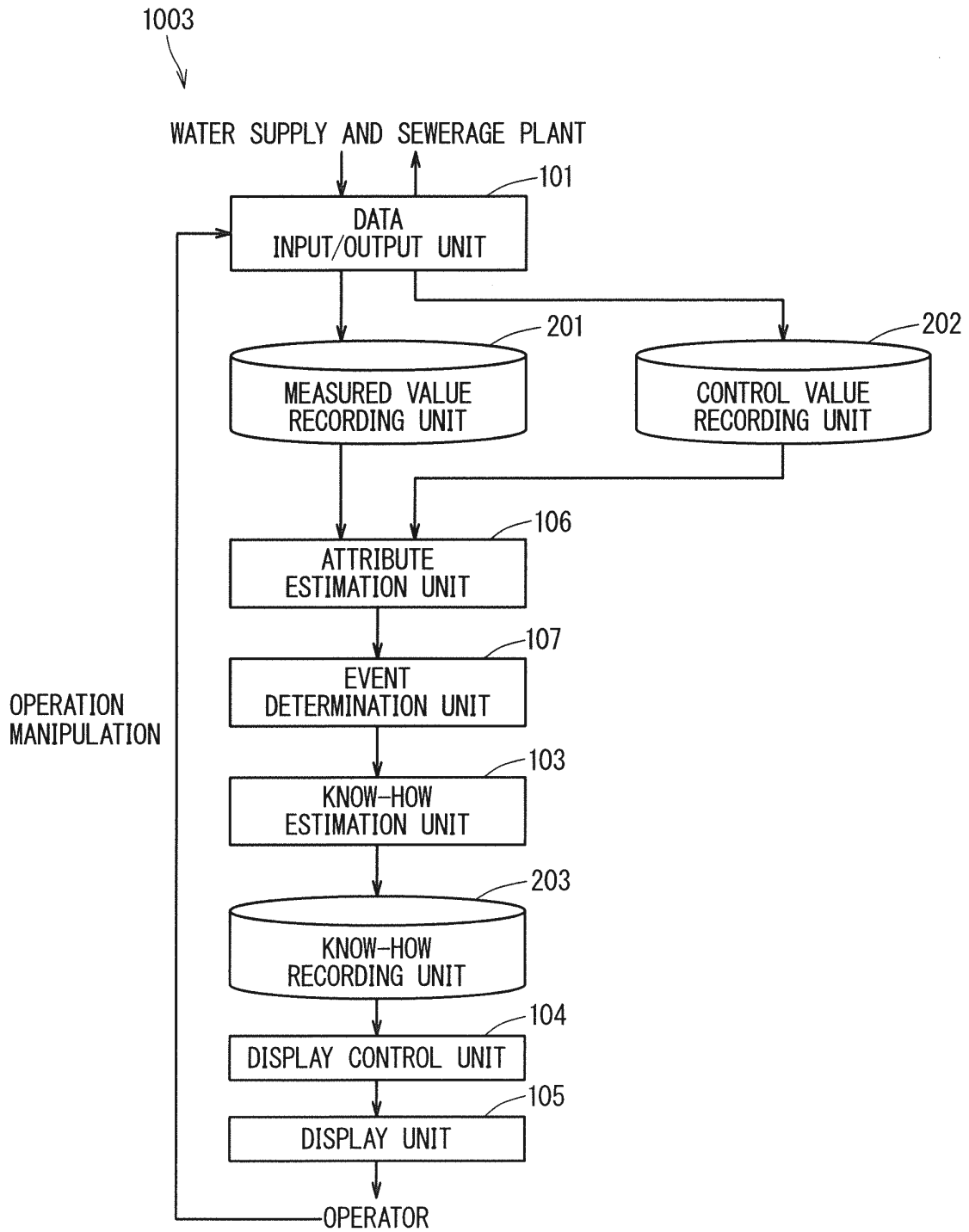
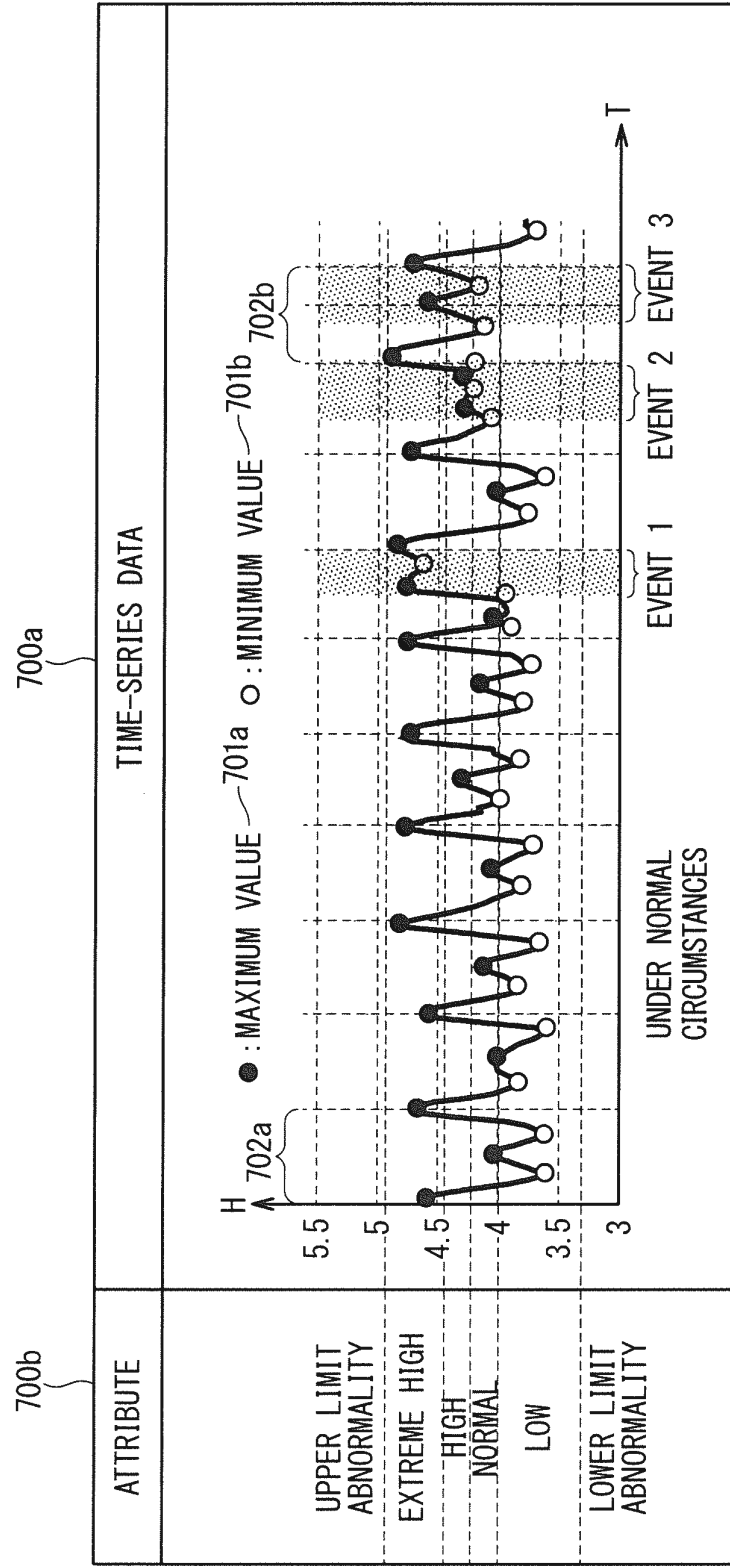


FIG. 18



F I G. 19

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EVENT X		EVENT Y	$n(X_i \times Y_j)$	$p(Y X)$
$E_A = \{E_{A1}(\text{NORMAL}), E_{A2}(\text{CONSTRUCTION})\}$	$H_A = \{H_{A1}(\text{LOW}), H_{A2}(\text{MEDIUM}), H_{A3}(\text{HIGH})\}$	$Q_A = \{Q_{A1}(\text{LOW}), Q_{A2}(\text{HIGH})\}$	$n(E_{Ak} \times H_{Ai} \times Q_{Aj})$	$p(Q_A H_A, E_A) = n(E_{Ak} \times H_{Ai} \times Q_{Aj}) / n(H_{Ai} \times E_{Ak})$
$E_{A1}(\text{NORMAL})$	$H_{A1}(\text{LOW})$	$Q_{A1}(\text{LOW})$	$n(E_{A1} \times H_{A1} \times Q_{A1}) = 3$	$n(E_{A1} \times H_{A1} \times Q_{A1}) / n(E_{A1} \times H_{A1}) = 3/14$
$E_{A1}(\text{NORMAL})$	$H_{A1}(\text{LOW})$	$Q_{A2}(\text{HIGH})$	$n(E_{A1} \times H_{A1} \times Q_{A2}) = 11$	$n(E_{A1} \times H_{A1} \times Q_{A2}) / n(E_{A1} \times H_{A1}) = 11/14$
$E_{A1}(\text{NORMAL})$	$H_{A2}(\text{MEDIUM})$	$Q_{A1}(\text{LOW})$	$n(E_{A1} \times H_{A2} \times Q_{A1}) = 9$	$n(E_{A1} \times H_{A2} \times Q_{A1}) / n(E_{A1} \times H_{A2}) = 9/10$
$E_{A1}(\text{NORMAL})$	$H_{A2}(\text{MEDIUM})$	$Q_{A2}(\text{HIGH})$	$n(E_{A1} \times H_{A2} \times Q_{A2}) = 1$	$n(E_{A1} \times H_{A2} \times Q_{A2}) / n(E_{A1} \times H_{A2}) = 1/10$
$E_{A1}(\text{NORMAL})$	$H_{A3}(\text{HIGH})$	$Q_{A1}(\text{LOW})$	$n(E_{A1} \times H_{A3} \times Q_{A1}) = 0$	–
$E_{A1}(\text{NORMAL})$	$H_{A3}(\text{HIGH})$	$Q_{A2}(\text{HIGH})$	$n(E_{A1} \times H_{A3} \times Q_{A2}) = 0$	–
$E_{A2}(\text{CONSTRUCTION})$	$H_{A1}(\text{LOW})$	$Q_{A1}(\text{LOW})$	$n(E_{A2} \times H_{A1} \times Q_{A1}) = 0$	–
$E_{A2}(\text{CONSTRUCTION})$	$H_{A1}(\text{LOW})$	$Q_{A2}(\text{HIGH})$	$n(E_{A2} \times H_{A1} \times Q_{A2}) = 0$	–
$E_{A2}(\text{CONSTRUCTION})$	$H_{A2}(\text{MEDIUM})$	$Q_{A1}(\text{LOW})$	$n(E_{A2} \times H_{A2} \times Q_{A1}) = 0$	$n(E_{A2} \times H_{A2} \times Q_{A1}) / n(E_{A2} \times H_{A2}) = 0/8$
$E_{A2}(\text{CONSTRUCTION})$	$H_{A2}(\text{MEDIUM})$	$Q_{A2}(\text{HIGH})$	$n(E_{A2} \times H_{A2} \times Q_{A2}) = 8$	$n(E_{A2} \times H_{A2} \times Q_{A2}) / n(E_{A2} \times H_{A2}) = 8/8$
$E_{A2}(\text{CONSTRUCTION})$	$H_{A3}(\text{HIGH})$	$Q_{A1}(\text{LOW})$	$n(E_{A2} \times H_{A3} \times Q_{A1}) = 10$	$n(E_{A2} \times H_{A3} \times Q_{A1}) / n(E_{A2} \times H_{A3}) = 10/14$
$E_{A2}(\text{CONSTRUCTION})$	$H_{A3}(\text{HIGH})$	$Q_{A2}(\text{HIGH})$	$n(E_{A2} \times H_{A3} \times Q_{A2}) = 4$	$n(E_{A2} \times H_{A3} \times Q_{A2}) / n(E_{A2} \times H_{A3}) = 4/14$

FIG. 20

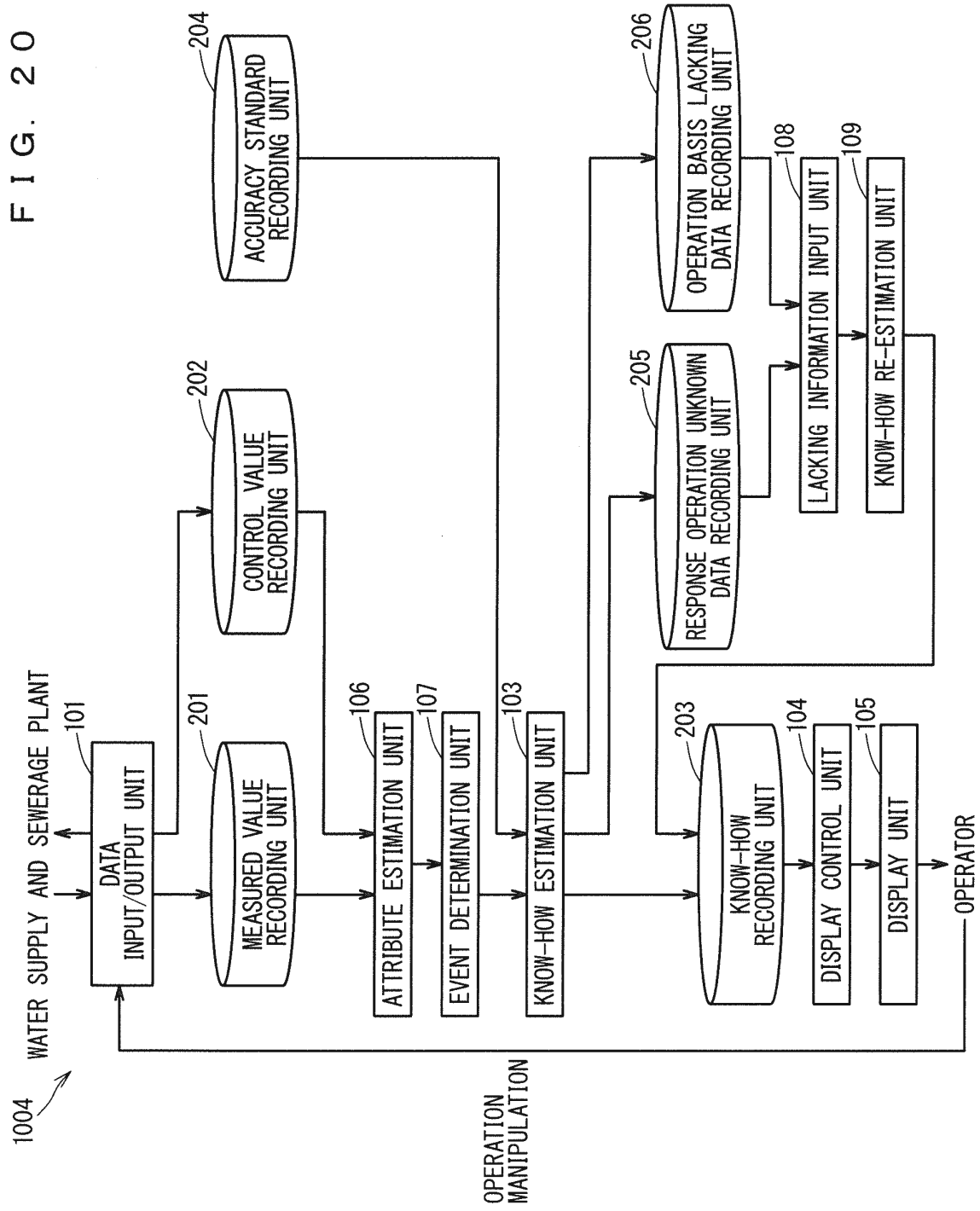


FIG. 21

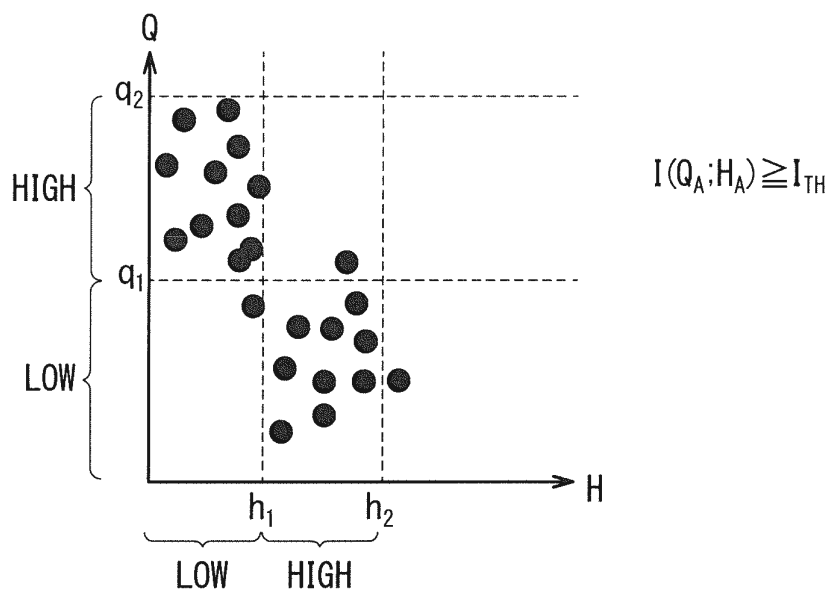


FIG. 22

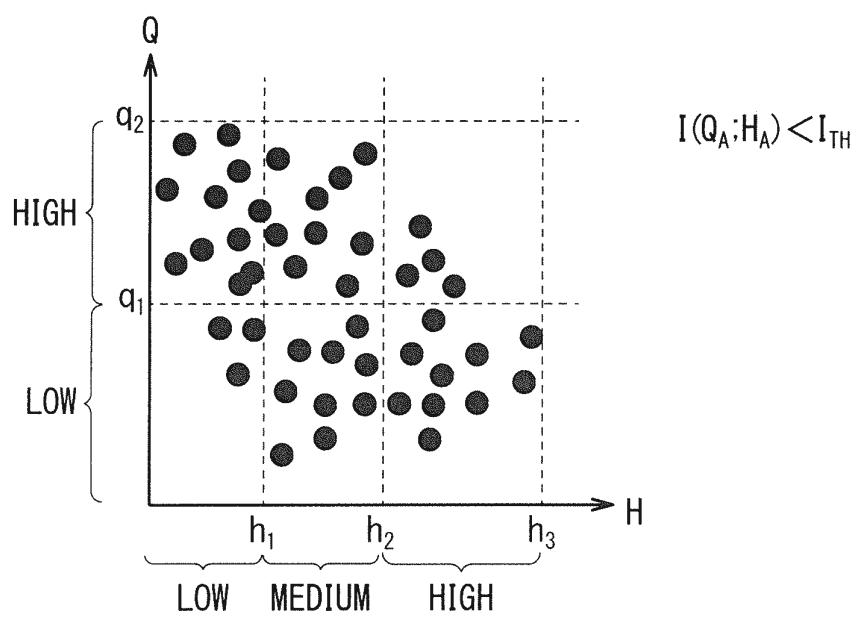


FIG. 23

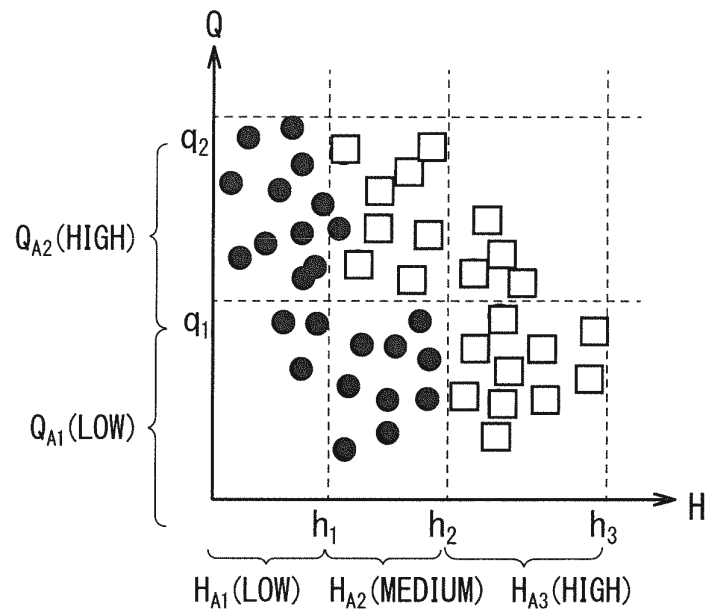


FIG. 24

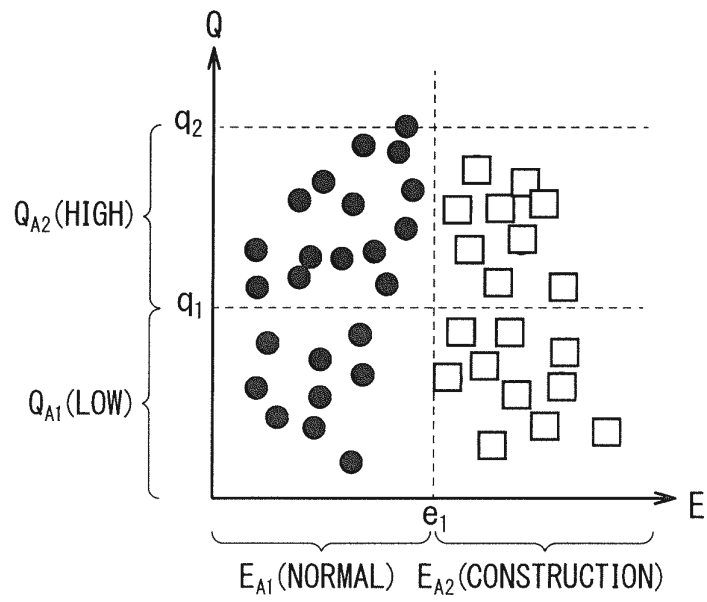


FIG. 25

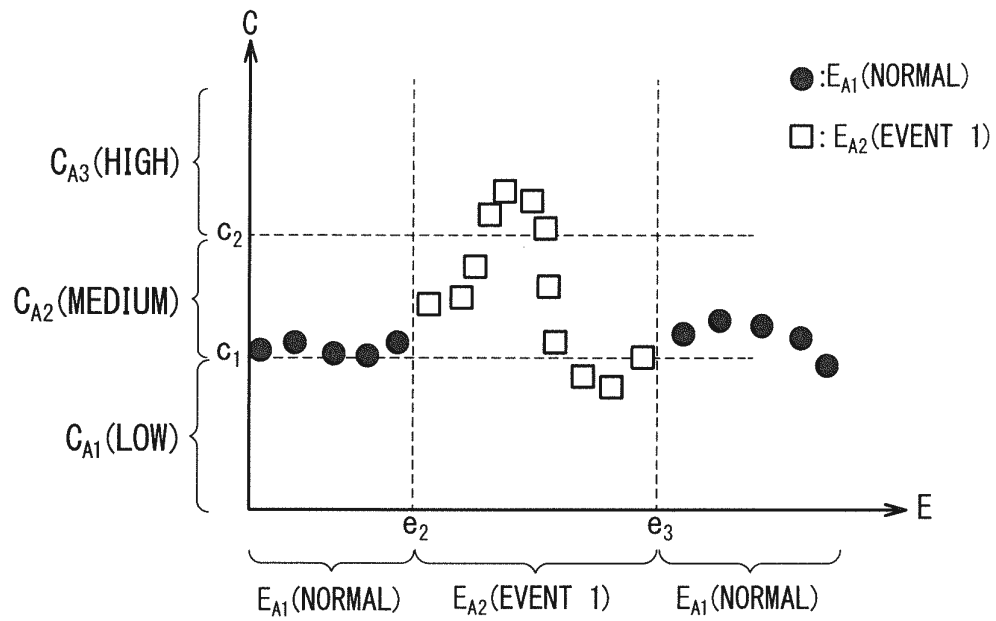


FIG. 26

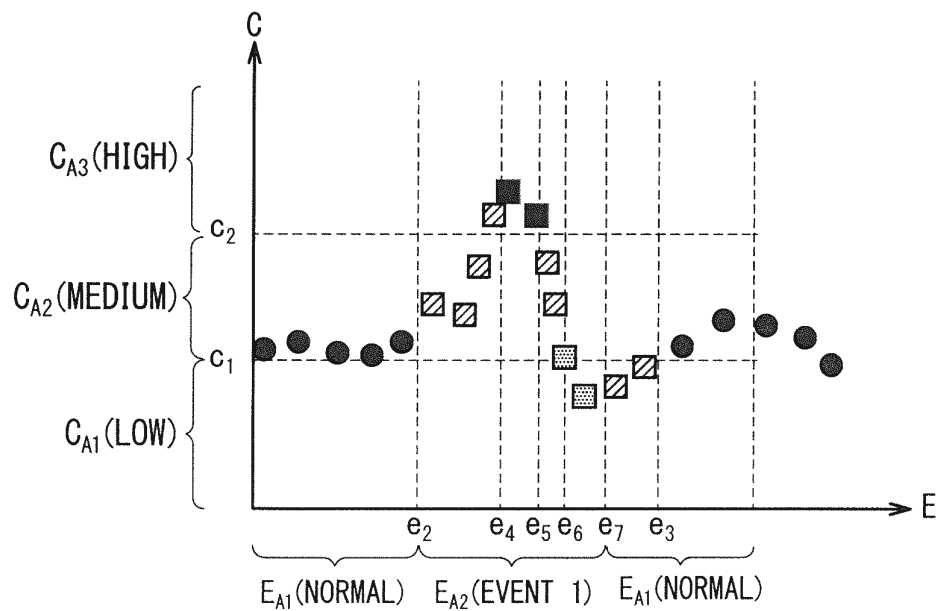


FIG. 27

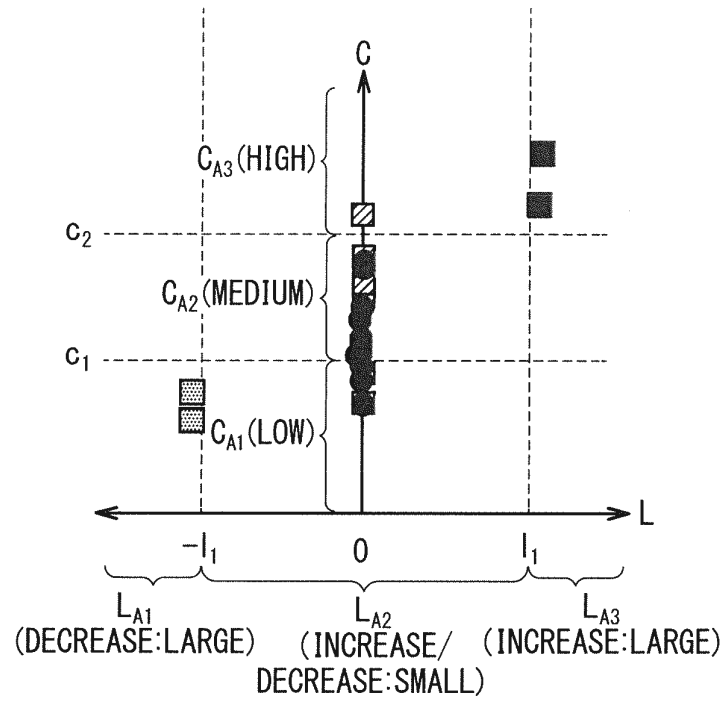


FIG. 28

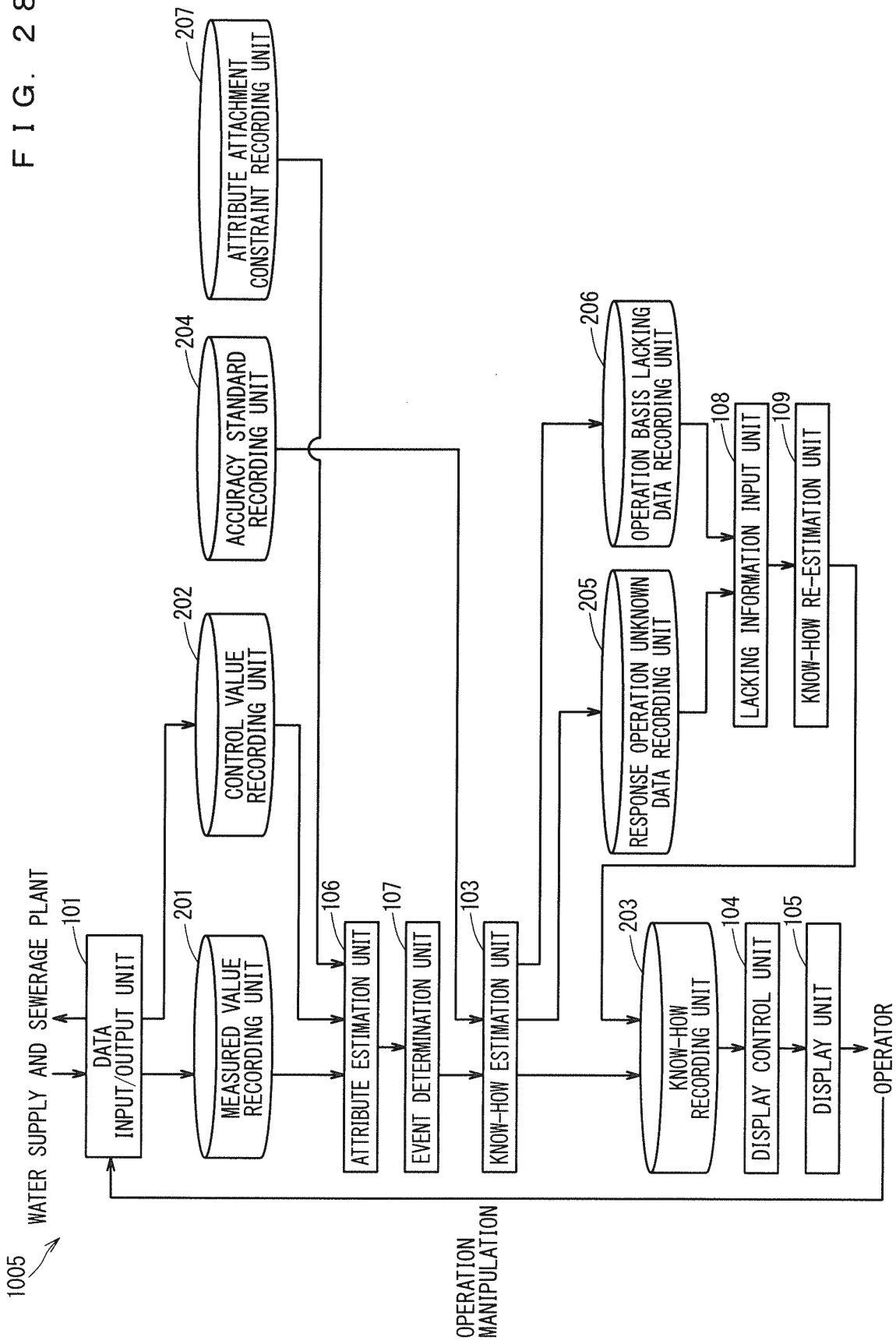


FIG. 29

