

Fig.1

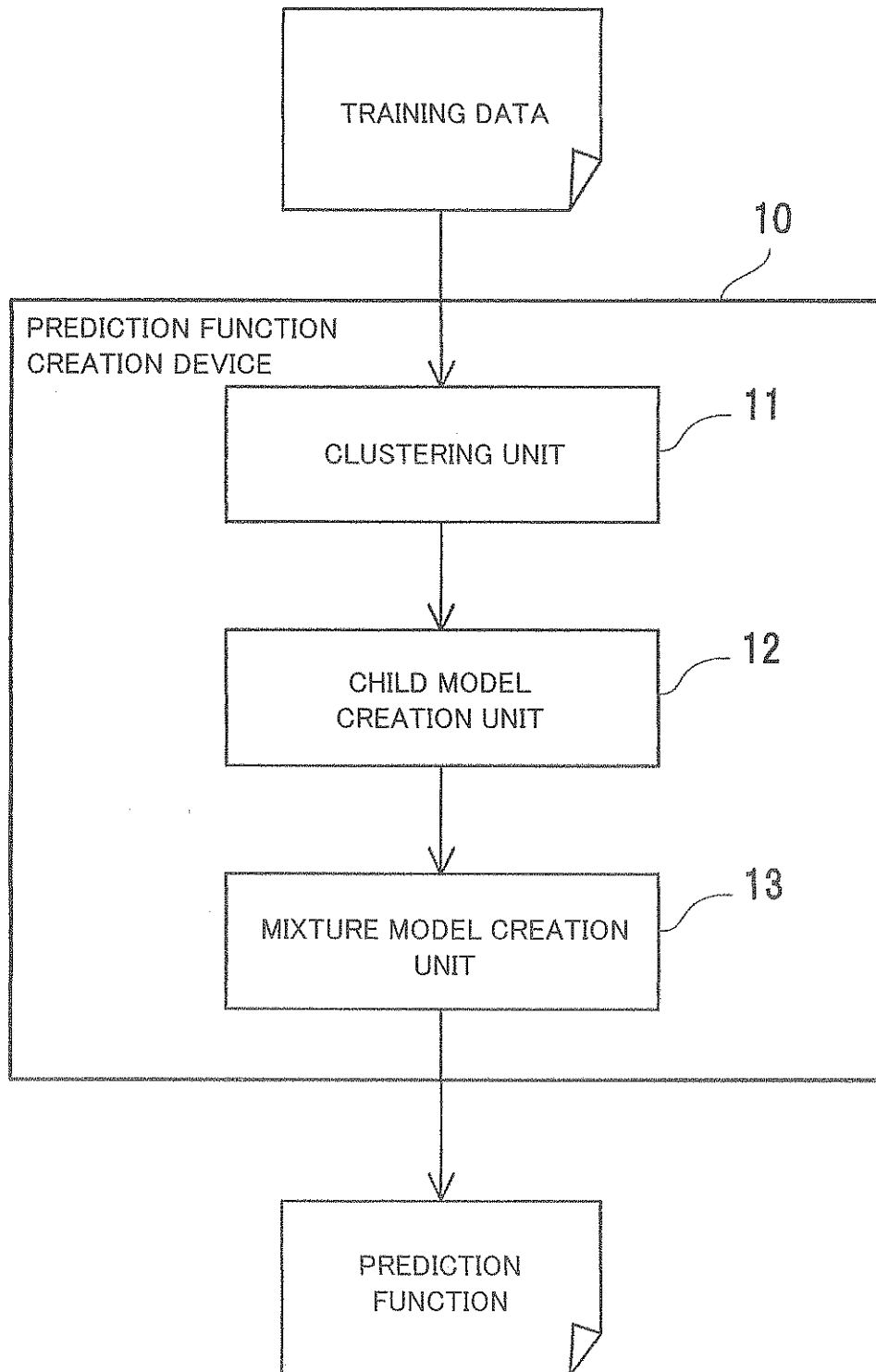


Fig.2

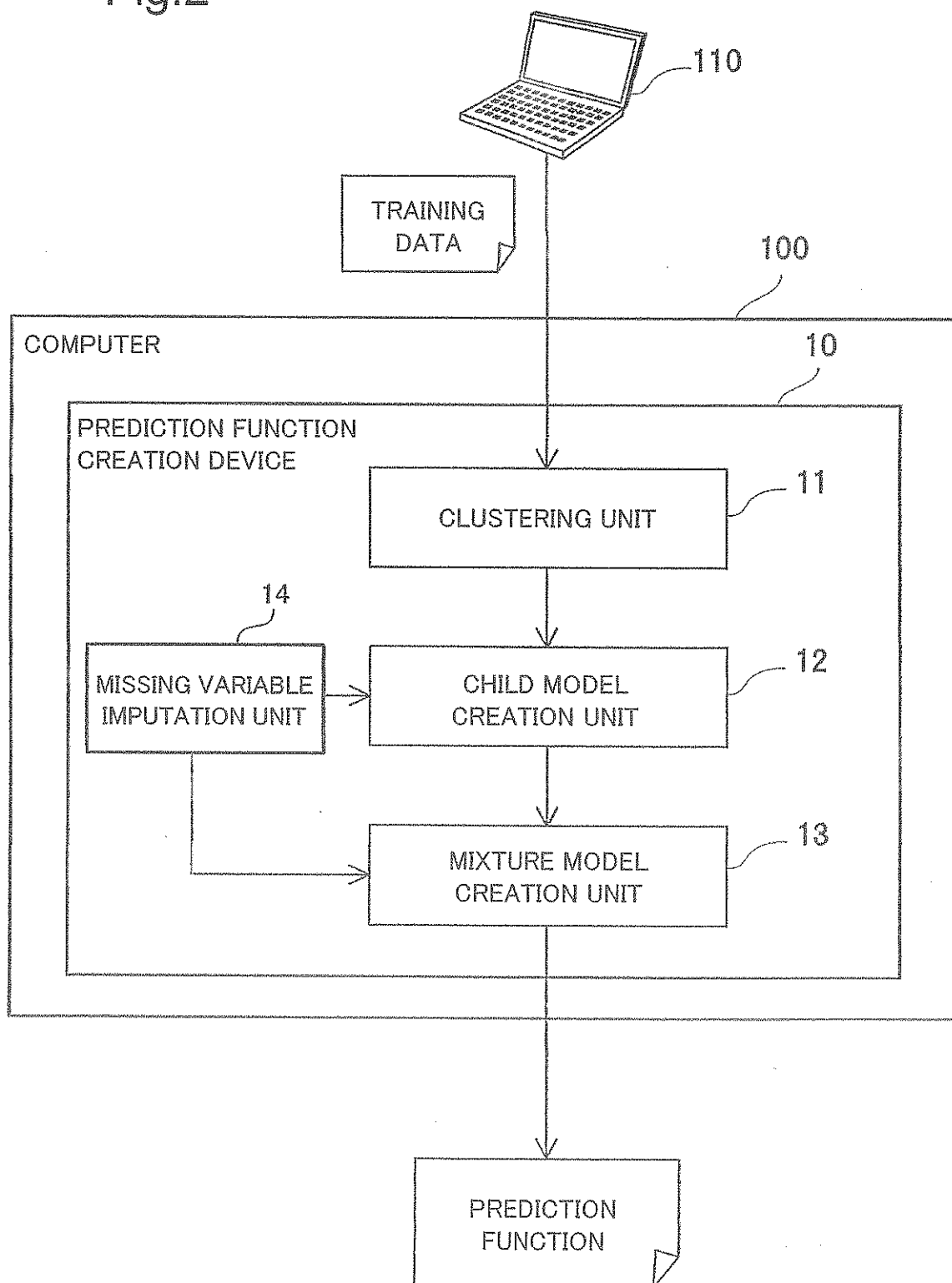


Fig.3

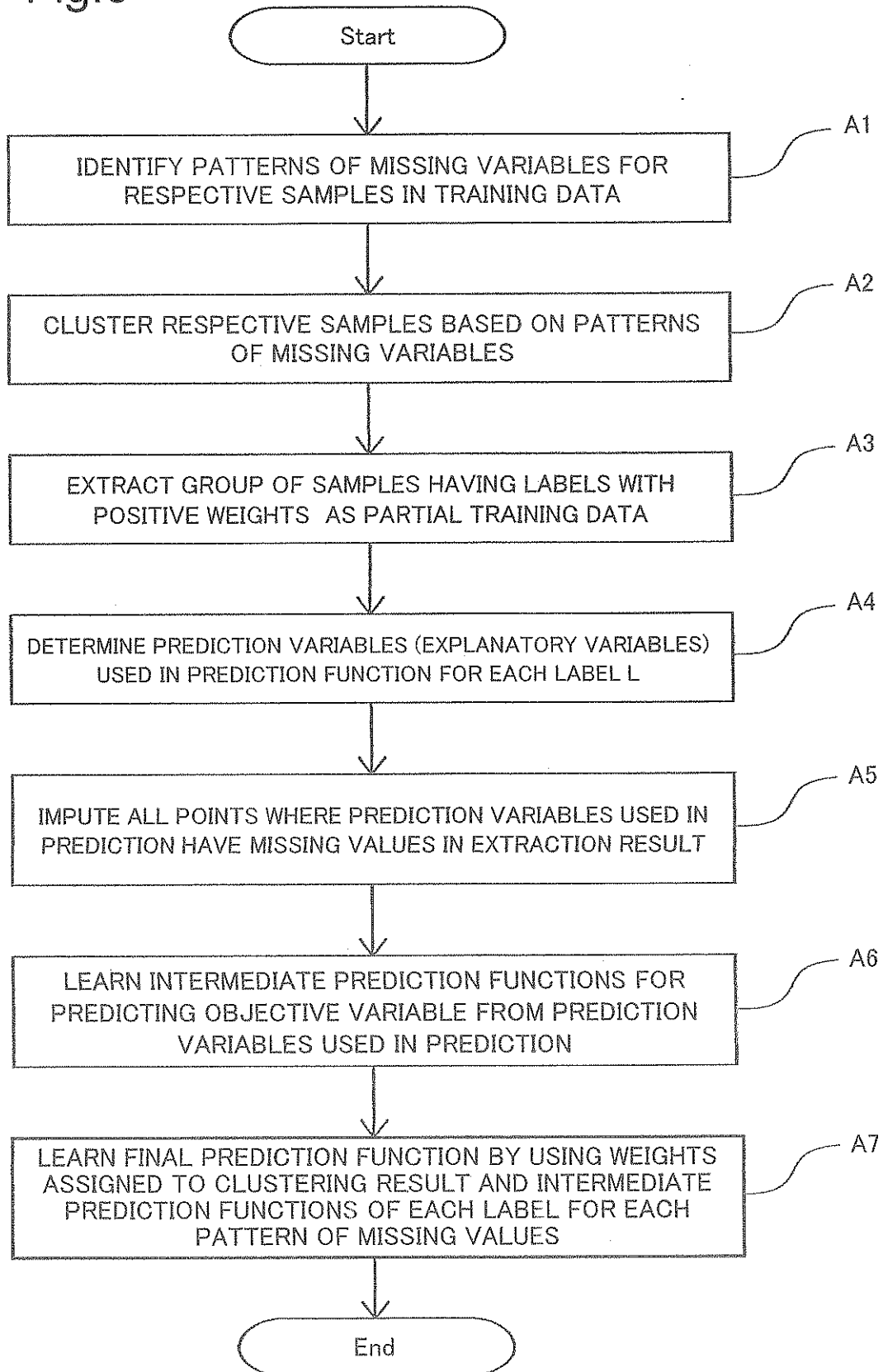


Fig.4

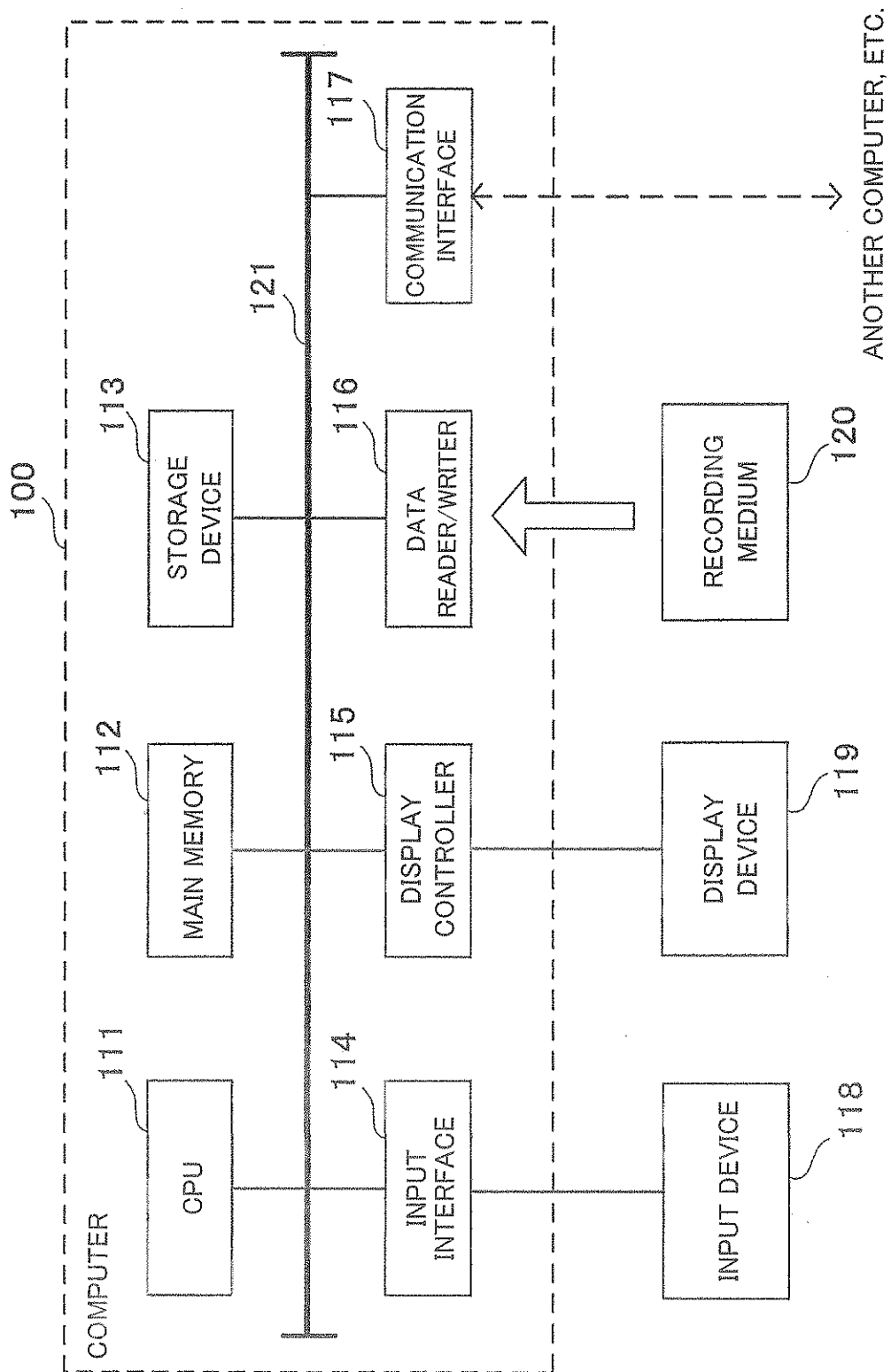


Fig.5

NUMBER	X1	X2	X3	Y
1	*	*	*	*
⋮	*	*	*	*
5	*	*	*	*
6	NA	*	*	*
⋮	NA	*	*	*
10	NA	*	*	*
11	NA	NA	*	*
⋮	NA	NA	*	*
20	NA	NA	*	*
21	*	*	NA	*
⋮	*	*	NA	*
40	*	*	NA	*

Fig.6

SET OF NON-MISSING VARIABLES	MULTIPLIED VALUE
EMPTY SET	0
X1	25
X2	30
X3	20
X1, X2	50
X2, X3	20
X1, X3	10
X1, X2, X3	15

Fig.7

PATTERN OF MISSING VARIABLES	CANDIDATE (X1)	CANDIDATE (X2)	CANDIDATE (X3)	CANDIDATE (X1, X2)	CANDIDATE (X2, X3)
EMPTY SET	2	2	2	1	1
X1	4	1	1	3	0
X1, X2	3	3	0	5	2
X3	2	1	4	0	3
X2	1	4	1	3	3
X2, X3	0	3	3	2	5
X1, X3	3	0	3	2	2

Fig.8

PATTERN OF MISSING VARIABLES	LABEL 1 (X2)	LABEL 2 (X3)	LABEL 3 (X1 , X2)	LABEL 4 (X2 , X3)	LABEL 5 (X1)
EMPTY SET	-	-	0.5	0.5	-
X1	0.21	0.21	-	0.58	-
X1, X2	-	1	-	-	-
X3	0.27	-	0.73	-	-
X2	-	0.5	-	-	0.5
X2, X3	-	-	-	-	1
X1, X3	1	-	-	-	-

Fig.9

LABEL	SAMPLE NUMBER
LABEL 1 (X2)	1-10, 21-40
LABEL 2 (X3)	1-20
LABEL 3 (X1, X2)	1-5, 21-40
LABEL 4 (X2, X3)	1-10
LABEL 5 (X1)	1-5, 21-40

Fig.10

PATTERN OF MISSING VARIABLES	FINAL PREDICTION FUNCTION
EMPTY SET	$0.5 f_3(x_1, x_2) + 0.5 f_4(x_2, x_3)$
X1	$0.21 f_1(x_2) + 0.21 f_2(x_3) + 0.58 f_4(x_2, x_3)$
X1, X2	$f_2(x_3)$
X3	$0.27 f_1(x_2) + 0.73 f_3(x_1, x_2)$
X2	$0.5 f_2(x_3) + 0.5 f_5(x_1)$
X2, X3	$f_5(x_1)$
X1, X3	$f_1(x_2)$

Fig.11

