FIG. 1

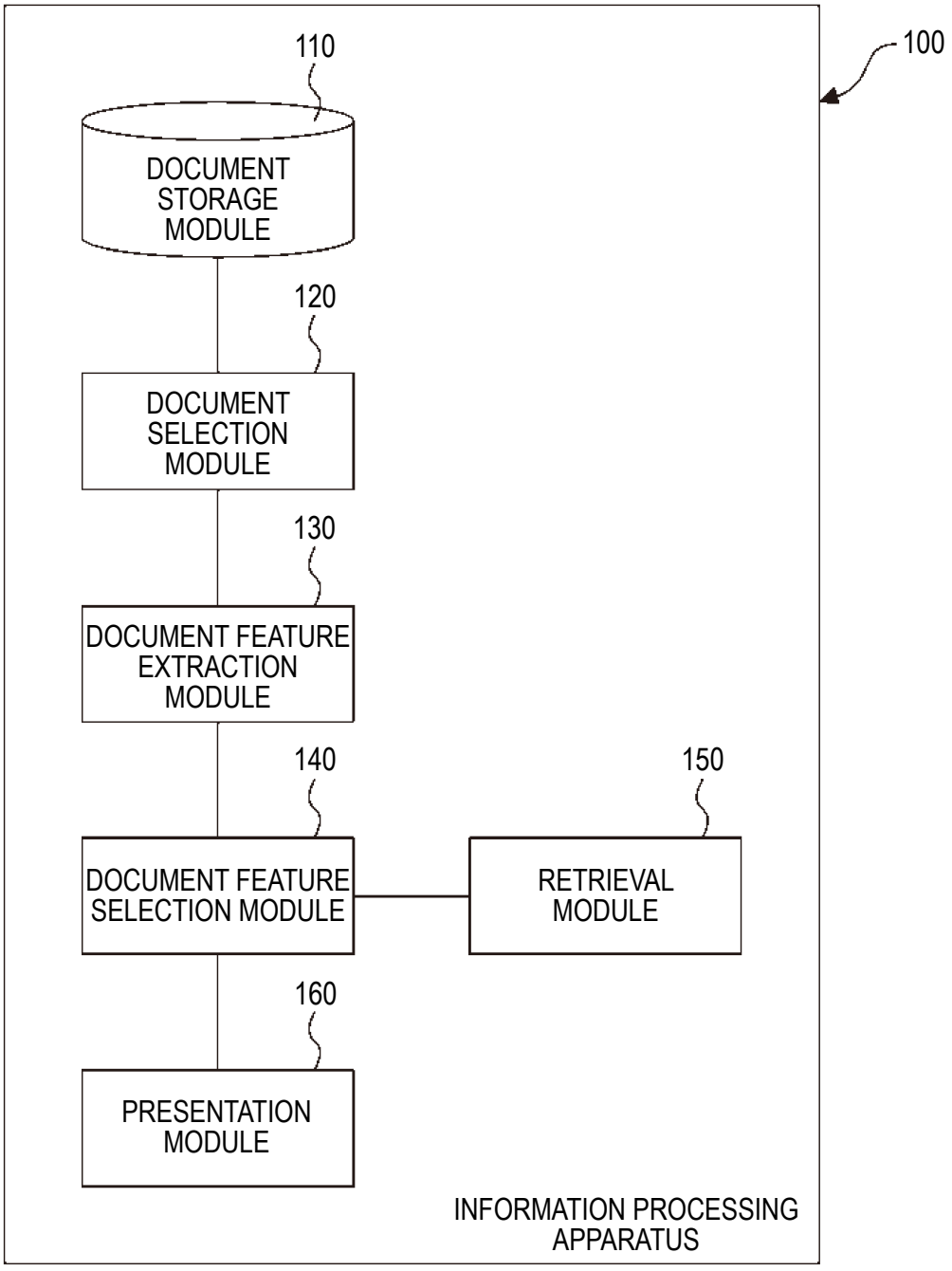

100
110
DOCUMENT STORAGE MODULE
120
DOCUMENT SELECTION MODULE
130
DOCUMENT FEATURE EXTRACTION MODULE
140
DOCUMENT FEATURE SELECTION MODULE
150
RETRIEVAL MODULE
160
PRESENTATION MODULE
INFORMATION PROCESSING APPARATUS

FIG. 2A

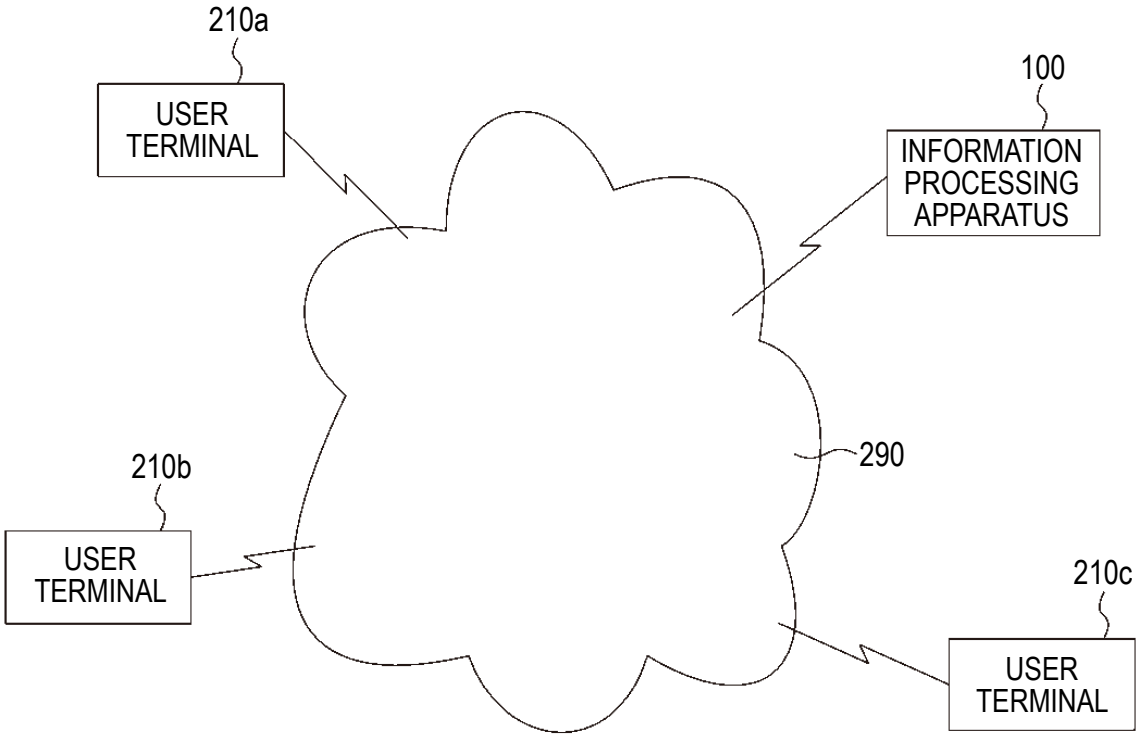

210a
USER TERMINAL
100
INFORMATION PROCESSING APPARATUS
290
210b
USER TERMINAL
210c
USER TERMINAL

FIG. 2B

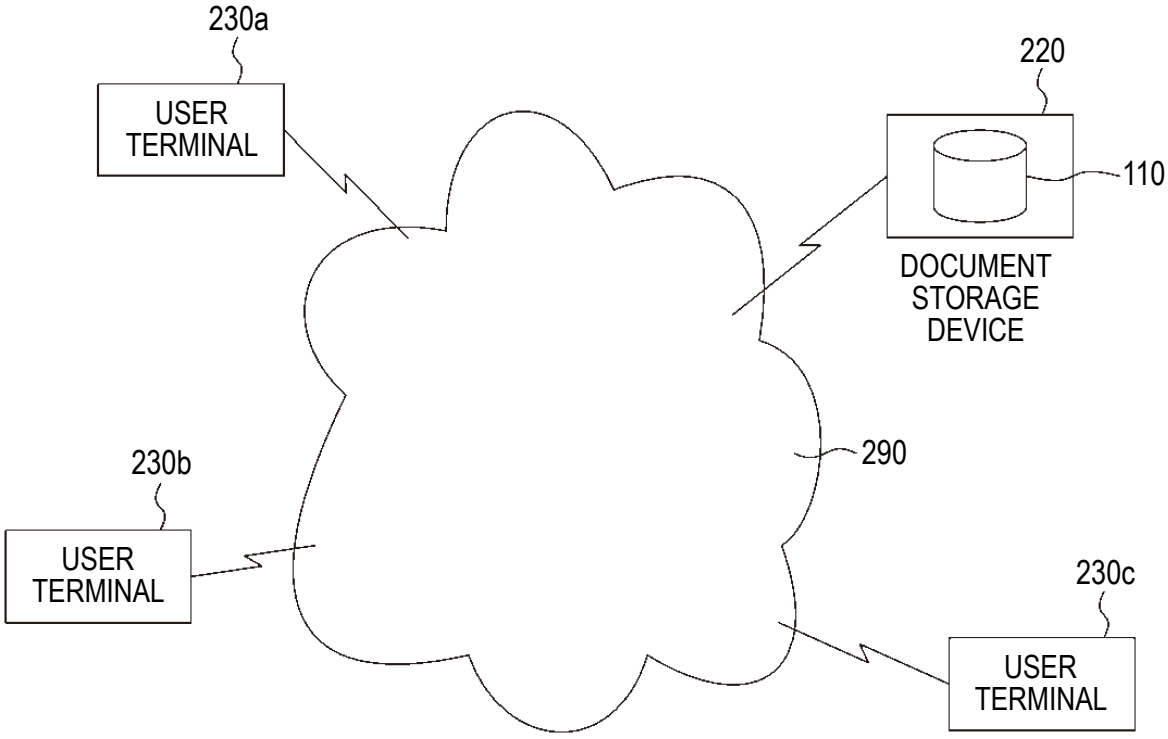

230a
USER TERMINAL
220
110
DOCUMENT STORAGE DEVICE
290
230b
USER TERMINAL
230c
USER TERMINAL

FIG. 3

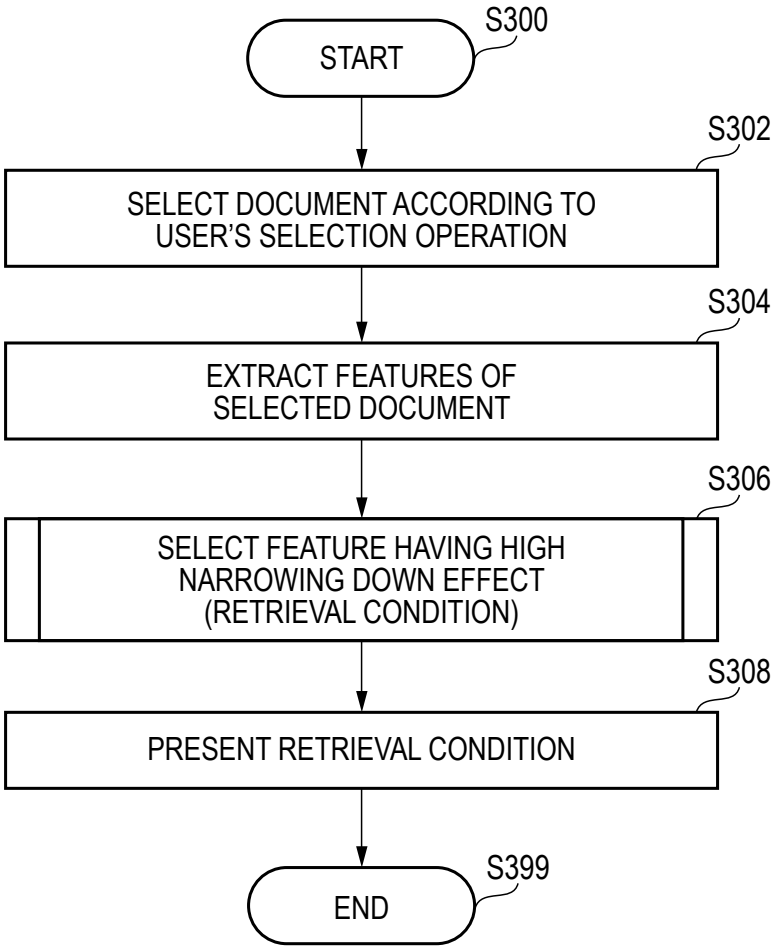

S300
START
S302
SELECT DOCUMENT ACCORDING TO USER'S SELECTION OPERATION
S304
EXTRACT FEATURES OF SELECTED DOCUMENT
S306
SELECT FEATURE HAVING HIGH NARROWING DOWN EFFECT (RETRIEVAL CONDITION)
S308
PRESENT RETRIEVAL CONDITION
S399
END

FIG. 4

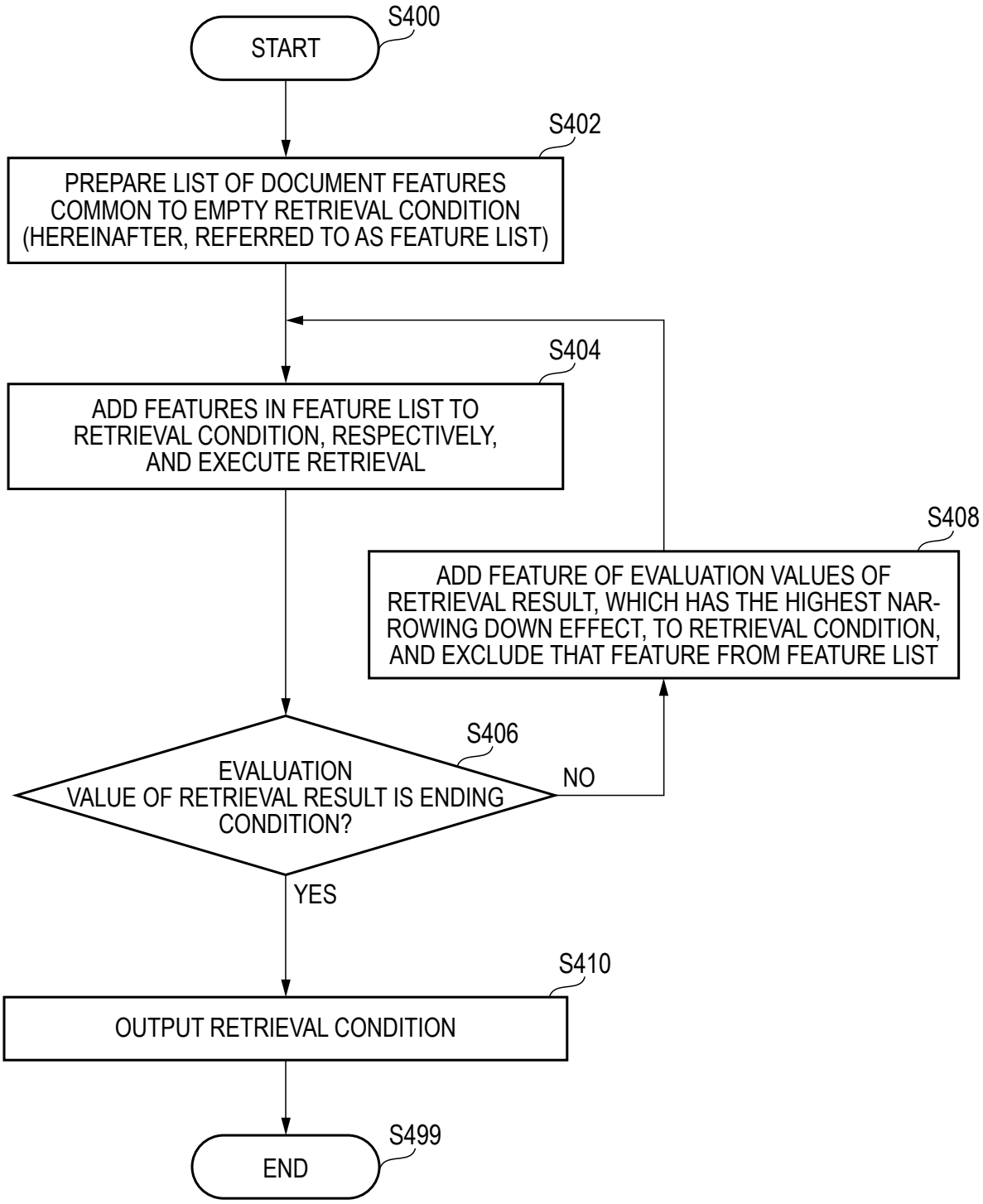

S400
START
S402
PREPARE LIST OF DOCUMENT FEATURES COMMON TO EMPTY RETRIEVAL CONDITION (HEREINAFTER, REFERRED TO AS FEATURE LIST)
S404
ADD FEATURES IN FEATURE LIST TO RETRIEVAL CONDITION, RESPECTIVELY, AND EXECUTE RETRIEVAL
S408
ADD FEATURE OF EVALUATION VALUES OF RETRIEVAL RESULT, WHICH HAS THE HIGHEST NARROWING DOWN EFFECT, TO RETRIEVAL CONDITION, AND EXCLUDE THAT FEATURE FROM FEATURE LIST
S406
EVALUATION VALUE OF RETRIEVAL RESULT IS ENDING CONDITION?
NO
YES
S410
OUTPUT RETRIEVAL CONDITION
S499
END

FIG. 5

	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

500

FIG. 6

	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

500

610

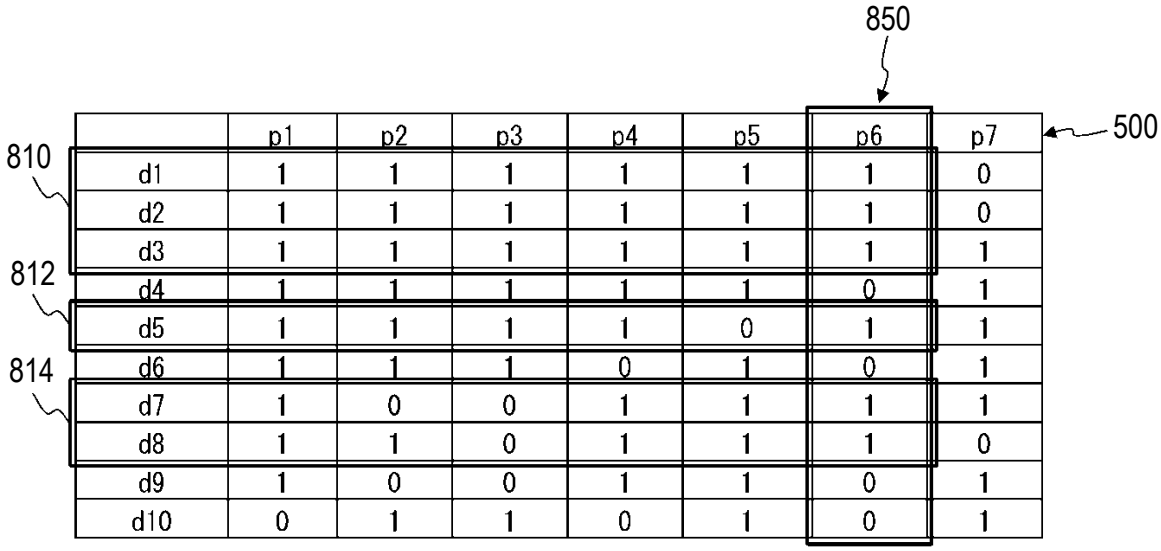
FIG. 7

	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

710

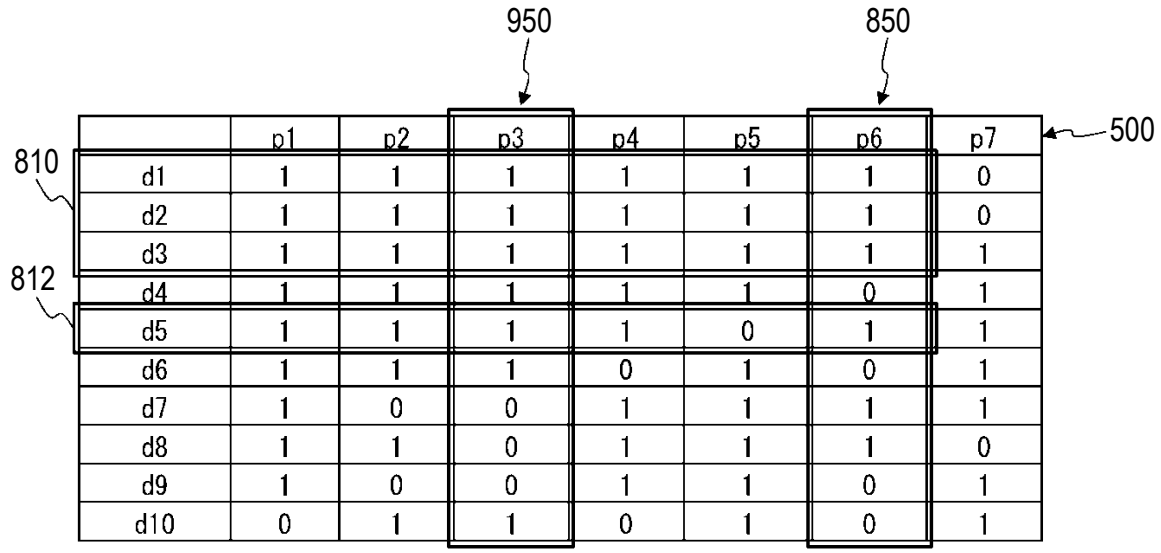
500

FIG. 8



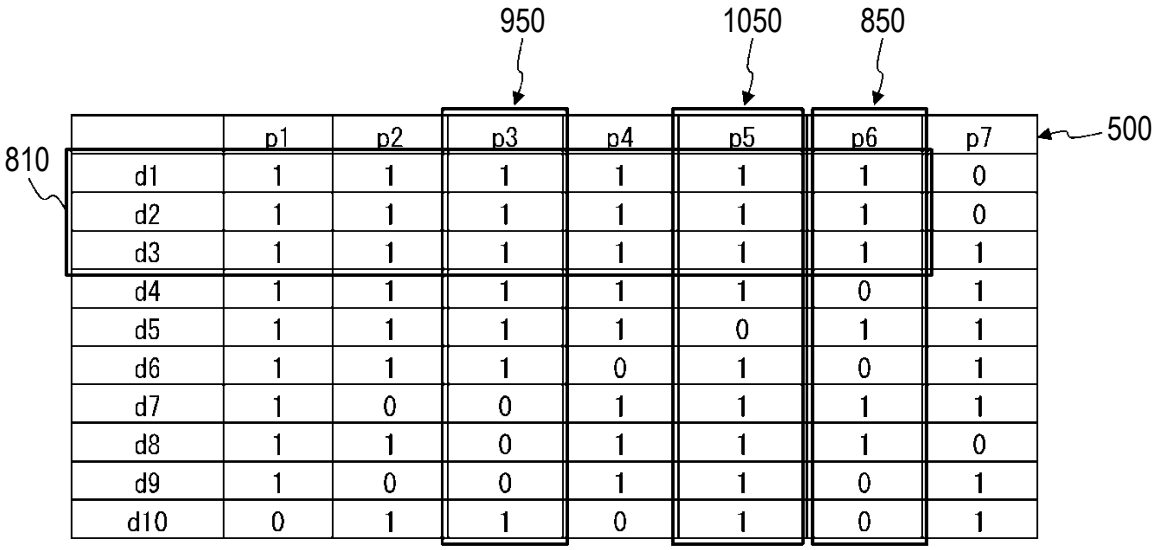
	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

FIG. 9



	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

FIG. 10

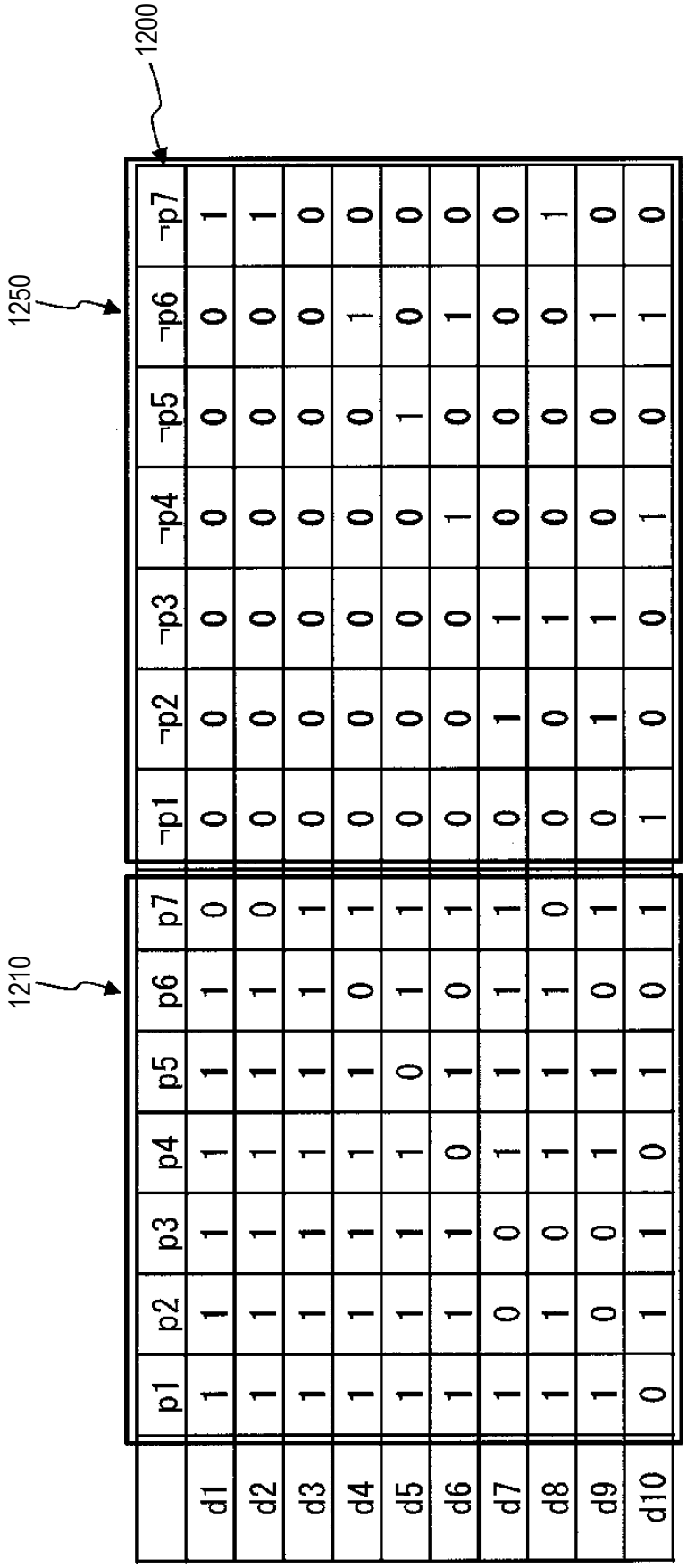


	p1	p2	p3	p4	p5	p6	p7
d1	1	1	1	1	1	1	0
d2	1	1	1	1	1	1	0
d3	1	1	1	1	1	1	1
d4	1	1	1	1	1	0	1
d5	1	1	1	1	0	1	1
d6	1	1	1	0	1	0	1
d7	1	0	0	1	1	1	1
d8	1	1	0	1	1	1	0
d9	1	0	0	1	1	0	1
d10	0	1	1	0	1	0	1

FIG. 11

	WORD 1	WORD 2	WORD 3	WORD 4	WORD 5	WORD 6	WORD 7
d1	0.01	0.3	0.4	0.01	0.04	0.1	0
d2	0.05	0.2	0.5	0.09	0.06	0.2	0
d3	0.02	0.1	0.4	0.1	0.03	0.3	0.5
d4	0.03	0.3	0.3	0.03	0.07	0	0.5
d5	0.01	0.4	0.1	0.02	0	0.3	0.4
d6	0.02	0.1	0.5	0	0.02	0	0.3
d7	0.04	0	0	0.06	0.03	0.2	0.1
d8	0.03	0.4	0	0.07	0.05	0.1	0
d9	0.02	0	0	0.03	0.03	0	0.2
d10	0	0.2	0.2	0	0.04	0	0.4

FIG. 12



	p1	p2	p3	p4	p5	p6	p7	¬p1	¬p2	¬p3	¬p4	¬p5	¬p6	¬p7
d1	1	1	1	1	1	1	0	0	0	0	0	0	0	1
d2	1	1	1	1	1	1	0	0	0	0	0	0	0	1
d3	1	1	1	1	1	1	1	0	0	0	0	0	0	0
d4	1	1	1	1	1	0	1	0	0	0	0	0	1	0
d5	1	1	1	1	0	1	1	0	0	0	0	1	0	0
d6	1	1	1	0	1	0	1	0	0	0	1	0	1	0
d7	1	0	0	1	1	1	1	0	1	1	0	0	0	0
d8	1	1	0	1	1	1	0	0	0	1	0	0	0	1
d9	1	0	0	1	1	0	1	0	1	1	0	0	1	0
d10	0	1	1	0	1	0	1	1	0	0	1	0	1	0

FIG. 13

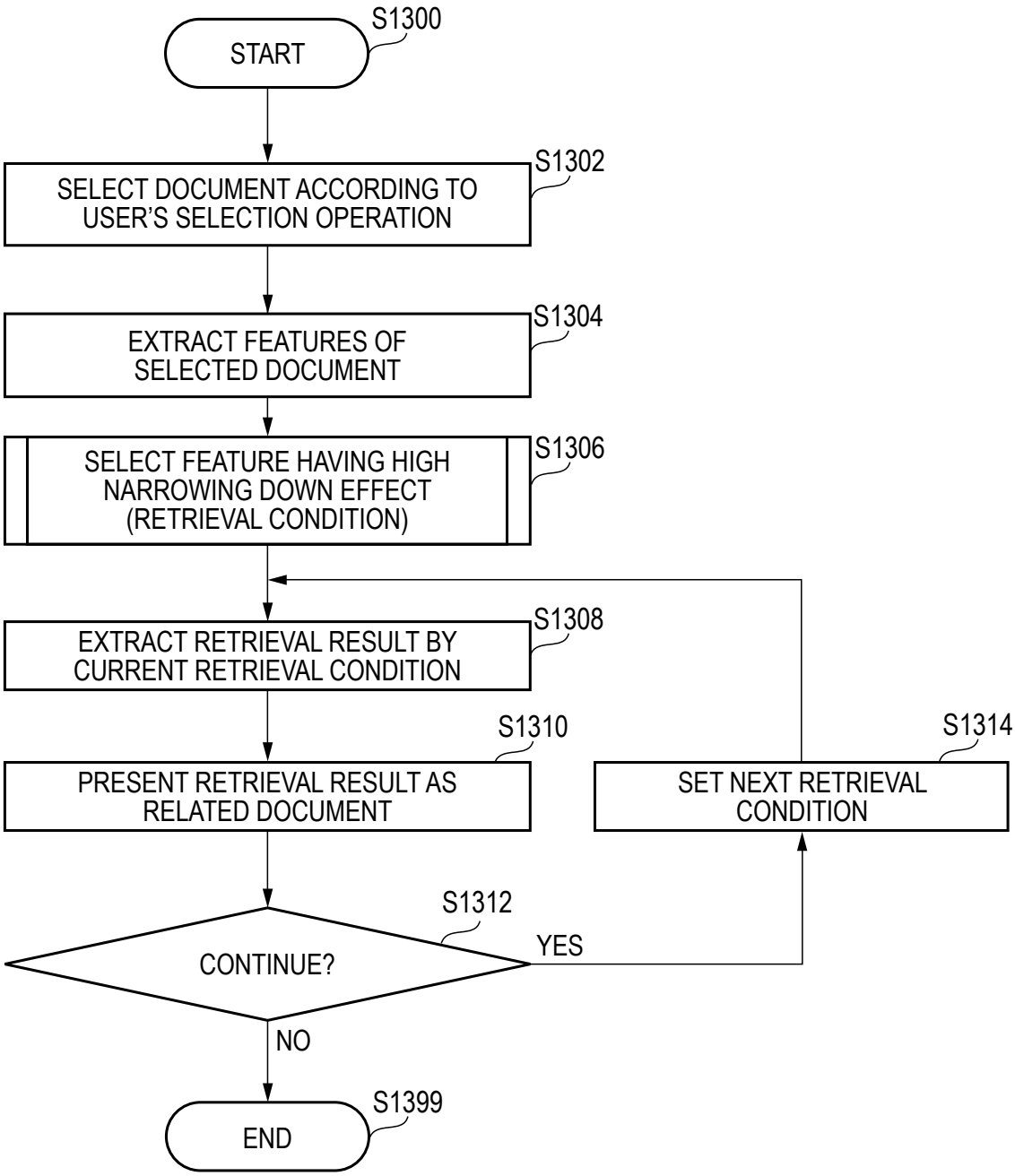

S1300
START
S1302
SELECT DOCUMENT ACCORDING TO USER'S SELECTION OPERATION
S1304
EXTRACT FEATURES OF SELECTED DOCUMENT
S1306
SELECT FEATURE HAVING HIGH NARROWING DOWN EFFECT (RETRIEVAL CONDITION)
S1308
EXTRACT RETRIEVAL RESULT BY CURRENT RETRIEVAL CONDITION
S1310
PRESENT RETRIEVAL RESULT AS RELATED DOCUMENT
S1312
CONTINUE?
YES
NO
S1314
SET NEXT RETRIEVAL CONDITION
S1399
END

FIG. 14

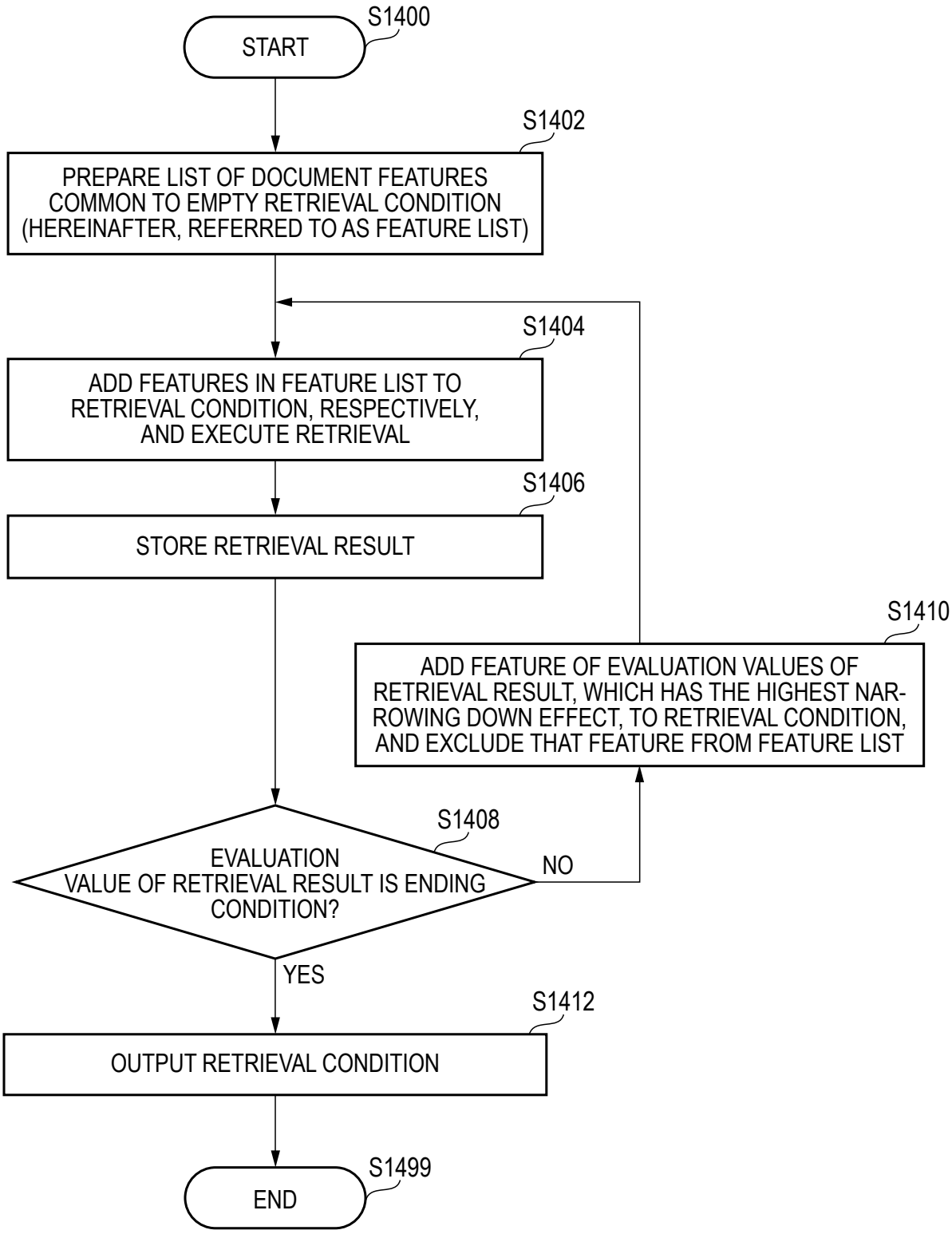
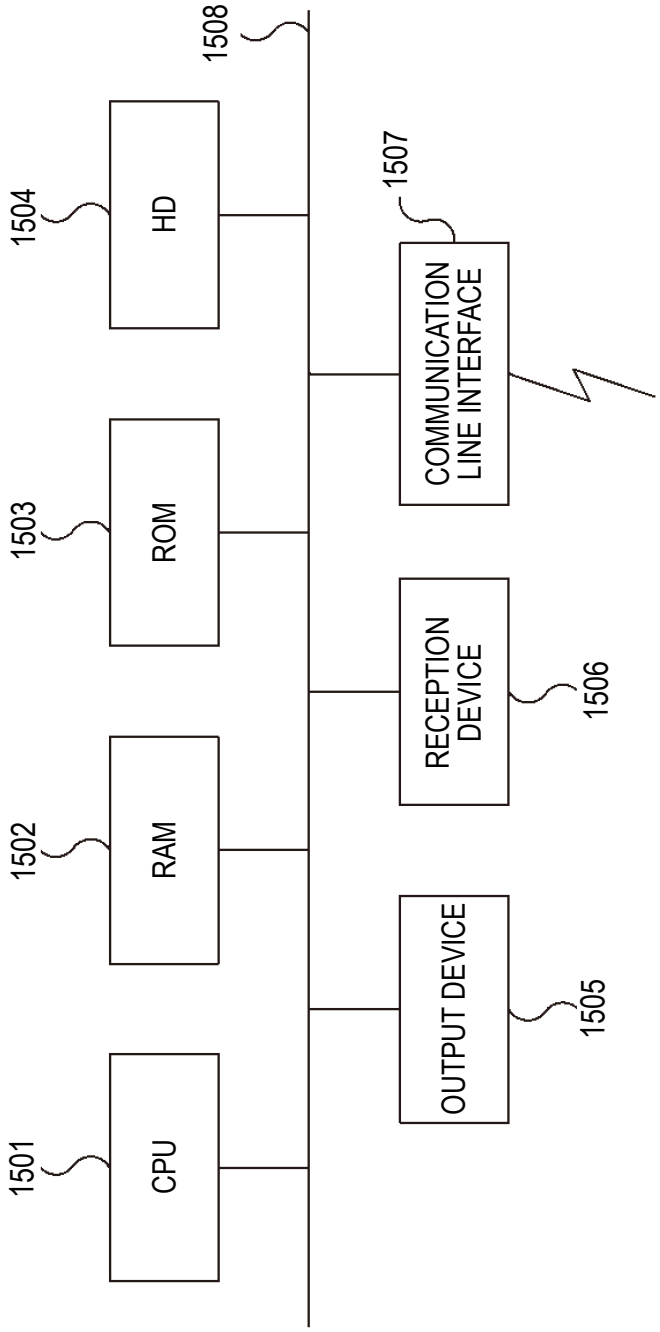

S1400
START
S1402
PREPARE LIST OF DOCUMENT FEATURES COMMON TO EMPTY RETRIEVAL CONDITION (HEREINAFTER, REFERRED TO AS FEATURE LIST)
S1404
ADD FEATURES IN FEATURE LIST TO RETRIEVAL CONDITION, RESPECTIVELY, AND EXECUTE RETRIEVAL
S1406
STORE RETRIEVAL RESULT
S1410
ADD FEATURE OF EVALUATION VALUES OF RETRIEVAL RESULT, WHICH HAS THE HIGHEST NARROWING DOWN EFFECT, TO RETRIEVAL CONDITION, AND EXCLUDE THAT FEATURE FROM FEATURE LIST
S1408
EVALUATION VALUE OF RETRIEVAL RESULT IS ENDING CONDITION?
NO
YES
S1412
OUTPUT RETRIEVAL CONDITION
S1499
END

FIG. 15


1508
1504
HD
1507
COMMUNICATION LINE INTERFACE
1503
ROM
RECEPTION DEVICE
1506
1502
RAM
OUTPUT DEVICE
1505
1501
CPU