FIG. 1

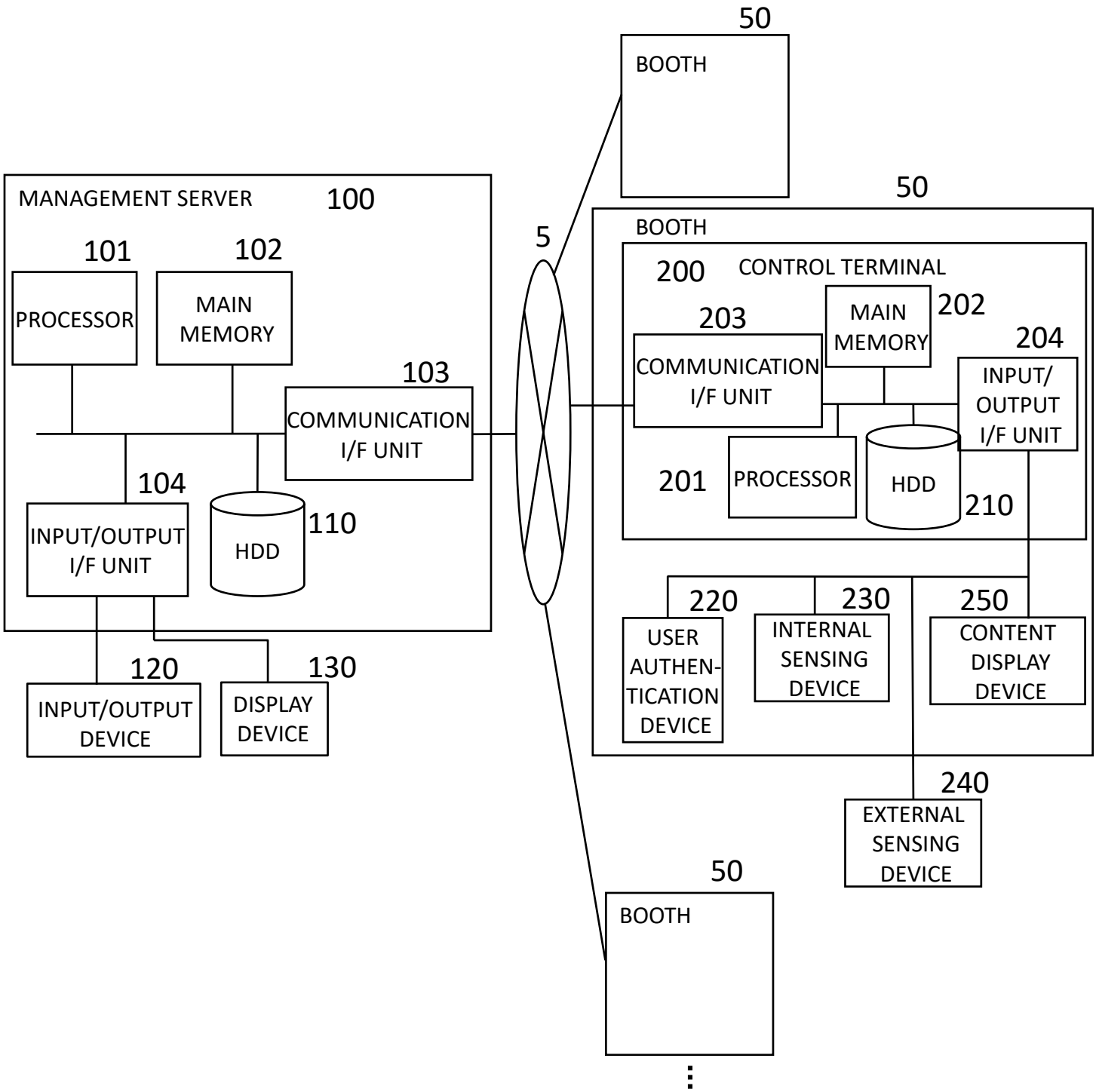

50
BOOTH
MANAGEMENT SERVER
100
101
PROCESSOR
102
MAIN MEMORY
103
COMMUNICATION I/F UNIT
104
INPUT/OUTPUT I/F UNIT
HDD
110
120
INPUT/OUTPUT DEVICE
130
DISPLAY DEVICE
5
50
BOOTH
200
CONTROL TERMINAL
203
COMMUNICATION I/F UNIT
MAIN MEMORY
202
204
INPUT/ OUTPUT I/F UNIT
201
PROCESSOR
HDD
210
220
USER AUTHEN-TICATION DEVICE
230
INTERNAL SENSING DEVICE
250
CONTENT DISPLAY DEVICE
240
EXTERNAL SENSING DEVICE
50
BOOTH

FIG. 2

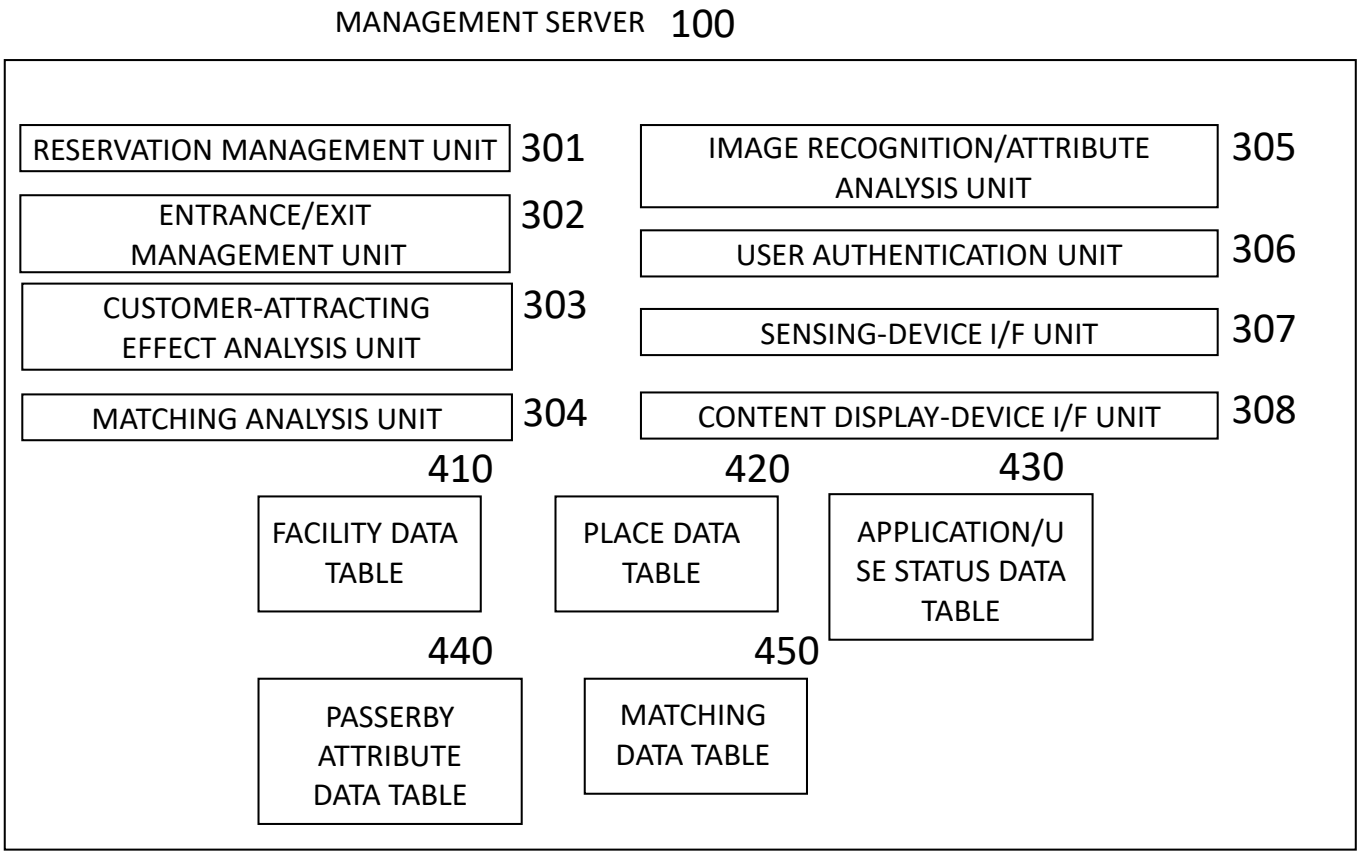

MANAGEMENT SERVER 100
RESERVATION MANAGEMENT UNIT 301
ENTRANCE/EXIT MANAGEMENT UNIT 302
CUSTOMER-ATTRACTING EFFECT ANALYSIS UNIT 303
MATCHING ANALYSIS UNIT 304
IMAGE RECOGNITION/ATTRIBUTE ANALYSIS UNIT 305
USER AUTHENTICATION UNIT 306
SENSING-DEVICE I/F UNIT 307
CONTENT DISPLAY-DEVICE I/F UNIT 308
410
FACILITY DATA TABLE
420
PLACE DATA TABLE
430
APPLICATION/USE STATUS DATA TABLE
440
PASSERBY ATTRIBUTE DATA TABLE
450
MATCHING DATA TABLE

FIG. 3

FACILITY DATA TABLE 410

410a	410b	
BOOTH ID	INSTALLATION PLACE	…
B001	A STATION	…
B111	B STATION	
B400	UNDERGROUND PASSAGE IN C CITY	…
…	…	…

FIG. 4

PLACE DATA TABLE 420

420a	420b	
INSTALLATION PLACE	INSTALLATION PLACE	…
A STATION	BUSSINESS, …	…
B STATION	TRANSFER STATION ,…	…
UNDERGROUND PASSAGE IN C CITY	STUDENT, SIGHTSEEING ,…	…
…	…	…

FIG. 5A

APPLICATION/USE STATUS DATA TABLE 430

USER ATTRIBUTE | DESIRE OF USER

430a BUSINESS OPERATOR	430b USAGE	430c CONTENT KEYWORD	430d CONTENT DETAILS	430e TARGET CUSTOMER GROUP	430f DESIRED START DATE/TIME	430g DESIRED END DATE/TIME	430h DESIRED BOOTH	
AAA	RETAIL	REGION, WOOD, CRAFTS, …	WOODS OF FOREST IN ○○ PREFECTURE ARE UTILIZED …	THIRTIES AND FORTIES, WOMEN , …	2018/10/1 10:00	2018/10/1 12:00	NO DESIGNATED	(1)
BBB	EXHIBITION	CLEANING, ROBOT, …	ROBOTIC CLEANER BEING NEW PRODUCT …	UNMARRIED PERSON, THIRTIES, MEN 、…	2017/11/15 10:00	2017/11/15 17:00	WITHIN RANGE OF ○○	
CCC	EXHIBITION	SMART PHONE, GAME, …	ADVERTISEMENT OF APPLICATION OF SMARTPHONE ADVERTISEMENT OF APPLICATION OF SMARTPHONE	TWENTIES, MEN, …	2016/8/1 9:00	2016/8/14 20:00	NO DESIGNATED	
…	…	…	…	…	…	…		

FIG. 5B

APPLICATION/USE STATUS DATA TABLE 430

RECOMMENDATION BY MATCHING

RESERVATION BY USER

430i	430j	430k	430l	430m	430n	430o
RECOM-MENDED START DATE/TIME	RECOM-MENDED END DATE/TIME	RECOM-MENDED BOOTH	RESER-VATION ID	RESER-VATION START DATE/ TIME	RESER-VATION END DATE/ TIME	RESER-VED BOOTH
2018/10/3 13:00	2018/10/3 15:00	B111	1230131	2018/10 /3 13:00	2018/10 /3 15:00	B111
2017/11/16 10:00	2017/11/16 17:00	B400	123123	2017/11 /16 10:00	2017/11 /16 17:00	B400
2016/8/1 9:00	2016/8/14 20:00	B312, B313, B314, B315	341231	2016/8/ 1 9:00	2016/8/ 14 20:00	B312、 B313、 B314、 B315
…	…	…	…	…	…	…

(1) .... (2)

USE RECORD

430p	430q	430r	
ACTUAL START DATE/TIME	ACTUAL END DATE/TIME	ACTUAL BOOTH	…
2018/10/3 13:00	2018/10/3 15:00	B111	…
2017/11/16 10:00	2017/11/16 17:00	B400	…
2016/8/1 9:00	2016/8/14 20:00	B312, B313, B314, B315	…
…	…	…	…

(2) .....

FIG. 6

PASSERBY ATTRIBUTE DATA TABLE 440

440a BOOTH ID	440b START DATE/ TIME	440c END DATE/ TIME	440d PRESENCE/ ABSENCE OF CONTENT	440e NUMBER OF PASSERSBY OUTSIDE BOOTH	440f PASSERBY ATTRIBUTE OUTSIDE BOOTH	440g NUMBER OF PERSONS WATCHING BOOTH	440h ATTRIBUTE OF PERSON WATCHING BOOTH
B111	2017/10/10 9:00	2017/10/10 9:30	PRESENCE	30	MEN (10's) : ○ , MEN (20's) : ○ , …, BUSINESS : ○ :, CASUAL : ○ , …	10	MEN (10's) : ○ , MEN (20's) : ○ , …, (1)
B111	2017/10/10 9:30	2017/10/10 10:00	PRESENCE	25	MEN (10's) : ○ , MEN (20's) : ○ , …,	5	MEN (10's) : ○ , MEN (20's) : ○ , …,
B111	2017/10/10 10:00	2017/10/10 10:30	PRESENCE	40	MEN (10's) : ○ , MEN (20's) : ○ , …,	10	MEN (10's) : ○ , MEN (20's) : ○ , …,
B111	2017/10/10 10:30	2017/10/10 11:00	ABSENCE	20	MEN (10's) : ○ , MEN (20's) : ○ , …,	–	–
…	…	…	…	…	…	…	…

(1)

440i NUMBER OF STOPPED PASSERSBY	440j ATTRIBUTE OF STOPPED PASSERBY	440k NUMBER OF PERSONS IN BOOTH	440l ATTRIBUTE OF PERSON IN BOOTH	…
5	MEN (10's) : ○ , MEN (20's) : ○ , …,	4	MEN (10's) : ○ , MEN (20's) : ○ , …,	…
5	MEN (10's) : ○ , MEN (20's) : ○ , …,	3	MEN (10's) : ○ , MEN (20's) : ○ , …,	…
6	MEN (10's) : ○ , MEN (20's) : ○ , …,	2	MEN (10's) : ○ , MEN (20's) : ○ , …,	…
…	…	…	…	…

FIG. 7

MATCHING DATA TABLE 450

450a BOOTH ID	450b USAGE	450c CONTENT KEYWORD	450d TARGET CUSTOMER GROUP	450e INSTALLA-TION PLACE	450f AGGREGA-TION DATE/ TIME	450g ATTRIBUTE PROPORTION OF PASSERBY WHEN THERE IS NO CONTENT	
B120	RETAIL	REGION, WOOD, CRAFTS	30's-40's , WOMEN, …	B STA-TION	2018/10/3 13:00–15:00	10's MEN : ○%, …, 30's WOMEN: ○%, …	(1) ·····
B312	EXHIBI-TION	CLEANING, ROBOT , …	UNMARRIED PERSON, 30's, MEN, …	UNDER-GROUND PASSAGE IN C CITY	2017/11/16 10:00–17:00	10's MEN : ○%, …	
…	…	…	…	…	…	…	

(1) ····	450h NUMBER OF ATTRACT-ED CUSTOM-ERS	450i DEGREE OF ATTEN-TION	450j ATTRIBUTE PROPOR-TION OF INTEREST-ED PERSON	450k DEGREE OF HIGH INTEREST	450l HIGHLY-INTER-ESTED ATTRIB-UTE PROPOR-TION	450m HELD CONTENT KEYWORD OF NEIGH-BORING BOOTH	450n DEGRE E OF MATCH -ING	450o NEIGHBOR - ING BOOTH-RELATED INDEX
	40	0.88	10's MEN : ○%, …, 30's WOMEN: ○%, …	0.74	10's MEN : ○%, …, 30's WOMEN: ○%, …	COSMET–ICS, TEST PRODUCT, …	0.89	3.2
	30	0.55	10's MEN : ○%, …,	0.63	10's MEN : ○%, …,	–	0.4	2.1
	…		…	…	…	…		…

FIG. 8

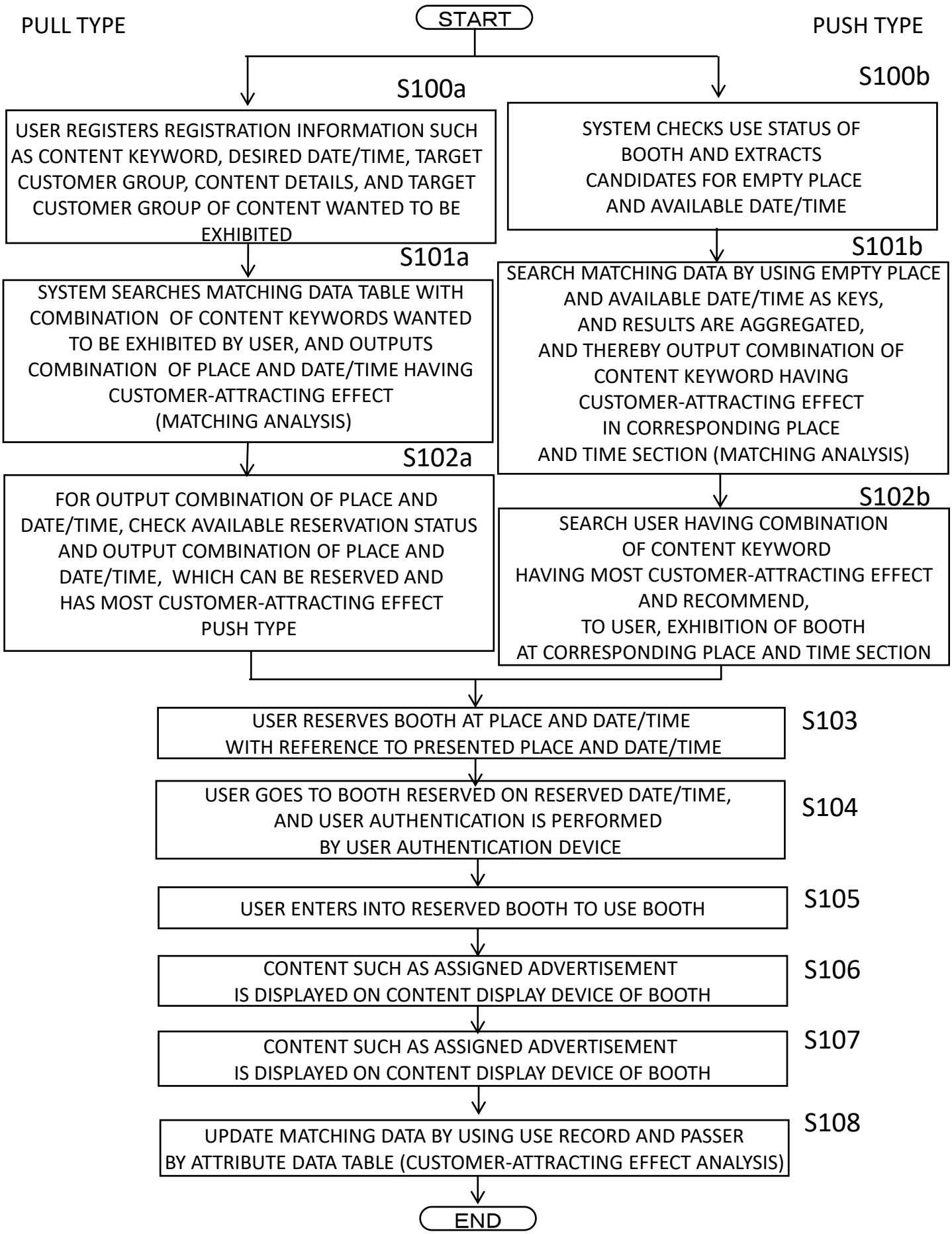

START
PULL TYPE
PUSH TYPE
S100a
USER REGISTERS REGISTRATION INFORMATION SUCH AS CONTENT KEYWORD, DESIRED DATE/TIME, TARGET CUSTOMER GROUP, CONTENT DETAILS, AND TARGET CUSTOMER GROUP OF CONTENT WANTED TO BE EXHIBITED
S100b
SYSTEM CHECKS USE STATUS OF BOOTH AND EXTRACTS CANDIDATES FOR EMPTY PLACE AND AVAILABLE DATE/TIME
S101a
SYSTEM SEARCHES MATCHING DATA TABLE WITH COMBINATION OF CONTENT KEYWORDS WANTED TO BE EXHIBITED BY USER, AND OUTPUTS COMBINATION OF PLACE AND DATE/TIME HAVING CUSTOMER-ATTRACTING EFFECT (MATCHING ANALYSIS)
S101b
SEARCH MATCHING DATA BY USING EMPTY PLACE AND AVAILABLE DATE/TIME AS KEYS, AND RESULTS ARE AGGREGATED, AND THEREBY OUTPUT COMBINATION OF CONTENT KEYWORD HAVING CUSTOMER-ATTRACTING EFFECT IN CORRESPONDING PLACE AND TIME SECTION (MATCHING ANALYSIS)
S102a
FOR OUTPUT COMBINATION OF PLACE AND DATE/TIME, CHECK AVAILABLE RESERVATION STATUS AND OUTPUT COMBINATION OF PLACE AND DATE/TIME, WHICH CAN BE RESERVED AND HAS MOST CUSTOMER-ATTRACTING EFFECT PUSH TYPE
S102b
SEARCH USER HAVING COMBINATION OF CONTENT KEYWORD HAVING MOST CUSTOMER-ATTRACTING EFFECT AND RECOMMEND, TO USER, EXHIBITION OF BOOTH AT CORRESPONDING PLACE AND TIME SECTION
S103
USER RESERVES BOOTH AT PLACE AND DATE/TIME WITH REFERENCE TO PRESENTED PLACE AND DATE/TIME
S104
USER GOES TO BOOTH RESERVED ON RESERVED DATE/TIME, AND USER AUTHENTICATION IS PERFORMED BY USER AUTHENTICATION DEVICE
S105
USER ENTERS INTO RESERVED BOOTH TO USE BOOTH
S106
CONTENT SUCH AS ASSIGNED ADVERTISEMENT IS DISPLAYED ON CONTENT DISPLAY DEVICE OF BOOTH
S107
CONTENT SUCH AS ASSIGNED ADVERTISEMENT IS DISPLAYED ON CONTENT DISPLAY DEVICE OF BOOTH
S108
UPDATE MATCHING DATA BY USING USE RECORD AND PASSER BY ATTRIBUTE DATA TABLE (CUSTOMER-ATTRACTING EFFECT ANALYSIS)
END

FIG. 9

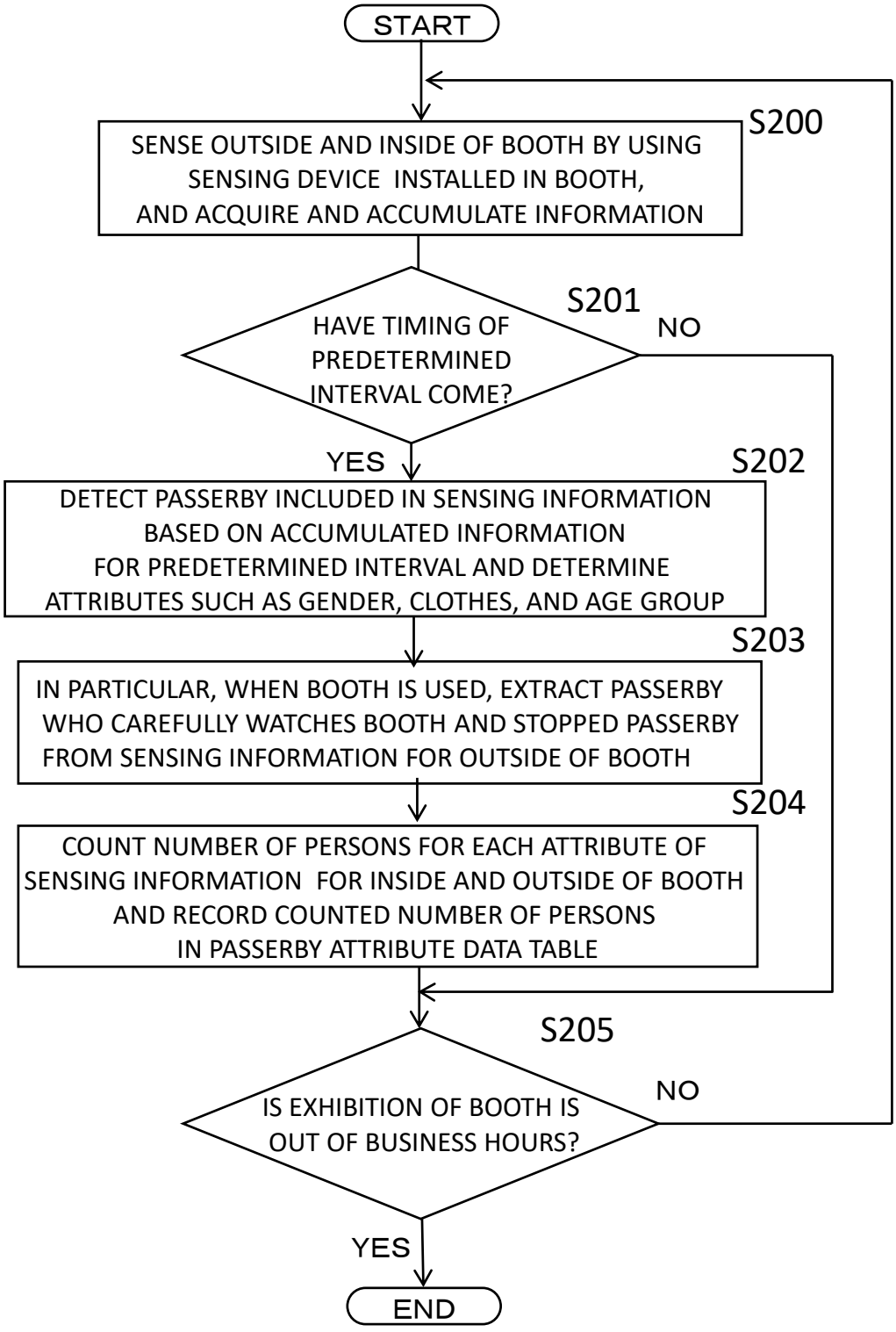

START
S200
SENSE OUTSIDE AND INSIDE OF BOOTH BY USING SENSING DEVICE INSTALLED IN BOOTH, AND ACQUIRE AND ACCUMULATE INFORMATION
S201
HAVE TIMING OF PREDETERMINED INTERVAL COME?
NO
YES
S202
DETECT PASSERBY INCLUDED IN SENSING INFORMATION BASED ON ACCUMULATED INFORMATION FOR PREDETERMINED INTERVAL AND DETERMINE ATTRIBUTES SUCH AS GENDER, CLOTHES, AND AGE GROUP
S203
IN PARTICULAR, WHEN BOOTH IS USED, EXTRACT PASSERBY WHO CAREFULLY WATCHES BOOTH AND STOPPED PASSERBY FROM SENSING INFORMATION FOR OUTSIDE OF BOOTH
S204
COUNT NUMBER OF PERSONS FOR EACH ATTRIBUTE OF SENSING INFORMATION FOR INSIDE AND OUTSIDE OF BOOTH AND RECORD COUNTED NUMBER OF PERSONS IN PASSERBY ATTRIBUTE DATA TABLE
S205
IS EXHIBITION OF BOOTH IS OUT OF BUSINESS HOURS?
NO
YES
END

FIG. 10

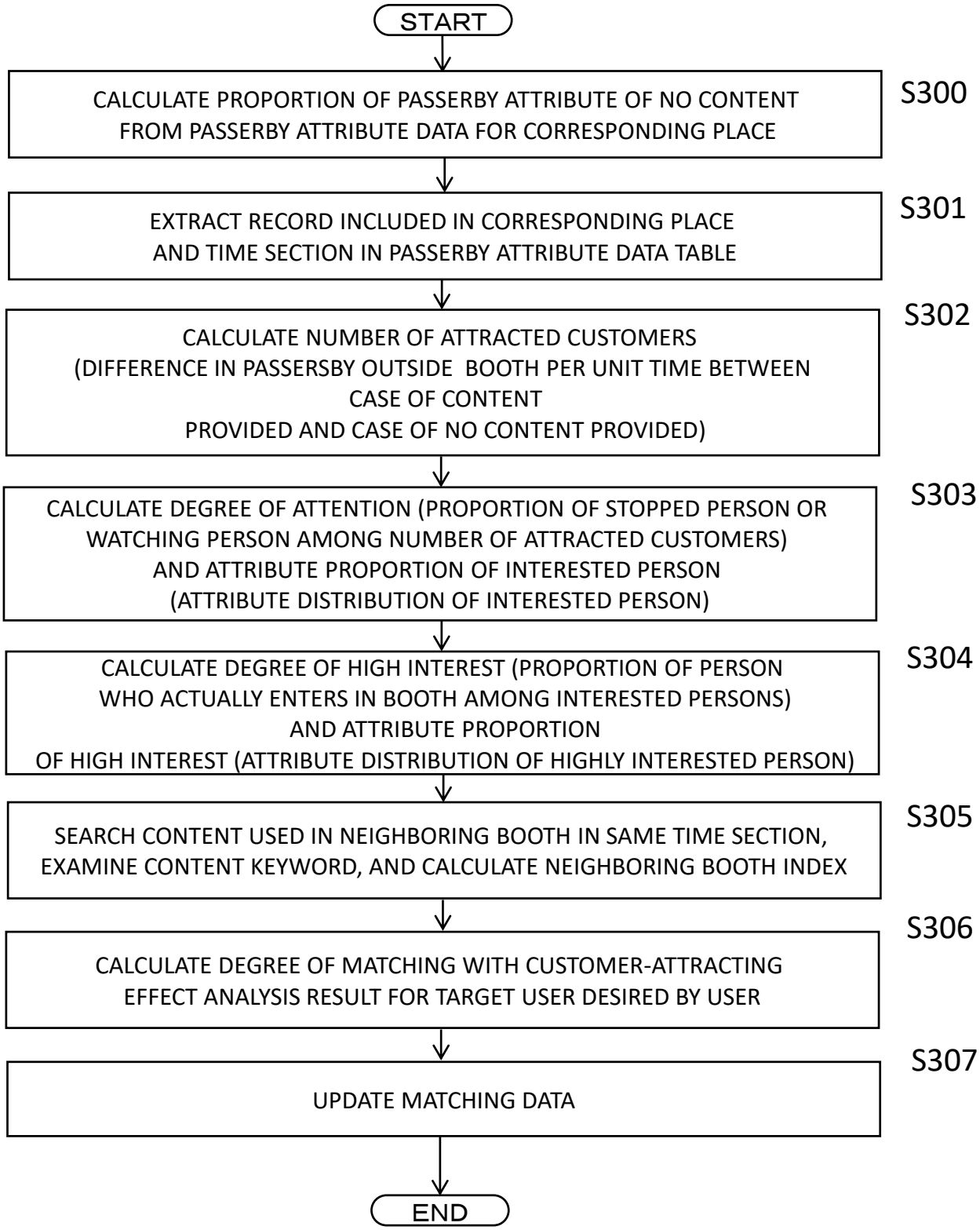

START
CALCULATE PROPORTION OF PASSERBY ATTRIBUTE OF NO CONTENT FROM PASSERBY ATTRIBUTE DATA FOR CORRESPONDING PLACE
S300
EXTRACT RECORD INCLUDED IN CORRESPONDING PLACE AND TIME SECTION IN PASSERBY ATTRIBUTE DATA TABLE
S301
CALCULATE NUMBER OF ATTRACTED CUSTOMERS (DIFFERENCE IN PASSERSBY OUTSIDE BOOTH PER UNIT TIME BETWEEN CASE OF CONTENT PROVIDED AND CASE OF NO CONTENT PROVIDED)
S302
CALCULATE DEGREE OF ATTENTION (PROPORTION OF STOPPED PERSON OR WATCHING PERSON AMONG NUMBER OF ATTRACTED CUSTOMERS) AND ATTRIBUTE PROPORTION OF INTERESTED PERSON (ATTRIBUTE DISTRIBUTION OF INTERESTED PERSON)
S303
CALCULATE DEGREE OF HIGH INTEREST (PROPORTION OF PERSON WHO ACTUALLY ENTERS IN BOOTH AMONG INTERESTED PERSONS) AND ATTRIBUTE PROPORTION OF HIGH INTEREST (ATTRIBUTE DISTRIBUTION OF HIGHLY INTERESTED PERSON)
S304
SEARCH CONTENT USED IN NEIGHBORING BOOTH IN SAME TIME SECTION, EXAMINE CONTENT KEYWORD, AND CALCULATE NEIGHBORING BOOTH INDEX
S305
CALCULATE DEGREE OF MATCHING WITH CUSTOMER-ATTRACTING EFFECT ANALYSIS RESULT FOR TARGET USER DESIRED BY USER
S306
UPDATE MATCHING DATA
S307
END

FIG. 11A

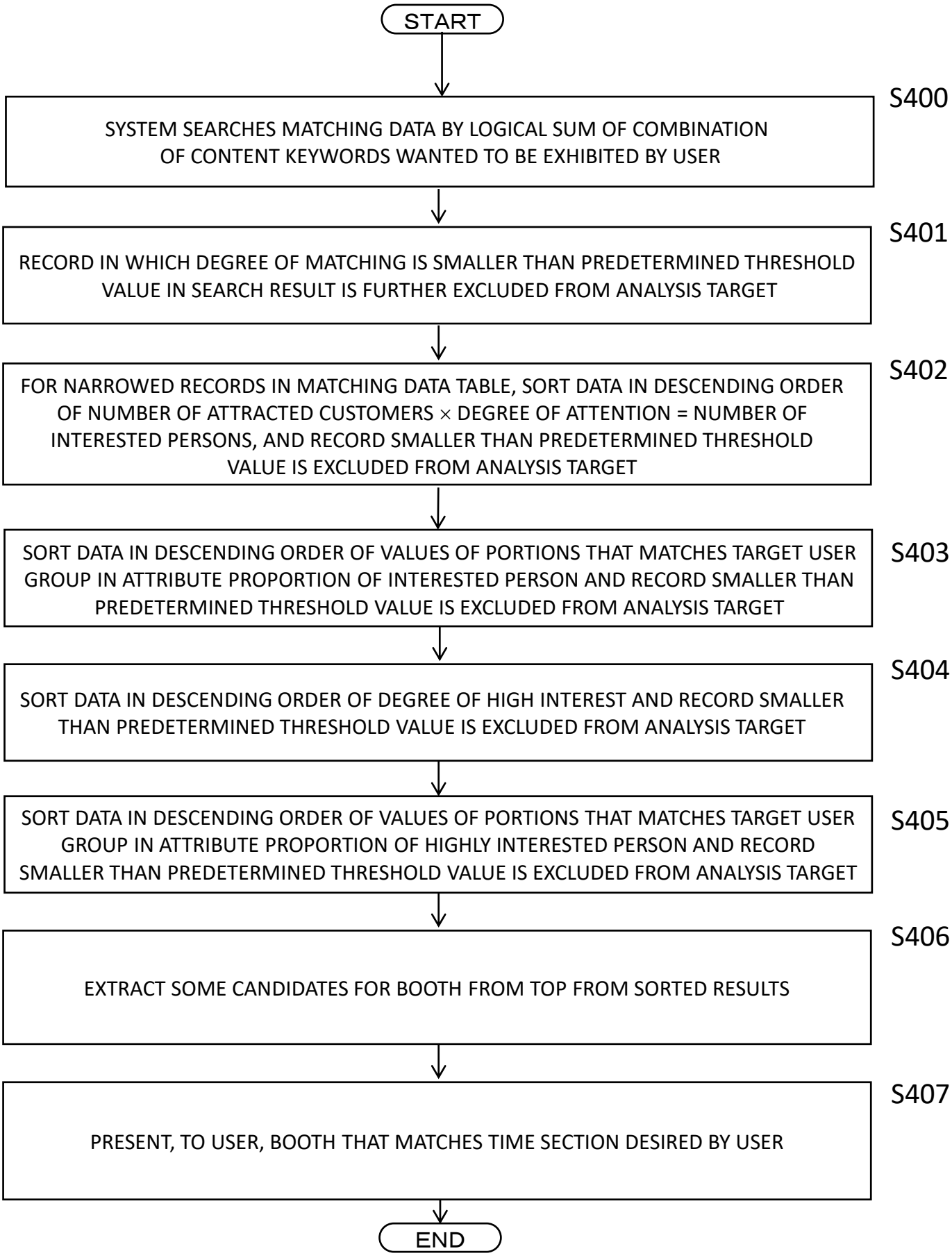

START
S400
SYSTEM SEARCHES MATCHING DATA BY LOGICAL SUM OF COMBINATION OF CONTENT KEYWORDS WANTED TO BE EXHIBITED BY USER
S401
RECORD IN WHICH DEGREE OF MATCHING IS SMALLER THAN PREDETERMINED THRESHOLD VALUE IN SEARCH RESULT IS FURTHER EXCLUDED FROM ANALYSIS TARGET
S402
FOR NARROWED RECORDS IN MATCHING DATA TABLE, SORT DATA IN DESCENDING ORDER OF NUMBER OF ATTRACTED CUSTOMERS × DEGREE OF ATTENTION = NUMBER OF INTERESTED PERSONS, AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S403
SORT DATA IN DESCENDING ORDER OF VALUES OF PORTIONS THAT MATCHES TARGET USER GROUP IN ATTRIBUTE PROPORTION OF INTERESTED PERSON AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S404
SORT DATA IN DESCENDING ORDER OF DEGREE OF HIGH INTEREST AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S405
SORT DATA IN DESCENDING ORDER OF VALUES OF PORTIONS THAT MATCHES TARGET USER GROUP IN ATTRIBUTE PROPORTION OF HIGHLY INTERESTED PERSON AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S406
EXTRACT SOME CANDIDATES FOR BOOTH FROM TOP FROM SORTED RESULTS
S407
PRESENT, TO USER, BOOTH THAT MATCHES TIME SECTION DESIRED BY USER
END

FIG. 11B

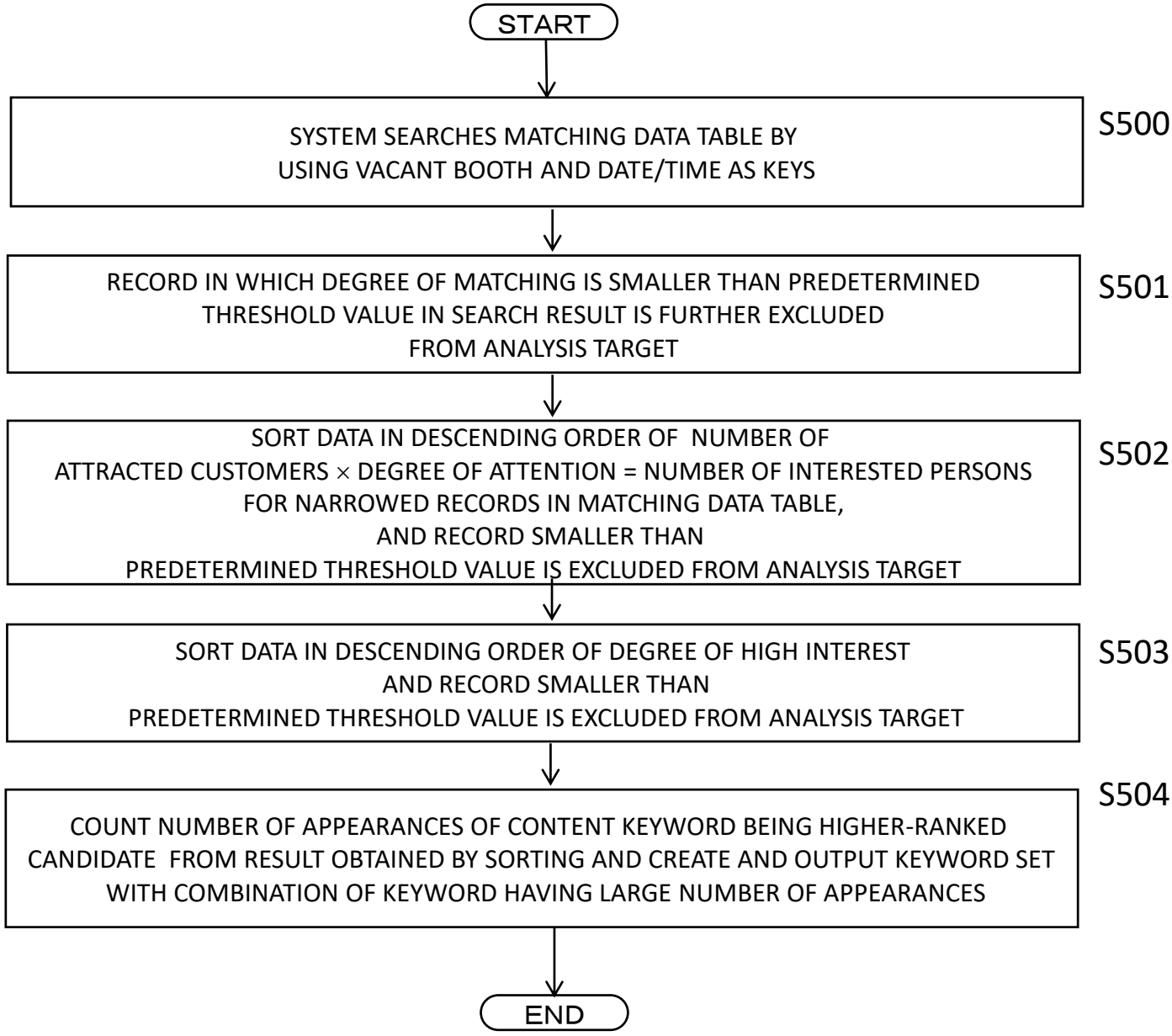

START
SYSTEM SEARCHES MATCHING DATA TABLE BY USING VACANT BOOTH AND DATE/TIME AS KEYS
S500
RECORD IN WHICH DEGREE OF MATCHING IS SMALLER THAN PREDETERMINED THRESHOLD VALUE IN SEARCH RESULT IS FURTHER EXCLUDED FROM ANALYSIS TARGET
S501
SORT DATA IN DESCENDING ORDER OF NUMBER OF ATTRACTED CUSTOMERS × DEGREE OF ATTENTION = NUMBER OF INTERESTED PERSONS FOR NARROWED RECORDS IN MATCHING DATA TABLE, AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S502
SORT DATA IN DESCENDING ORDER OF DEGREE OF HIGH INTEREST AND RECORD SMALLER THAN PREDETERMINED THRESHOLD VALUE IS EXCLUDED FROM ANALYSIS TARGET
S503
COUNT NUMBER OF APPEARANCES OF CONTENT KEYWORD BEING HIGHER-RANKED CANDIDATE FROM RESULT OBTAINED BY SORTING AND CREATE AND OUTPUT KEYWORD SET WITH COMBINATION OF KEYWORD HAVING LARGE NUMBER OF APPEARANCES
S504
END

FIG. 12

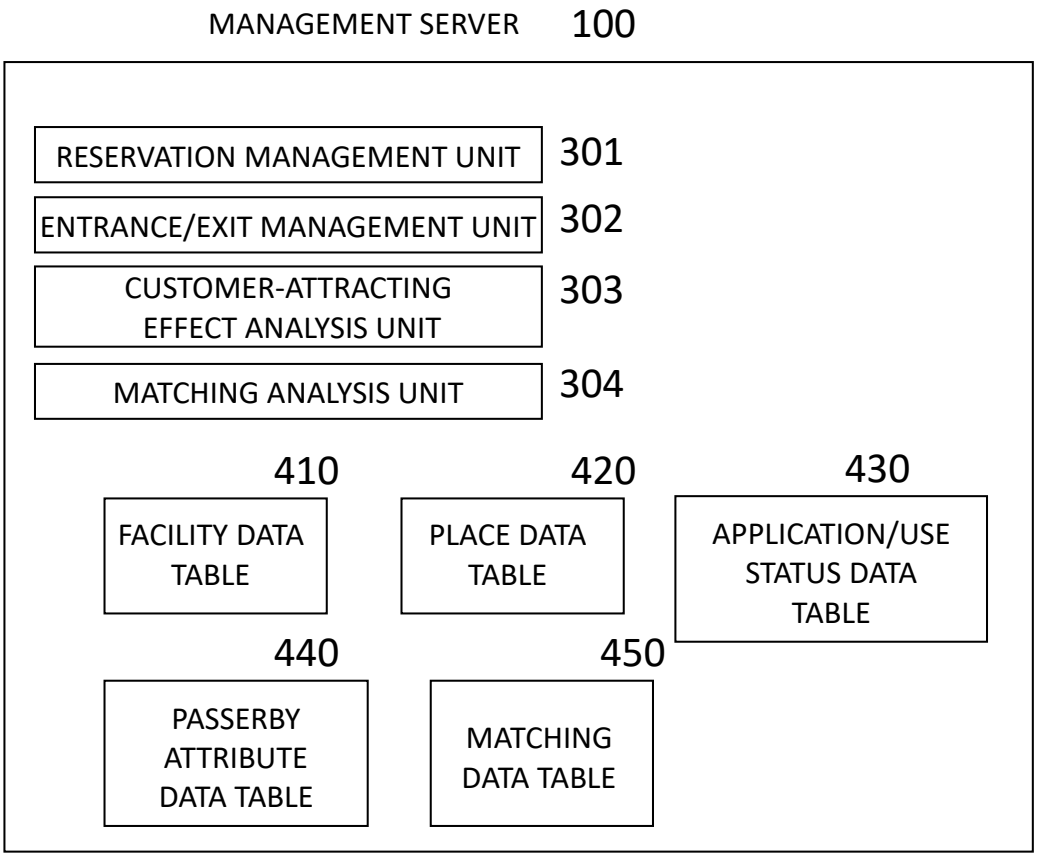
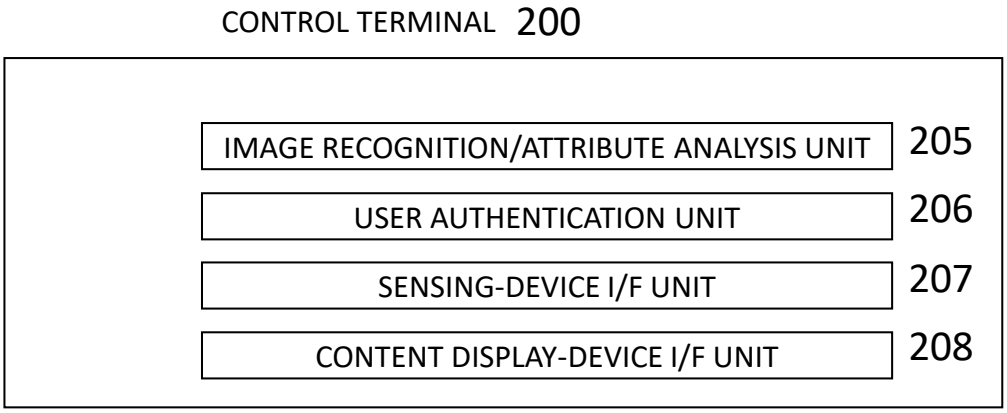

MANAGEMENT SERVER
100
RESERVATION MANAGEMENT UNIT
301
ENTRANCE/EXIT MANAGEMENT UNIT
302
CUSTOMER-ATTRACTING EFFECT ANALYSIS UNIT
303
MATCHING ANALYSIS UNIT
304
410
FACILITY DATA TABLE
420
PLACE DATA TABLE
430
APPLICATION/USE STATUS DATA TABLE
440
PASSERBY ATTRIBUTE DATA TABLE
450
MATCHING DATA TABLE

FIG. 13


CONTROL TERMINAL 200
IMAGE RECOGNITION/ATTRIBUTE ANALYSIS UNIT
205
USER AUTHENTICATION UNIT
206
SENSING-DEVICE I/F UNIT
207
CONTENT DISPLAY-DEVICE I/F UNIT
208