

Fig. 1

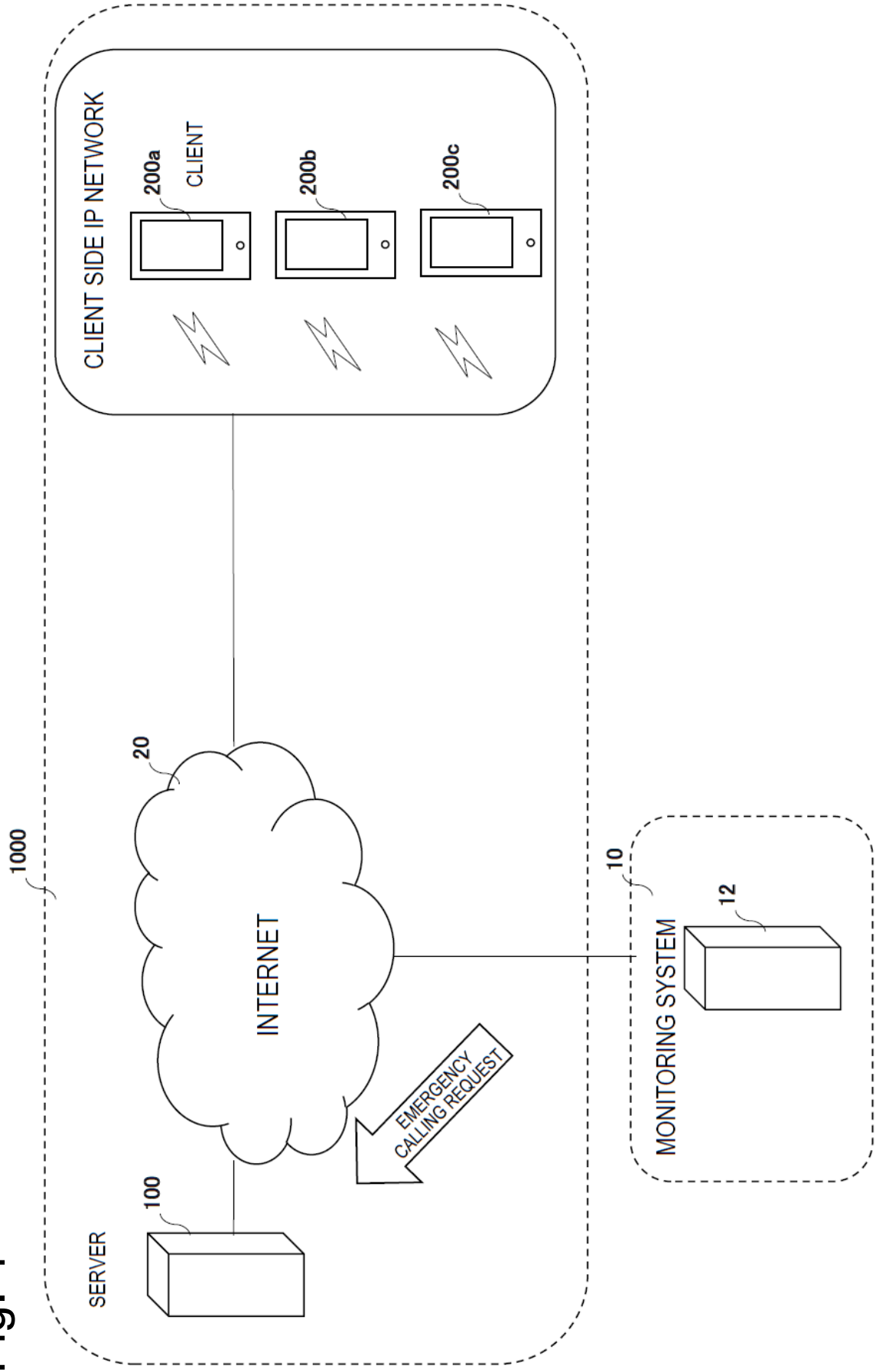


Fig. 2

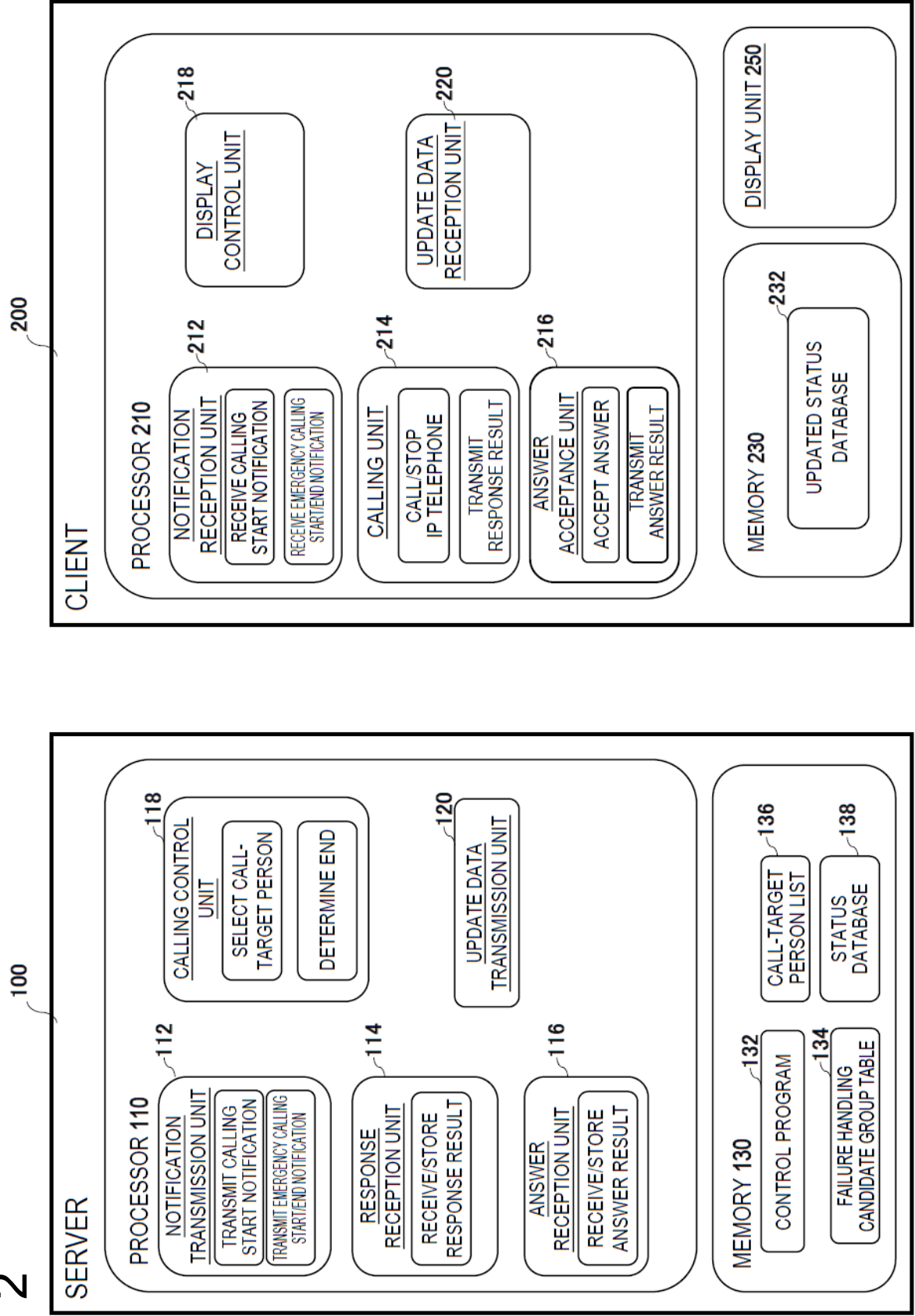


Fig. 3

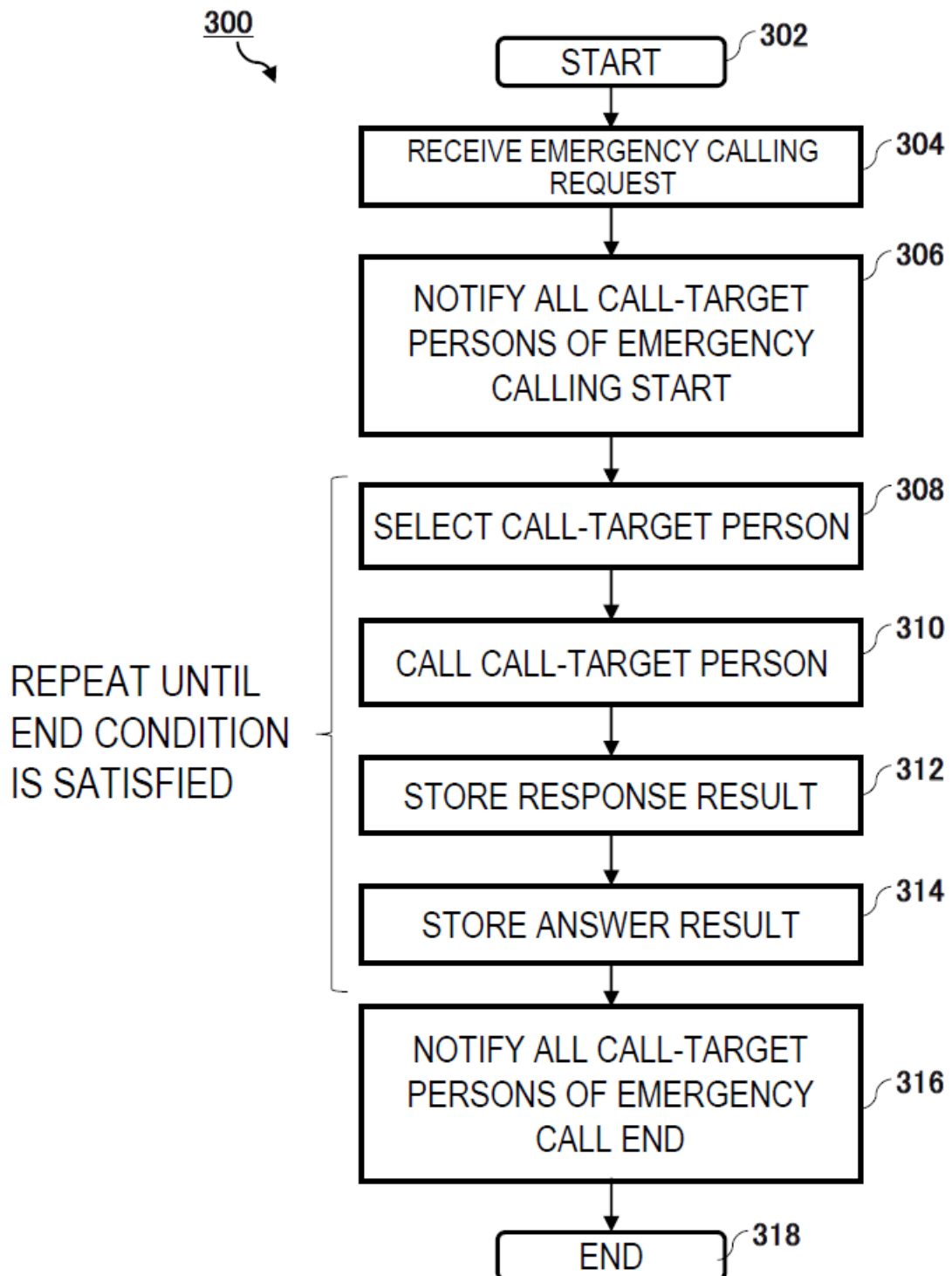


Fig. 4

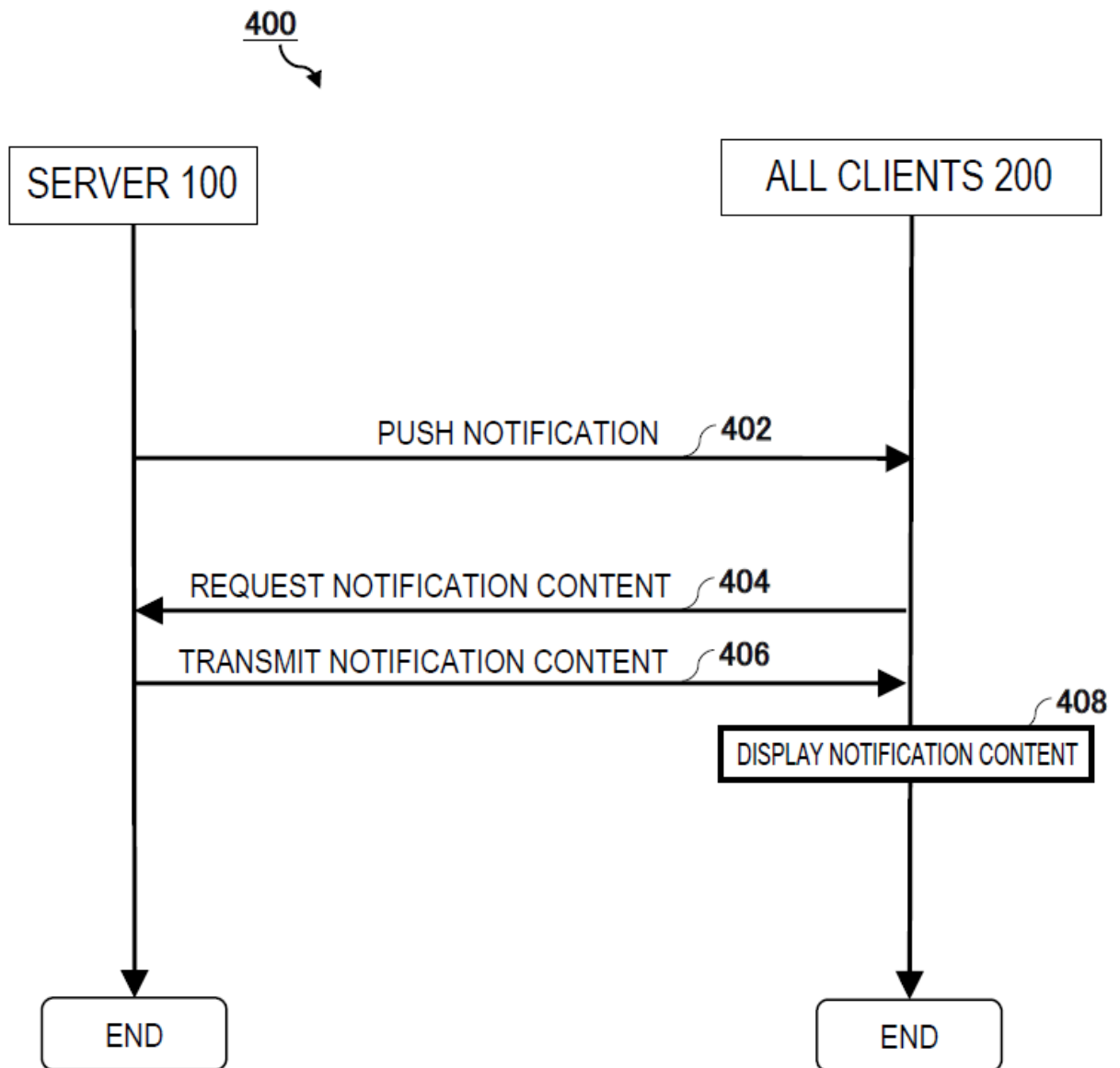


Fig. 5

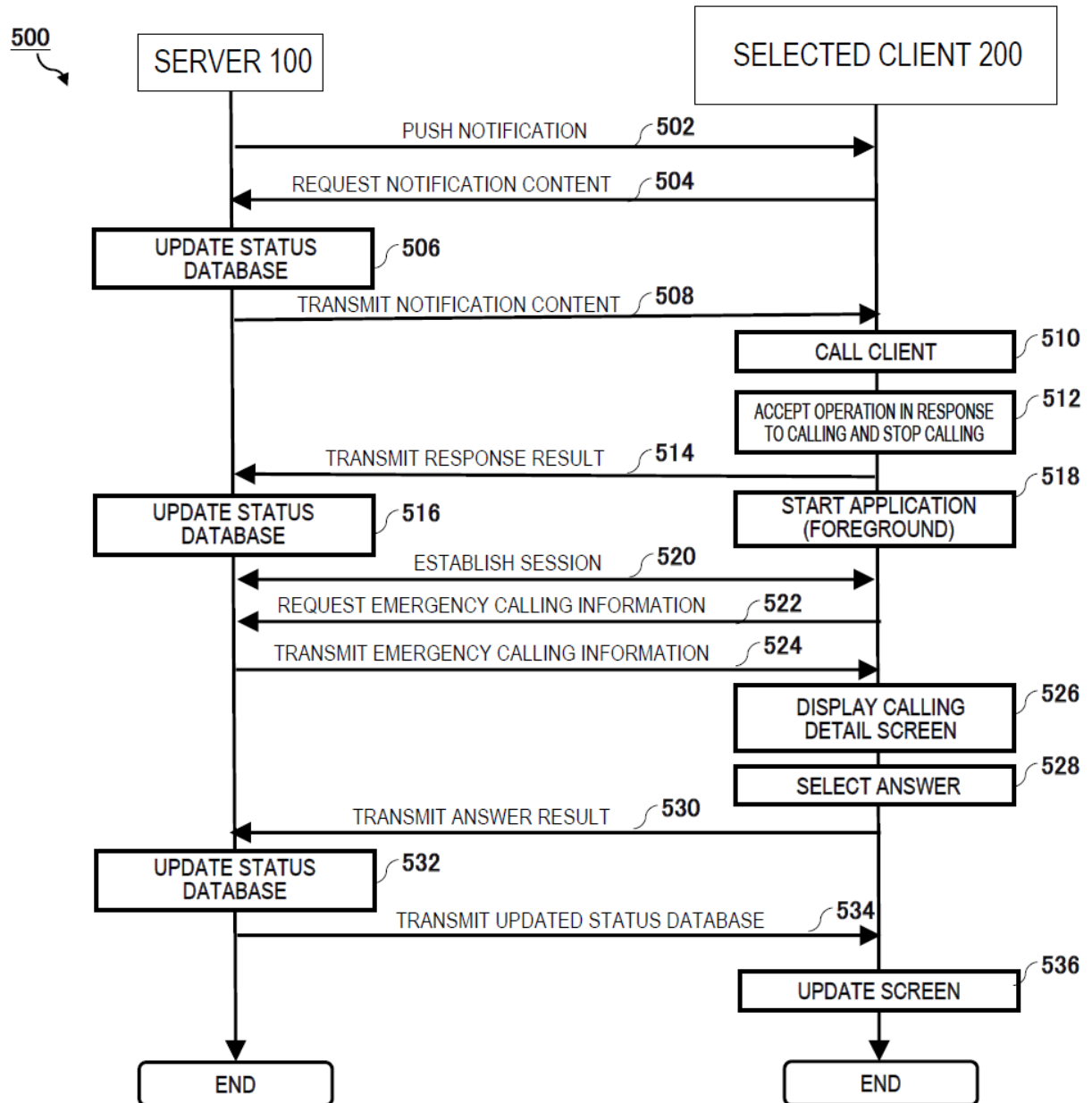


Fig. 6A

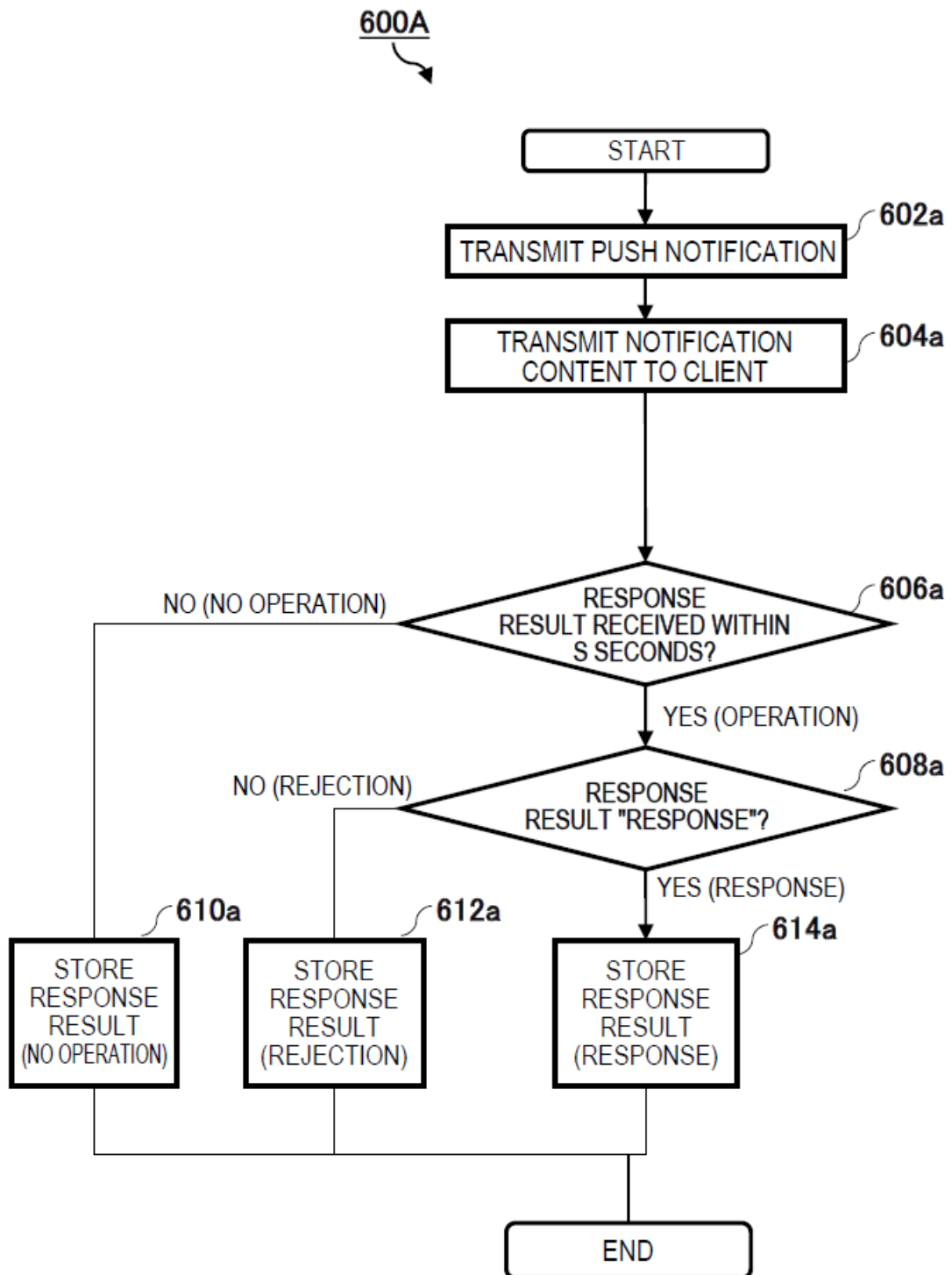


Fig. 6B

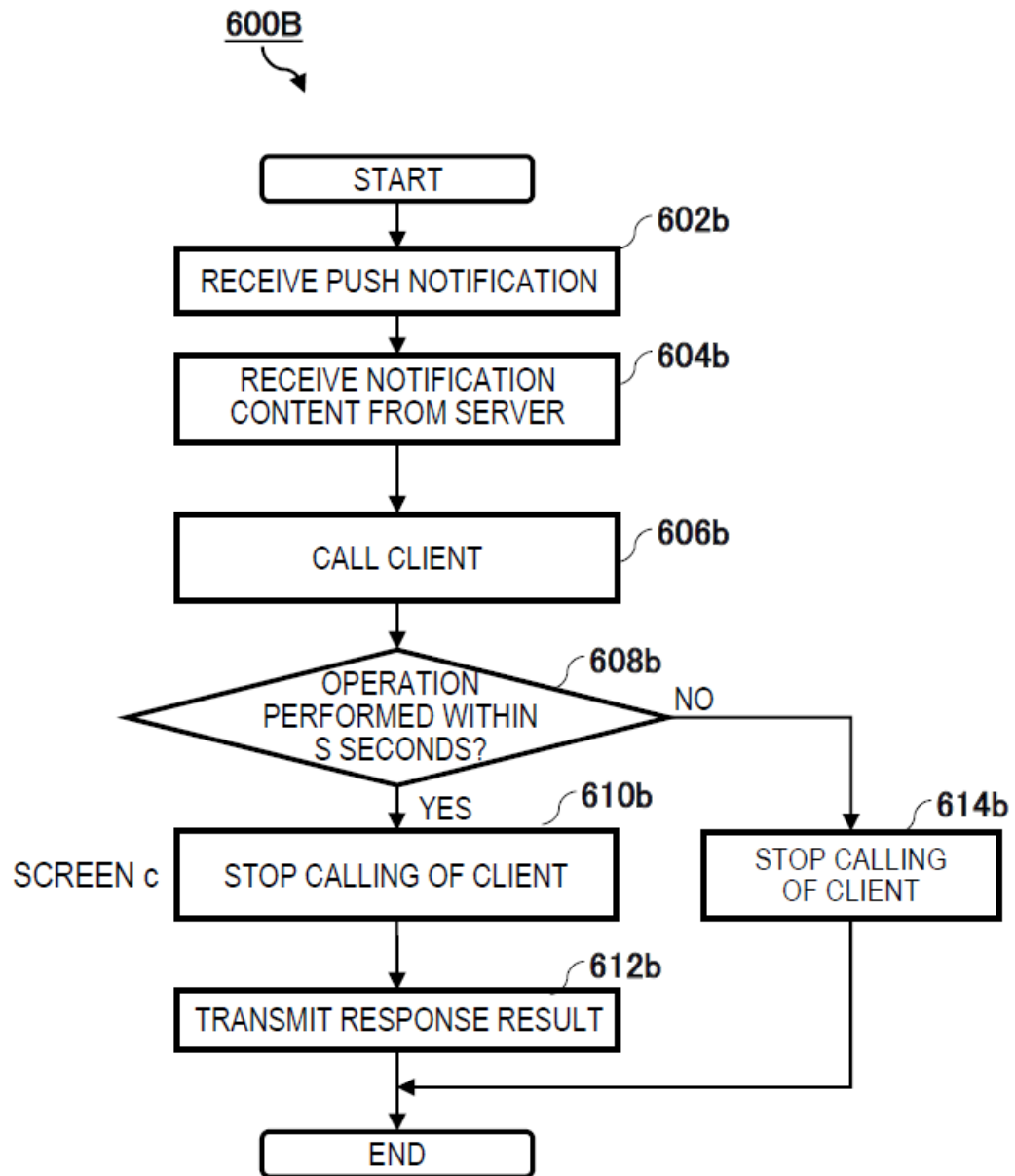


Fig. 7A

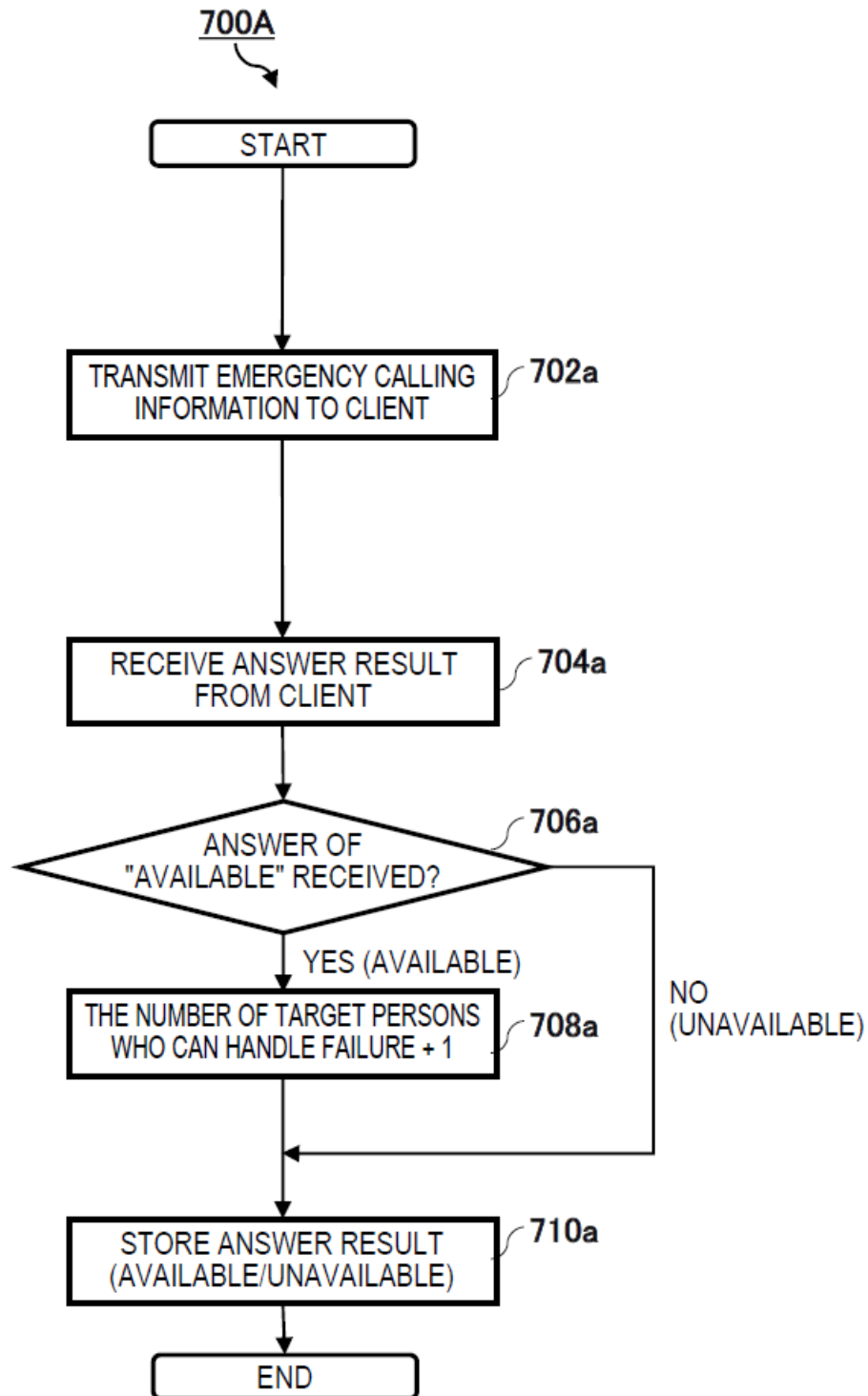


Fig. 7B

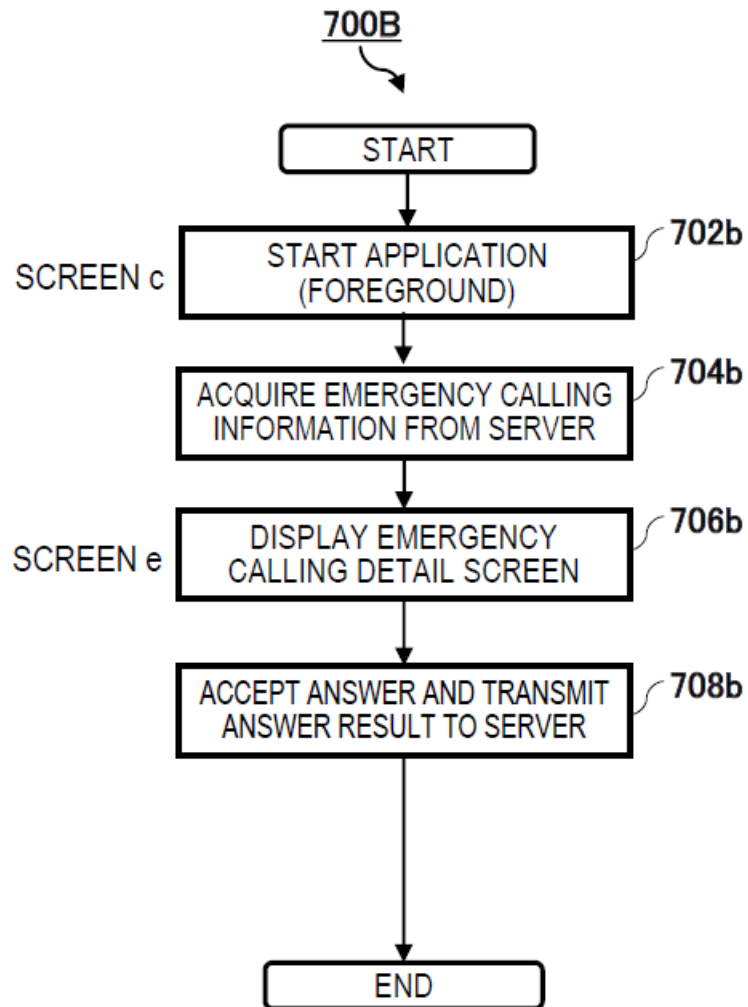


Fig. 8

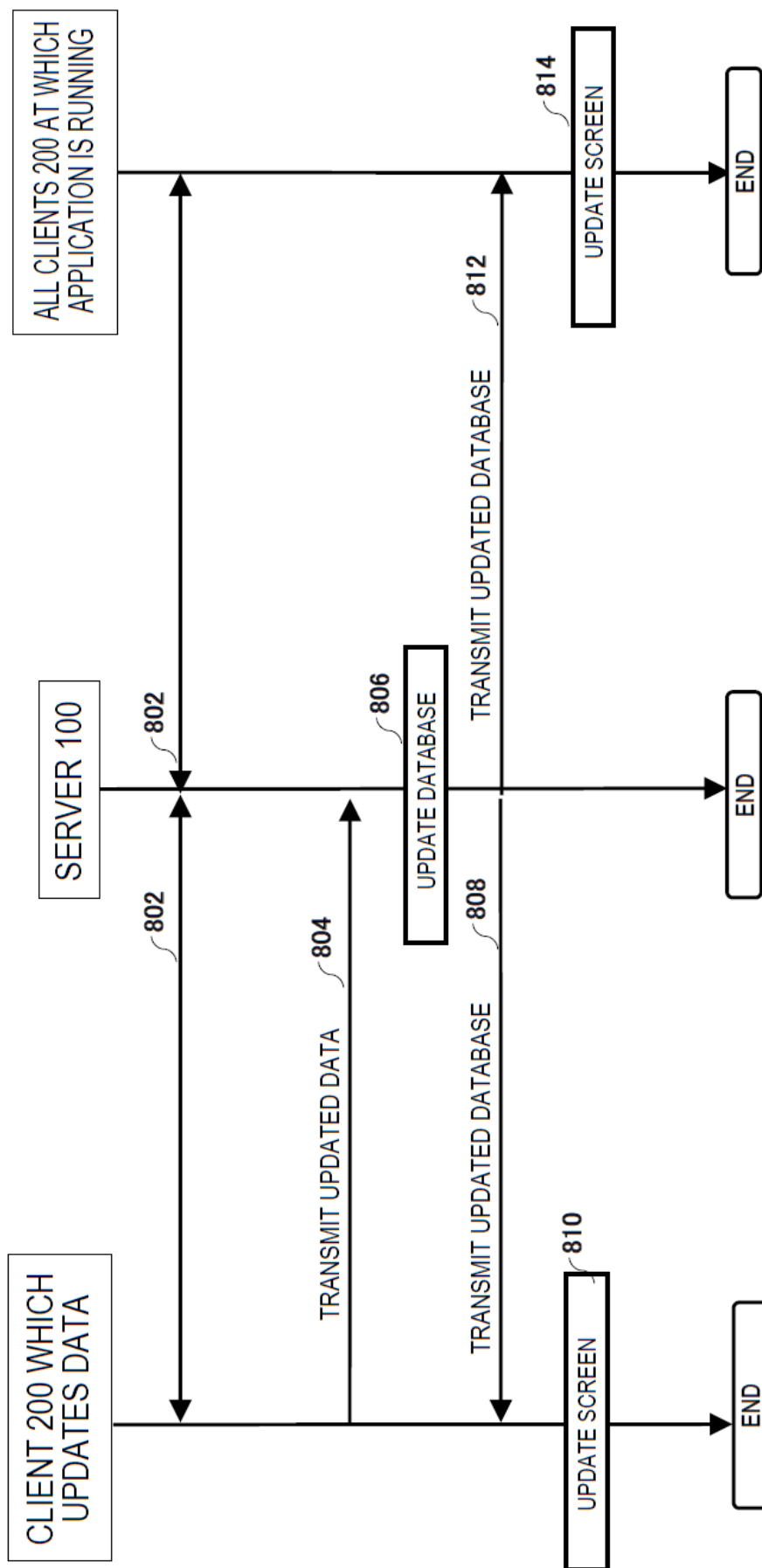


Fig. 9

SCREEN TRANSITION DIAGRAM

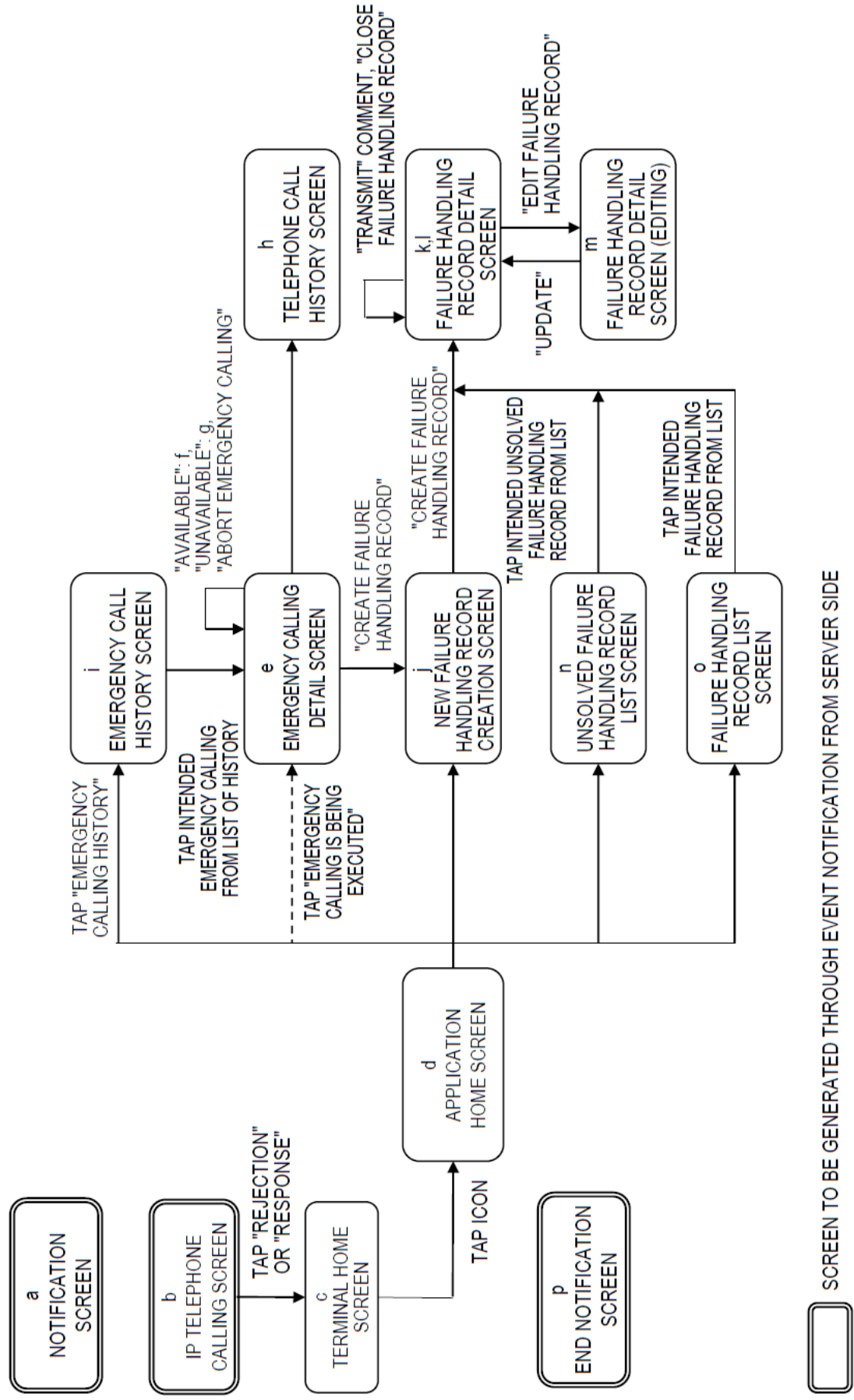


Fig. 10A

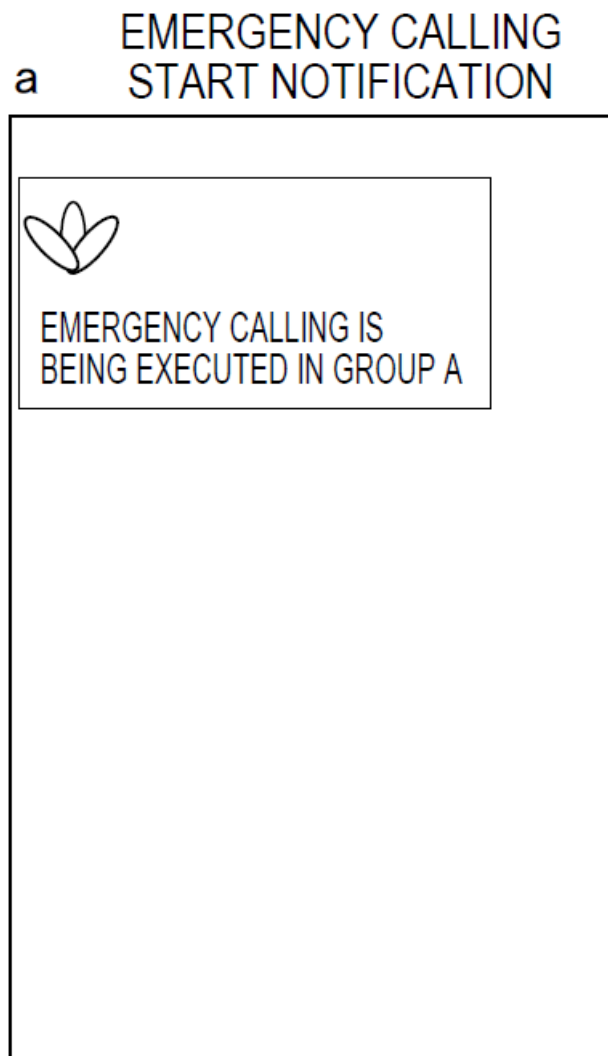


Fig. 10B

b IP TELEPHONE CALLING

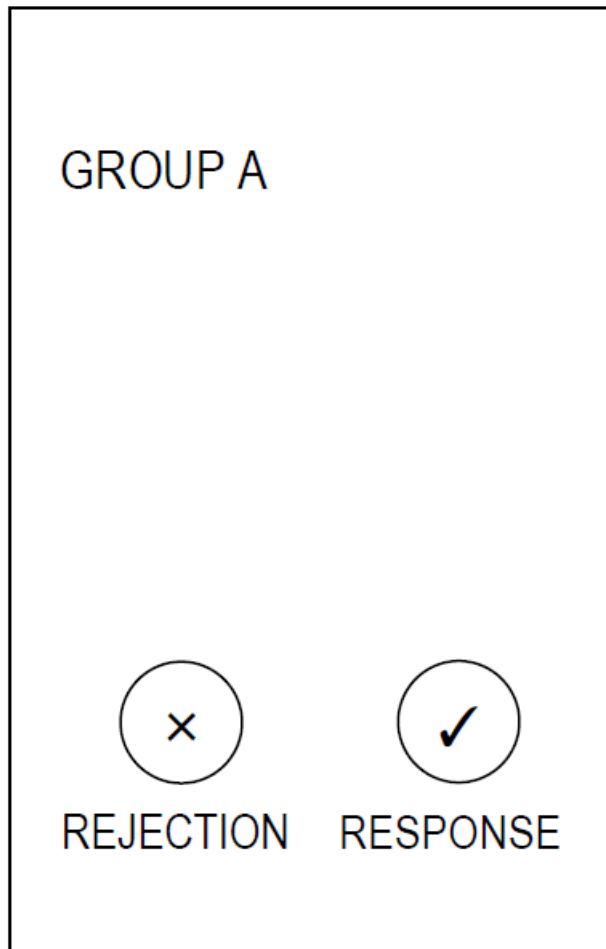


Fig. 10C

c TERMINAL HOME SCREEN

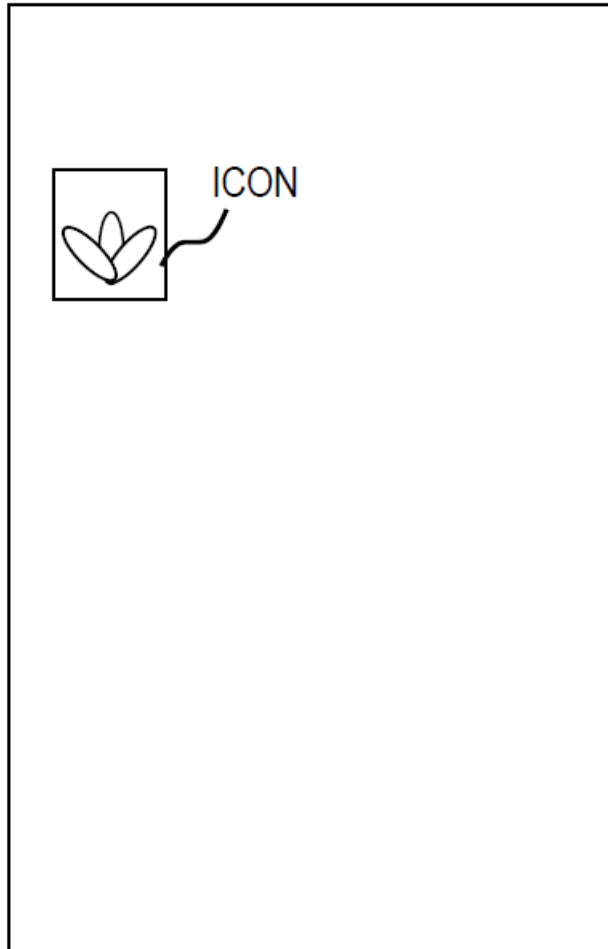


Fig. 10D

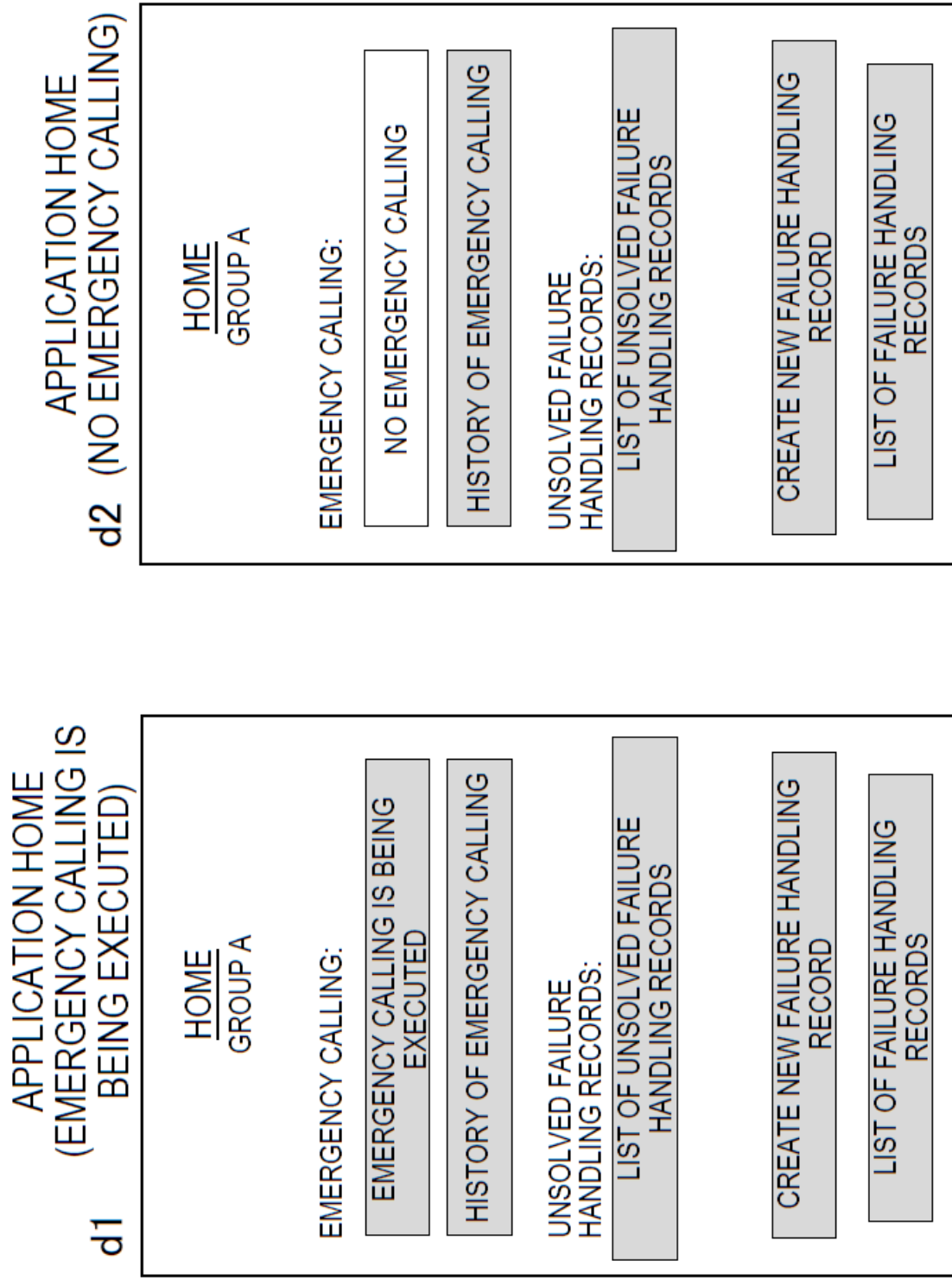


Fig. 10E

e EMERGENCY CALLING DETAIL (UNANSWERED)

DETAILS OF EMERGENCY CALLING GROUP A YOU NEED TO ANSWER CALLING SOURCE INFORMATION PERSON WHO HAS EXECUTED EMERGENCY CALLING: TARO KONO REASON FOR EMERGENCY CALLING: FAILURE OCCURRED AT SERVER 1 CREATE FAILURE HANDLING RECORD RESPOND AVAILABLE UNAVAILABLE CALLING STATUS PERSON WHO HANDLES FAILURE : EMERGENCY CALLING ELAPSED PERIOD: 80 SECONDS START OF EMERGENCY CALLING: 2019/02/25 17:01:52 COMPLETION OF EMERGENCY CALLING: -	EMERGENCY CALLING LIST PERSON IN CHARGE: REN SATO CALLING RESULT: NO OPERATION CALLING PERIOD: 2019/02/25 17:01:52 - 2019/02/25 17:02:52 PERSON IN CHARGE: MINATO SUZUKI CALLING RESULT: UNAVAILABLE CALLING PERIOD: 2019/02/25 17:02:53 - 2019/02/25 17:03:10 PERSON IN CHARGE: HIROTO TAKAHASHI CALLING RESULT: ANSWERING CALLING PERIOD: 2019/02/25 17:03:11 - 2019/02/25 17:03:20 PERSON IN CHARGE: YAMATO TANAKA CALLING RESULT: - CALLING PERIOD: - PERSON IN CHARGE: HINATO WATANABE CALLING RESULT: - CALLING PERIOD: - TELEPHONE CALL HISTORY ABORT EMERGENCY CALLING CONTINUED ON RIGHT DRAWING
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Fig. 10F

f EMERGENCY CALLING DETAIL
(ANSWERED, AFTER EMERGENCY CALLING IS COMPLETED)

DETAILS OF EMERGENCY CALLING GROUP A CALLING SOURCE INFORMATION PERSON WHO HAS EXECUTED EMERGENCY CALLING: TARO KONO REASON FOR EMERGENCY CALLING: FAILURE OCCURRED AT SERVER 1 CREATE FAILURE HANDLING RECORD RESPOND ANSWERED: AVAILABLE CALLING STATUS PERSON WHO HANDLES FAILURE: HIROTO TAKAHASHI EMERGENCY CALLING ELAPSED PERIOD: 93 SECONDS START OF EMERGENCY CALLING: 2019/02/25 17:01:52 COMPLETION OF EMERGENCY CALLING: 2019/02/25 17:03:25	EMERGENCY CALLING LIST PERSON IN CHARGE: REN SATO CALLING RESULT: NO OPERATION CALLING PERIOD: 2019/02/25 17:01:52 – 2019/02/25 17:02:52 PERSON IN CHARGE: MINATO SUZUKI CALLING RESULT: UNAVAILABLE CALLING PERIOD: 2019/02/25 17:02:53 – 2019/02/25 17:03:10 PERSON IN CHARGE: HIROTO TAKAHASHI CALLING RESULT: AVAILABLE CALLING PERIOD: 2019/02/25 17:03:11 – 2019/02/25 17:03:25 PERSON IN CHARGE: YAMATO TANAKA CALLING RESULT: - CALLING PERIOD: - PERSON IN CHARGE: HINATO WATANABE CALLING RESULT: - CALLING PERIOD: - TELEPHONE CALL HISTORY
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CONTINUED
ON RIGHT
DRAWING

Fig. 10G

g EMERGENCY CALLING DETAIL
(ANSWERED, EMERGENCY CALLING IS ONGOING)

DETAILS OF EMERGENCY CALLING GROUP A CALLING SOURCE INFORMATION PERSON WHO HAS EXECUTED EMERGENCY CALLING: TARO KONO REASON FOR EMERGENCY CALLING: FAILURE OCCURRED AT SERVER 1 CREATE FAILURE HANDLING RECORD RESPOND ANSWERED: UNAVAILABLE AVAILABLE UNAVAILABLE CALLING STATUS PERSON WHO HANDLES FAILURE: HIROTO TAKAHASHI EMERGENCY CALLING ELAPSED PERIOD: 80 SECONDS START OF EMERGENCY CALLING: 2019/02/25 17:01:52 COMPLETION OF EMERGENCY CALLING: - CONTINUED ON RIGHT DRAWING	EMERGENCY CALLING LIST PERSON IN CHARGE: REN SATO CALLING RESULT: NO OPERATION CALLING PERIOD: 2019/02/25 17:01:52 – 2019/02/25 17:02:52 PERSON IN CHARGE: MINATO SUZUKI CALLING RESULT: UNAVAILABLE CALLING PERIOD: 2019/02/25 17:02:53 – 2019/02/25 17:03:10 PERSON IN CHARGE: HIROTO TAKAHASHI CALLING RESULT: ANSWERING CALLING PERIOD: 2019/02/25 17:03:11 – 2019/02/25 17:03:20 PERSON IN CHARGE: YAMATO TANAKA CALLING RESULT: - CALLING PERIOD: - PERSON IN CHARGE: HINATO WATANABE CALLING RESULT: - CALLING PERIOD: - TELEPHONE CALL HISTORY ABORT EMERGENCY CALLING
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Fig. 10H

h TELEPHONE CALL HISTORY

TELEPHONE CALL HISTORY
GROUP A

PERSON IN CHARGE: HIROTO TAKAHASHI
CALLING RESULT: AVAILABLE
CALLING PERIOD: 2019/02/25 17:03:11 – 2019/02/25 17:03:25

PERSON IN CHARGE: MINATO SUZUKI
CALLING RESULT: UNAVAILABLE
CALLING PERIOD: 2019/02/25 17:02:53 – 2019/02/25 17:03:10

PERSON IN CHARGE: REN SATO
CALLING RESULT: NO OPERATION
CALLING PERIOD: 2019/02/25 17:01:52 – 2019/02/25 17:02:52

⋮

Fig. 10I

I EMERGENCY CALLING HISTORY

<u>EMERGENCY CALLING HISTORY</u>
GROUP A
EMERGENCY CALLING ID: #XXXXXXXXXXXXXXXXXX EMERGENCY CALLING RESULT: SUCCESS REASON FOR EMERGENCY CALLING: FAILURE OCCURRED AT SERVER 1 2019/02/25 17:01:52 – 2019/02/25 17:03:25
EMERGENCY CALLING ID: #XXXXXXXXXXXXXXXXXX EMERGENCY CALLING RESULT: SUCCESS REASON FOR EMERGENCY CALLING: FAILURE OCCURRED AT SERVER 2 2019/02/02 00:25:14 – 2019/02/02 00:35:01
EMERGENCY CALLING ID: #XXXXXXXXXXXXXXXXXX EMERGENCY CALLING RESULT: SUCCESS REASON FOR EMERGENCY CALLING: DISCONNECTION OF LINE WAS DETECTED 2018/12/31 04:21:39 – 2018/12/31 04:55:20
⋮

Fig. 10J

j

NEW FAILURE HANDLING
RECORD CREATION

NEW FAILURE HANDLING
RECORD CREATION
GROUP A

TITLE:

DETAIL:

CREATE FAILURE
HANDLING RECORD

Fig. 10K

K FAILURE HANDLING RECORD DETAIL (UNSOLVED)

DETAIL OF FAILURE HANDLING RECORD

TITLE: FAILURE AT SERVER 1

DETAIL:

HARDWARE FAILURE OCCURRED AT SERVER 1

DATE AND TIME OF CREATION: 2019/02/25 17:05:15

STATUS: UNSOLVED

PERSON WHO HANDLES FAILURE: HIROTO TAKAHASHI

EDIT FAILURE HANDLING RECORD

CLOSE FAILURE HANDLING RECORD

HANDLING HISTORY:

TARO KONO EXECUTED EMERGENCY CALLING
2019/02/25 17:01:52

HIROTO TAKAHASHI ANSWERED "AVAILABLE"
EMERGENCY CALLING ENDED
2019/02/25 17:03:25

CONTINUED ON RIGHT DRAWING

HIROTO TAKAHASHI CREATED FAILURE HANDLING RECORD
2019/02/25 17:05:15

HIROTO TAKAHASHI 2019/02/25 17:07:00
CANNOT LOG IN SERVER 1

MINATO SUZUKI 2019/02/25 17:07:15
PLEASE CONFIRM WHETHER SERVER 1 IS POWERED ON

HIROTO TAKAHASHI 2019/02/25 17:07:00
SERVER 1 IS POWERED DOWN

HINATO WATANABE 2019/02/25 17:08:01
PLEASE CONTACT MAINTENANCE SERVICE TO REQUEST REPAIR

HIROTO TAKAHASHI 2019/02/25 17:21:05
REQUESTED REPAIR

CONTINUED ON RIGHT DRAWING

HIROTO TAKAHASHI 2019/02/25 18:50:32
REPAIR WAS COMPLETED AND RESTORED

ADD COMMENT:

TRANSMIT

Fig. 10L

I FAILURE HANDLING RECORD DETAIL (SOLVED)

DETAIL OF FAILURE HANDLING RECORD

TITLE: FAILURE AT SERVER 1

DETAIL:

HARDWARE FAILURE OCCURRED AT SERVER 1

CONTACTED MAINTENANCE SERVICE AND REPAIRED FAILURE

DATE AND TIME OF CREATION: 2019/02/25 17:05:15

STATUS: SOLVED

PERSON WHO HANDLES FAILURE: HIROTO TAKAHASHI

EDIT FAILURE HANDLING RECORD

HISTORY OF HANDLING:

TARO KONO EXECUTED EMERGENCY CALLING
2019/02/25 17:01:52

HIROTO TAKAHASHI ANSWERED "AVAILABLE"
EMERGENCY CALLING ENDS
2019/02/25 17:03:25

CONTINUED ON RIGHT DRAWING

HIROTO TAKAHASHI CREATED FAILURE HANDLING RECORD
2019/02/25 17:05:15

HIROTO TAKAHASHI
2019/02/25 17:07:00
CANNOT LOG IN SERVER 1

MINATO SUZUKI
2019/02/25 17:07:15
PLEASE CONFIRM WHETHER SERVER 1 IS POWERED ON

HIROTO TAKAHASHI
2019/02/25 17:07:00
SERVER 1 IS POWERED DOWN

HINATO WATANABE
2019/02/25 17:08:01
PLEASE CONTACT MAINTENANCE SERVICE TO REQUEST REPAIR

HIROTO TAKAHASHI
2019/02/25 17:21:05
REQUESTED REPAIR

CONTINUED ON RIGHT DRAWING

HIROTO TAKAHASHI
2019/02/25 18:50:32
REPAIR WAS COMPLETED AND RESTORED

HIROTO TAKAHASHI CLOSED FAILURE HANDLING RECORD
2019/02/25 19:00:00

ADD COMMENT:

TRANSMIT

Fig. 10M

m FAILURE HANDLING RECORD
DETAIL (EDITING)

<u>DETAIL OF FAILURE HANDLING RECORD</u>	
GROUP A	
TITLE:	
FAILURE AT SERVER 1	
DETAIL:	
HARDWARE FAILURE OCCURRED AT SERVER 1 CONTACTED MAINTENANCE SERVICE AND REPAIRED FAILURE	
UPDATE	
DATE AND TIME OF CREATION: 2019/02/25 17:05:15 STATUS: UNSOLVED PERSON WHO HANDLES FAILURE: HIROTO TAKAHASHI	

Fig. 10N

n UNSOLVED FAILURE HANDLING
RECORD LIST

<u>LIST OF UNSOLVED FAILURE HANDLING RECORDS</u> GROUP A
TITLE: FAILURE AT SERVER 1 FAILURE HANDLING RECORD ID: #XXXXXXXXXXXXXXXXXX 2019/02/25 17:05:15

O

GROUP A

-
-
-

Fig. 10P

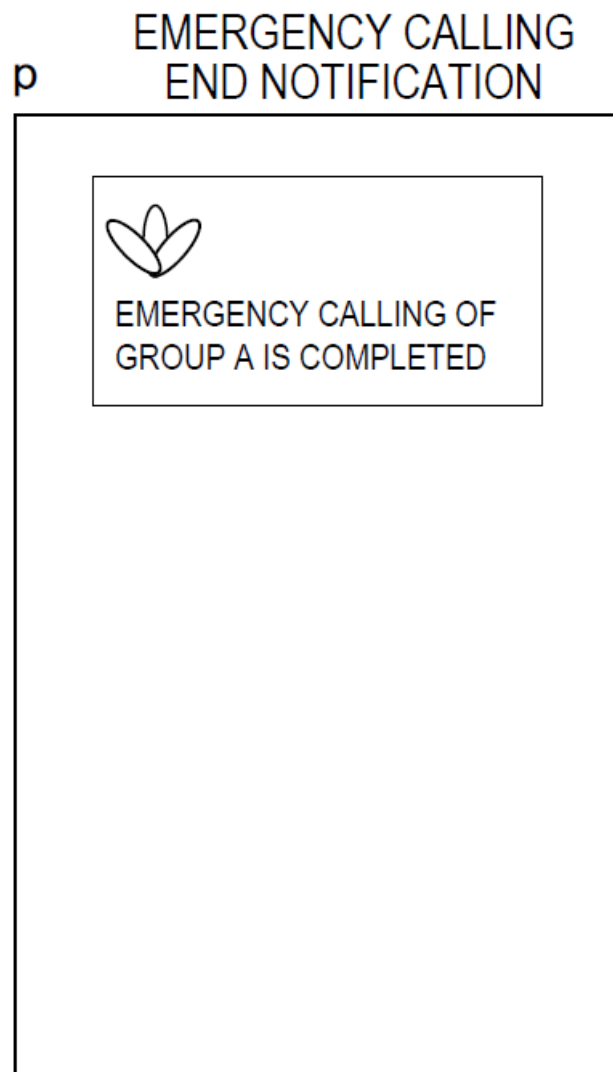


Fig. 11

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GROUP A	
PRIORITY	NAME
1	REN SATO
2	MINATO SUZUKI
3	HIROTO TAKAHASHI
4	YAMATO TANAKA
5	HINATO WATANABE

Fig. 12

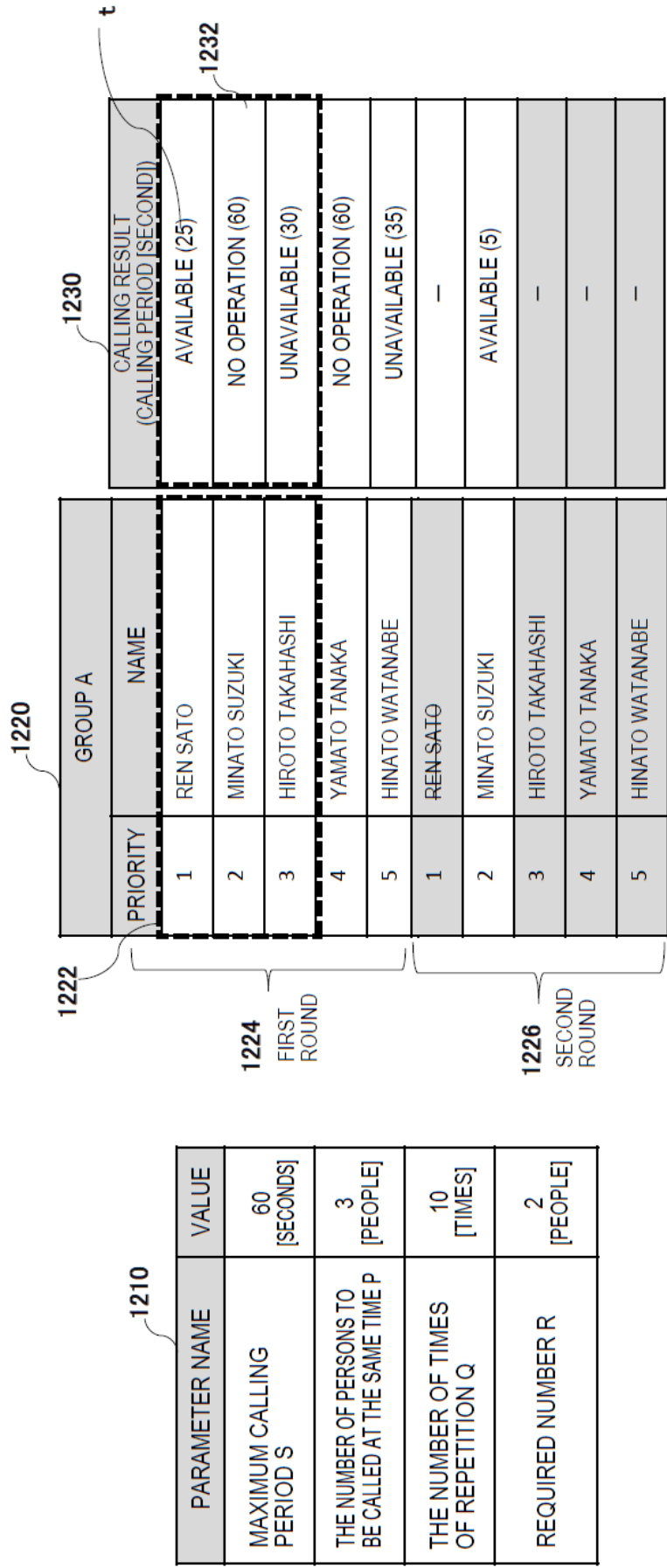


Fig. 13A

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FAILURE HANDLING CANDIDATE GROUP TABLE							
FAILURE HANDLING CANDIDATE GROUP ID	FAILURE HANDLING CANDIDATE GROUP NAME	EXPLANATION OF GROUP	MINIMUM REQUIRED NUMBER R	MAXIMUM CALLING PERIOD S	THE NUMBER OF PERSONS TO BE CALLED AT THE SAME TIME P	THE NUMBER OF TIMES OF REPETITION Q	FAILURE HANDLING CANDIDATE
0000A	GROUP A	PERSON IN CHARGE OF SYSTEM A	2	60	3	10	0000A.json
0000B	GROUP B	PERSON IN CHARGE OF SYSTEM B	1	120	1	99	0000B.json

0000A.json
{
 "user_ids": [
 00001,
 00003,
 00006,
 00008,
 00004,
]
}

Fig. 13B

138

138A

EMERGENCY CALLING TABLE							
EMERGENCY CALLING ID	FAILURE HANDLING CANDIDATE GROUP ID	USER ID OF PERSON WHO HAS EXECUTED EMERGENCY CALLING	FAILURE HANDLING RECORD ID	EMERGENCY CALLING STATUS	EMERGENCY CALLING START TIME	EMERGENCY CALLING END TIME	REASON FOR EMERGENCY CALLING
10001	0000A	00005	30002	FAILURE	2019-01-18 04:21:32	2019-01-18 04:25:32	...
10002	0000A	00009	30001	SUCCESS	2019-02-25 17:01:52	2019-02-25 17:03:25	FAILURE OCCURRED AT SERVER 1
10003	0000B	00007	...				...
							...

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138B

TELEPHONE CALL TABLE						
TELEPHONE CALL ID	EMERGENCY CALLING ID	USER ID	TELEPHONE CALL STATUS	ANSWER RESULT	CALLING START TIME	CALLING END TIME
20001	10002	00001	NO OPERATION	-	2019-02-25 17:01:52	2019-02-25 17:02:52
20002	10002	00003	REJECTION	UNAVAILABLE	2019-02-25 17:02:53	2019-02-25 17:03:10
20003	10002	00006	RESPONSE	AVAILABLE	2019-02-25 17:03:11	2019-02-25 17:03:25
20004	10003	00007	ANSWERING	-	...	...

cts

cte