FIG. 1

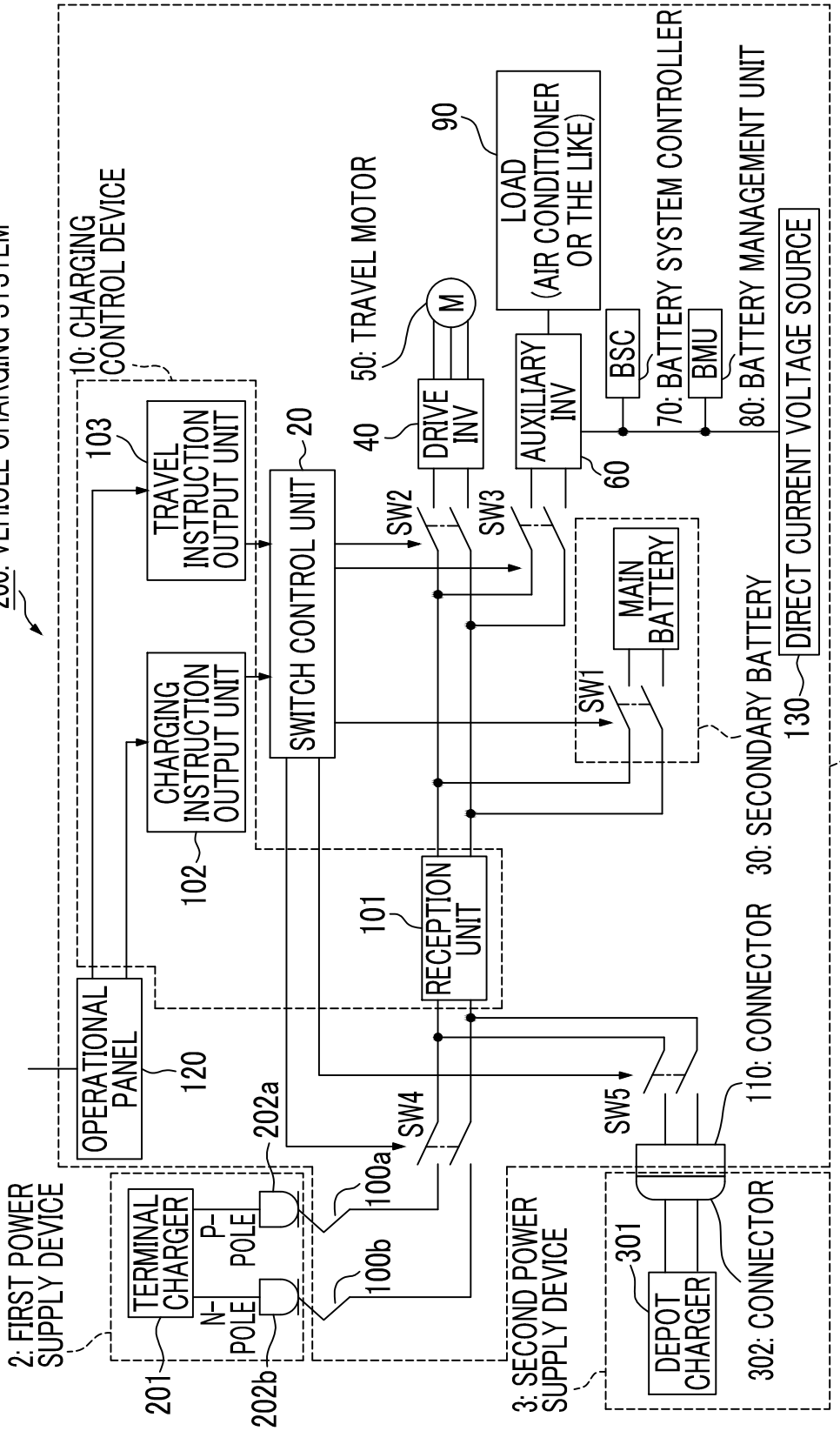

200: VEHICLE CHARGING SYSTEM
10: CHARGING CONTROL DEVICE
103
TRAVEL INSTRUCTION OUTPUT UNIT
102
CHARGING INSTRUCTION OUTPUT UNIT
20
SWITCH CONTROL UNIT
101
RECEPTION UNIT
120
OPERATIONAL PANEL
SW1
SW2
SW3
SW4
SW5
40
DRIVE INV
50: TRAVEL MOTOR
M
90
LOAD (AIR CONDITIONER OR THE LIKE)
AUXILIARY INV
60
BSC
70: BATTERY SYSTEM CONTROLLER
BMU
80: BATTERY MANAGEMENT UNIT
MAIN BATTERY
30: SECONDARY BATTERY
130
DIRECT CURRENT VOLTAGE SOURCE
1: VEHICLE
110: CONNECTOR
2: FIRST POWER SUPPLY DEVICE
TERMINAL CHARGER
201
P-POLE
202a
100a
N-POLE
202b
100b
3: SECOND POWER SUPPLY DEVICE
301
DEPOT CHARGER
302: CONNECTOR

FIG. 2

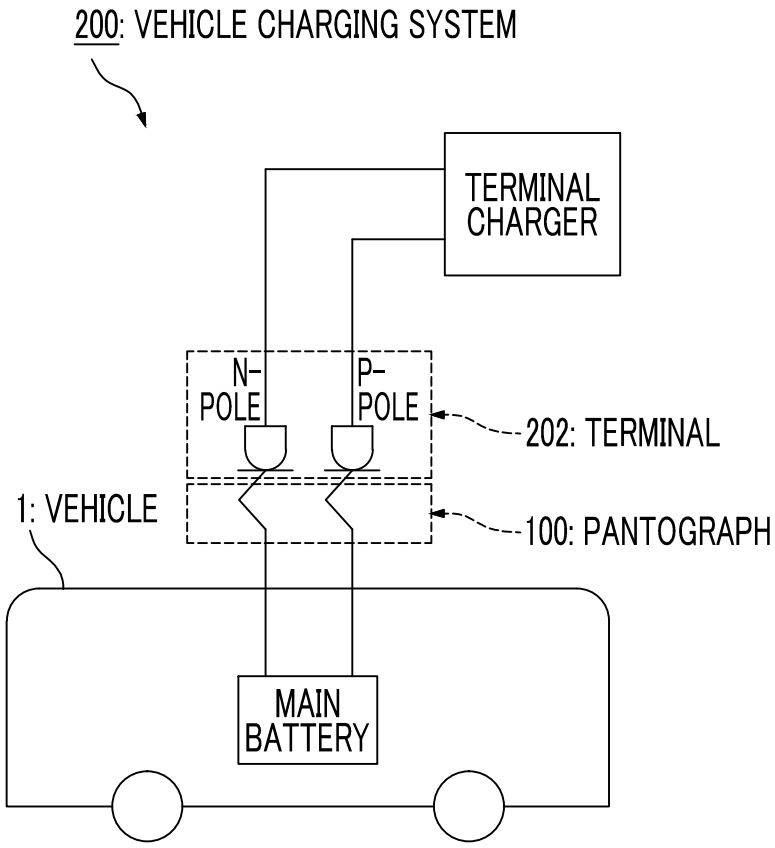

200: VEHICLE CHARGING SYSTEM
TERMINAL CHARGER
N-POLE
P-POLE
202: TERMINAL
1: VEHICLE
100: PANTOGRAPH
MAIN BATTERY

FIG. 3

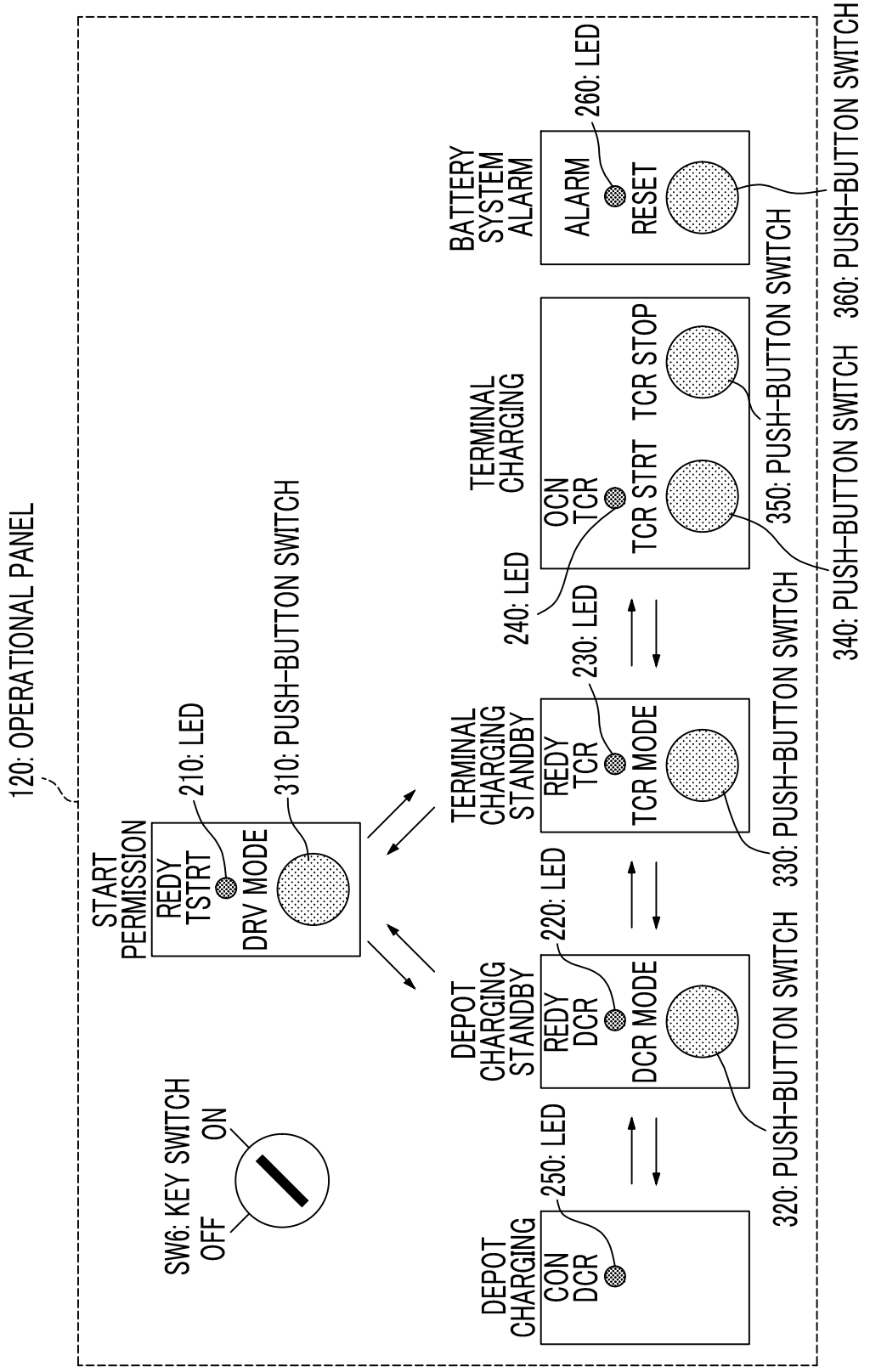

120: OPERATIONAL PANEL
START PERMISSION
REDY TSTRT
DRV MODE
210: LED
310: PUSH-BUTTON SWITCH
SW6: KEY SWITCH
ON
OFF
DEPOT CHARGING
CON DCR
250: LED
DEPOT CHARGING STANDBY
REDY DCR
DCR MODE
220: LED
320: PUSH-BUTTON SWITCH
TERMINAL CHARGING STANDBY
REDY TCR
TCR MODE
230: LED
330: PUSH-BUTTON SWITCH
TERMINAL CHARGING
OCN TCR
TCR STRT
TCR STOP
240: LED
350: PUSH-BUTTON SWITCH
340: PUSH-BUTTON SWITCH
BATTERY SYSTEM ALARM
ALARM
RESET
260: LED
360: PUSH-BUTTON SWITCH

FIG. 4

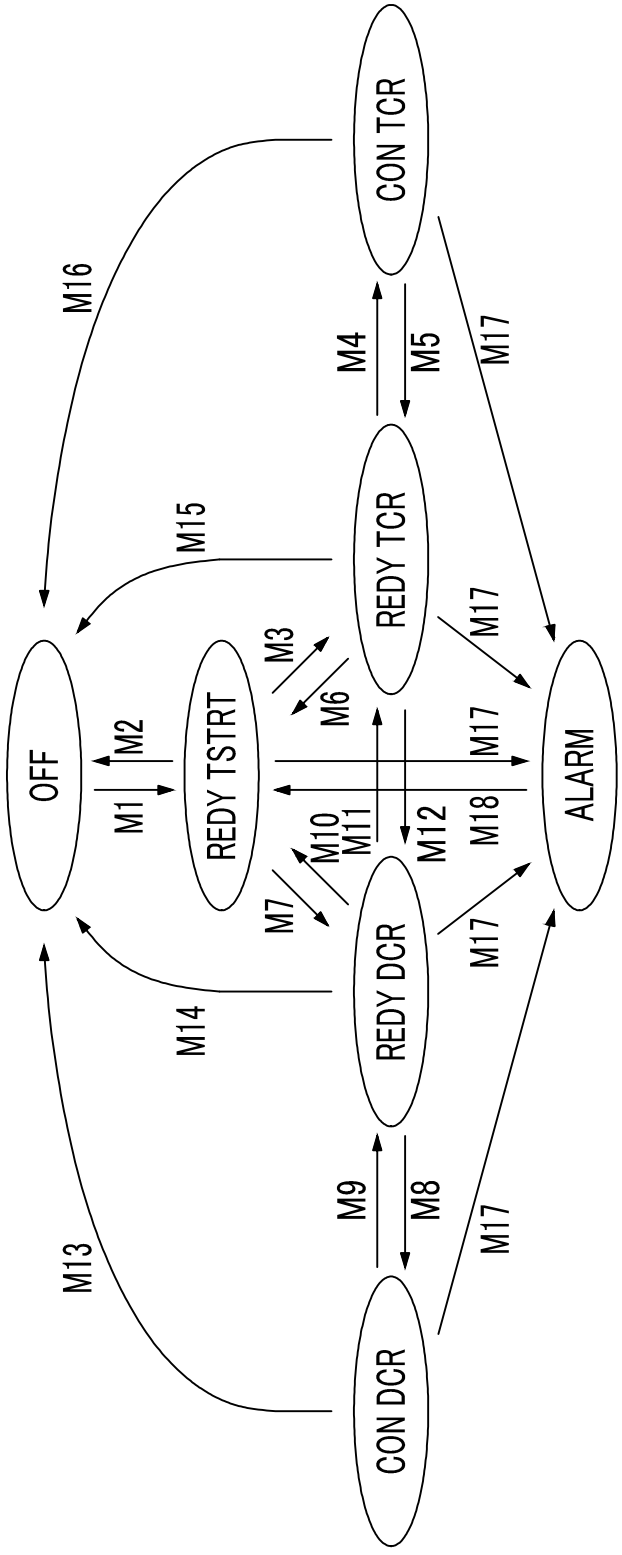

CON TCR
REDY TCR
REDY TSTRT
OFF
REDY DCR
CON DCR
ALARM
M1
M2
M3
M4
M5
M6
M7
M8
M9
M10
M11
M12
M13
M14
M15
M16
M17
M18

FIG. 5

MODE TRANSITION	OPERATION WHICH BECOMES TRIGGER FOR MODE TRANSITION	PROCESS IN MODE TRANSITION
M1	KEY SWITCH ON	SW1 Close, SW2 Close, SW3 Close, SW4 Open, SW5 Open
M2	KEY SWITCH OFF	SW3 Open, SW2 Open, SW1 Open, SW4 Open, SW5 Open
M3	TCR MODE BUTTON ON	SW2 Open
M4	TCR STRT BUTTON ON	SW4 Close
M5	TERMINAL CHARGING COMPLETION	SW4 Open
M6	DRV MODE BUTTON ON	SW2 Close
M7	DCR MODE BUTTON ON	SW2 Open, SW5 Close
M8	CHARGING START BUTTON OF DEPOT CHARGER ON (GROUND-SIDE DEPOT CHARGER OPERATION)	—
M9	DEPOT CHARGING COMPLETION	—
M10	DRV MODE BUTTON ON	SW2 Close, SW5 Open
M11	TCR MODE BUTTON ON	SW5 Open
M12	DCR MODE BUTTON ON	SW5 Close
M13	KEY SWITCH OFF	SW3 Open, SW1 Open, SW5 Open
M14	KEY SWITCH OFF	SW3 Open, SW1 Open, SW5 Open
M15	KEY SWITCH OFF	SW3 Open, SW1 Open
M16	KEY SWITCH OFF	SW3 Open, SW1 Open, SW4 Open
M17	ALARM GENERATION	ALL SW Open
M18	ALARM RESET	SW1 Close, SW2 Close, SW3 Close, SW4 Open, SW5 Open