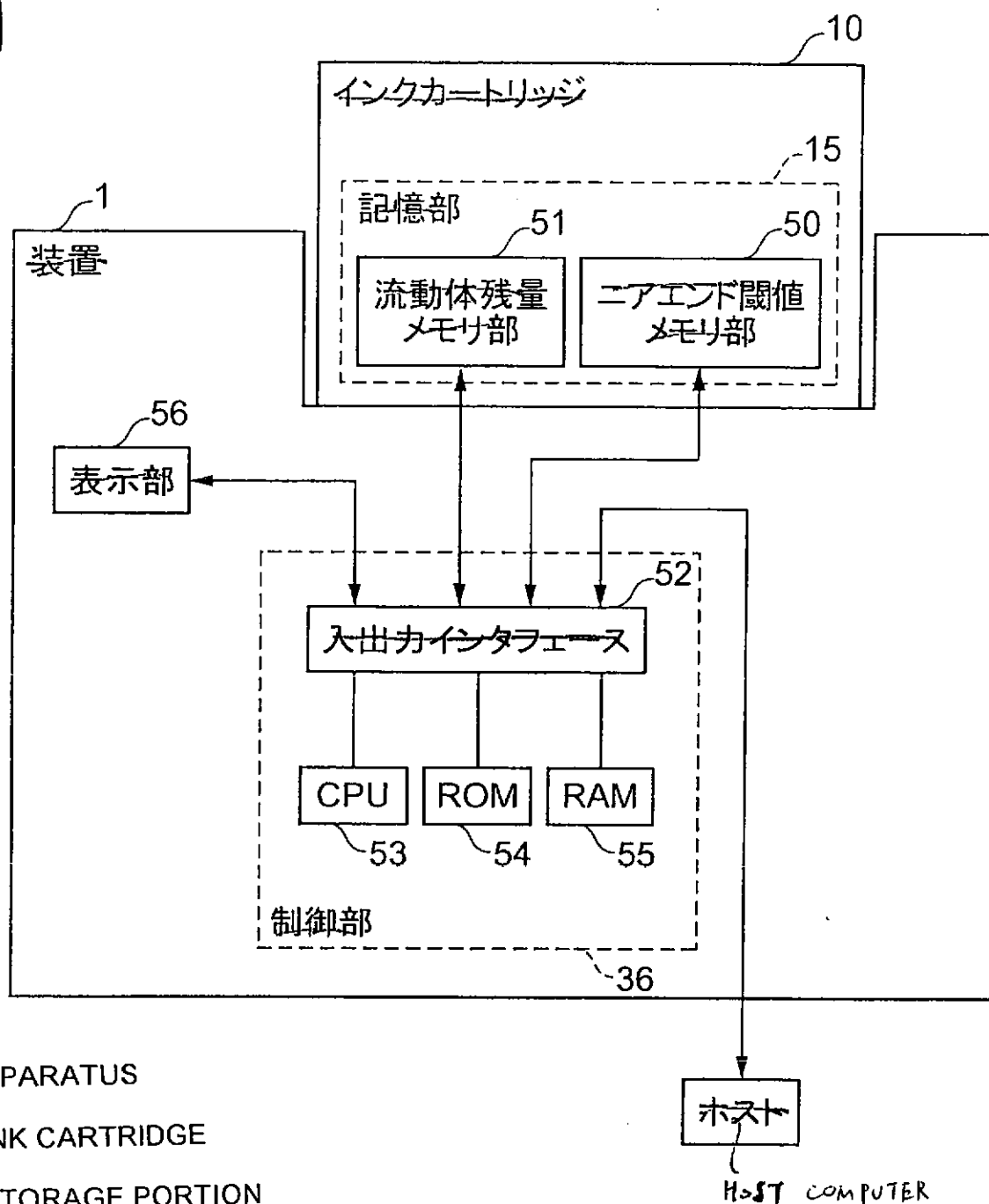


Fig. 1



1: APPARATUS

10: INK CARTRIDGE

15: STORAGE PORTION

36: CONTROL PORTION

51: INK RESIDUAL AMOUNT MEMORY PORTION

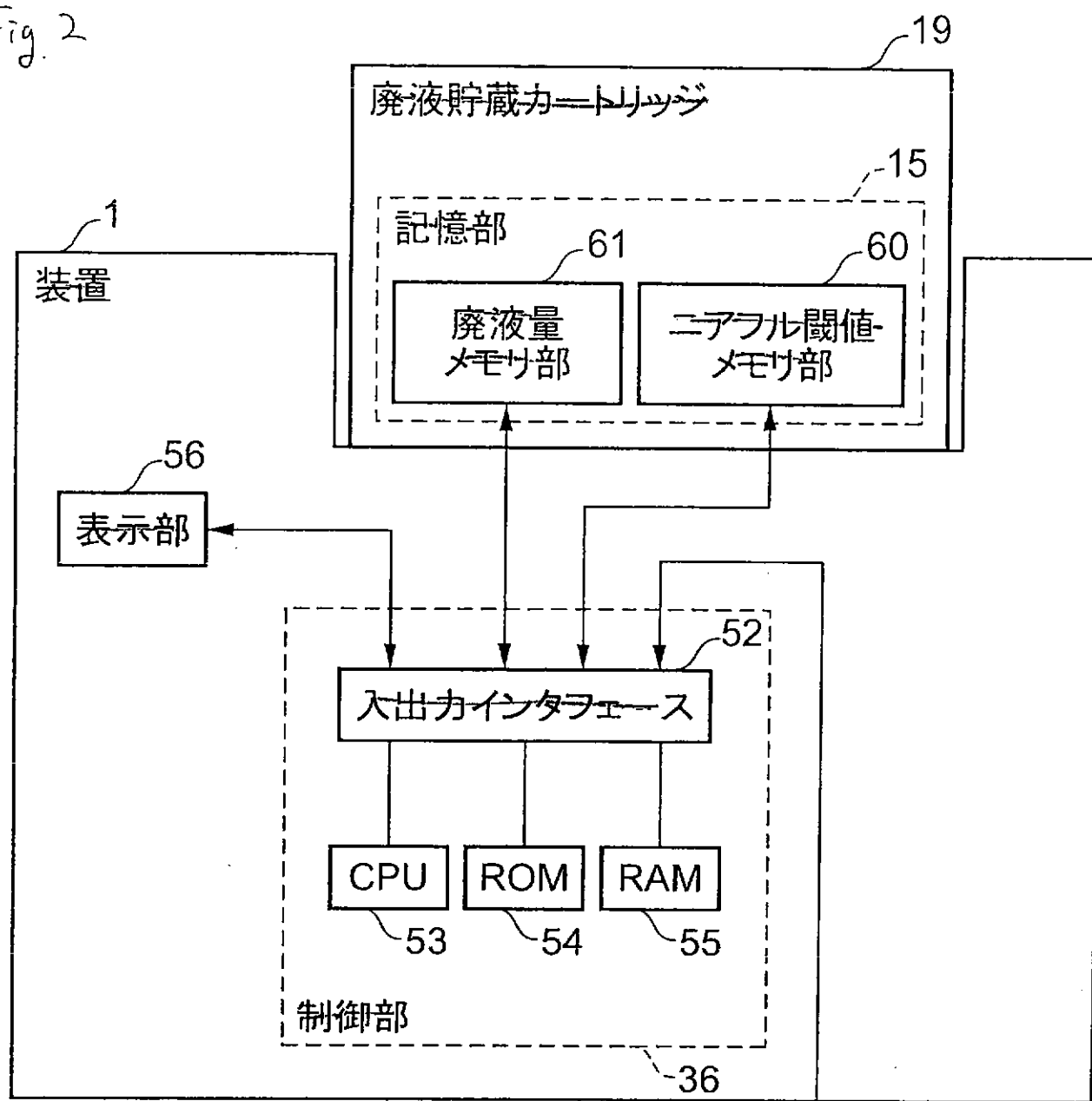
50: NEAR-END THRESHOLD MEMORY PORTION

52: INPUT/OUTPUT INTERFACE

56: DISPLAY PORTION

HOST COMPUTER

Fig. 2



1: APPARATUS

15: STORAGE PORTION

19: WASTE LIQUID AMOUNT MEMORY PORTION

36: CONTROL PORTION

52: INPUT/OUTPUT INTERFACE

56: DISPLAY PORTION

60: NEAR-FULL THRESHOLD MEMORY PORTION

61: WASTE LIQUID STORAGE CARTRIDGE

ホスト

HOST COMPUTER

Fig. 3

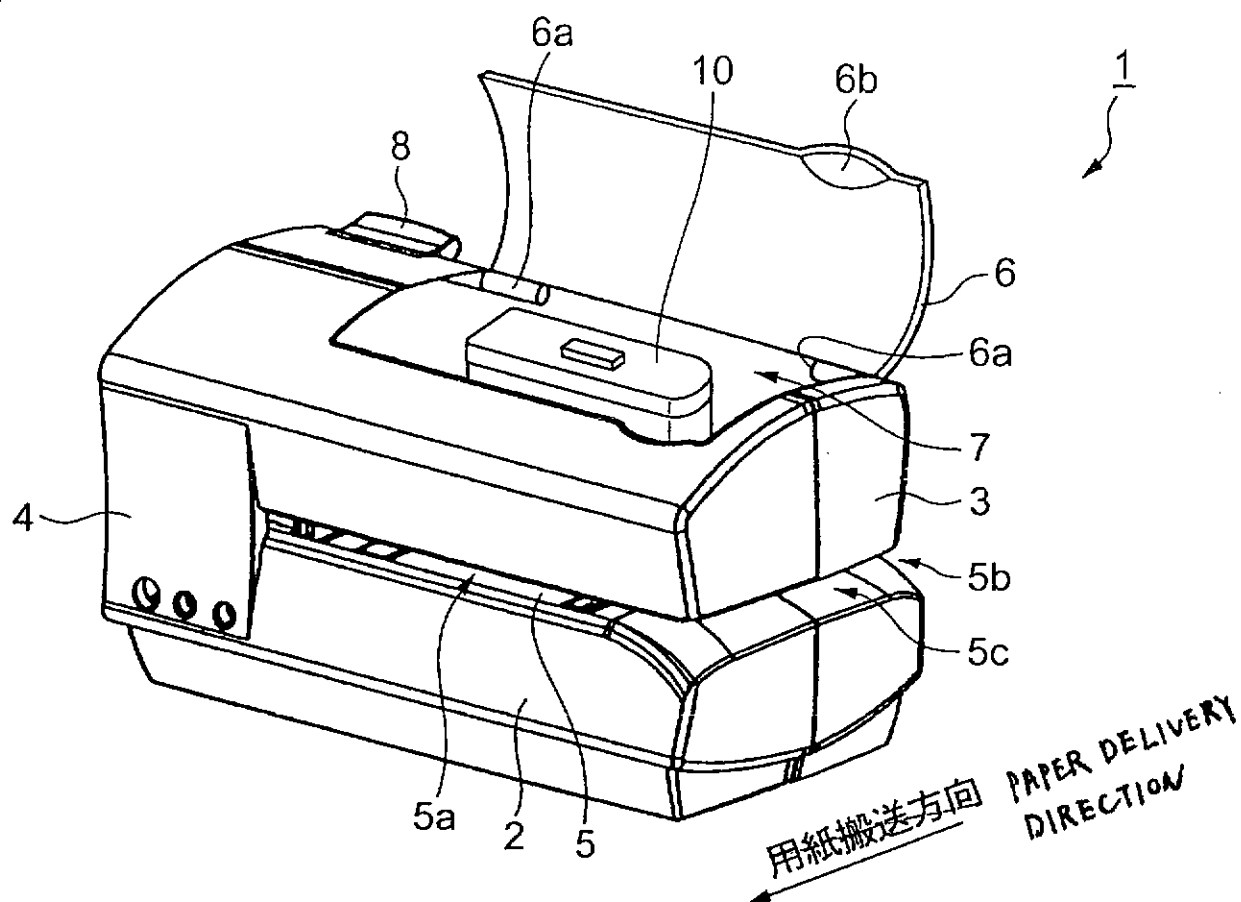


Fig. 4

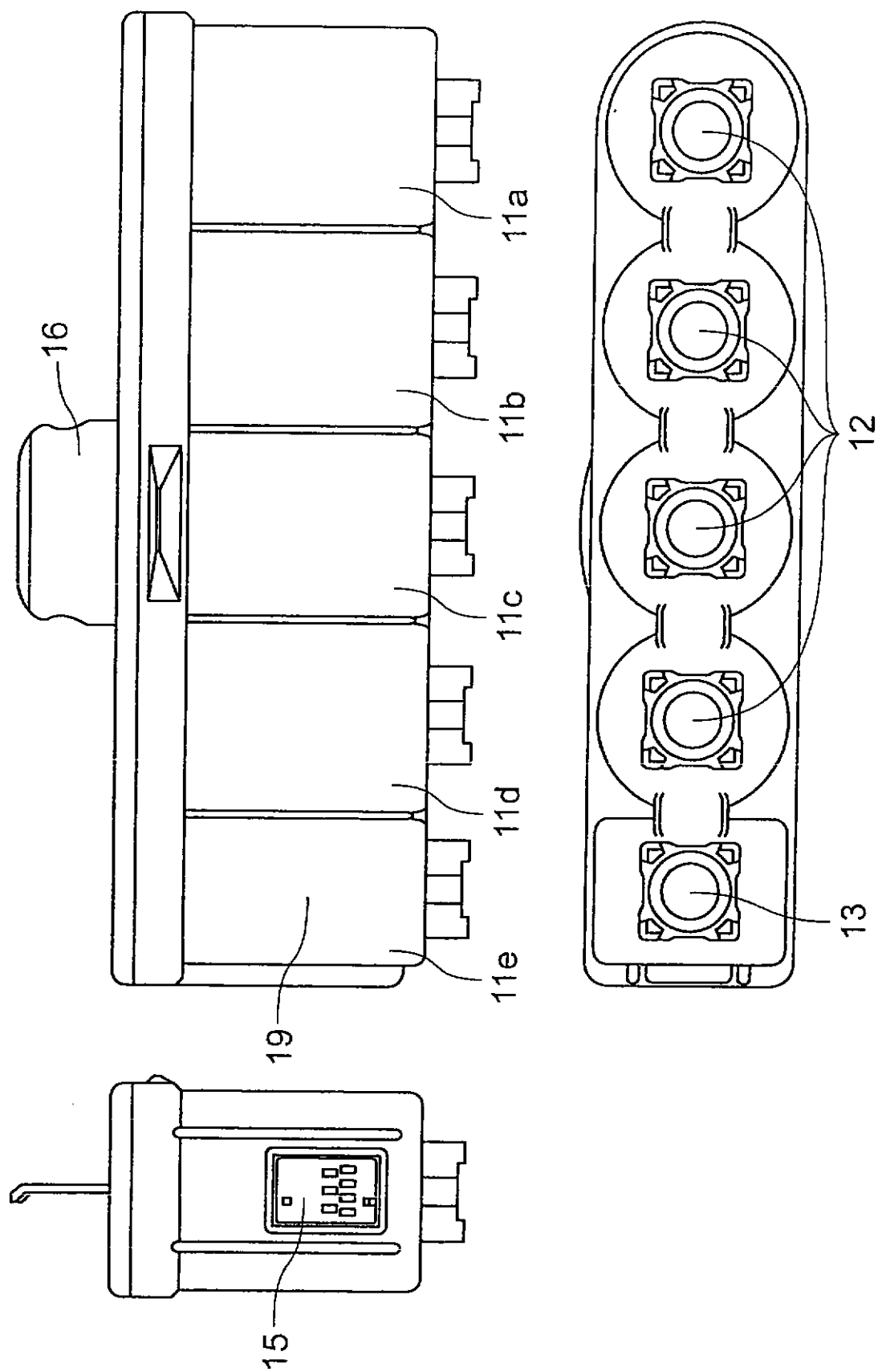


Fig. 5

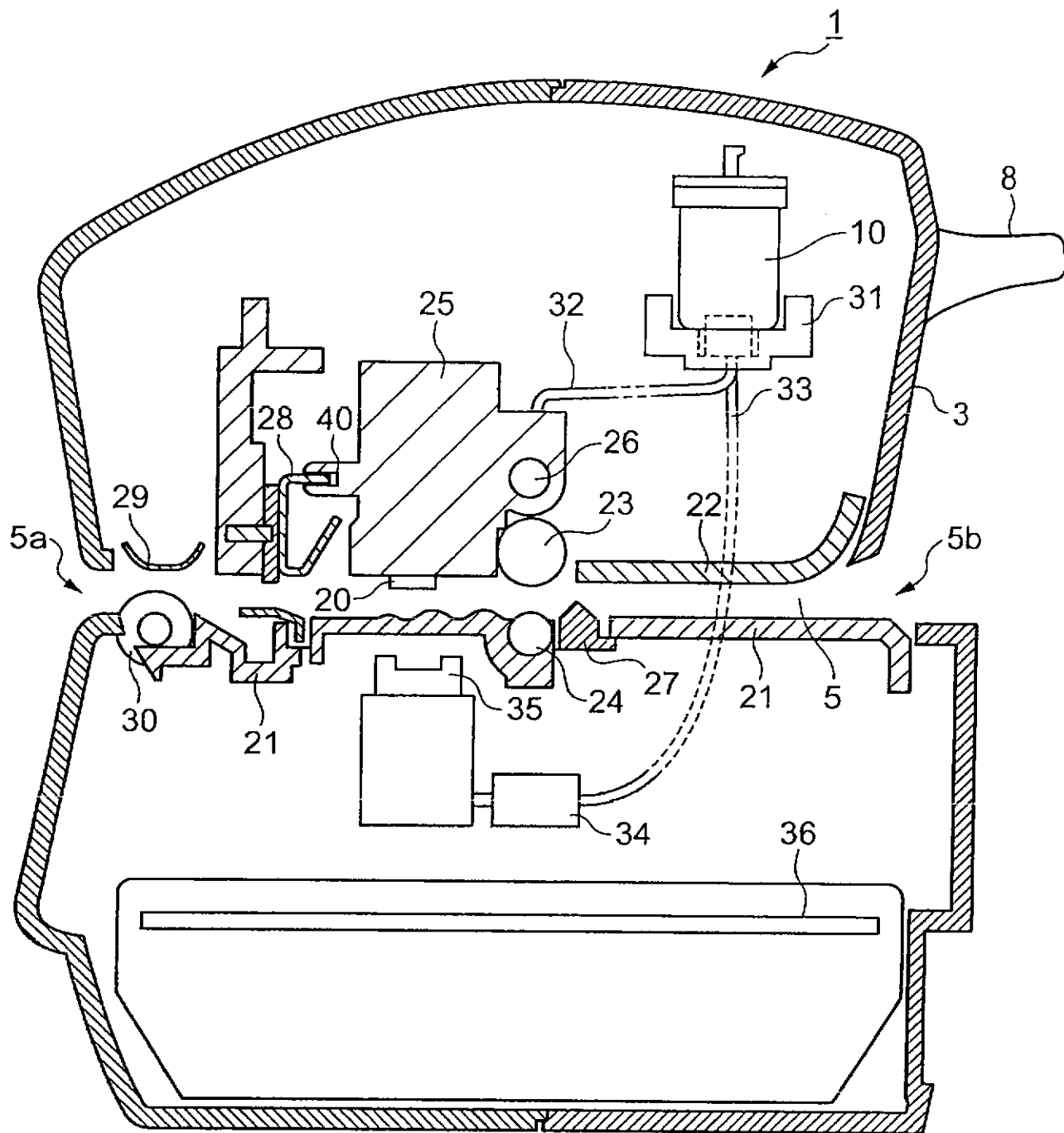


Fig. 6

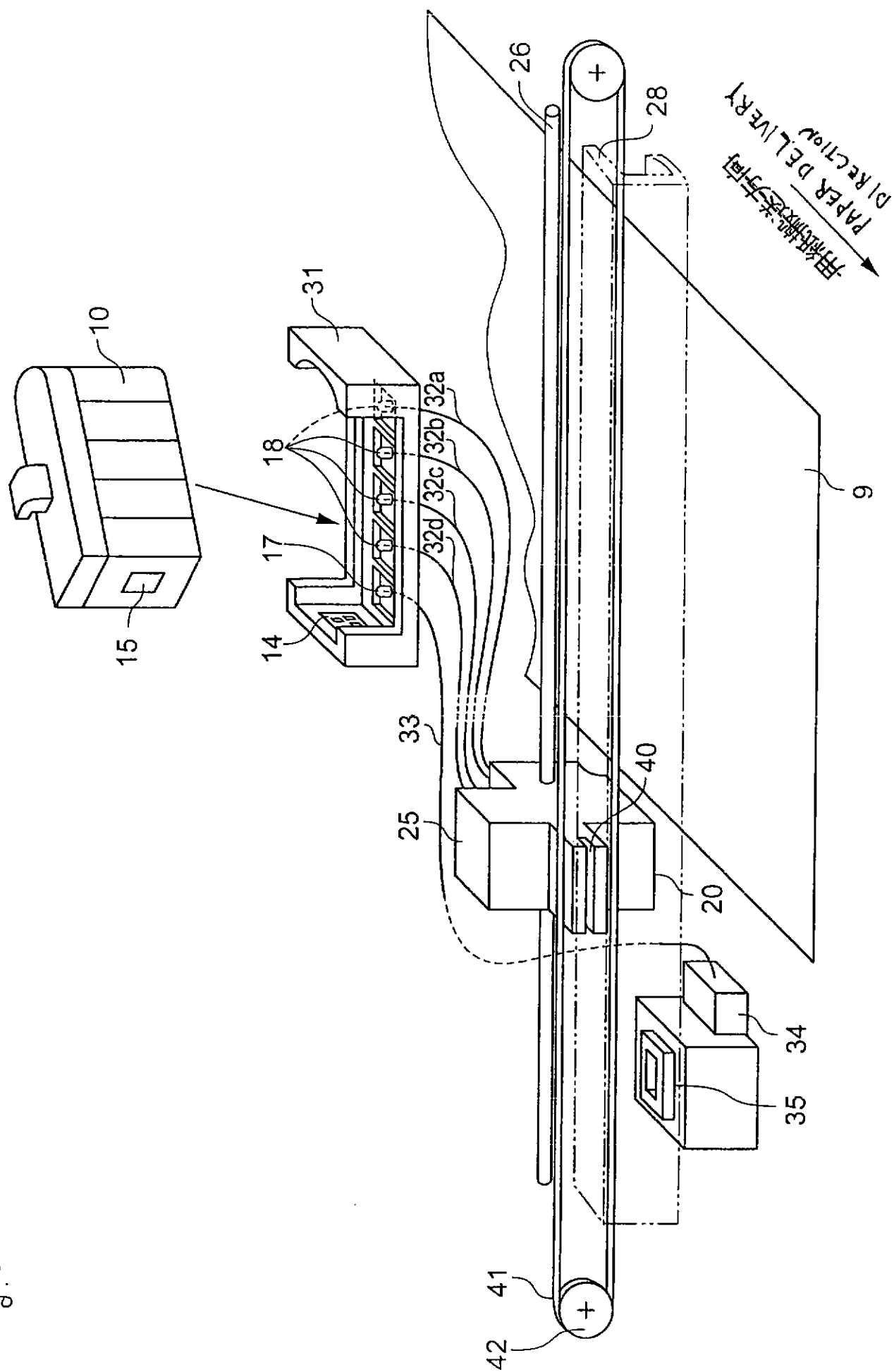


Fig. 7

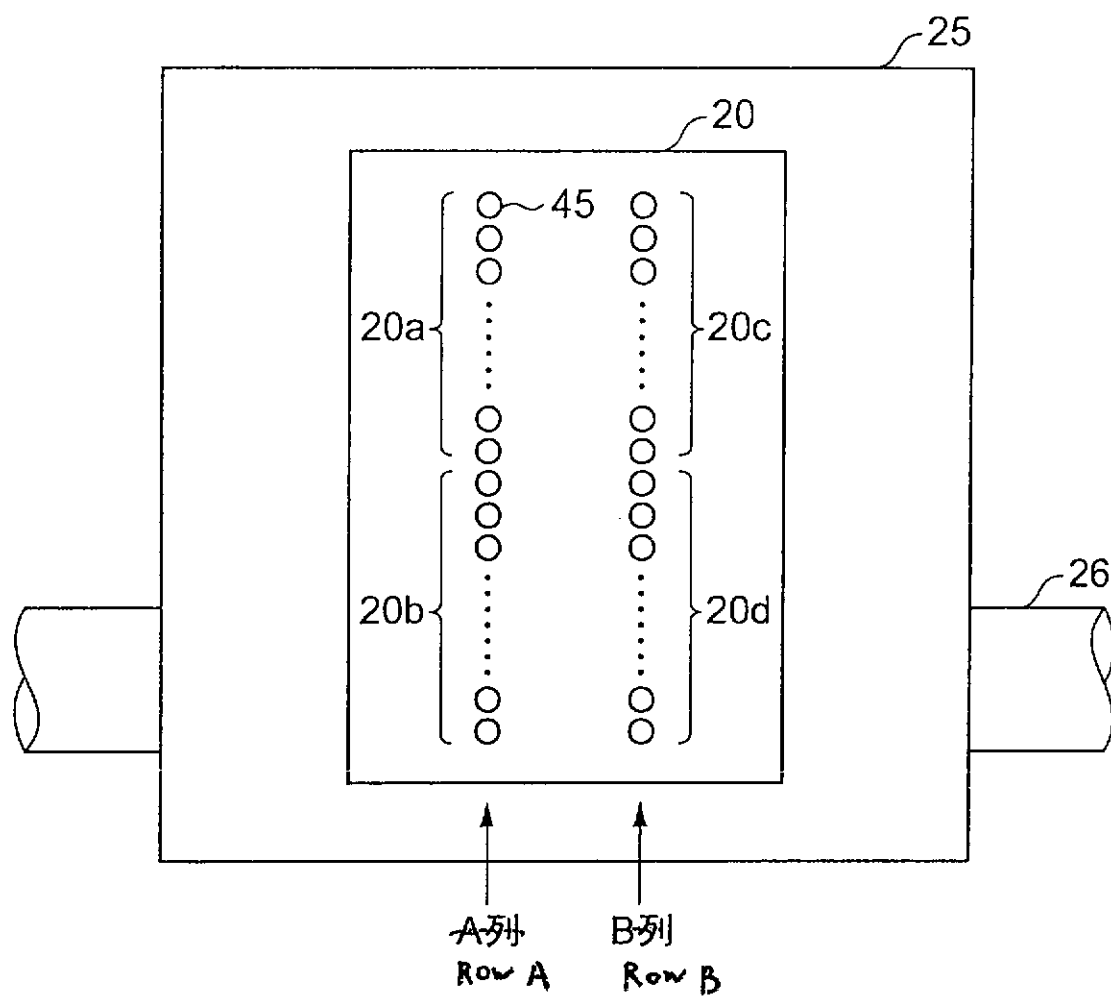
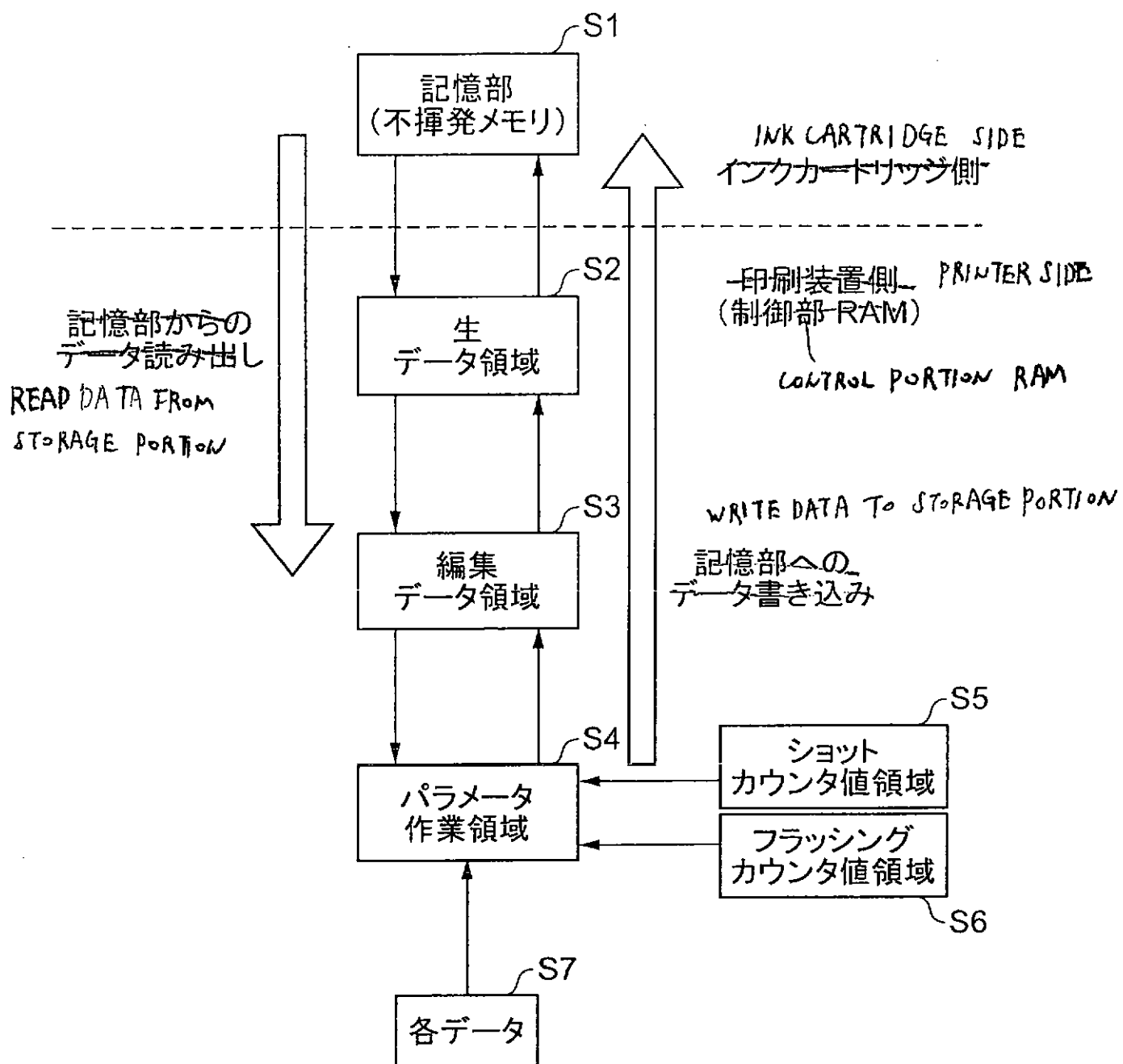


Fig. 8



- (S1) STORAGE PORTION (NONVOLATILE MEMORY)
- (S2) RAW DATA AREA
- (S3) EDIT DATA AREA
- (S4) PARAMETER WORK AREA
- (S5) SHOT COUNTER VALUE AREA
- (S6) FLASHING COUNTER VALUE AREA
- (S7) EACH DATA

Fig. 9

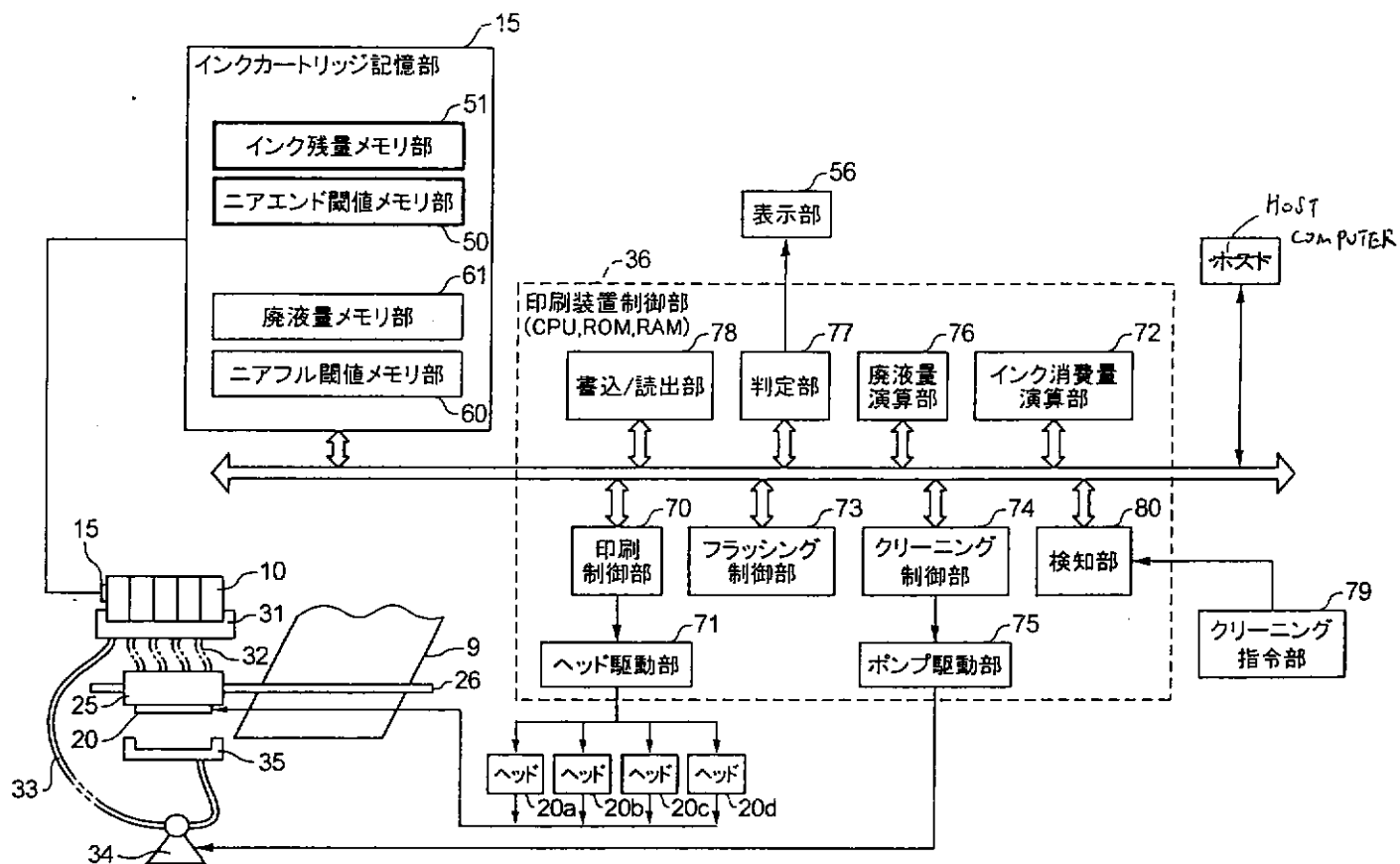


FIG. 9

- 15: INK CARTRIDGE STORAGE PORTION
- 51: INK RESIDUAL AMOUNT MEMORY PORTION
- 50: NEAR-END THRESHOLD MEMORY PORTION
- 61: WASTE LIQUID AMOUNT MEMORY PORTION
- 60: NEAR-FULL THRESHOLD MEMORY PORTION
- 56: DISPLAY PORTION
- 36: PRINTER CONTROL PORTION
- 78: WRITING/READING PORTION
- 77: DECIDING PORTION
- 76: WASTE LIQUID AMOUNT CALCULATING PORTION
- 72: INK CONSUMPTION AMOUNT CALCULATING PORTION
- 70: PRINTING CONTROL PORTION
- 73: FLUSHING CONTROL PORTION
- 74: CLEANING CONTROL PORTION
- 80: DETECTING PORTION
- 71: HEAD DRIVING PORTION
- 75: PUMP DRIVING PORTION
- 79: CLEANING COMMAND PORTION
- 20A, 20B, 20C, 20D: HEAD

Fig. 10

(S10) STANDBY STATE

(S11) DECIDE AFTER READING DATA OF INK CARTRIDGE STORAGE PORTION

(S12) DECISION END RESPONSE

(S13) DECIDE BY USE OF INK

(S14) SAVE DATA

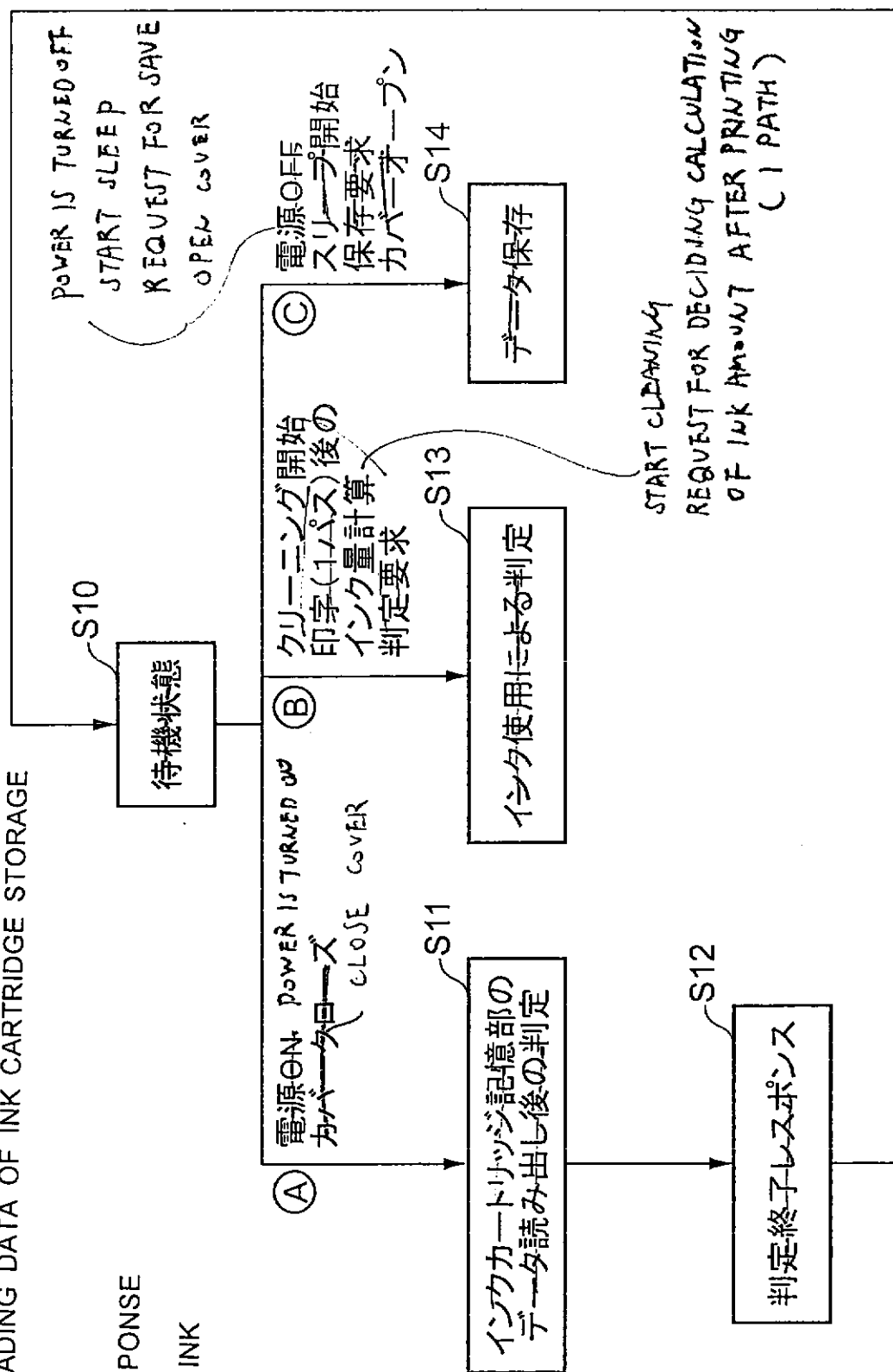


Fig. 11

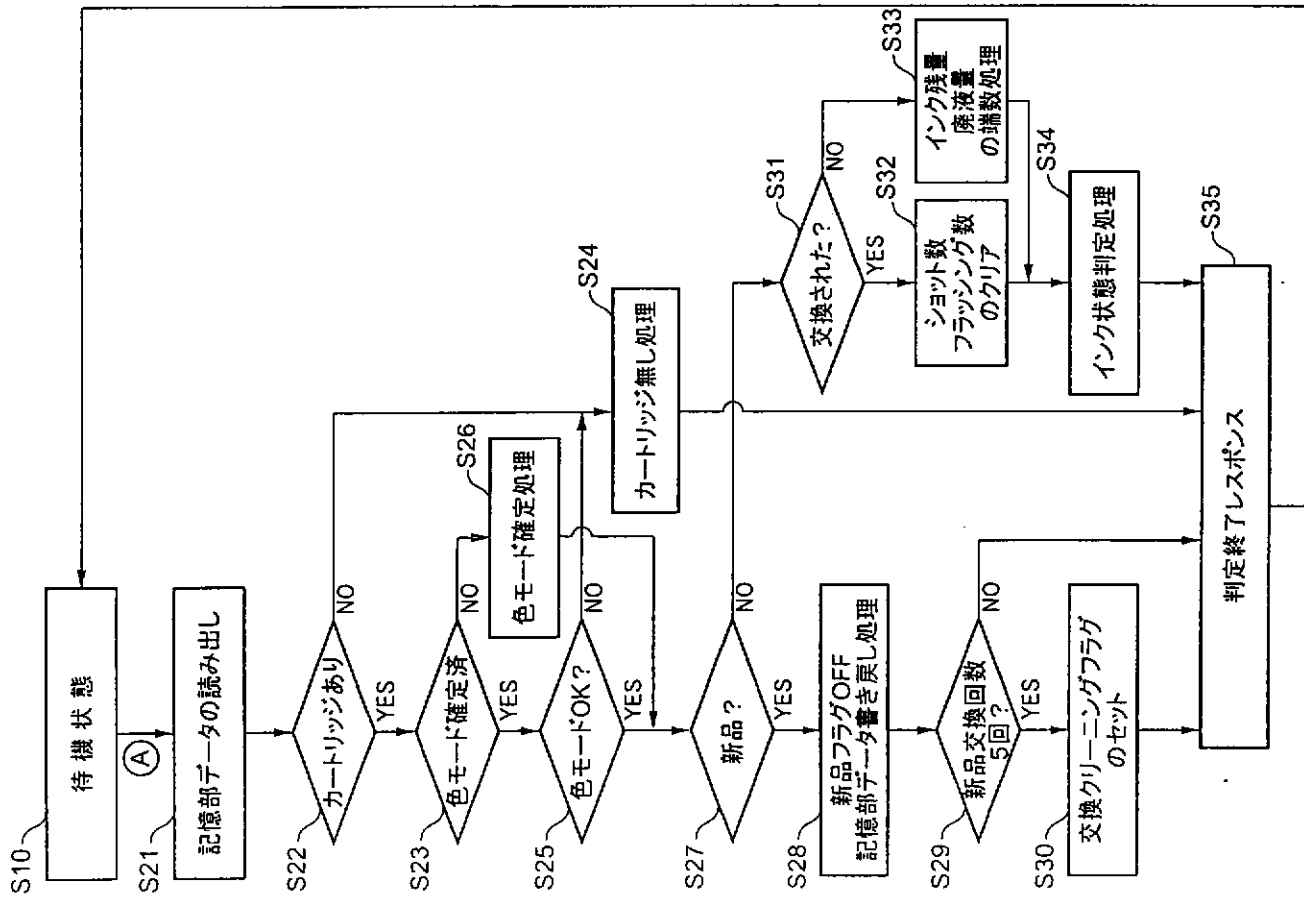
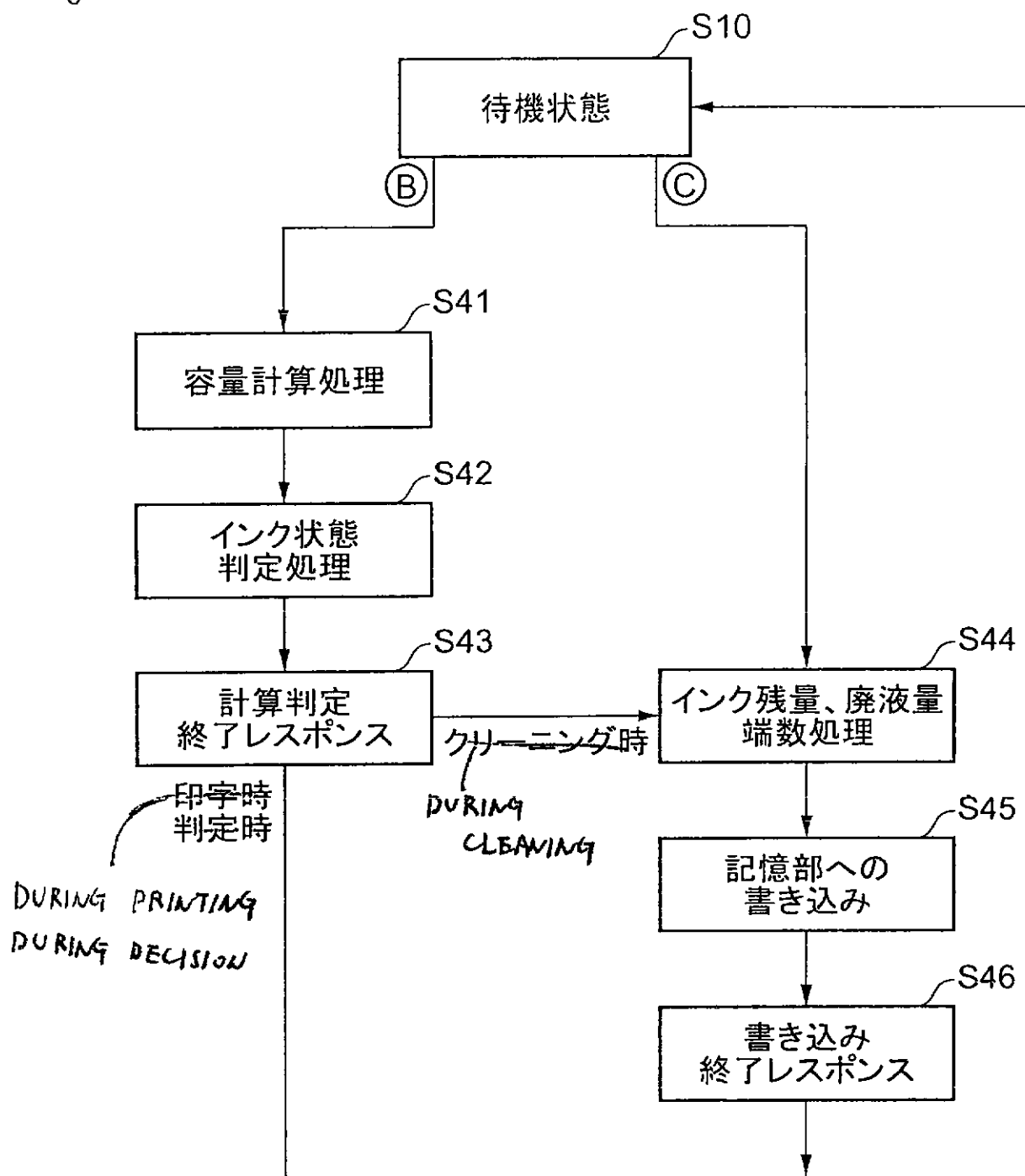


FIG. 11

- (S10) STANDBY STATE
- (S21) READ DATA IN STORAGE PORTION
- (S22) CARTRIDGE IS ATTACHED
- (S23) COLOR MODE IS DEFINED
- (S24) NON-CARTRIDGE PROCESSING
- (S25) COLOR MODE OK ?
- (S26) COLOR MODE DEFINING PROCESSING
- (S27) BRAND-NEW ?
- (S28) TURN OFF BRAND-NEW FLAG
- (S29) REWRITE DATA TO STORAGE PORTION
- (S30) NUMBER OF TIMES OF EXCHANGE OF BRAND-NEW PRODUCT IS FIVE ?
- (S31) SET EXCHANGE CLEANING FLAG
- (S32) EXCHANGED ?
- (S33) CLEAR NUMBER OF SHOT AND NUMBER OF FLASHING
- (S34) FRACTIONAL PROCESSING OF AMOUNT OF RESIDUAL INK AND AMOUNT OF WASTE LIQUID
- (S35) INK STATE DECISION PROCESSING
- (S36) DECISION END RESPONSE

Fig. 12



(S10) STANDBY STATE

(S41) CALCULATE PROCESSING OF CAPACITY

(S42) DECISION PROCESSING OF INK STATE

(S43) CALCULATION DECISION END RESPONSE

(S44) FRACTIONAL PROCESSING OF AMOUNT OF RESIDUAL INK AND AMOUNT OF WASTE LIQUID

(S45) WRITE TO STORAGE PORTION

(S46) WRITE END RESPONSE