FIG.1

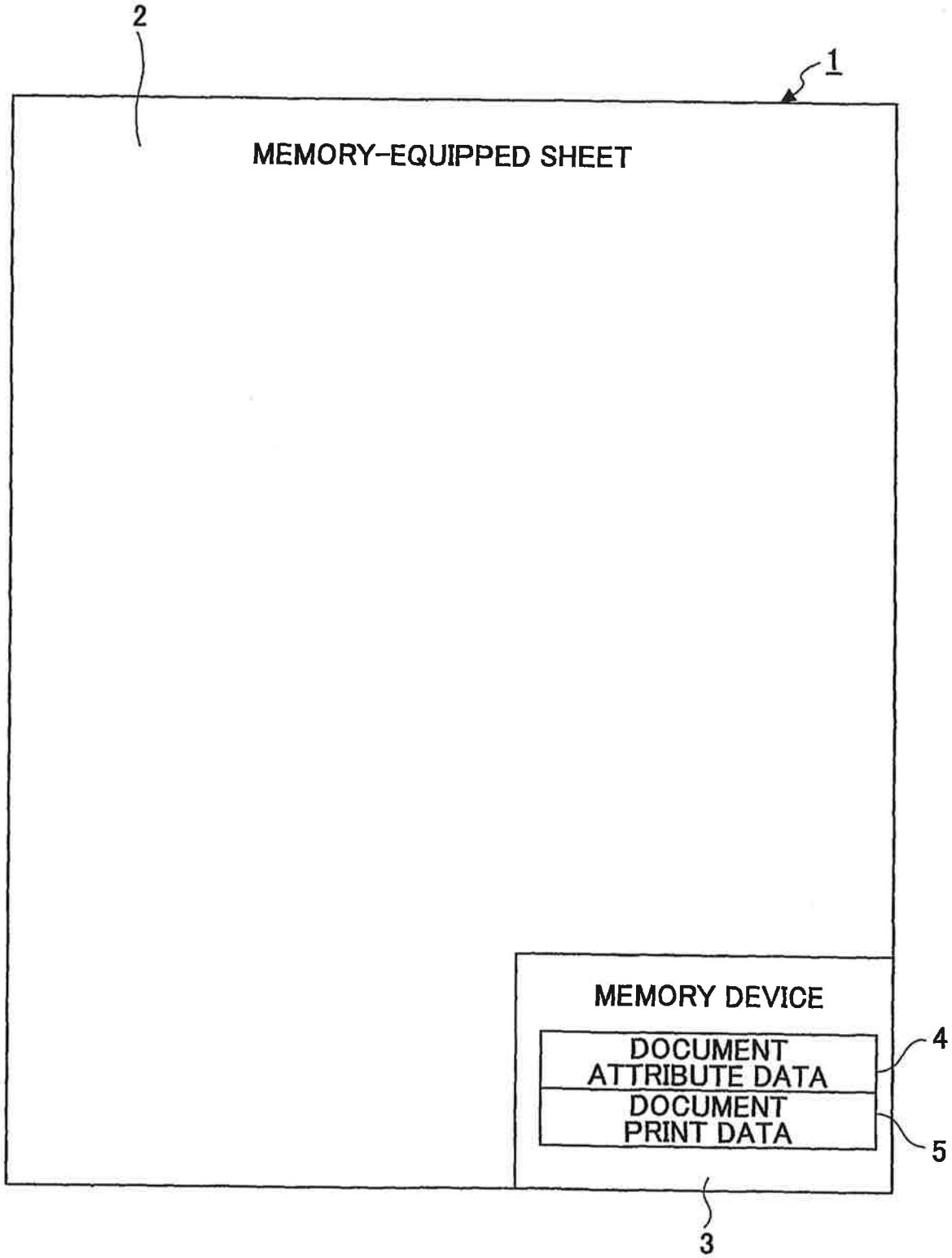

2
1
MEMORY-EQUIPPED SHEET
MEMORY DEVICE
DOCUMENT ATTRIBUTE DATA
DOCUMENT PRINT DATA
4
5
3

FIG.2

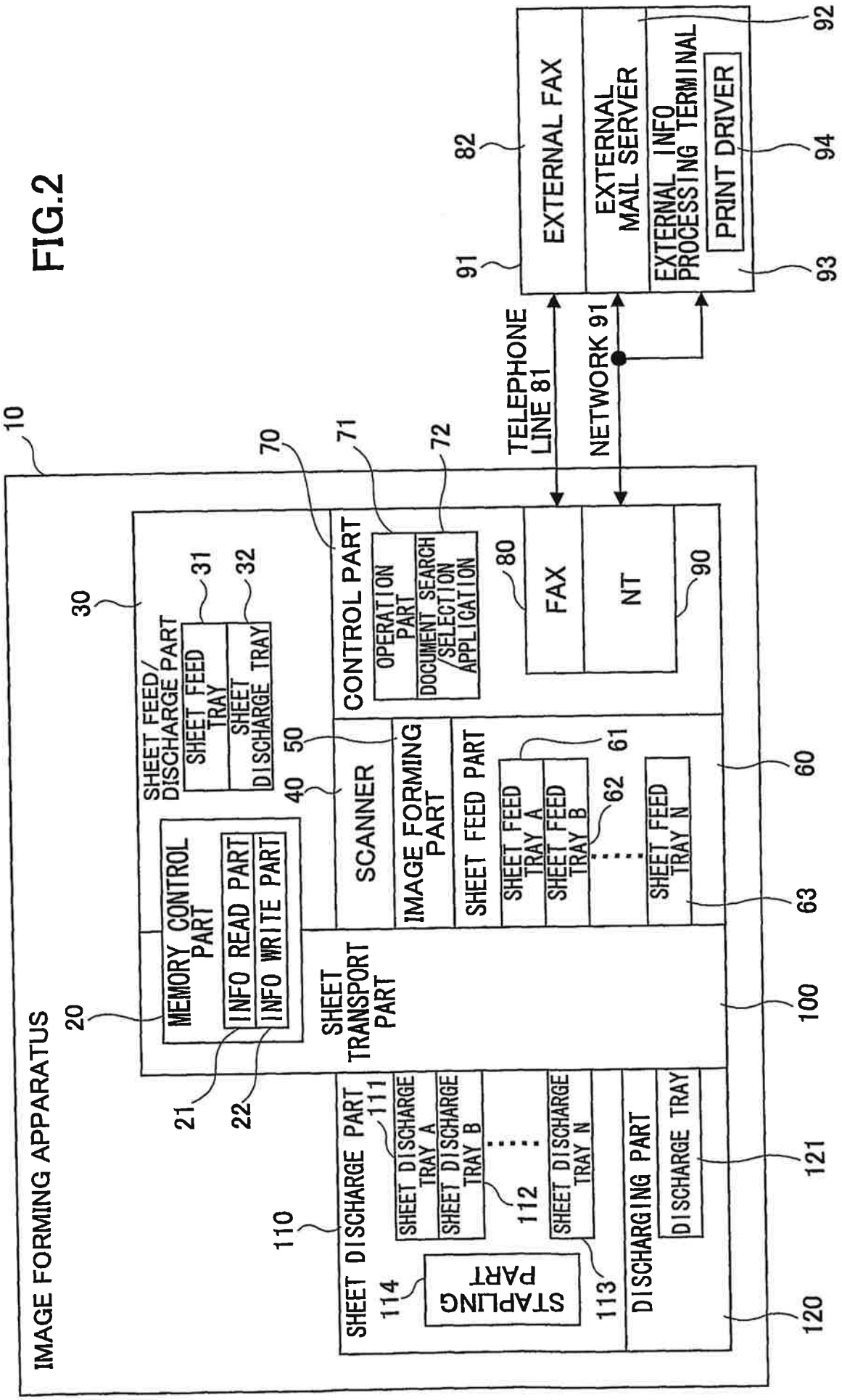

IMAGE FORMING APPARATUS
10
20
MEMORY CONTROL PART
INFO READ PART
INFO WRITE PART
21
22
30
SHEET FEED/ DISCHARGE PART
SHEET FEED TRAY
31
SHEET DISCHARGE TRAY
32
40
SCANNER
50
IMAGE FORMING PART
SHEET FEED PART
SHEET FEED TRAY A
SHEET FEED TRAY B
SHEET FEED TRAY N
61
62
63
60
70
CONTROL PART
71
OPERATION PART
DOCUMENT SEARCH /SELECTION APPLICATION
72
80
FAX
90
NT
SHEET TRANSPORT PART
100
110
SHEET DISCHARGE PART
111
SHEET DISCHARGE TRAY A
SHEET DISCHARGE TRAY B
112
SHEET DISCHARGE TRAY N
113
114
STAPLING PART
120
DISCHARGING PART
DISCHARGE TRAY
121
TELEPHONE LINE 81
NETWORK 91
91
EXTERNAL FAX
82
EXTERNAL MAIL SERVER
EXTERNAL INFO PROCESSING TERMINAL
PRINT DRIVER
92
93
94

FIG.3

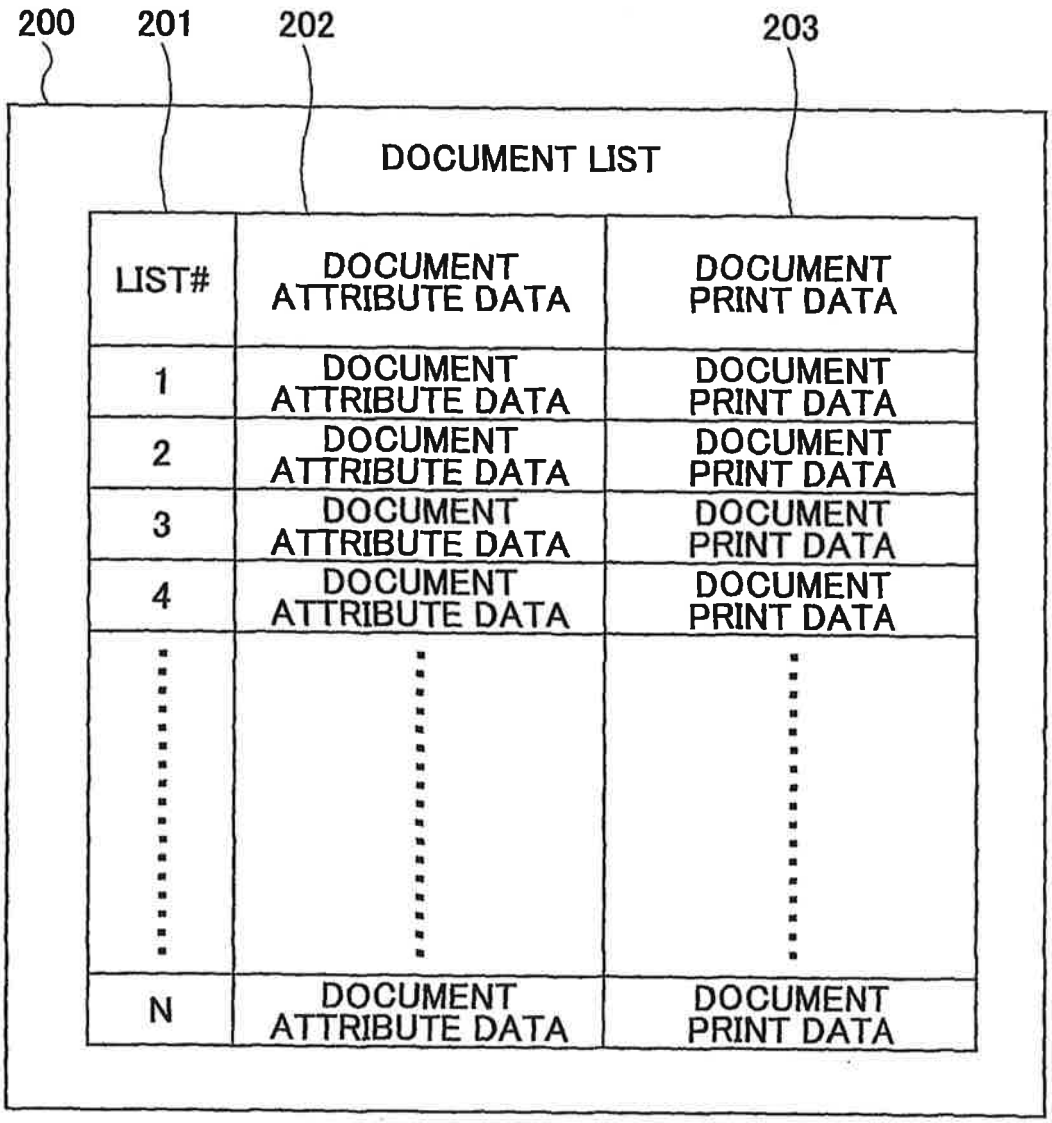

200
201
202
203
DOCUMENT LIST
LIST#
DOCUMENT ATTRIBUTE DATA
DOCUMENT PRINT DATA
1
2
3
4
N

FIG.4

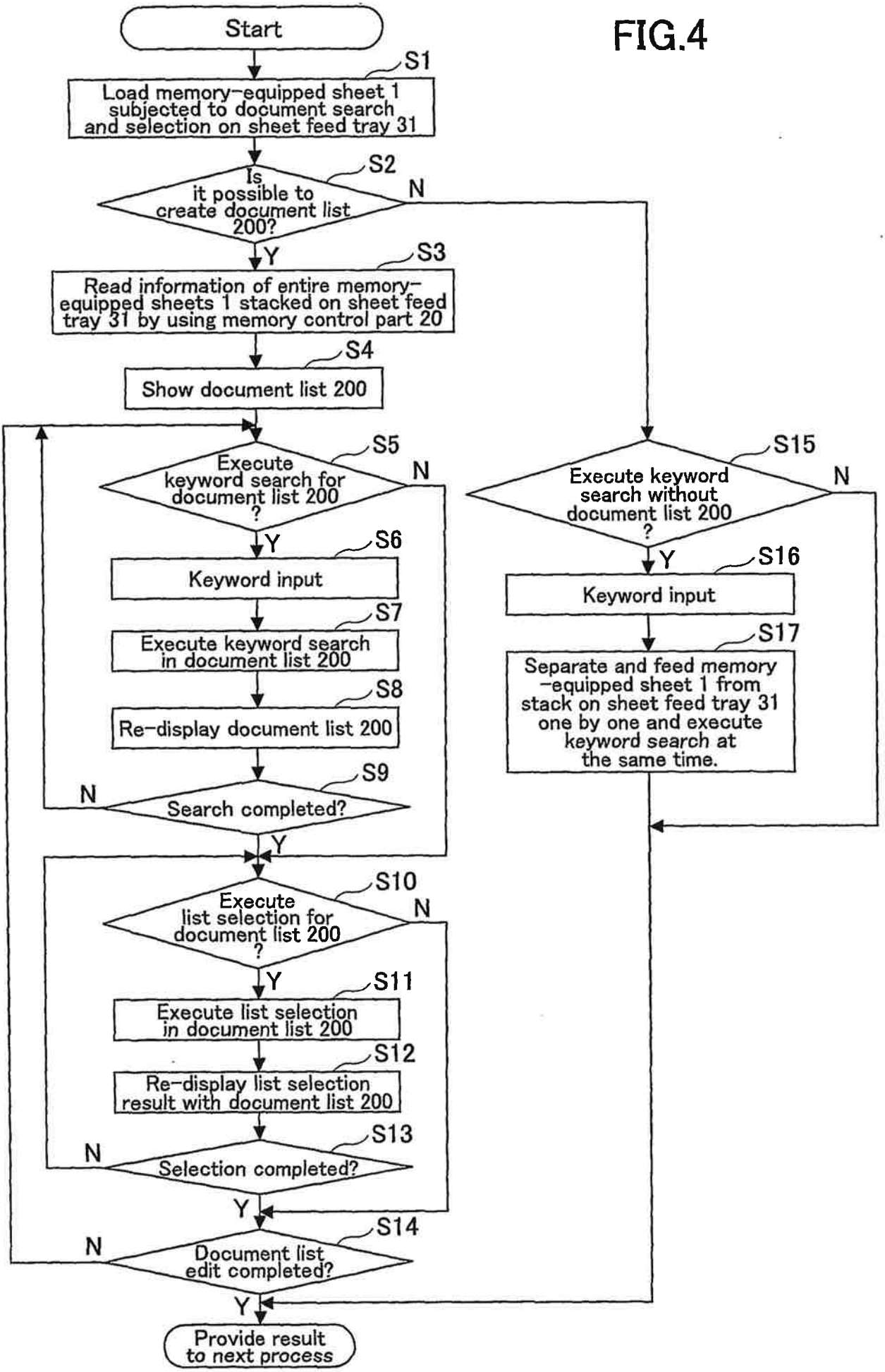

Start
S1
Load memory-equipped sheet 1 subjected to document search and selection on sheet feed tray 31
S2
Is it possible to create document list 200?
N
Y
S3
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S4
Show document list 200
S5
Execute keyword search for document list 200 ?
N
Y
S6
Keyword input
S7
Execute keyword search in document list 200
S8
Re-display document list 200
S9
Search completed?
N
Y
S10
Execute list selection for document list 200 ?
N
Y
S11
Execute list selection in document list 200
S12
Re-display list selection result with document list 200
S13
Selection completed?
N
Y
S14
Document list edit completed?
N
Y
S15
Execute keyword search without document list 200 ?
N
Y
S16
Keyword input
S17
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one and execute keyword search at the same time.
Provide result to next process

FIG.5

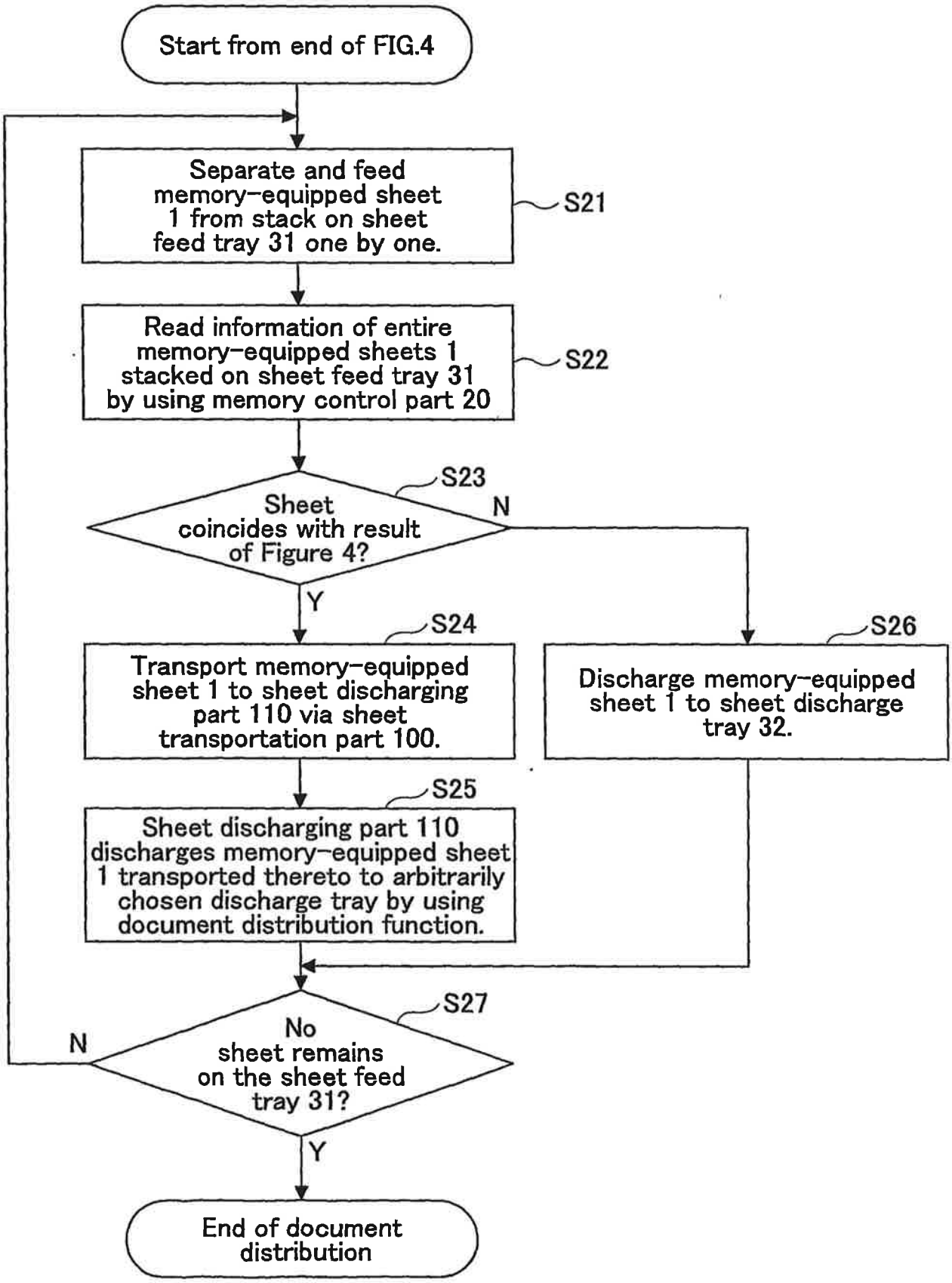

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S21
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S22
S23
Sheet coincides with result of Figure 4?
N
Y
S24
Transport memory-equipped sheet 1 to sheet discharging part 110 via sheet transportation part 100.
S25
Sheet discharging part 110 discharges memory-equipped sheet 1 transported thereto to arbitrarily chosen discharge tray by using document distribution function.
S26
Discharge memory-equipped sheet 1 to sheet discharge tray 32.
S27
No sheet remains on the sheet feed tray 31?
N
Y
End of document distribution

FIG.6

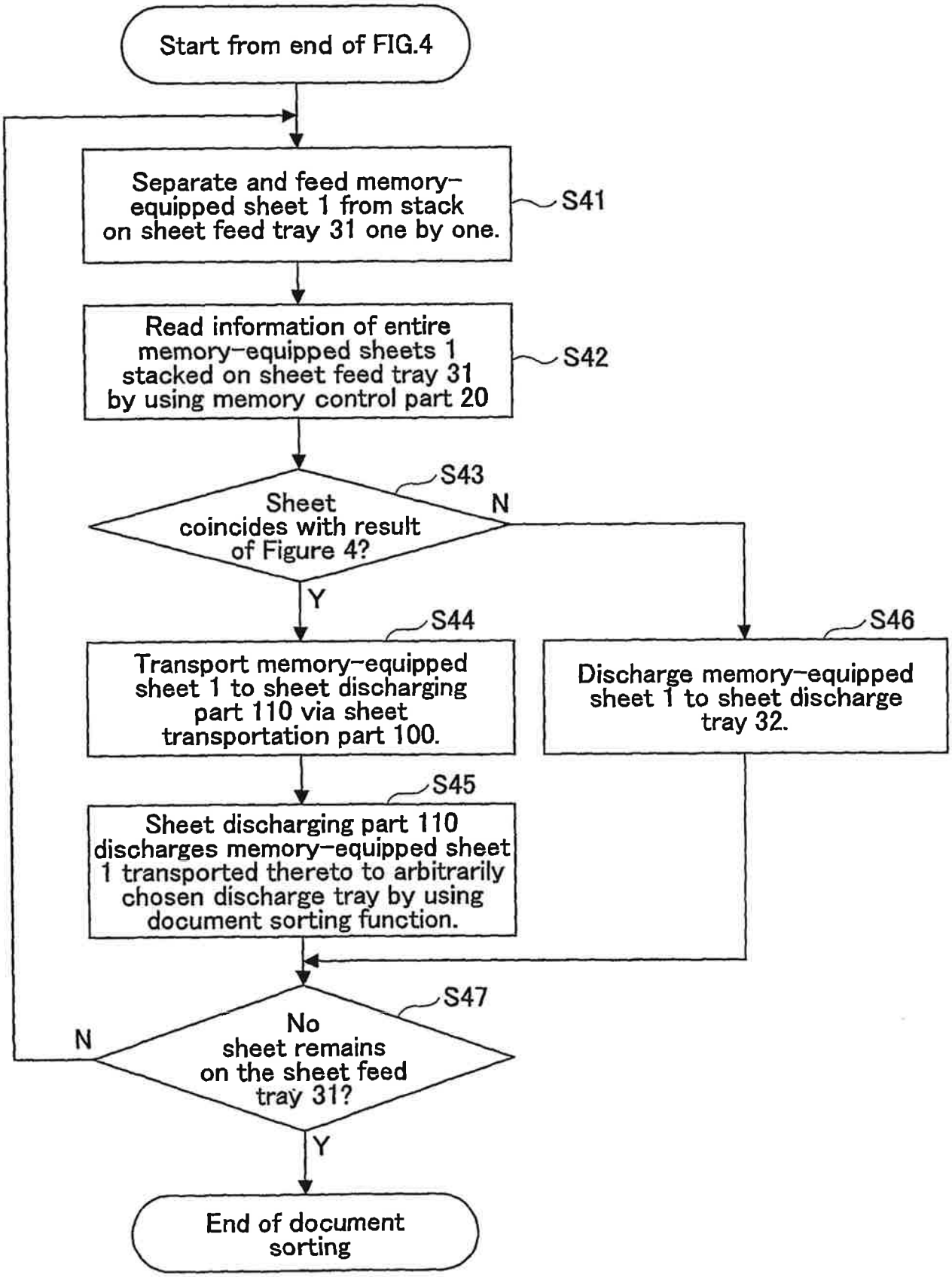

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S41
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S42
S43
Sheet coincides with result of Figure 4?
N
Y
S44
Transport memory-equipped sheet 1 to sheet discharging part 110 via sheet transportation part 100.
S45
Sheet discharging part 110 discharges memory-equipped sheet 1 transported thereto to arbitrarily chosen discharge tray by using document sorting function.
S46
Discharge memory-equipped sheet 1 to sheet discharge tray 32.
S47
No sheet remains on the sheet feed tray 31?
N
Y
End of document sorting

FIG.7

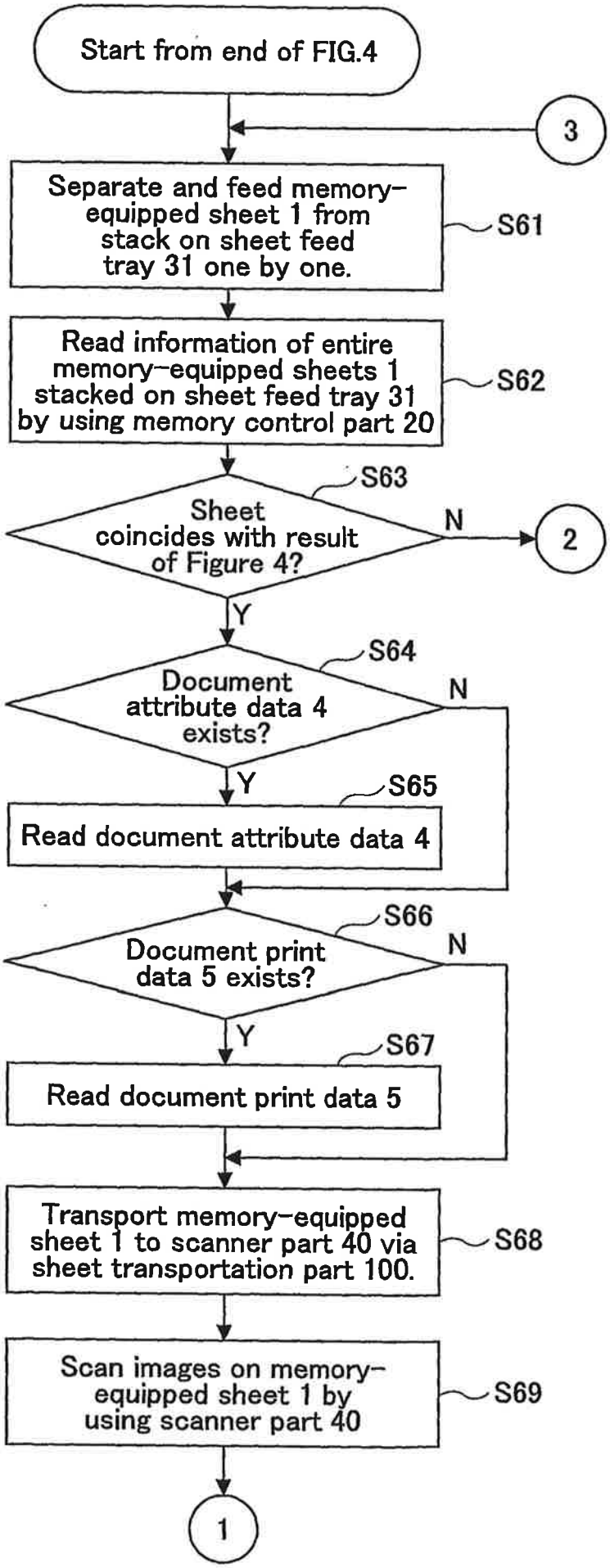

Start from end of FIG.4
3
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S61
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S62
S63
Sheet coincides with result of Figure 4?
N
2
Y
S64
Document attribute data 4 exists?
N
Y
S65
Read document attribute data 4
S66
Document print data 5 exists?
N
Y
S67
Read document print data 5
Transport memory-equipped sheet 1 to scanner part 40 via sheet transportation part 100.
S68
Scan images on memory-equipped sheet 1 by using scanner part 40
S69
1

FIG.8

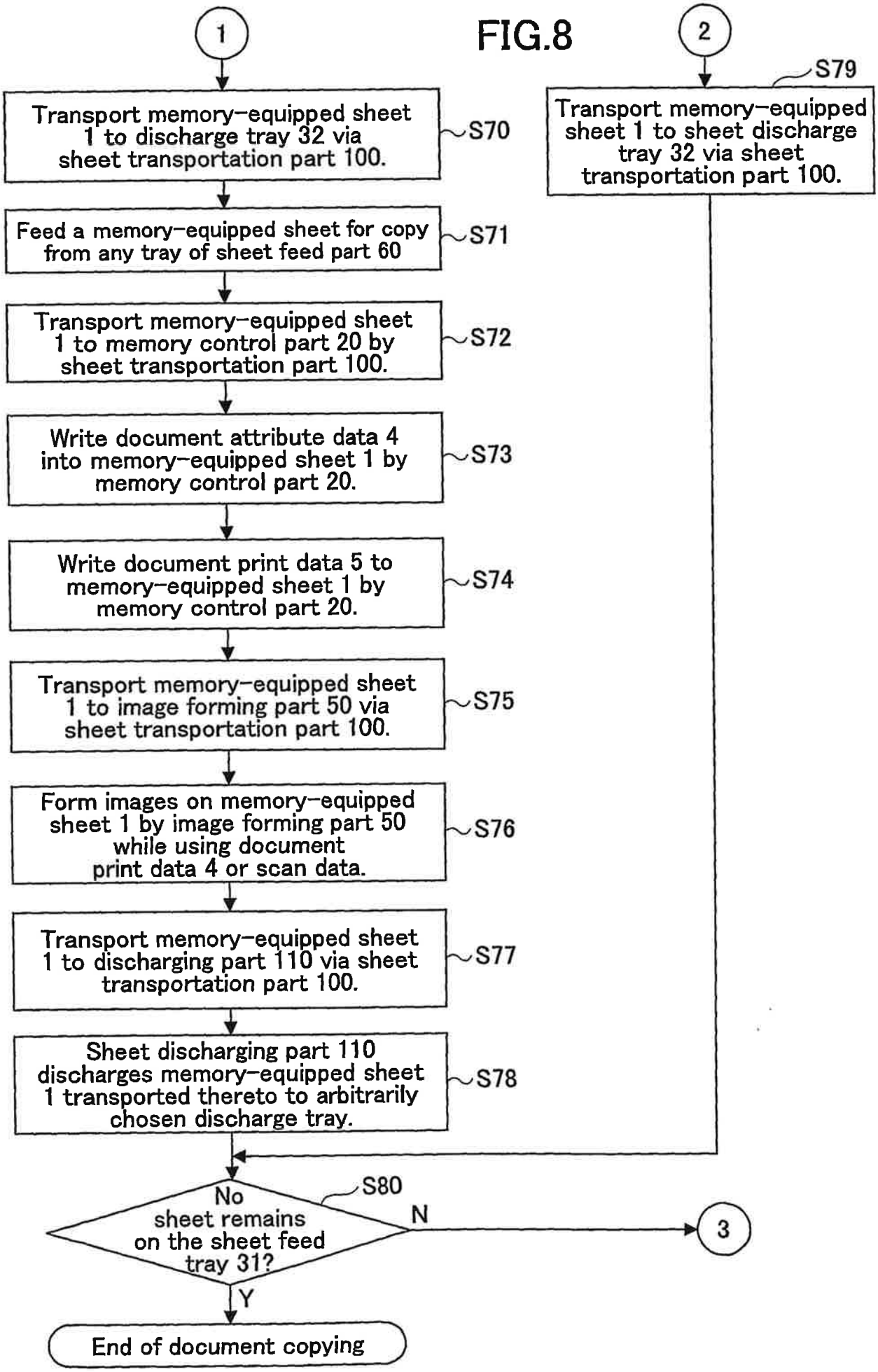

1
Transport memory-equipped sheet 1 to discharge tray 32 via sheet transportation part 100.
S70
Feed a memory-equipped sheet for copy from any tray of sheet feed part 60
S71
Transport memory-equipped sheet 1 to memory control part 20 by sheet transportation part 100.
S72
Write document attribute data 4 into memory-equipped sheet 1 by memory control part 20.
S73
Write document print data 5 to memory-equipped sheet 1 by memory control part 20.
S74
Transport memory-equipped sheet 1 to image forming part 50 via sheet transportation part 100.
S75
Form images on memory-equipped sheet 1 by image forming part 50 while using document print data 4 or scan data.
S76
Transport memory-equipped sheet 1 to discharging part 110 via sheet transportation part 100.
S77
Sheet discharging part 110 discharges memory-equipped sheet 1 transported thereto to arbitrarily chosen discharge tray.
S78
2
S79
Transport memory-equipped sheet 1 to sheet discharge tray 32 via sheet transportation part 100.
No sheet remains on the sheet feed tray 31?
S80
N
3
Y
End of document copying

FIG.9

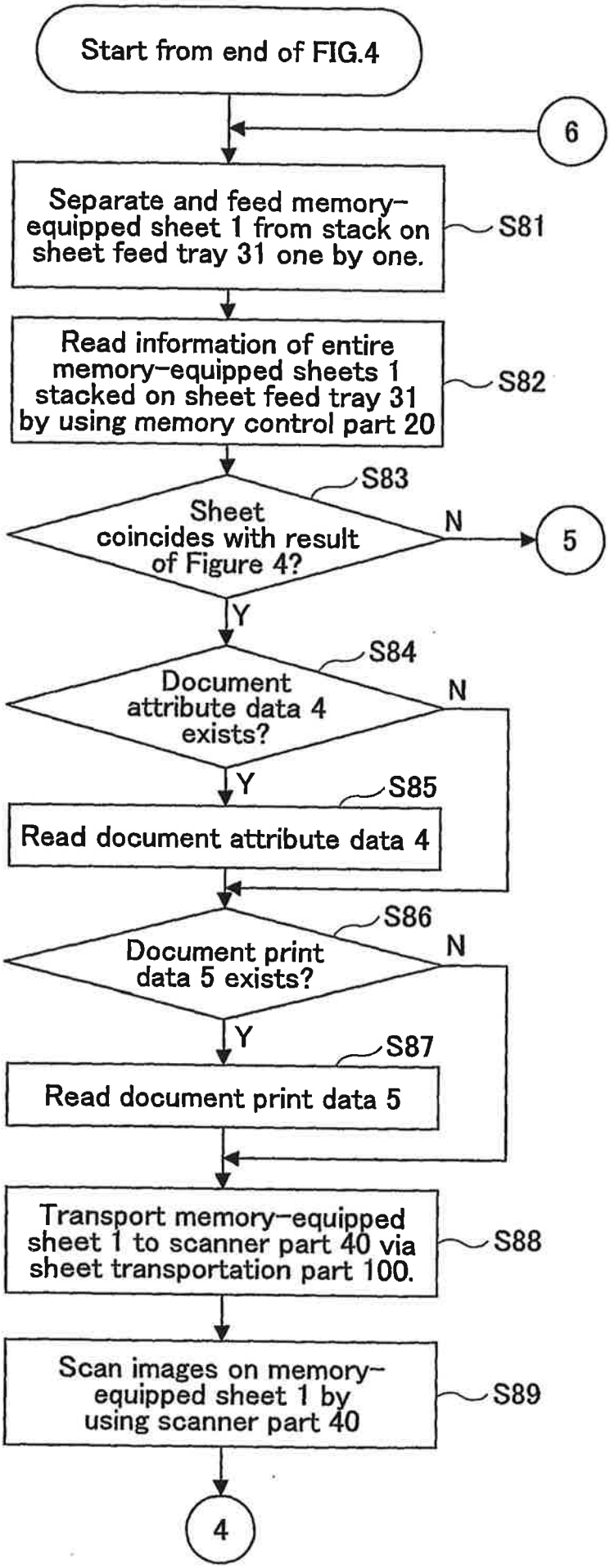

Start from end of FIG.4
6
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S81
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S82
S83
Sheet coincides with result of Figure 4?
N
5
Y
S84
Document attribute data 4 exists?
N
Y
S85
Read document attribute data 4
S86
Document print data 5 exists?
N
Y
S87
Read document print data 5
Transport memory-equipped sheet 1 to scanner part 40 via sheet transportation part 100.
S88
Scan images on memory-equipped sheet 1 by using scanner part 40
S89
4

FIG.10

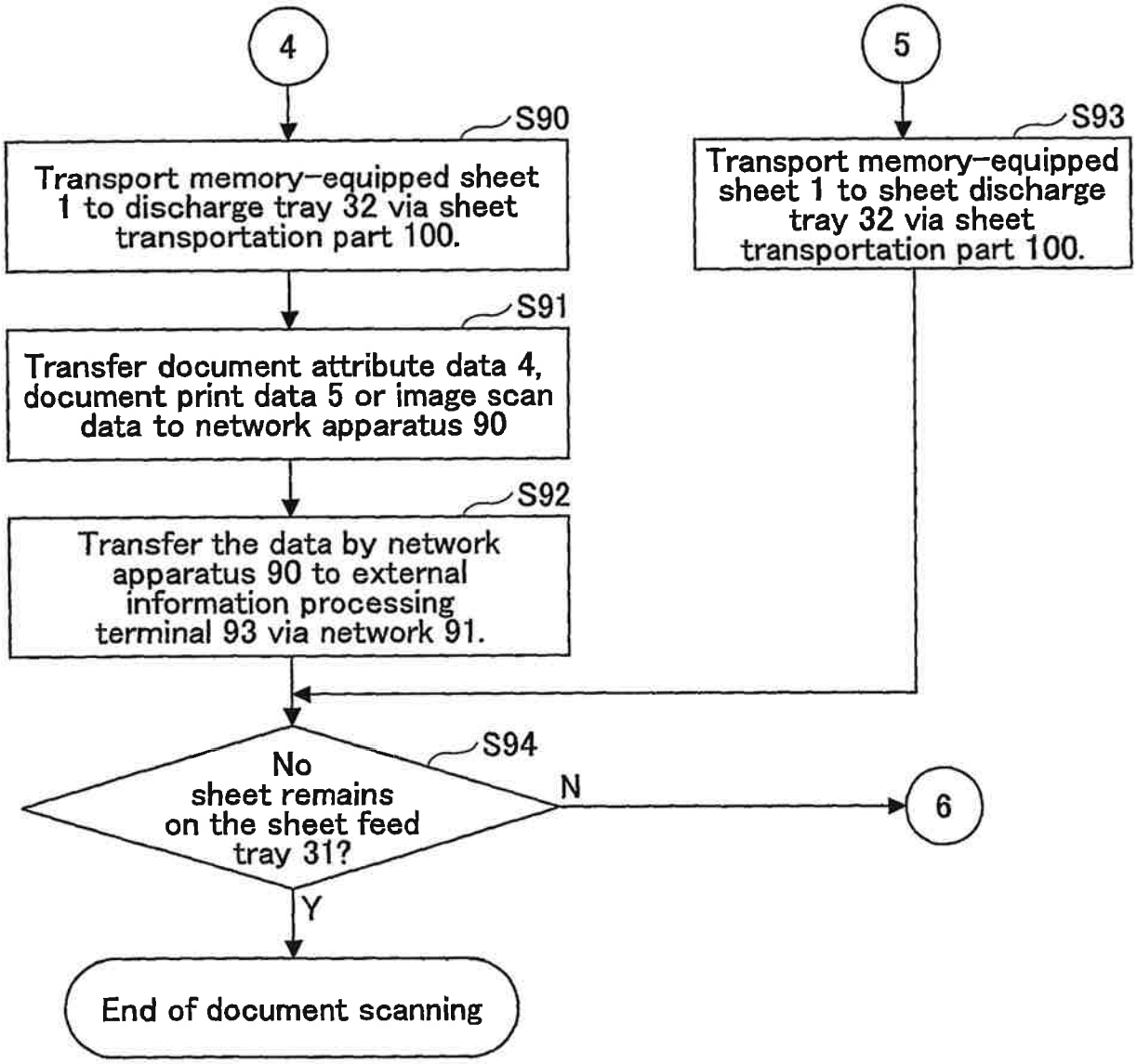

4
5
S90
Transport memory-equipped sheet 1 to discharge tray 32 via sheet transportation part 100.
S93
Transport memory-equipped sheet 1 to sheet discharge tray 32 via sheet transportation part 100.
S91
Transfer document attribute data 4, document print data 5 or image scan data to network apparatus 90
S92
Transfer the data by network apparatus 90 to external information processing terminal 93 via network 91.
S94
No sheet remains on the sheet feed tray 31?
N
6
Y
End of document scanning

FIG.11

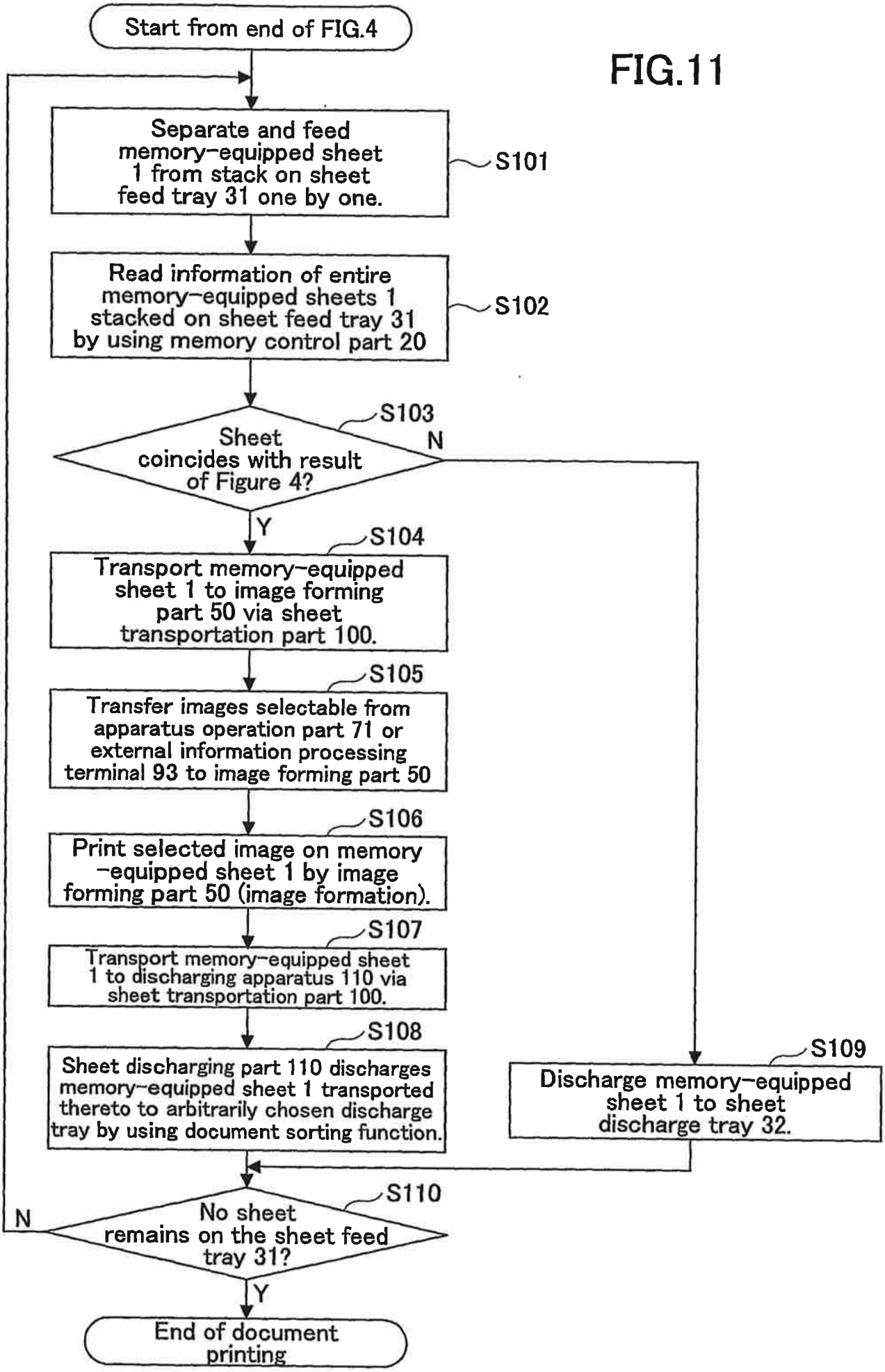

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S101
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S102
S103
Sheet coincides with result of Figure 4?
N
Y
S104
Transport memory-equipped sheet 1 to image forming part 50 via sheet transportation part 100.
S105
Transfer images selectable from apparatus operation part 71 or external information processing terminal 93 to image forming part 50
S106
Print selected image on memory -equipped sheet 1 by image forming part 50 (image formation).
S107
Transport memory-equipped sheet 1 to discharging apparatus 110 via sheet transportation part 100.
S108
Sheet discharging part 110 discharges memory-equipped sheet 1 transported thereto to arbitrarily chosen discharge tray by using document sorting function.
S109
Discharge memory-equipped sheet 1 to sheet discharge tray 32.
S110
No sheet remains on the sheet feed tray 31?
N
Y
End of document printing

FIG.12

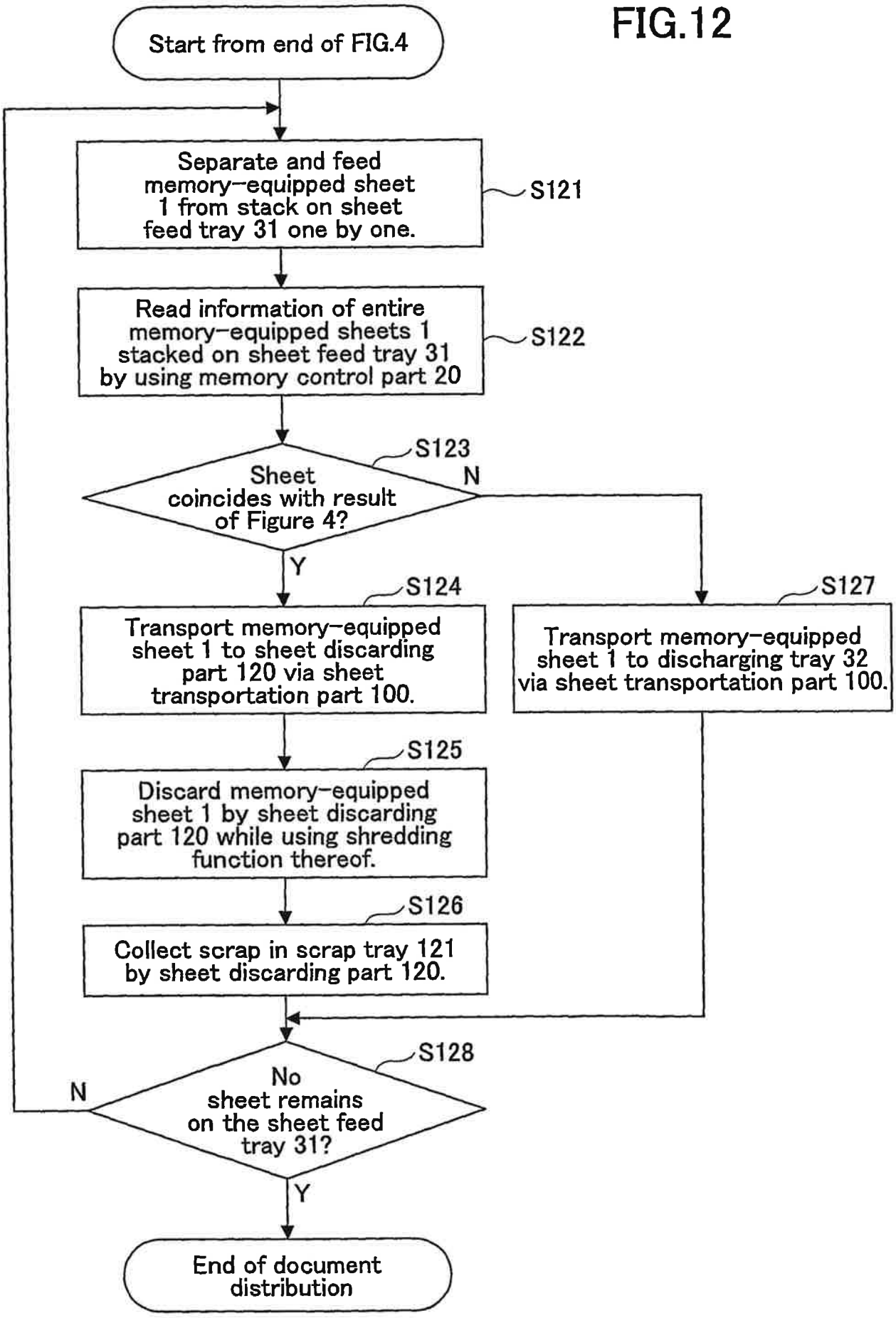

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S121
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S122
S123
Sheet coincides with result of Figure 4?
N
Y
S124
Transport memory-equipped sheet 1 to sheet discarding part 120 via sheet transportation part 100.
S125
Discard memory-equipped sheet 1 by sheet discarding part 120 while using shredding function thereof.
S126
Collect scrap in scrap tray 121 by sheet discarding part 120.
S127
Transport memory-equipped sheet 1 to discharging tray 32 via sheet transportation part 100.
S128
No sheet remains on the sheet feed tray 31?
N
Y
End of document distribution

FIG.13

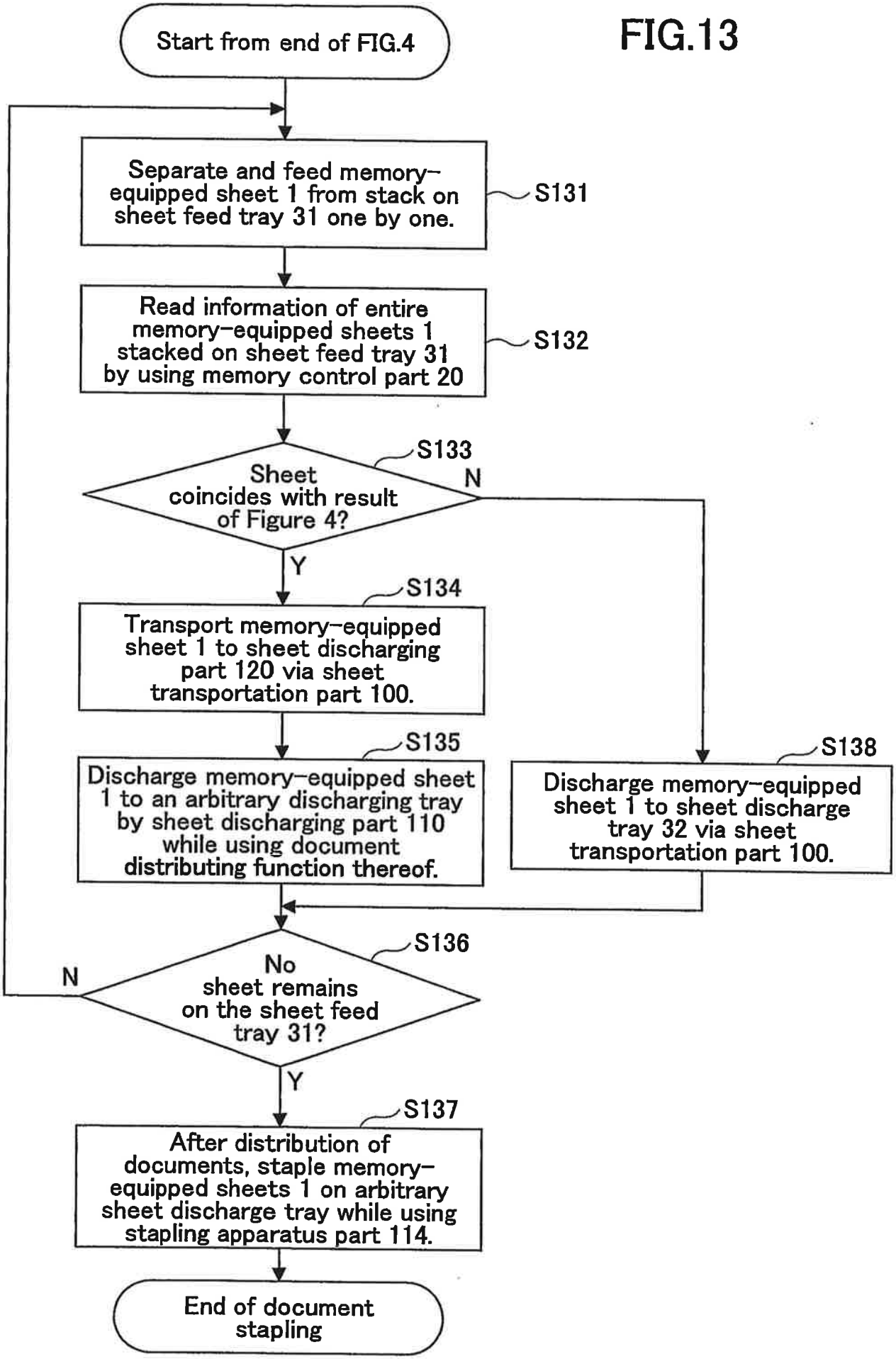

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S131
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S132
S133
Sheet coincides with result of Figure 4?
N
Y
S134
Transport memory-equipped sheet 1 to sheet discharging part 120 via sheet transportation part 100.
S135
Discharge memory-equipped sheet 1 to an arbitrary discharging tray by sheet discharging part 110 while using document distributing function thereof.
S138
Discharge memory-equipped sheet 1 to sheet discharge tray 32 via sheet transportation part 100.
S136
No sheet remains on the sheet feed tray 31?
N
Y
S137
After distribution of documents, staple memory-equipped sheets 1 on arbitrary sheet discharge tray while using stapling apparatus part 114.
End of document stapling

FIG.14

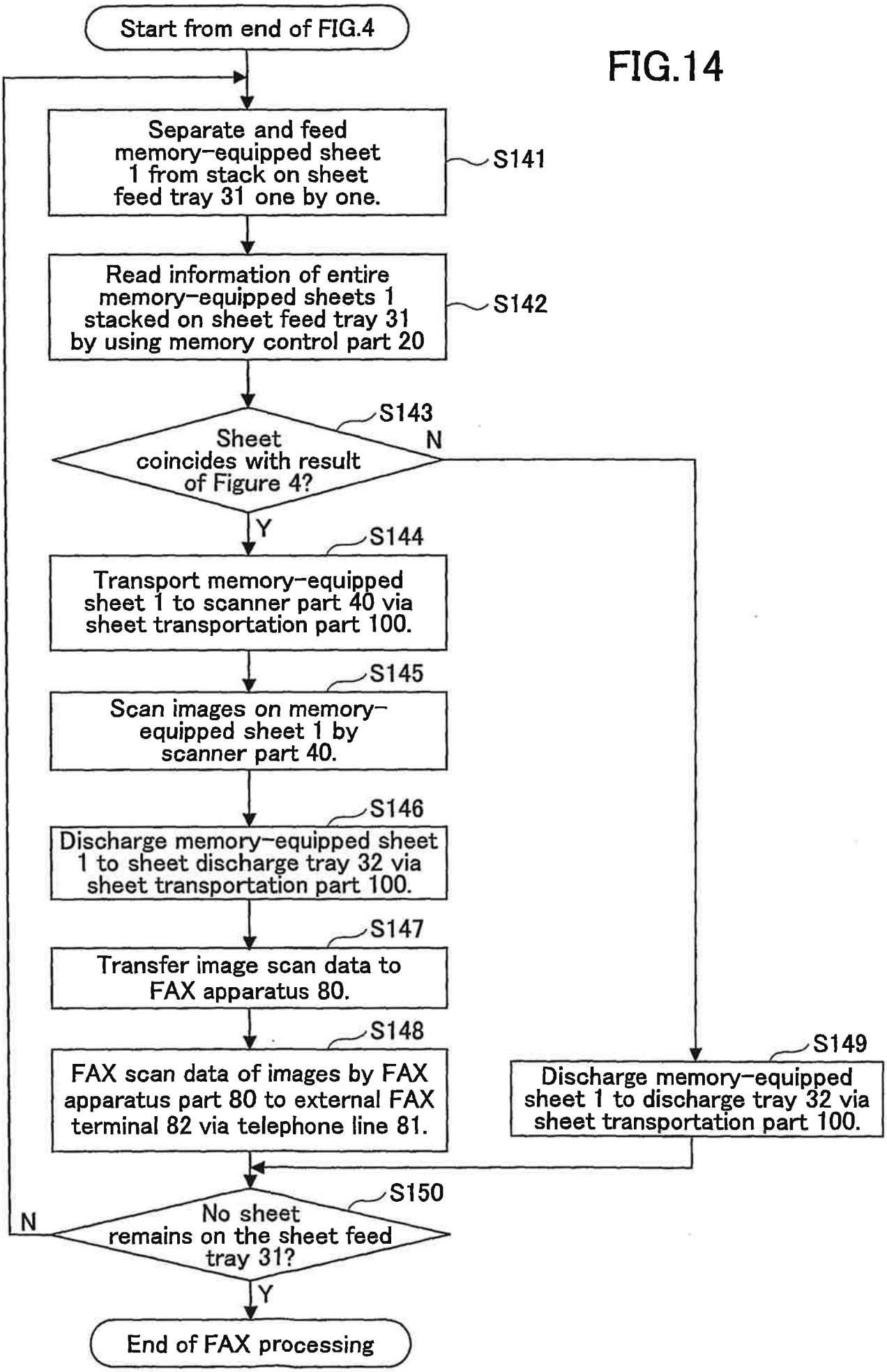

Start from end of FIG.4
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S141
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S142
S143
Sheet coincides with result of Figure 4?
N
Y
S144
Transport memory-equipped sheet 1 to scanner part 40 via sheet transportation part 100.
S145
Scan images on memory-equipped sheet 1 by scanner part 40.
S146
Discharge memory-equipped sheet 1 to sheet discharge tray 32 via sheet transportation part 100.
S147
Transfer image scan data to FAX apparatus 80.
S148
FAX scan data of images by FAX apparatus part 80 to external FAX terminal 82 via telephone line 81.
S149
Discharge memory-equipped sheet 1 to discharge tray 32 via sheet transportation part 100.
S150
No sheet remains on the sheet feed tray 31?
N
Y
End of FAX processing

FIG.15

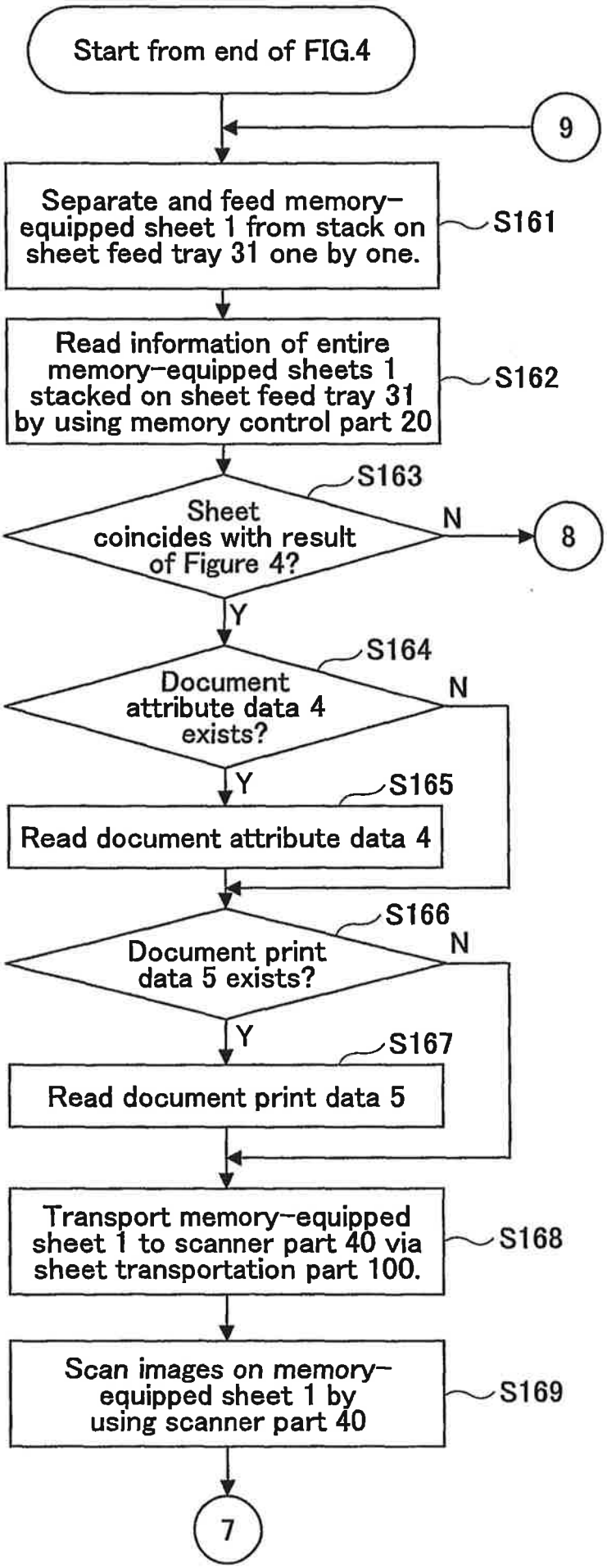

Start from end of FIG.4
9
Separate and feed memory-equipped sheet 1 from stack on sheet feed tray 31 one by one.
S161
Read information of entire memory-equipped sheets 1 stacked on sheet feed tray 31 by using memory control part 20
S162
S163
Sheet coincides with result of Figure 4?
N
8
Y
S164
Document attribute data 4 exists?
N
Y
S165
Read document attribute data 4
S166
Document print data 5 exists?
N
Y
S167
Read document print data 5
Transport memory-equipped sheet 1 to scanner part 40 via sheet transportation part 100.
S168
Scan images on memory-equipped sheet 1 by using scanner part 40
S169
7

FIG.16

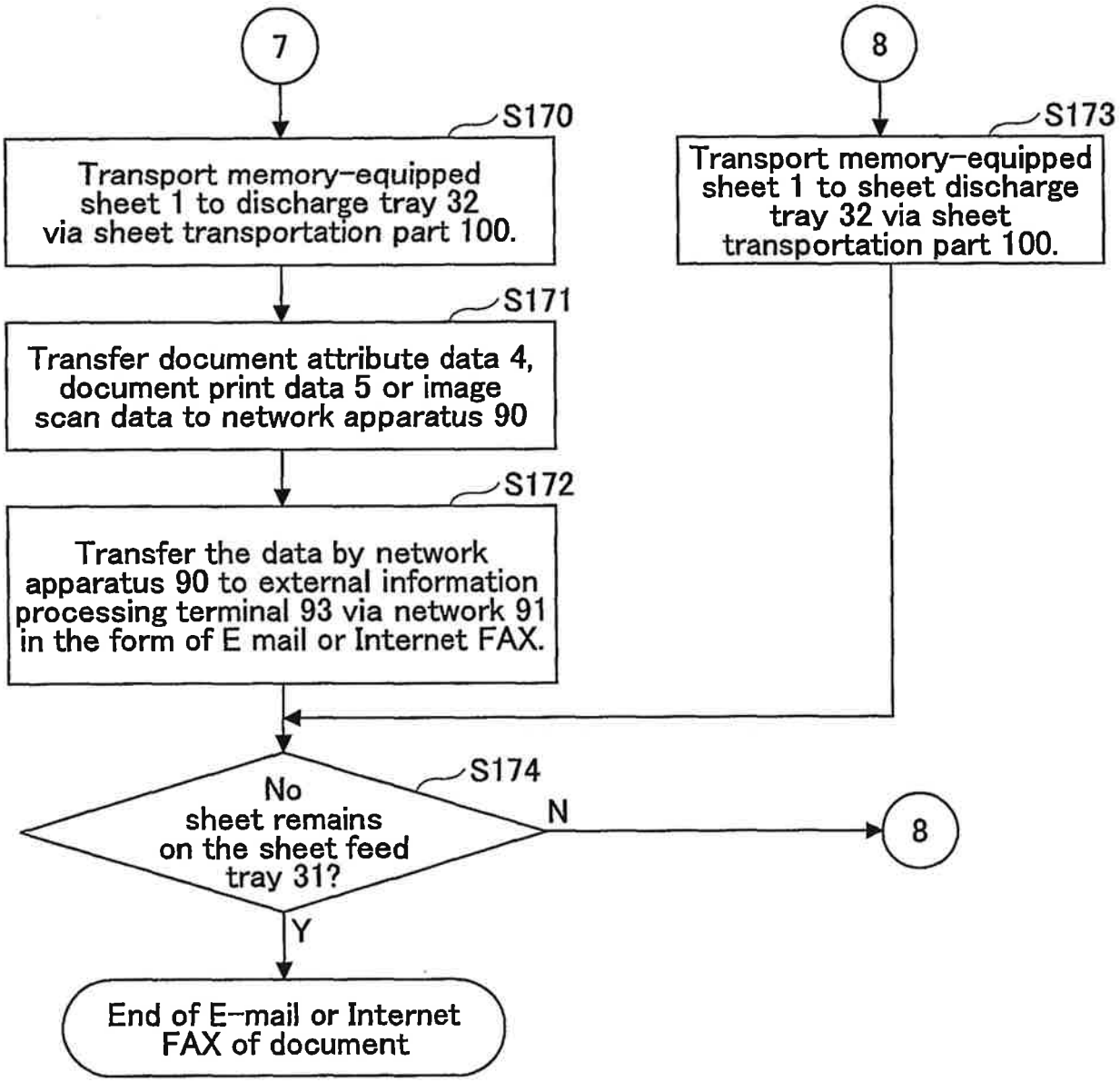

7
S170
Transport memory-equipped sheet 1 to discharge tray 32 via sheet transportation part 100.
S171
Transfer document attribute data 4, document print data 5 or image scan data to network apparatus 90
S172
Transfer the data by network apparatus 90 to external information processing terminal 93 via network 91 in the form of E mail or Internet FAX.
8
S173
Transport memory-equipped sheet 1 to sheet discharge tray 32 via sheet transportation part 100.
S174
No sheet remains on the sheet feed tray 31?
N
8
Y
End of E-mail or Internet FAX of document

FIG.17

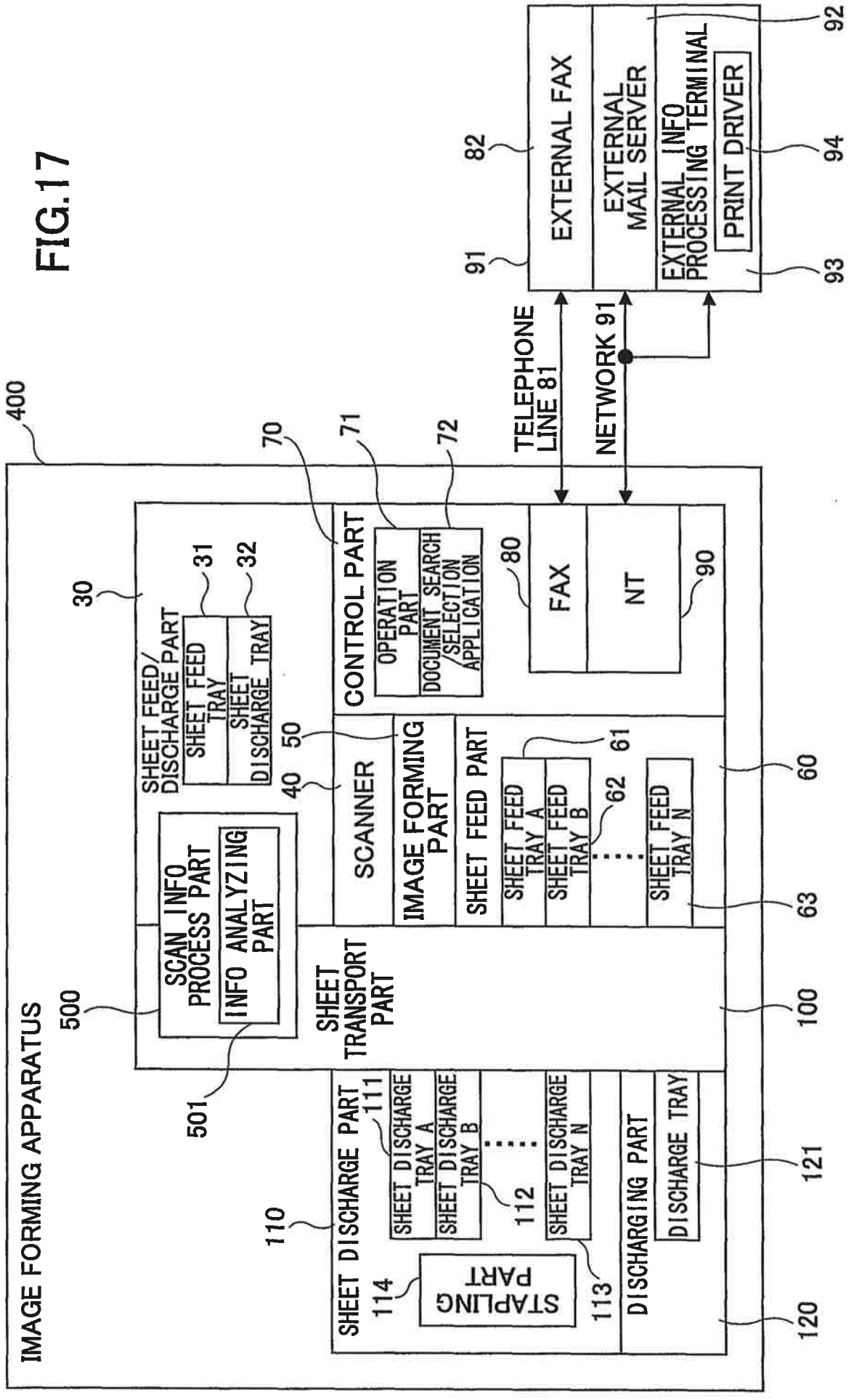
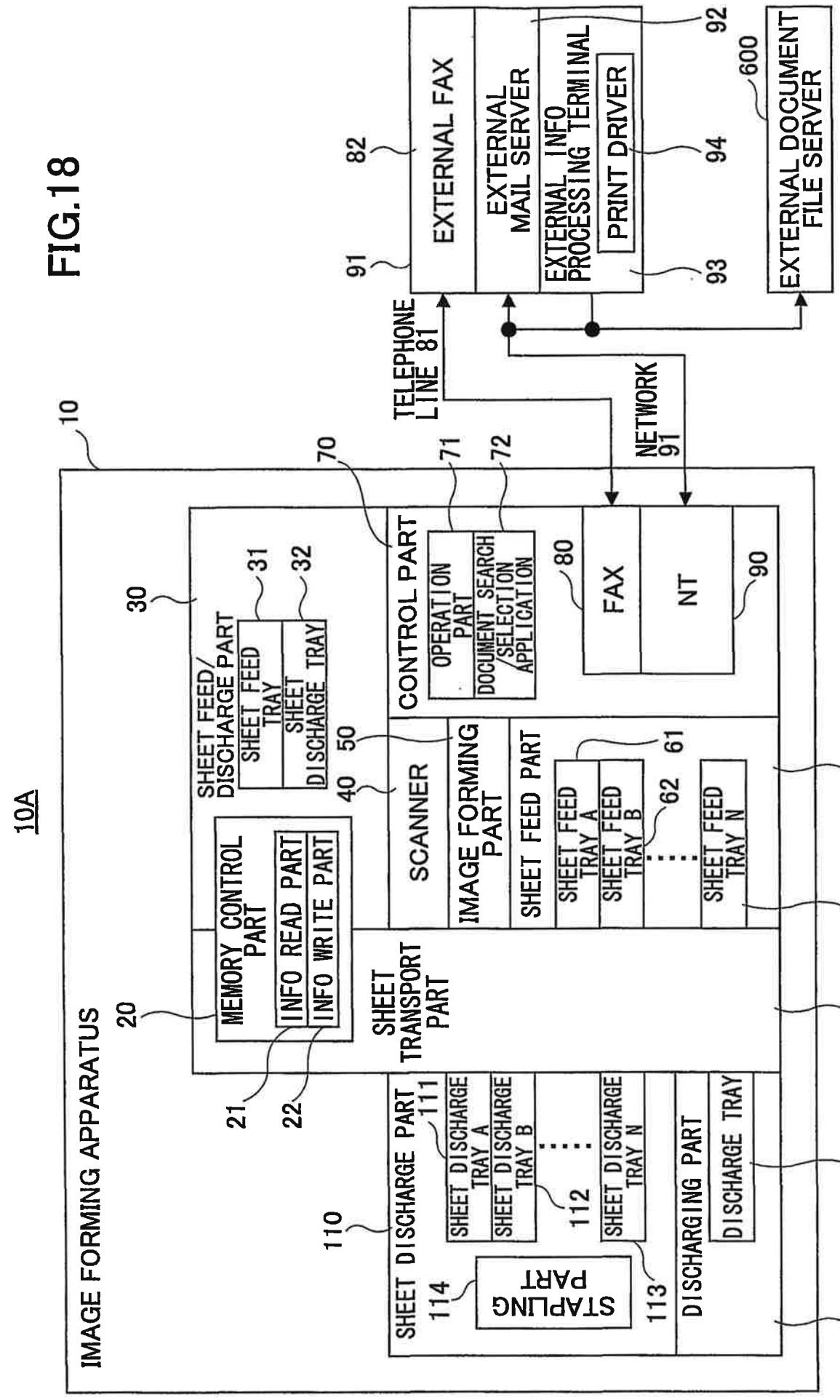

IMAGE FORMING APPARATUS
400
SHEET FEED/ DISCHARGE PART
30
SHEET FEED TRAY
31
SHEET DISCHARGE TRAY
32
SCAN INFO PROCESS PART
INFO ANALYZING PART
500
501
SCANNER
40
IMAGE FORMING PART
50
CONTROL PART
70
OPERATION PART
71
DOCUMENT SEARCH /SELECTION APPLICATION
72
SHEET TRANSPORT PART
100
SHEET FEED PART
60
SHEET FEED TRAY A
SHEET FEED TRAY B
61
62
SHEET FEED TRAY N
63
SHEET DISCHARGE PART
110
SHEET DISCHARGE TRAY A
111
SHEET DISCHARGE TRAY B
112
SHEET DISCHARGE TRAY N
113
STAPLING PART
114
DISCHARGING PART
120
DISCHARGE TRAY
121
FAX
80
NT
90
TELEPHONE LINE 81
NETWORK 91
EXTERNAL FAX
82
EXTERNAL MAIL SERVER
91
EXTERNAL INFO PROCESSING TERMINAL
92
PRINT DRIVER
93
94

FIG.18


10A
IMAGE FORMING APPARATUS
10
20
MEMORY CONTROL PART
INFO READ PART
INFO WRITE PART
21
22
30
SHEET FEED/ DISCHARGE PART
SHEET FEED TRAY
31
SHEET DISCHARGE TRAY
32
40
50
SCANNER
IMAGE FORMING PART
SHEET FEED PART
SHEET FEED TRAY A
SHEET FEED TRAY B
SHEET FEED TRAY N
61
62
63
60
70
CONTROL PART
71
OPERATION PART
72
DOCUMENT SEARCH /SELECTION APPLICATION
80
FAX
90
NT
100
SHEET TRANSPORT PART
110
SHEET DISCHARGE PART
111
SHEET DISCHARGE TRAY A
SHEET DISCHARGE TRAY B
112
SHEET DISCHARGE TRAY N
113
114
STAPLING PART
120
DISCHARGING PART
121
DISCHARGE TRAY
TELEPHONE LINE 81
NETWORK 91
91
EXTERNAL FAX
82
EXTERNAL MAIL SERVER
EXTERNAL INFO PROCESSING TERMINAL
92
PRINT DRIVER
93
94
600
EXTERNAL DOCUMENT FILE SERVER