100

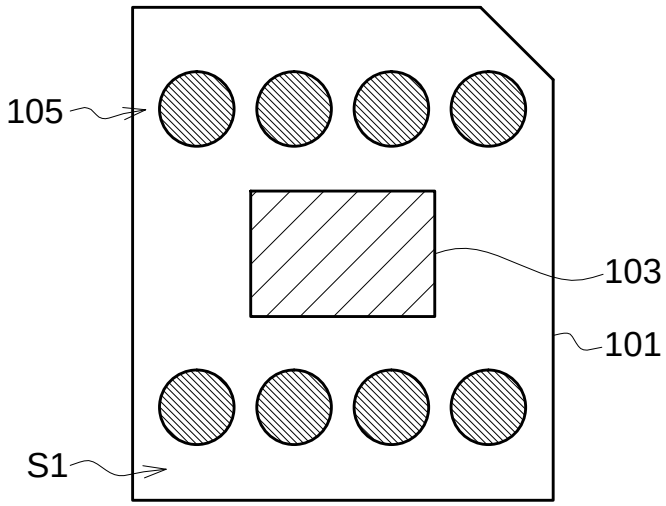

FIG. 1A

100

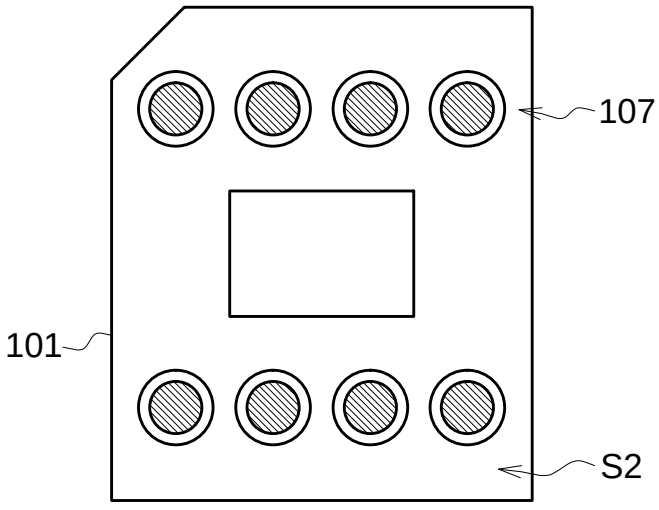

FIG. 1B

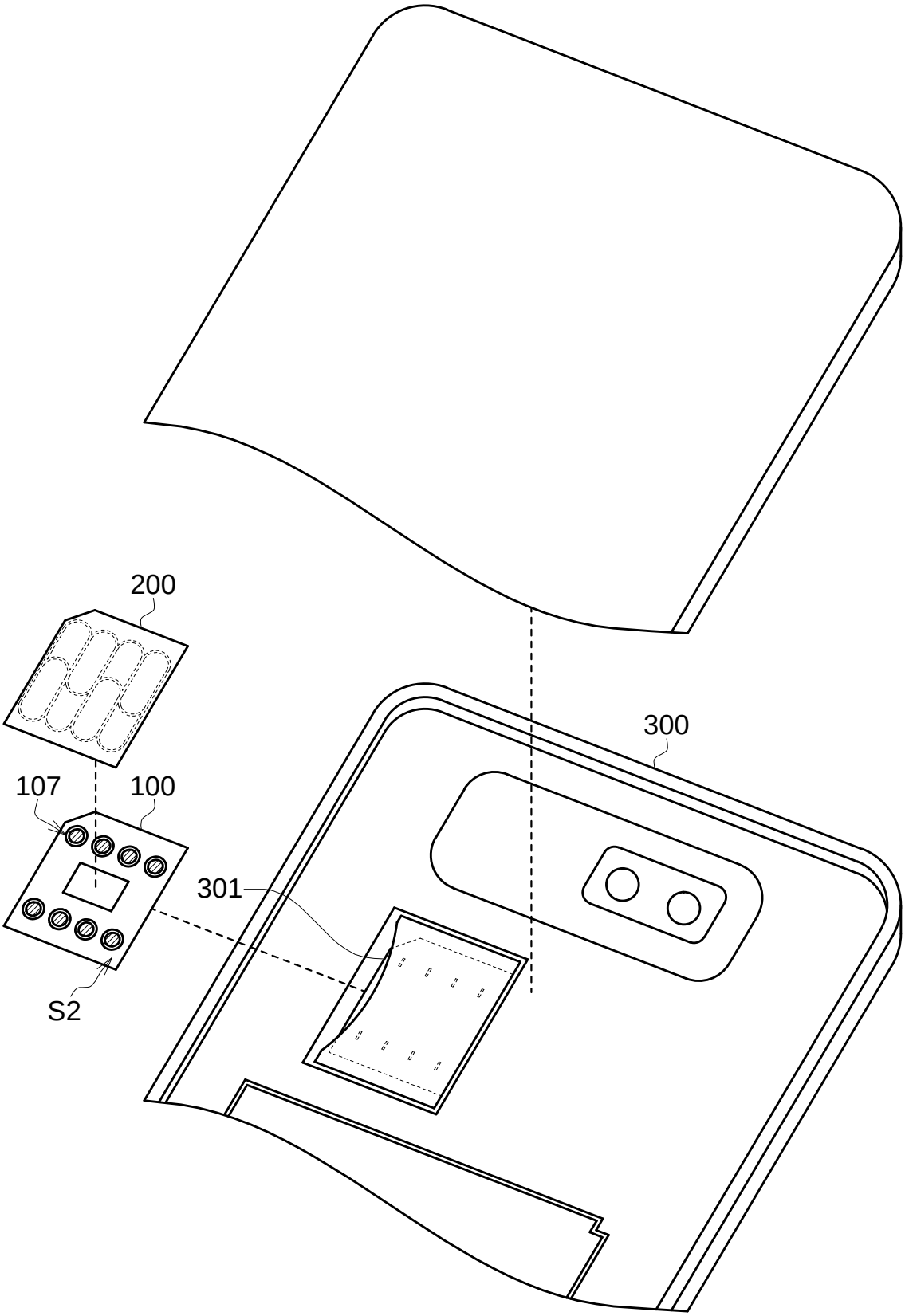

FIG. 2

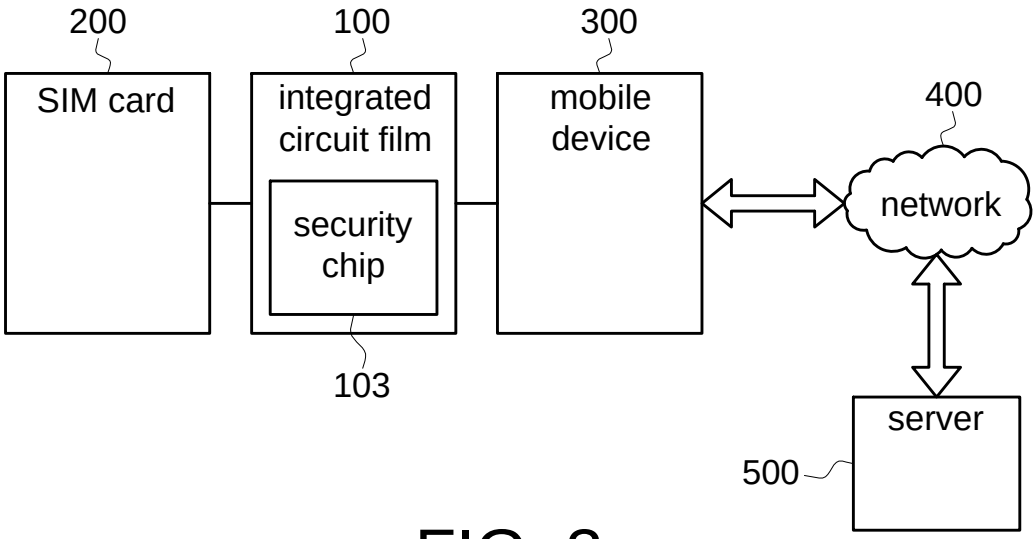
200
100
300
SIM card
integrated circuit film
security chip
103
mobile device
400
network
server
500

FIG. 3

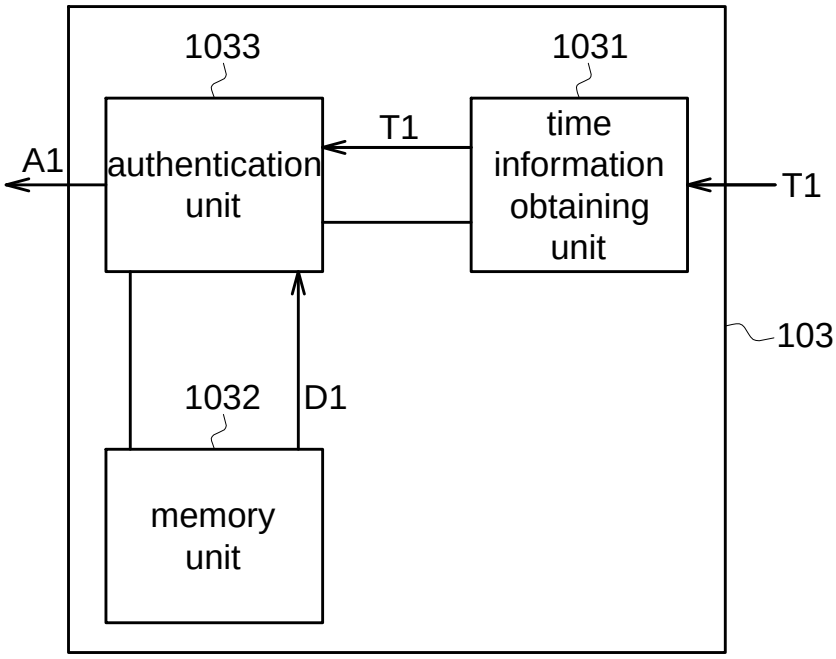
1033
1031
A1
authentication unit
T1
time information obtaining unit
T1
103
1032
D1
memory unit

FIG. 4

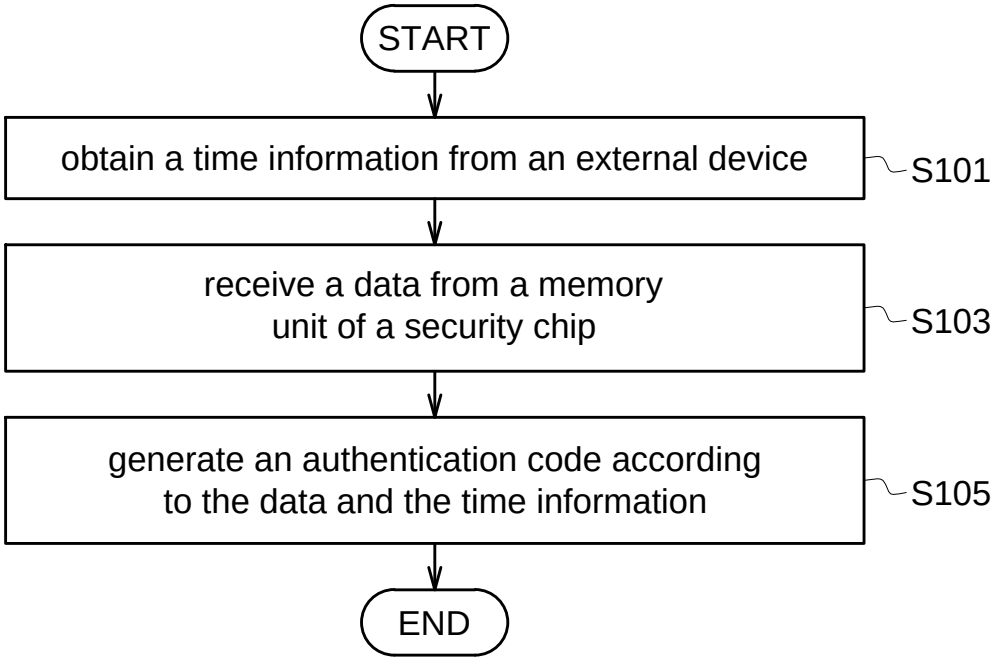
START
obtain a time information from an external device
S101
receive a data from a memory unit of a security chip
S103
generate an authentication code according to the data and the time information
S105
END

FIG. 5

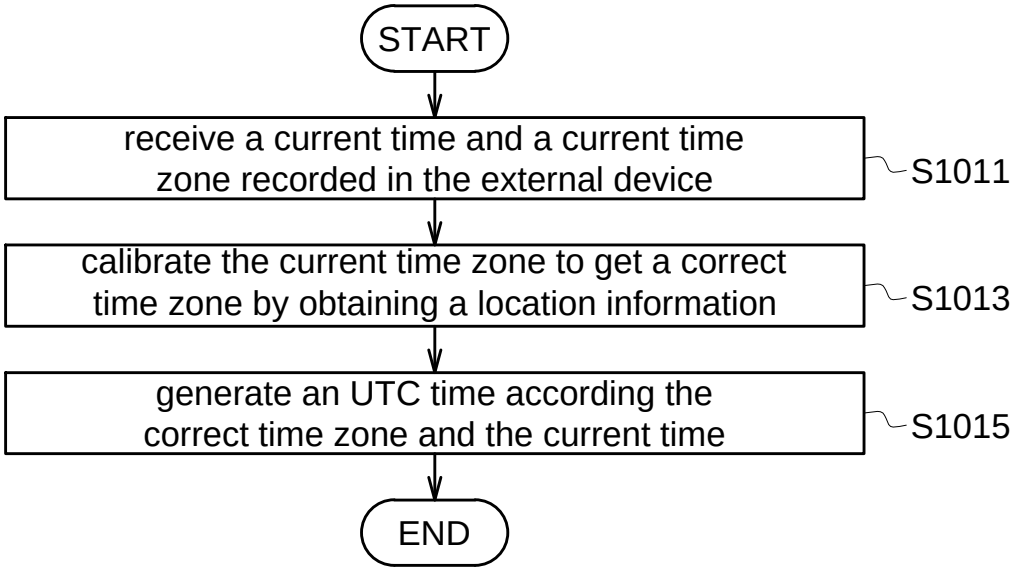
START
receive a current time and a current time zone recorded in the external device
S1011
calibrate the current time zone to get a correct time zone by obtaining a location information
S1013
generate an UTC time according the correct time zone and the current time
S1015
END

FIG. 6

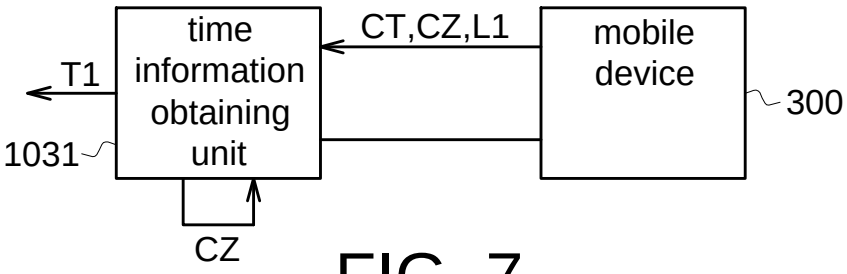

FIG. 7

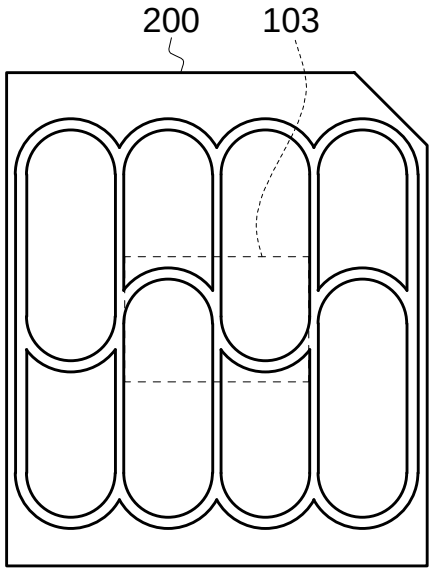

FIG. 8

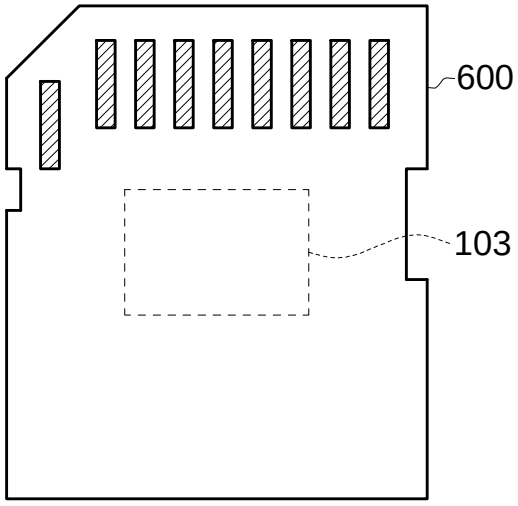

FIG. 9

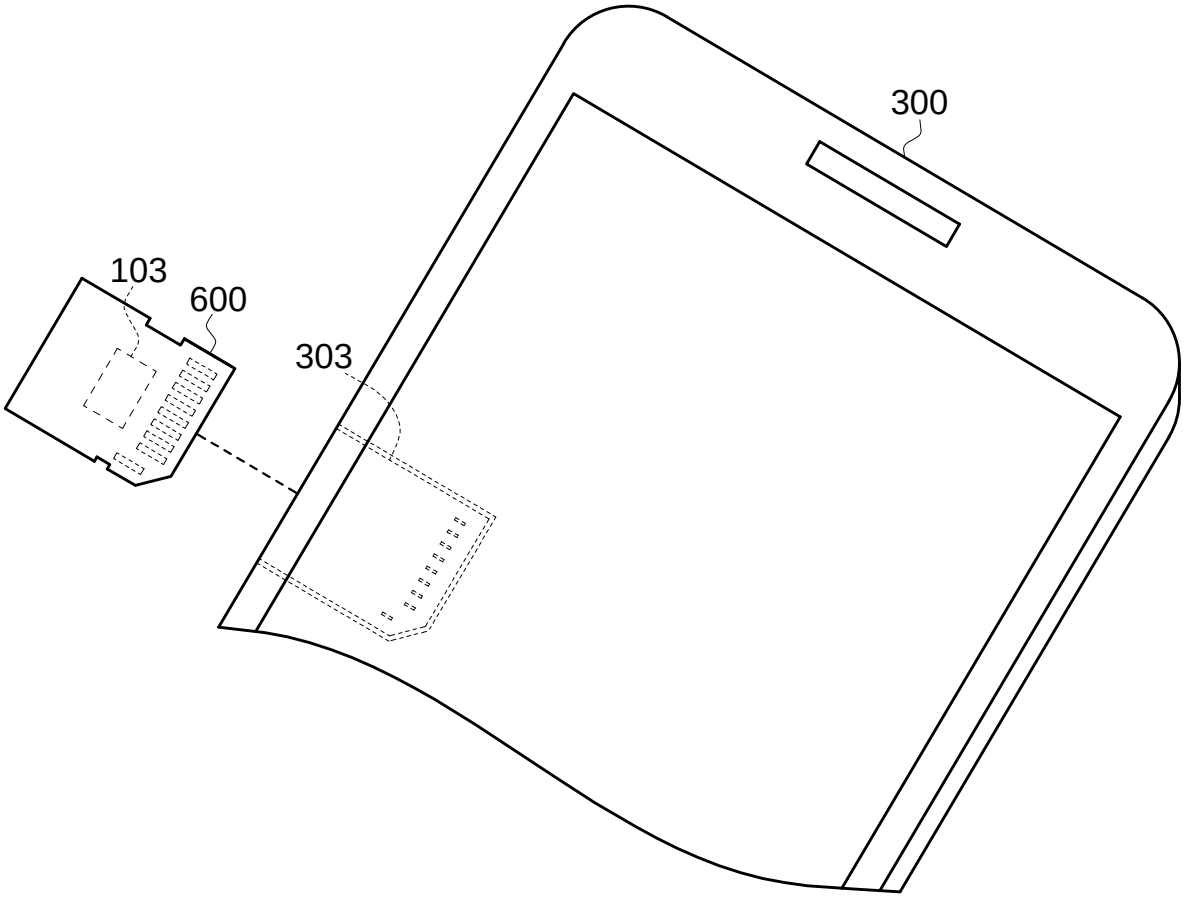
300
103
600
303

FIG. 10

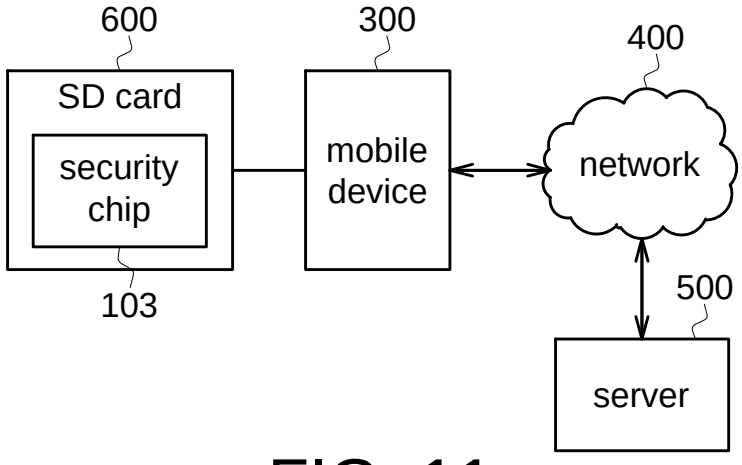
600
SD card
security chip
103
300
mobile device
400
network
500
server

FIG. 11