

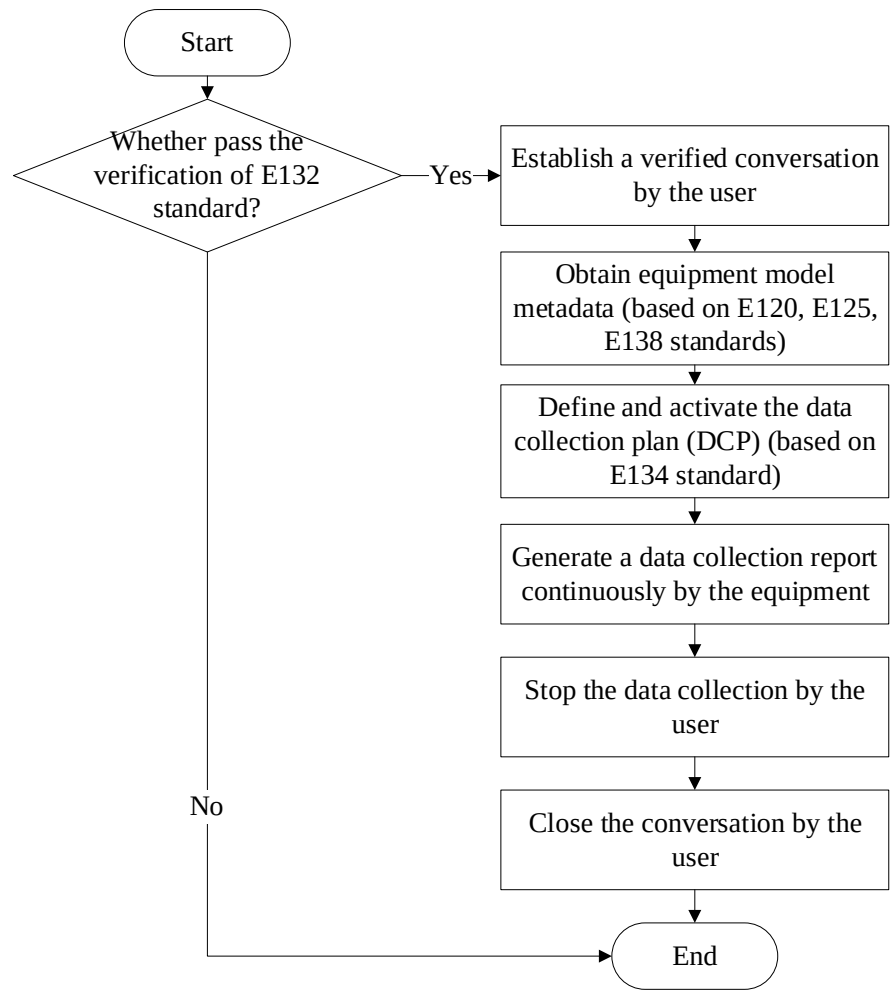


FIG. 1

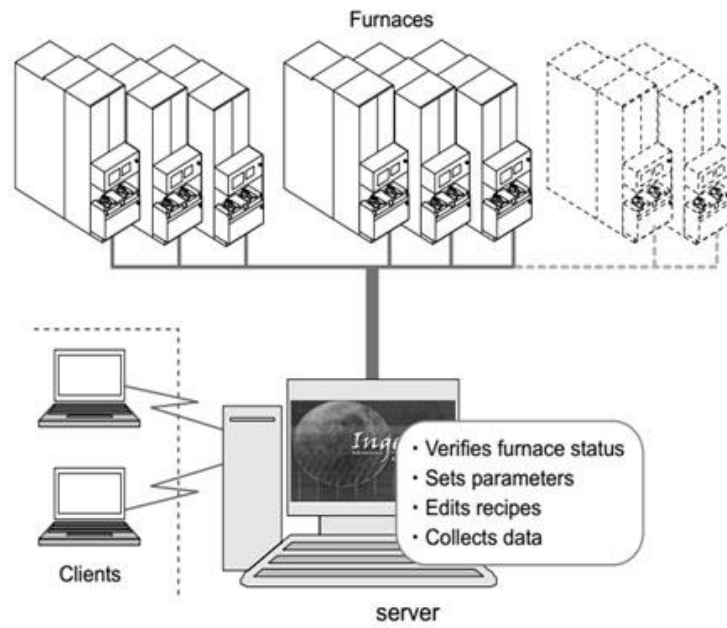


FIG. 2

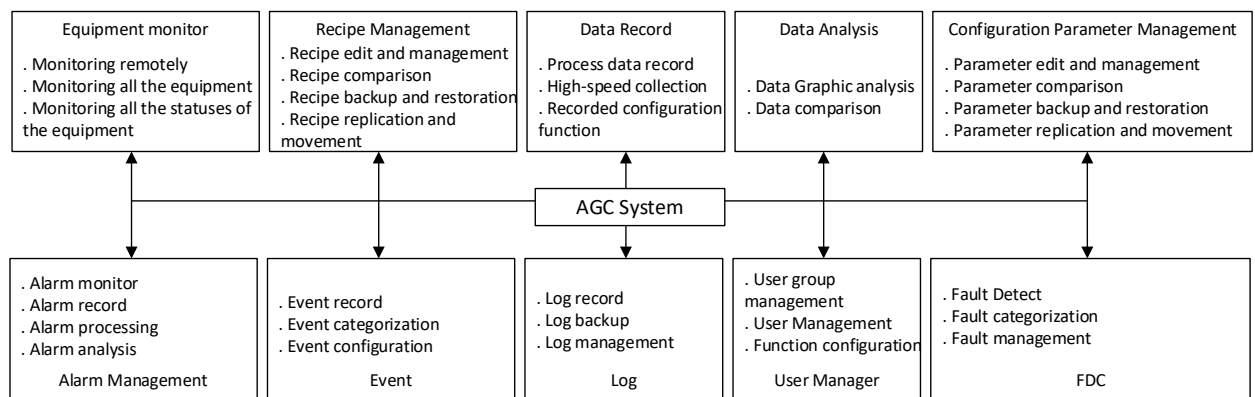


FIG. 3

SECS/GEM	Interface A
Status variable, Equipment constant, Data variable	Parameter
Alarm	Abnormal
Event collection (S6, F11)	Event in the data collection plan (DCP)
E39 Object	SEMIObjType and example number
Track data collection	Tracking in the data collection plan (DCP)
Report	Data collection plan/report
State machine	State machine
Activate/prohibit the event collection	Activate plan/Stop plan
Definition and connection report (S2, F33 and S2, F35)	Define the plan

FIG. 4

SECS/GEM	EDA/Interface A
SECS/GEM only supports connection with one use.	EDA requires to support a plurality of users at the same time.
SECS/GEM is only a part of self-description, and detailed document description needs to be added.	EDA performs self-description through the metadata of the E125 standard.
SECS/GEM includes data being relatively less hierarchical and less organized.	EDA displays the data hierarchically, and the data is organized according to main hardware assemblies.
SECS/GEM information includes data that is highly structured and has poor flexibility.	Because EDA uses XML, addition metadata can be accommodated.
SECS/GEM is only applied in a few industries, and professional users are limited globally.	SOAP/XML and HTTP are basis for a majority of internet and intranet applications.
SECS/GEM interface is configured to configure and control the equipment. Thus, SECS/GEM interface is closely monitored, and the modification process is lengthy.	EDA is independent of GEM interface. Thus, the dynamic data collection requirement of the engineer is satisfied.

FIG. 5

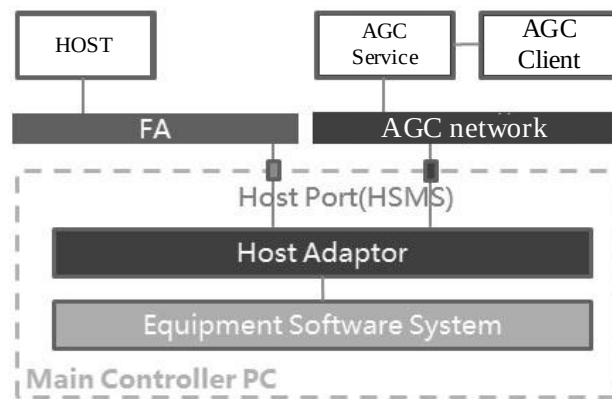


FIG. 6

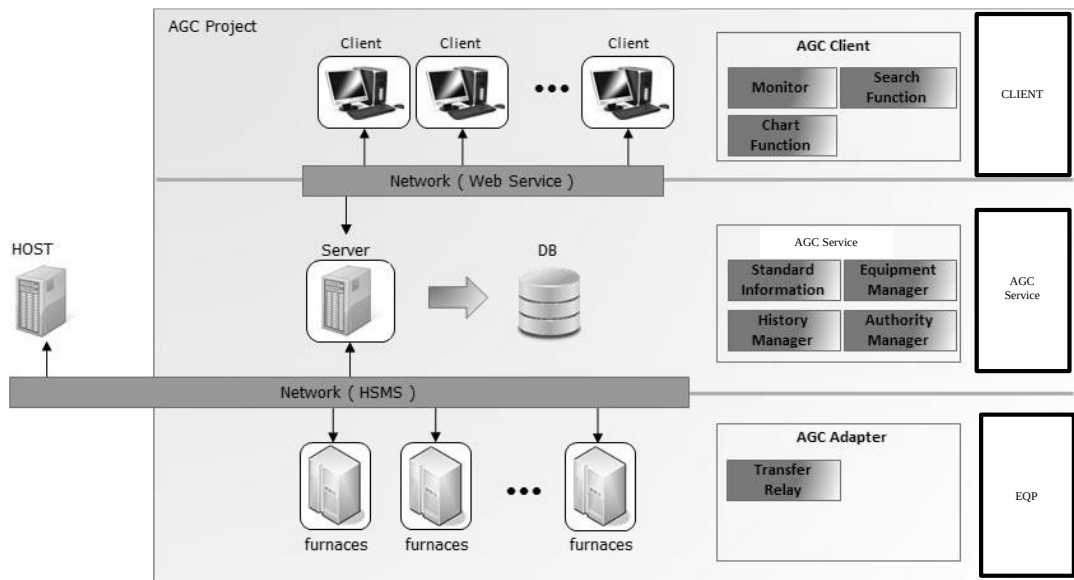


FIG. 7

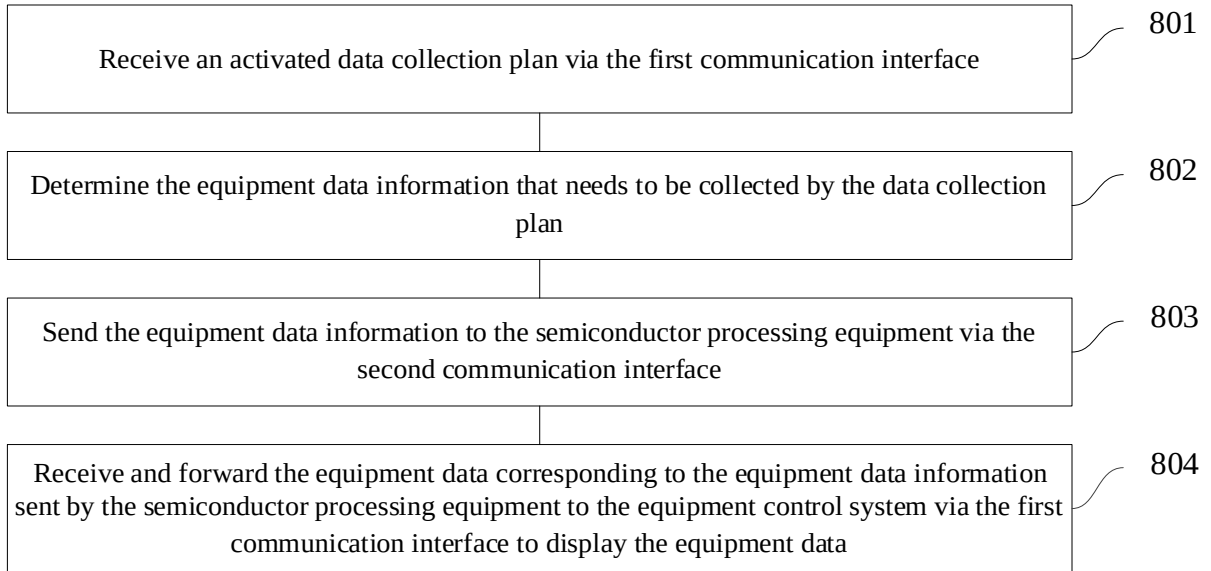


FIG. 8

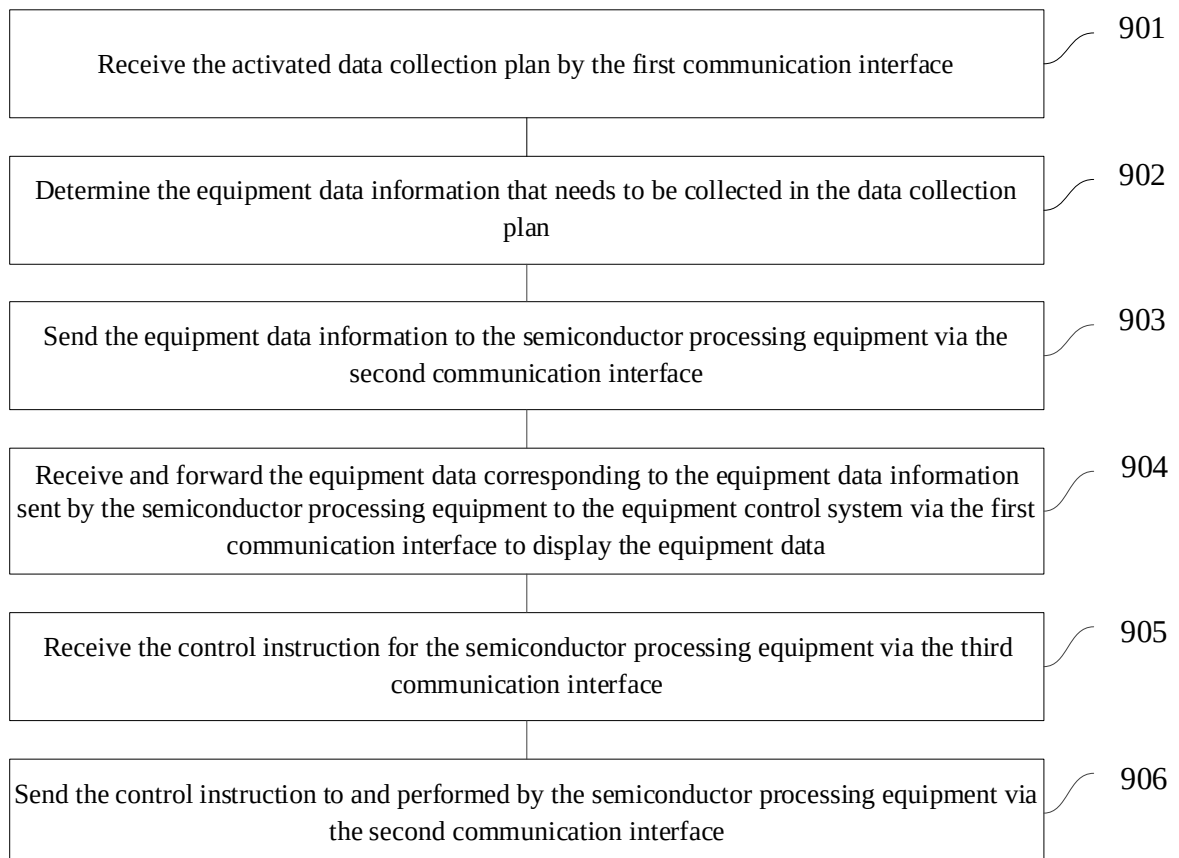


FIG. 9

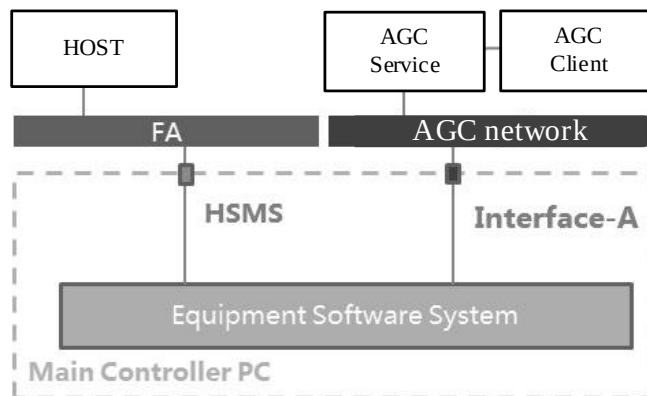


FIG. 10

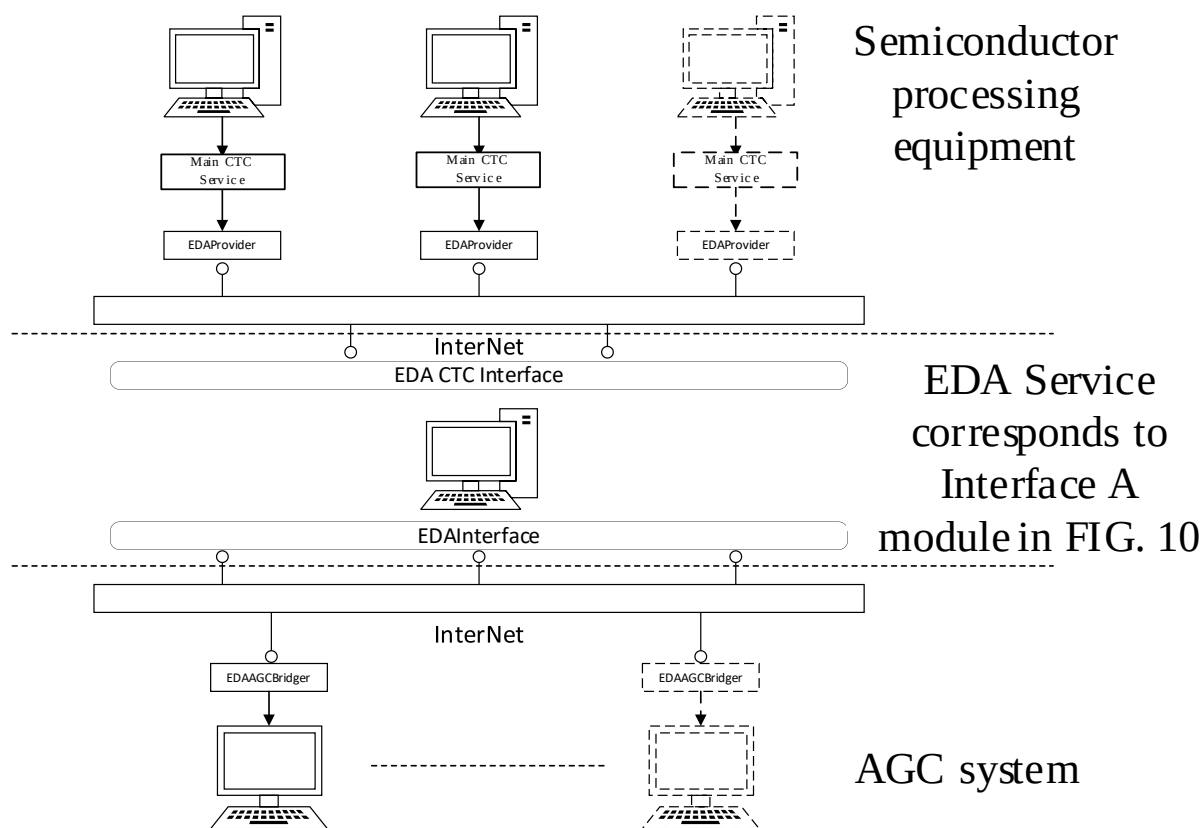


FIG. 11

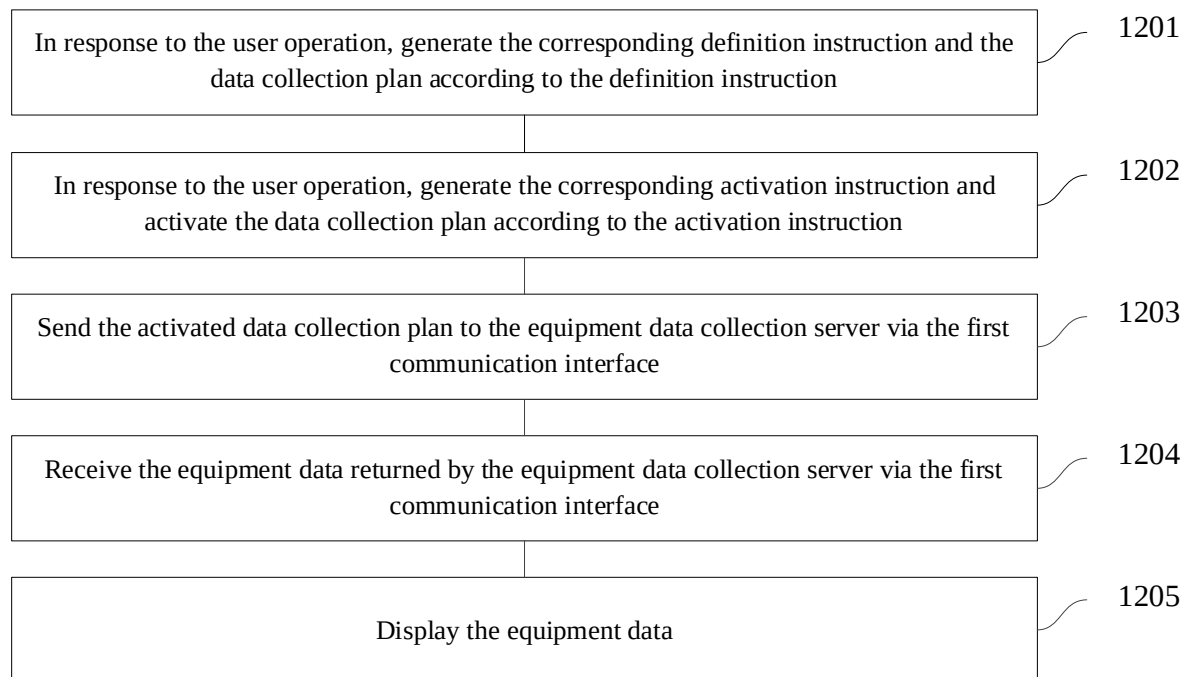


FIG. 12

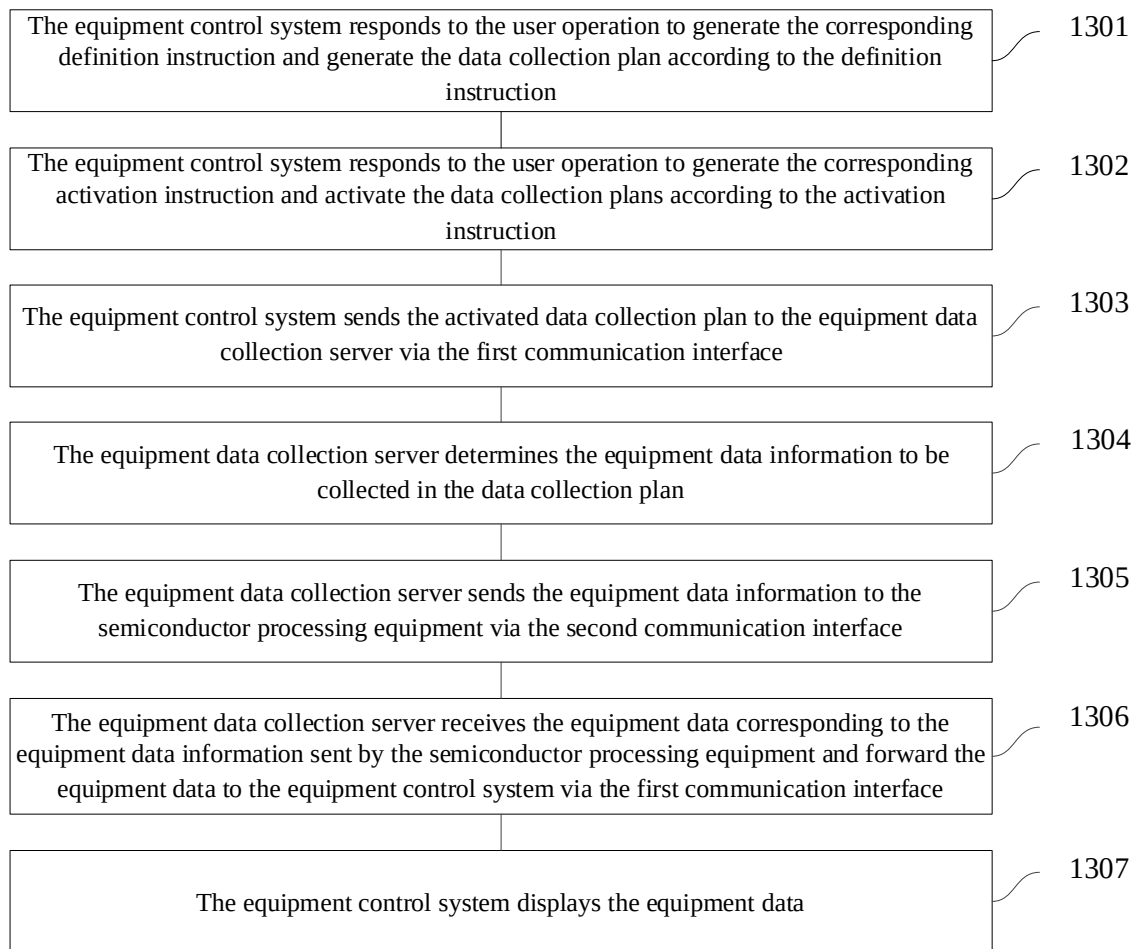


FIG. 13

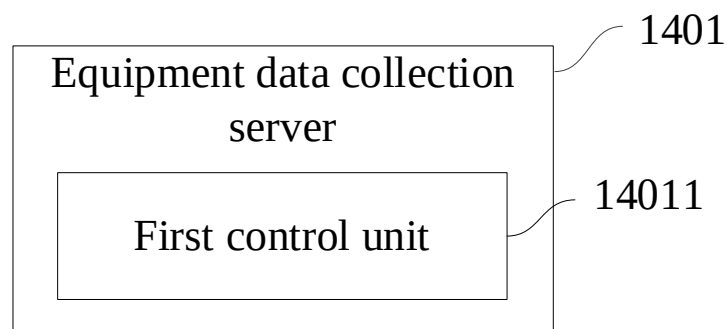


FIG. 14

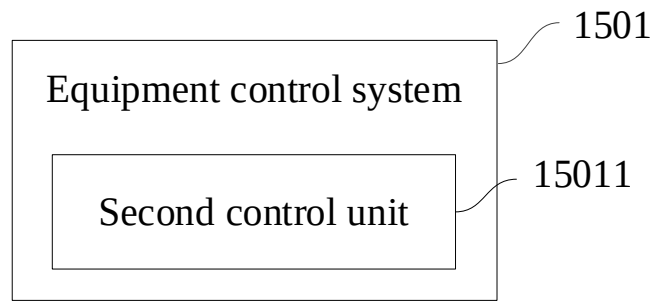


FIG. 15