

CLAIMS

1. A system comprising:

a wafer-handling system of a semiconductor-manufacturing system, wherein the wafer-handling system is configured to hold one or more wafers for processing;

one or more processing components configured to physically treat the one or more wafers;

a controller configured to operate the processing components; and

a text bot in communication with the semiconductor-manufacturing system and configured to respond to a user inquiry.

2. The system of Claim 1, wherein the user inquiry is a spoken user inquiry.

3. A system comprising:

a wafer-handling system of a semiconductor-manufacturing system, wherein the wafer-handling system is configured to hold one or more wafers for processing;

processing components configured to physically treat the one or more wafers;

a controller configured to operate the processing components; and

a speech bot in communication with the semiconductor-manufacturing system and configured to respond to a spoken user inquiry, wherein the speech bot is further configured to access the controller and operate processing components based on user-response input.

4. A system comprising:

a wafer-handling system of a semiconductor-manufacturing system, wherein the wafer-handling system is configured to hold one or more wafers for processing;

processing components configured to physically treat the one or more wafers;
a controller configured to operate the processing components; and
an artificial intelligence (AI) engine in communication with the semiconductor-manufacturing system, wherein the AI configured to respond to a user inquiry.

5. A system comprising:

a wafer-handling system of a semiconductor-manufacturing system, wherein the wafer-handling system is configured to hold one or more wafers for processing;
processing components configured to physically treat the one or more wafers;
a controller configured to operate the processing components; and
a natural language processing (NLP) bot in communication with the semiconductor-manufacturing system, wherein the NLP bot is configured to respond to a user inquiry.

6. A system comprising:

a wafer-handling system of a semiconductor-manufacturing system, wherein the wafer-handling system is configured to hold one or more wafers for processing;
processing components configured to physically treat the one or more wafers;
a controller configured to operate the processing components; and
a conversational bot in communication with the semiconductor-manufacturing system, wherein the conversational bot is configured to respond to a user inquiry.

7. The system of Claim 6, wherein the conversational bot is configured to provide a contextual response with multiple answers to the user inquiry.

8. The system of Claim 6, wherein:

the user inquiry is associated with a trouble-shooting problem; and

the conversational bot is configured to provide to respond to the user inquiry based on one or more of:

- a decision-making logical path analysis of historical logs;
- best known methods; or
- trouble-shooting decision-making-tree guides.

9. The system of Claim 6, further comprising augmented reality (AR) wearable equipment in communication with the conversational bot, wherein the AR wearable equipment is configured to transmit the user query to the conversational bot and receive response data.

10. The system of claim 9, further comprising virtual reality (VR) wearable equipment in communication with the conversational bot and the AR wearable equipment, wherein the VR wearable equipment is configured to transmit the user query to the conversational bot and receive response data.

11. The system of Claim 6, further comprising virtual reality (VR) wearable equipment in communication with the conversational bot, wherein the VR wearable equipment is configured to transmit the user query to the conversational bot and receive response data.

12. The system of Claim 6, further comprising user-wearable equipment in communication with the conversational bot, wherein the user-wearable equipment is configured to transmit the user query to the conversational bot and receive response data.

13. The system of Claim 12, wherein the user-wearable equipment comprises a microphone and a speaker.

14. The system of Claim 13, wherein the user-wearable equipment comprises a display configured to display video clips in response to the user query to the conversational bot.

15. The system of claim 14, wherein the user-wearable equipment comprises a camera configured to record video and transmit the video to a remote display.

16. A system comprising:

an artificial intelligence (AI) engine in communication with one or more semiconductor-manufacturing systems, wherein the AI engine:

has access to a process-data store that comprises data extracted and transformed from corresponding operation manuals; and

is configured to monitor operation of the one or more semiconductor-manufacturing systems and predict failure conditions.

17. The system of Claim 16, wherein the AI engine is further configured to provide recommended tool-operation parameters configured to increase device yield compared with observed tool operation parameters.

18. A system comprising:

an artificial intelligence (AI) engine in communication with one or more semiconductor-manufacturing systems, wherein the AI engine:

has access to a process-data store that comprises data extracted and transformed from corresponding operation manuals; and

is configured to monitor operation of the semiconductor-manufacturing systems and recommend actions determined to improve yield.

19. A system comprising:

processing components configured to physically treat of one or more semiconductor wafers;

a controller configured to operate the processing components; and

a conversational bot configured to respond to a user inquiry.

20. The system of Claim 19, wherein the conversational bot is further configured to initiate treatment of one or more of the semiconductor wafers based on one or more of:

user input; or

accessed best known methods.