

Claims:

1. An architecture for creating a plasma-processing-related application, said architecture stored on a non-transitory storage medium that is operatively connected to at least one processor, whereby the at least one processor executes functions programmed into the following layers, components, set of views, modules and applications, said architecture comprising:
 - a foundation layer having a plurality of framework components, wherein said framework components including at least one of security component, data management component and user interface (UI) component;
 - an analysis view layer having a set of views, wherein said set of views are generated utilizing components from said foundation layer;
 - an analysis module layer having a plurality of analysis modules, wherein each analysis module of said plurality of analysis modules is assembled from one or more view of said set of views; and
 - an application layer having a plurality of applications, wherein each application of said plurality of applications is assembled from one or more analysis module.
2. The architecture of claim 1 wherein said framework component includes said security component including at least security definitions.
3. The architecture of claim 1 wherein said framework component includes said data management component including at least one of
 - data types, wherein said data types including at least data definitions from a set of tools, and
 - data management, wherein said data management including at least location of stored data, format of said stored data, and a mean for accessing said stored data.
4. The architecture of claim 1 wherein said framework component includes said UI component including at least one of
 - graphical user interface (GUI) component, wherein said GUI including at least one of UI definitions and rules, and

data visualization component, wherein said data visualization component including at least one of charts and tables.

5. The architecture of claim 1 wherein said set of views are presented as a set of pages on a display screen, wherein each view of said set of views having at least one of
a consistent UI with consistent navigational mode,
a consistent data management methodology, and
a consistent security methodology.
6. The architecture of claim 1 wherein a view of said set of views is utilized by a single analysis module.
7. The architecture of claim 1 wherein a view of said set of views is utilized by multiple analysis modules.
8. The architecture of claim 1 wherein an analysis module of said plurality of analysis modules is utilized by a single application.
9. The architecture of claim 1 wherein an analysis module of said plurality of analysis modules is utilized by multiple applications.
10. The architecture of claim 1 wherein each view of said set of views is modular.
11. The architecture of claim 1 wherein each analysis module of said plurality of analysis modules is modular.
12. A computer-implemented method for providing a common data architecture and user interface (UI) in creating plasma-processing-related applications, comprising:
setting up a plurality of framework components based on a foundation layer,
wherein said plurality of framework components including at least one of security component, data management component and user interface (UI) component;
generating a set of views, wherein said set of views are developed utilizing components from said foundation layer;

combining one or more views to create at least one analysis module; and
combining one or more analysis modules to create at least one application.

13. The computer-implemented method of claim 12 wherein said plurality of framework components including said security component is provided by establishing security definitions.

14. The computer-implemented method of claim 12 wherein said plurality of framework components including said data management component is provide by at least one of

establishing data types, wherein said data types including at least data definitions from a set of tools, and

establishing data management, wherein said data management including at least location of stored data, format of said stored data, and a mean for accessing said stored data.

15. The computer-implemented method of claim 12 wherein said plurality of framework components including said UI component is provide by at least one of
establishing a graphical user interface (GUI) component, wherein said GUI including at least one of UI definitions and rules, and

establishing a data visualization component, wherein said data visualization component including at least one of charts and tables.

16. The computer-implemented method of claim 12 wherein said set of views are presented as a set of pages on a display screen, wherein each view of said set of views having at least one of

a consistent UI with consistent navigational mode,

a consistent data management methodology, and

a consistent security methodology.

17. The computer-implemented method of claim 12 wherein a view of said set of views is utilized by a single analysis module.

18. The computer-implemented method of claim 12 wherein a view of said set of views is utilized by multiple analysis modules.
19. The computer-implemented method of claim 12 wherein an analysis module of said plurality of analysis modules is utilized by a single application.
20. The computer-implemented method of claim 12 wherein an analysis module of said plurality of analysis modules is utilized by multiple applications.
21. The computer-implemented method of claim 12 wherein each view of said set of views is modular.
22. The computer-implemented method of claim 12 wherein each analysis module of said plurality of analysis modules is modular.

CLAIMS

What is claimed is:

1. An architecture for creating a plasma-processing-related application, comprising:
 - a foundation layer having a plurality of framework components, wherein said framework components including at least one of security component, data management component and user interface (UI) component;
 - an analysis view layer having a set of views, wherein said set of views are generated utilizing components from said foundation layer;
 - an analysis module layer having a plurality of analysis modules, wherein each analysis module of said plurality of analysis modules is assembled from one or more view of said set of views; and
 - an application layer having a plurality of applications, wherein each application of said plurality of applications is assembled from one or more analysis module.
2. The architecture of claim 1 wherein said framework component includes said security component including at least security definitions.
3. The architecture of claim 1 wherein said framework component includes said data management component including at least one of
 - data types, wherein said data types including at least data definitions from a set of tools, and
 - data management, wherein said data management including at least location of stored data, format of said stored data, and a mean for accessing said stored data.
4. The architecture of claim 1 wherein said framework component includes said UI component including at least one of
 - graphical user interface (GUI) component, wherein said GUI including at least one of UI definitions and rules, and
 - data visualization component, wherein said data visualization component including at least one of charts and tables.

5. The architecture of claim 1 wherein said set of views are presented as a set of pages on a display screen, wherein each view of said set of views having at least one of
a consistent UI with consistent navigational mode,
a consistent data management methodology, and
a consistent security methodology.
6. The architecture of claim 1 wherein a view of said set of views is utilized by a single analysis module.
7. The architecture of claim 1 wherein a view of said set of views is utilized by multiple analysis modules.
8. The architecture of claim 1 wherein an analysis module of said plurality of analysis modules is utilized by a single application.
9. The architecture of claim 1 wherein an analysis module of said plurality of analysis modules is utilized by multiple applications.
10. The architecture of claim 1 wherein each view of said set of views is modular.
11. The architecture of claim 1 wherein each analysis module of said plurality of analysis modules is modular.
12. A computer-implemented method for providing a common data architecture and user interface (UI) in creating plasma-processing-related applications, comprising:
setting up a plurality of framework components, wherein said plurality of framework components including at least one of security component, data management component and user interface (UI) component;
generating a set of views, wherein said set of views are developed utilizing components from said foundation layer;
combining one or more views to create at least one analysis module; and
combining one or more analysis modules to create at least one application.

13. The computer-implemented method of claim 12 wherein said plurality of framework components including said security component is provided by establishing security definitions.
14. The computer-implemented method of claim 12 wherein said plurality of framework components including said data management component is provide by at least one of
- establishing data types, wherein said data types including at least data definitions from a set of tools, and
 - establishing data management, wherein said data management including at least location of stored data, format of said stored data, and a mean for accessing said stored data.
15. The computer-implemented method of claim 12 wherein said plurality of framework components including said UI component is provide by at least one of
- establishing a graphical user interface (GUI) component, wherein said GUI including at least one of UI definitions and rules, and
 - establishing data visualization component, wherein said data visualization component including at least one of charts and tables.
16. The computer-implemented method of claim 12 wherein said set of views are presented as a set of pages on a display screen, wherein each view of said set of views having at least one of
- a consistent UI with consistent navigational mode,
 - a consistent data management methodology, and
 - a consistent security methodology.
17. The computer-implemented method of claim 12 wherein a view of said set of views is utilized by a single analysis module.
18. The computer-implemented method of claim 12 wherein a view of said set of views is utilized by multiple analysis modules.

19. The computer-implemented method of claim 12 wherein an analysis module of said plurality of analysis modules is utilized by a single application.
20. The computer-implemented method of claim 12 wherein an analysis module of said plurality of analysis modules is utilized by multiple applications.
21. The computer-implemented method of claim 12 wherein each view of said set of views is modular.
22. The computer-implemented method of claim 12 wherein each analysis module of said plurality of analysis modules is modular.