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(54) **COMPUTER BASED SYSTEM FOR CONFIGURING, MANUFACTURING, TESTING, DIAGNOSING, AND RESETTING TARGET UNIT EQUIPMENT AND METHODS OF USE THEREOF**

9/45504; G06F 9/45537; G06F 11/0778;
G06F 11/3055; G06F 11/3089; G06F
3/0482; G06F 9/4406; G06F 3/0481;
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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

2009/0323801 A1* 12/2009 Imajou H04N 19/105
382/232
2018/0270249 A1* 9/2018 Joshi H04L 63/105

* cited by examiner

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CPC *H04N 21/4183* (2013.01); *G06F 9/45504* (2013.01); *G06F 9/45537* (2013.01); *H04N 21/4184* (2013.01)

(57) **ABSTRACT**

In some embodiments, the present disclosure provides an exemplary method that may include the steps of providing a computing device associated with a plurality of user; receiving output data transmitted from a target unit; analyzing the output data; transmitting a plurality of interaction commands; transmitting the plurality of interaction commands to an application or operating system; determining a plurality of identifying key words; dynamically determining a configuration screen image based on an identification of the plurality of identifying key words associated with the plurality of graphical user interface displays; automatically selecting a configuration setting associated with the plurality of interactive image elements based on the configurations screen image; and executing a plurality of ameliorative actions associated with the configuration setting.

(58) **Field of Classification Search**
CPC H04N 21/4183; H04N 21/4184; G06F

20 Claims, 37 Drawing Sheets

