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Declarations under Rule 4.17:

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

(54) Title: PERFORMING RADIO FREQUENCY MATCHING CONTROL USING A MODEL-BASED DIGITAL TWIN

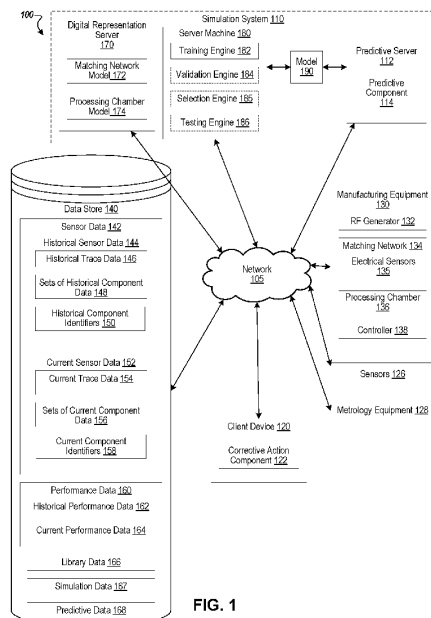


FIG. 1

(57) Abstract: A method includes causing manufacturing equipment to generate a RF signal to energize a processing chamber associated with the manufacturing equipment. The method further includes receiving, from one or more sensors associated with the manufacturing equipment, current trace data associated with the RF signal. The method further includes updating impedance values of a digital replica associated with the manufacturing equipment based on the current trace data. The method further includes obtaining, from the digital replica, one or more outputs indicative of predictive data. The method further includes causing, based on the predictive data, performance of one or more corrective actions associated with the manufacturing equipment.

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