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(71) Applicant: **EEKI AUTOMATION PRIVATE LIMITED** [IN/IN]; E-44 Gyan Sarovar Colony, Kota-Bundi Road, Kota 324008 (IN).

(72) Inventor: **KUMAR, Amit**; E-44 Gyan Sarovar Colony, Kota-Bundi Road, Kota 324008 (IN).

(74) Agent: **MONDAL, Prosenjit**; C block Sector 2, C-44 First Floor, Noida 201301 (IN).

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(54) Title: PLANT GROWTH SYSTEM

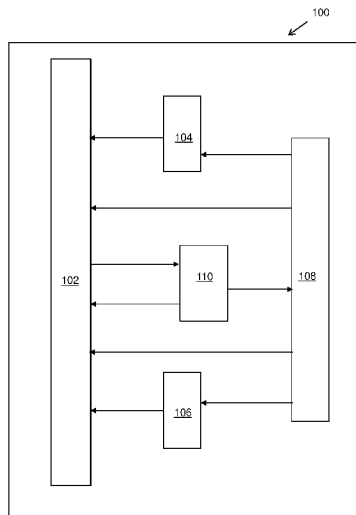


FIG. 1

(57) Abstract: The present disclosure discloses a plant growth system for cultivating plants in a soil-less environment. The plant growth system comprises: at least one plant growth chamber for accommodating roots of at least one plant; a root volume adaptability module for identifying and maintaining water level in the at least one plant growth chamber; a conditioning module for identifying and maintaining at least one plant growth parameter in adjoining surrounding of the roots inside the at least one plant growth chamber; a control module communicably coupled with the root volume adaptability module and the conditioning module for controlling at least one actuators of the plant growth system; and at least one image capturing module for capturing visual data of the at least one plant and communicably coupled with the control module for sharing captured visual data to detect deficiency in the at least one plant.

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