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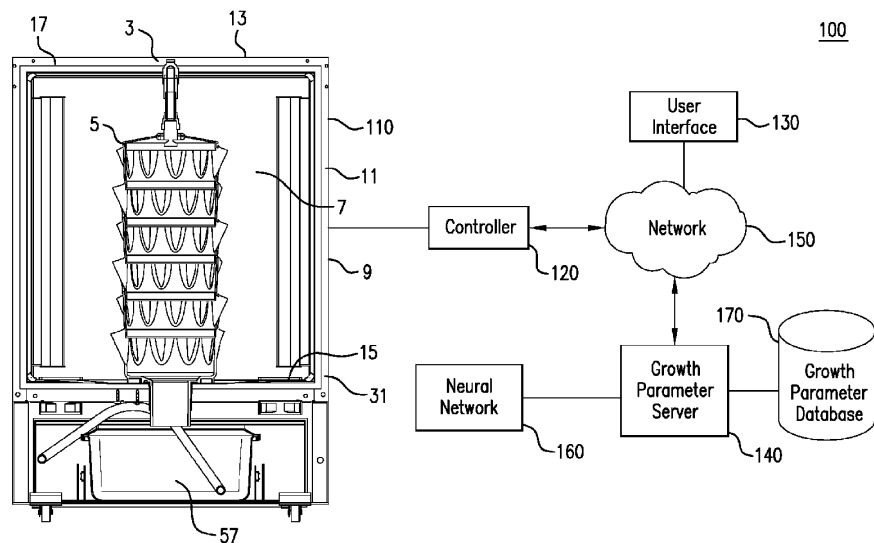


FIG. 1

(57) Abstract: A system for providing a growth environment for a plant positioned in an automated plant growing system is disclosed. Light sources with each light source positioned in the automated plant growing system to expose the plant to the light sources and to generate light to trigger photosynthesis in the plant. A controller that monitors a growth parameters associated with the plant to determine whether the growth parameters deviate beyond a corresponding growth threshold. Each of the growth parameters provides an indicator as to a growth status of the plant and the growth status of the plant decreases when the growth parameters deviate beyond the corresponding growth threshold. The controller automatically adjusts an environmental parameter when the growth parameters deviate beyond the growth thresholds. Each of the environmental parameters impact the growth environment of the plant positioned in the automated plant growing system.

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