

Agrarian Group Inventors

John R. New, CEO, The Agrarian Group, LLC
Dylan Straughan

Unmet Need

The legal marijuana market is witnessing robust growth due to increasing legalization and decriminalization of marijuana across North America and Europe. Rising demand of marijuana for recreational use and medical use is a key growth factor; and, the full potential of the market is not yet realized. Valued at \$14.3 Billion in 2016, the global legal marijuana market is forecast to grow at a CAGR of 21.1% between 2017 and 2024¹, culminating in 2024 global sales of \$63.5 Billion.

Producing this high-value, specialty crop in an efficient, controlled, and cost-effective manner is key to producers realizing the highest possible profits in this surging market.

The Controlled Environment Agriculture (“CEA”) approach to cannabis production supports profit optimization.

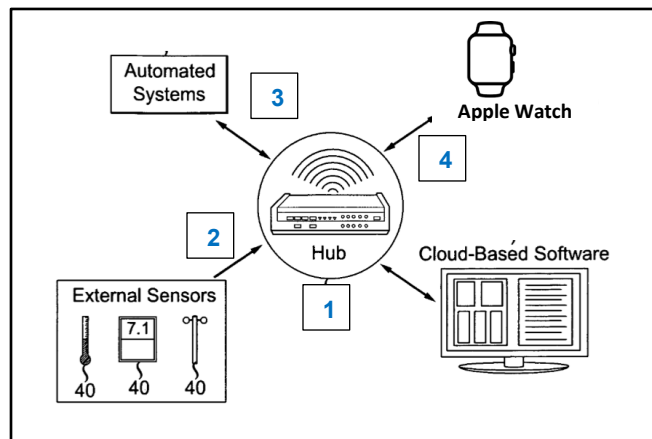
Properly applied, CEA can provide protection and maintain optimal growing conditions throughout the development and distribution of a cannabis crop. CEA optimizes use of resources such as water, energy, space, capital, and labor, reducing expense and enhancing crop yields while minimizing environmental impacts.

Opportunity

The Agrarian Group, LLC (TAG) agricultural technology focuses on the automated monitoring, intervention, and adjustment of agrarian product production. As with manufacturing control systems, this patented technology also can drive the distribution of crops to the industrial distribution chain.

TAG’s novel systems are adaptable to a broad range of specific purposes and crop types, including aquaculture. They generally comprise

1. A hub containing a computer for collecting, processing, and communicating data throughout the CEA, and
2. an external sensor interface in communication with the hub for receiving data from external sensors which monitor controllable CEA which implement automated agrarian product production systems.
3. TAG CEAs also have an automated system interface, in communication with the hub which, using external sensor data, allows the hub to determine operational parameters.



¹ Ameri Research Inc., *Legal Marijuana Market Outlook To 2024*; 21 April, 2017.

4. Additionally, *an interaction interface*, in communication with the hub, allows the hub to generate and provide instructions to interactivity devices allowing the automated systems to be managed in view of the parameters determined by the hub so that production of the agrarian products can be managed.

Notably, the TAG CEA's automated system provides activities to the CEA in response to the hub's instructions. The hub then provides machine-to-machine interaction between the sensor and the interactivity devices for automated management of the CEA.

Additional TAG CEA features include management processes allowing the hub to generate and issue instructions to the automated systems in order to adjust them in view of the parameters and data gathered from the external sensors.

Finally, through the use of computers that can communicate with individuals in an agrarian supply chain over a network, product distribution within the chain can be coordinated and managed.

Unique Attributes

In addition to the novel hub containing a computer for collecting, processing and communicating data throughout the CEA, the external sensor interface, advanced inventory monitoring, stocking and other features described above, unlike other specialty management systems, *TAG's CEA total integration system can manage these tasks without the need for highly trained IT specialists.*

Cannabis Industry Applications

- Crop production management, including plant and yield optimization
- Product distribution and supply chain management
- Pesticide management, including increased adherence to highest standards of quality

Stage of Development

Invention is completed, tested, ready for licensing to commercial user.
An implementation team is available.

Intellectual Property

United States Patent No. 10, 068, 195 B2. 4 September 2018

Collaboration Opportunity

Actively seeking licensee or collaboration to expand distribution.

References

www.theagrariangroup.com

L2C PARTNERS CONTACT

Merle Gilmore
+1 610.662.0940
gilmore@l2cpartners.com