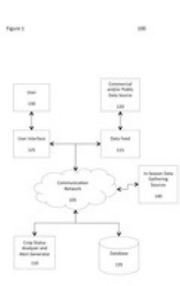
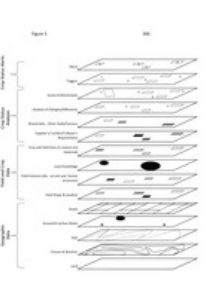
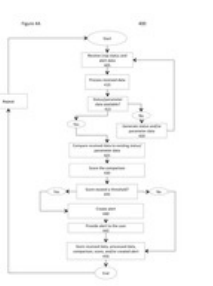
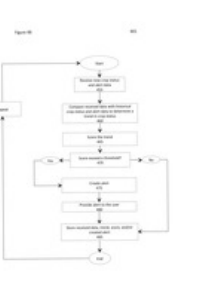
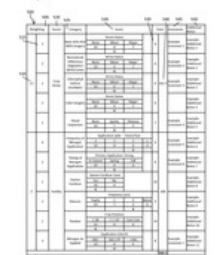
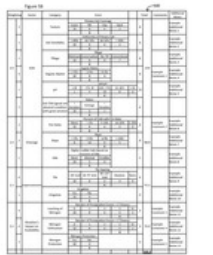
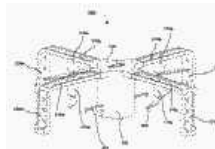
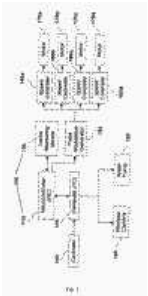
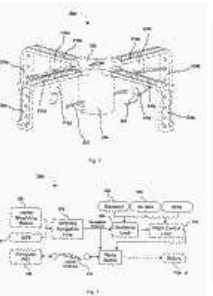
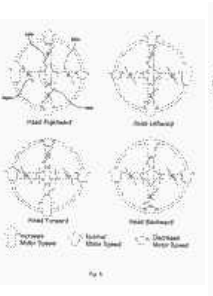
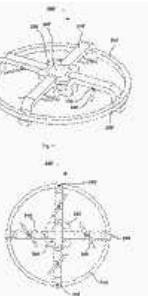
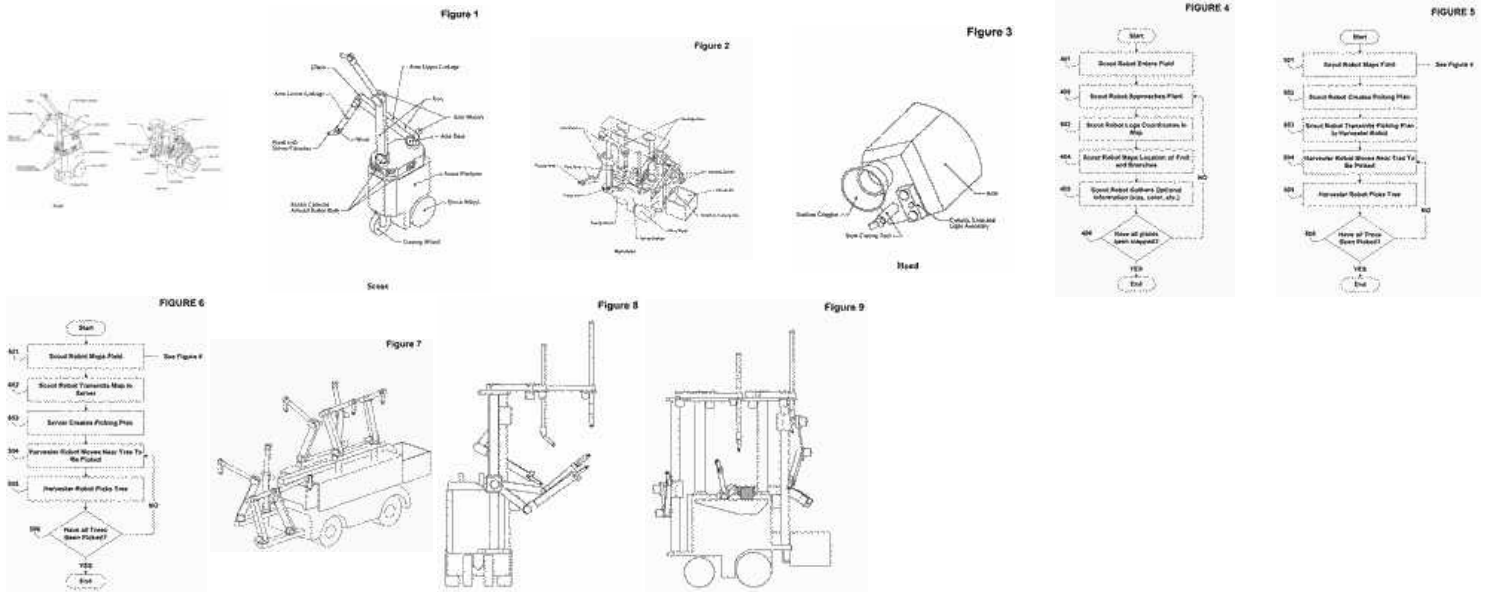


4 results for Forward and Backward citations - Collection: FAMPAT

#	 Title	Publication number	1st App. date	Applicant/Assignee	1st Publ. date	Publ. date
1.	Methods, apparatus, and systems for determining in-season crop status in an agricultural crop and alerting users	US2014035752	2012-08-06	SUPERIOR EDGE*	2014-02-06	2014-02-06
A crop's status may be determined from analysis of information regarding the crop received from, for example, a user, an in-season data gathering source, a database, a data feed, an aerial sensor, a UAV, and/or a remote sensor via a communication network. The received data may be compared to, for example, a benchmark, a parameter, a previously determined crop status, and/or a baseline associated with the crop and the comparison may be scored. When the score exceeds a predetermined threshold, an alert may be generated and provided to a user via the communication network.						
         						
2.	A flying apparatus for aerial agricultural application	WO2011152702	2011-06-03	UNIVERSITI MALAYSIA PERLIS*	2011-12-08	2011-12-08
A remotely controlled flying apparatus (200) utilized for crop-spraying and crop monitoring purposes is disclosed. The present indention comprises a microcontroller (110) electronically coupled to an inertia measuring means(120). A controller (140) is connected to a computer (130) to allow a user to control movements of the flying apparatus (200). The computer (130) interprets control motions of the controller (140) and translates the motions to control signals. Upon translation, control signals are sent to the microcontroller (110) wirelessly and the control signals are modulated by a pulse modulation generator (150) before they are sent to a plurality of speed controllers (160a - 160d) which are coupled to a plurality of motors (170a - 170d). The controller (140) allows the user to control the motions of the flying apparatus remotely by changing respective rotational speeds of the plurality of motors (170a - 170d). The controller (140) also allows the user to wirelessly control a pump (180) or a camera (190) or both through the computer (130) for spraying a pesticide or fertilizer fluid -when necessary or for crop monitoring purposes.						
    						

An agricultural robot system and method of harvesting, pruning, culling, weeding, measuring and managing of agricultural crops. Uses autonomous and semi-autonomous robot(s) comprising machine-vision using cameras that identify and locate the fruit on each tree, points on a vine to prune, etc., or may be utilized in measuring agricultural parameters or aid in managing agricultural resources. The cameras may be coupled with an arm or other implement to allow views from inside the plant when performing the desired agricultural function. A robot moves through a field first to "map" the plant locations, number and size of fruit and approximate positions of fruit or map the cordons and canes of grape vines. Once the map is complete, a robot or server can create an action plan that a robot may implement. An action plan may comprise operations and data specifying the agricultural function to perform.



Agricultural operations by applying flexible manufacturing software, robotics and sensing techniques to agriculture. In manufacturing operations utilizing flexible machining and flexible assembly robots, work pieces flow through a fixed set of workstations on an assembly line. At different stations are located machine vision systems, laser based raster devices, radar, touch, photocell, and other methods of sensing; flexible robot armatures and the like are used to operate on them. This flexible agricultural automation turns that concept inside out, moving software programmable workstations through farm fields on mobile robots that can sense their environment and respond to it flexibly. The agricultural automation will make it possible for large scale farming to take up labor intensive farming practices which are currently only practical for small scale farming, improving land utilization efficiency, while lowering manpower costs dramatically.

