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(57) Abstract :
[0037] The system (100) includes an aquaculture system (102), a hydroponics system (104), a pure water tank (106) and an aquaponic controller module (202). The aquaculture system (102) includes a fish tank (103), an aquaculture waste pump (118) & an aquaculture waste exit pipe (112), and an aquaculture sensor (108 A). The hydroponics system (104) comprises a sprayer pipe (105), a pure water carrier pipe (114), a purifier (110) and a hydroponics sensor (108 B). The pure water tank (106) includes a pure water collection tank (107), a pure water return pump (120), a pure water sensor (108 C), and a pure water return pipe (116). The aquaculture sensor data collection module (102 A) receives the aquaculture sensor data. The hydroponics sensor data collection module (102 B) receives the hydroponics sensor data. The pure water sensor data collection module (102 C) receives the pure water sensor data. The data processing module (302) processes the sensor data. The relay activation module (304) activates the relays associated with the aquaculture waste pump (118), a pure water return pump (120) and the purifier (110). This system provides an effective multipurpose aquaculture and hydroponics system with higher crop cultivation.

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