

CLAIMS:

1. A granular material effect system, comprising:
a plurality of granular particles disposed in a container;
a nozzle configured to activate to direct a fluid into the container;
an actuator disposed in the container within the plurality of granular particles, wherein the actuator is coupled to a prop; and
a controller communicatively coupled to the nozzle and the actuator, wherein the controller is configured to:
instruct the nozzle to activate to direct the fluid into the container;
and
instruct the actuator to move the prop relative to the container while the nozzle is activated.
2. The granular material effect system of claim 1, wherein the nozzle is part of a plurality of nozzles, wherein each nozzle of the plurality of nozzles is configured to direct the fluid into the container from different positions on or near the container, and wherein the controller is configured to instruct each nozzle of the plurality of nozzles to activate independently of one another to direct the fluid.
3. The granular material effect system of claim 1, comprising a sensor configured to detect debris disposed in the container and within the plurality of granular particles, wherein the prop is a sheet configured to capture the debris, and the controller is configured to instruct the actuator to move the sheet through the plurality of granular particles to remove the debris from the container in response to receiving feedback from the sensor, the feedback indicative of detected debris in the container.
4. The granular material effect system of claim 1, comprising a projector configured to project an image toward the container based on a position of the prop.

5. The granular material effect system of claim 4, wherein the projector is a first projector, and the granular material effect system comprises a second projector, wherein the controller is configured to instruct the first projector to project a first image onto a first side of the prop and/or the plurality of granular particles, and/or wherein the controller is configured to instruct the second projector to project a second image onto a second side of the prop and/or the plurality of granular particles.

6. The granular material effect system of claim 1, wherein the controller is configured to receive feedback indicative of a target position of the prop, and the controller is configured to instruct the actuator to move the prop toward the target position based on the feedback.

7. The granular material effect system of claim 1, comprising a sensor configured to determine a position of the actuator with respect to the plurality of granular particles, and the controller is configured to instruct the actuator to move the prop based on a level of the plurality of granular particles, such that the prop remains at least partially submerged within the plurality of granular particles.

8. The granular material effect system of claim 1, wherein the plurality of granular particles comprises a first type of granular particle and a second type of granular particle, wherein an individual particle of the first type of granular particle is more dense than an individual particular of the second type such that the first type of granular particle forms a first layer within the container and the second type forms a second layer within the container while the nozzle is deactivated.

9. The granular material effect system of claim 8, wherein the first type of granular particle is a different color than the second type of granular particle.

10. A granular material effect system, comprising:

a plurality of granular particles disposed in a container;
a plurality of nozzles disposed about the container, wherein each nozzle of the plurality of nozzles is configured to activate to inject fluid into the container to move at least a portion of the granular particles of the plurality of granular particles;
a prop disposed in the container; and
a controller communicatively coupled to each nozzle of the plurality of nozzles, wherein the controller is configured to:
receive feedback indicative of a target position of the prop and an actual position of the prop; and
instruct a subset of nozzles of the plurality of nozzles to activate in response to receiving the feedback, wherein activation of the plurality of nozzles causes injection of fluid into the container to move the prop from the actual position towards the target position.

11. The granular material effect system of claim 10, wherein an additional subset of nozzles of the plurality of nozzles is not activated by the controller while the subset of nozzles is activated.

12. The granular material effect system of claim 10, wherein the controller is communicatively coupled to an individual nozzle of the plurality of nozzles, the individual nozzle being positioned within the prop, and wherein the controller is configured to control the individual nozzle to emit fluid.

13. The granular material effect system of claim 10, wherein at least one nozzle of the plurality of nozzles is configured to inject a flammable fluid into the container, and wherein the granular material effect system comprises an ignition source configured to ignite the flammable fluid.

14. The granular material effect system of claim 10, wherein the controller is configured to control a flowrate of fluid injection from each nozzle of the plurality of nozzles.

15. A granular material effect system, comprising:
a plurality of granular particles disposed in a container;
a plurality of nozzles, wherein each nozzle of the plurality of nozzles is configured to inject fluid into the container;
one or more position sensors; and
a controller communicatively coupled to each nozzle of the plurality of nozzles, wherein the controller is configured to:
receive feedback from the one or more position sensors indicative of a position of a user in or near the container; and
instruct at least one nozzle of the plurality of nozzles to inject fluid into the container based on the feedback to fluidize the granular particles.

16. The granular material effect system of claim 15, wherein the one or more position sensors comprise a light detection and ranging sensor, a camera, an RFID sensor, an electro-optical sensor, an ultrasonic sensor, an infrared sensor, or any combination thereof.

17. The granular material effect system of claim 15, wherein the controller is configured to instruct a subset of nozzles of the plurality of nozzles to inject fluid into the container, wherein the subset of nozzles of the plurality of nozzles is located close to the position of the user as determined based on the received feedback.

18. The granular material effect system of claim 17, wherein the controller is configured to instruct the subset of nozzles of the plurality of nozzles to move the plurality of granular particles to create a clearing or depression at the position of the user.

19. The granular material effect system of claim 15, comprising a user-associated device configured to provide user identification information of the user, wherein the controller is configured to instruct the at least one nozzle based at least in part on the user identification information.

20. The granular material effect system of claim 15, comprising a prop disposed in the container and submerged under at least a portion of the granular particles of the plurality of granular particles, wherein the controller is configured to instruct an actuator to cause the prop to emerge from the plurality of granular particles while the at least one nozzle is injecting fluid unto the container.