eject drops of material and form layers of material with reference to digital image data of a three-dimensional object to produce the object on the platen (block **304**). In one embodiment, the controller **120** operates a first plurality of ejectors of the ejector head **108** to eject material onto the surface **112** of the platen **104** to form one or more parts on the platen. In another embodiment, the controller **120** first operates a second plurality of ejectors of the ejector head **108** to eject wax onto the surface **112** of the platen **104** to form a wax base **304**, as shown in FIG. **4**. After forming the wax base **304**, the controller **120** operates the first plurality of ejectors of the ejector head **108** to eject material onto the wax base **304** to form the object **138**. Once the part has been produced, the cart is tilted to rotate the platen to the second position where gravity urges the object towards the edge at which the sensor **128** is positioned (block **308**). As the platen rotates, the controller connects the inductive heater **124** to an electrical power source to operate the heater and melt support material adhering to the platen so the object slides towards the edge of the platen or drops from the platen (block **312**). Once the controller **120** receives a signal from the sensor that indicates the object has been removed from the platen, the cart rotates to return the platen to the horizontal level position for the production of the next object (block **316**).

It will be appreciated that variants of the above-disclosed and other features and functions, or alternatives thereof, may be desirably combined into many other different systems, applications or methods. Various presently unforeseen or unanticipated alternatives, modifications, variations, or improvements therein may be subsequently made by those skilled in the art, which are also intended to be encompassed by the following claims.

What is claimed is:

1. A method of manufacturing a three-dimensional object comprising:

operating a plurality of ejectors with a controller with reference to digital image data of the three-dimensional object to eject drops of material towards a platen and form a plurality of layers that produce the three-dimensional object on the platen;

operating an actuator with the controller to rotate the platen from a first position that is horizontally level to a second position that is not horizontal after the three-dimensional object is formed on the platen; and

operating an inductive heater with the controller to heat the platen as the platen is rotated to the second position to release the three-dimensional object from the platen and enable gravity to remove the three-dimensional object from the non-horizontal platen.

2. The method of claim **1**, the rotating of the platen further comprising:

operating the actuator with the controller to rotate the platen to the second position so the platen is tilted at an acute angle with reference to the first position.

3. The method of claim **2**, the operation of the actuator further comprising:

operating the actuator with the controller to rotate the platen to the second position that is at an angle of about forty-five degrees with reference to the first position.

4. The method of claim **2**, the operation of the actuator further comprising:

operating the actuator with the controller to rotate the platen to another position that is at an angle up to one hundred and eighty degrees with reference to the first position.

5. The method of claim **1** further comprising:

operating another actuator with the controller to move a wiper across the platen to remove melted material from the platen while the platen is at the second position.

6. The method of claim **1** further comprising:

generating with a sensor a signal indicative of the three-dimensional object being removed from the platen; and

operating the actuator with the controller to return the platen to the first position in response to the controller receiving from the sensor the signal indicative of the three-dimensional object being removed from the platen.

7. The method of claim **1**, the operation of the ejectors further comprising:

operating a first plurality of ejectors with the controller to eject wax onto the platen to form a wax base on the platen; and

operating a second plurality of ejectors with the controller to eject the drops of material that form the layers of the three-dimensional object onto the wax base, the wax base having a footprint that is larger than a footprint of the three-dimensional object.

8. The method of claim **1**, the rotation of the platen further comprising:

operating a motive force operatively connected to the platen with the controller to move the platen along a track while the platen is at the second position and while the controller is operating the inductive heater to heat the platen to enable the three-dimensional object to fall from the platen.

9. The method of claim **8** wherein the operation of the motive force rotates the platen one hundred and eighty degrees with reference to the first position as the platen moves along the track.

10. The method of claim **9** further comprising:

continuing to operate the other actuator to move the platen along the track past a wiper after the platen has been rotated the one hundred and eighty degrees to enable the wiper to remove debris from the platen.

11. A printer for manufacturing a three-dimensional object comprising:

a plurality of ejectors configured to eject drops of material;

a platen positioned opposite the plurality of ejectors, the platen being oriented at a first position that is horizontally level;

an actuator operatively connected to the platen, the actuator being configured to rotate the platen from the first position to a second position that is not horizontal;

an inductive heater configured to heat the platen; and

a controller operatively connected to the inductive heater, the actuator, and the plurality of ejectors, the controller being configured to:

operate the plurality of ejectors with reference to digital image data of the three-dimensional object to eject the drops of material towards the platen while the platen is at the first position to form layers of material on the platen and produce the three-dimensional object on the platen;

operate the actuator to rotate the platen from the first position to the second position to enable gravity to urge the three-dimensional object from the platen after the three-dimensional object is formed on the platen; and

operate the inductive heater to heat the platen as the platen is rotated to the second position to release the

three-dimensional object from the platen and enable gravity to remove the three-dimensional object from the non-horizontal platen.

12. The printer of claim **11**, the controller being further configured to:

operate the actuator to rotate the platen to the second position that is at an acute angle with reference to the first position.

13. The printer of claim **12**, the controller being configured to:

operate the actuator to rotate the platen to the second position that is at an angle of about forty-five degrees with reference to the first position.

14. The printer of claim **13**, the controller being further configured to:

continue to operate the actuator to rotate the platen to another position that is at an angle that is up to one hundred and eighty degrees with reference to the first position.

15. The printer of claim **11** further comprising:

a wiper configured to move across the platen after the platen has been rotated to the second position;

another actuator operatively connected to the wiper, the other actuator being configured to move the wiper across the platen while the platen is at the second position; and

the controller is further configured to operate the other actuator to move the wiper across the platen and remove melted material from the platen while the platen is at the second position.

16. The printer of claim **11** further comprising:

a sensor configured to generate a signal indicative of the three-dimensional object being removed from the platen; and

the controller is operatively connected to the sensor, the controller further configured to operate the actuator to return the platen to the first position in response to the controller receiving from the sensor the signal indicative of the three-dimensional object being removed from the platen.

17. The printer of claim **12**, the controller being further configured to:

operate a first group of ejectors in the plurality of ejectors to eject wax onto the platen to form a wax base on the platen; and

operate a second group of ejectors in the plurality of ejectors to eject the drops of material that form the layers of the three-dimensional object on the wax base, the wax base having a footprint that is larger than a footprint of the three-dimensional object.

18. The printer of claim **11** further comprising:

a track;

the platen being operatively connected to a motive force that is configured to move the platen along the track;

the controller being further configured to operate the motive force to move the platen along the track while the platen is at the second position and to operate the inductive heater to heat the platen while the platen is moving along the track at the second position to enable the three-dimensional object to fall from the platen.

19. The printer of claim **18**, the track being further configured to rotate the platen one hundred eighty degrees; and

the controller is further configured to operate the motive force to move the platen along the track and rotate the platen one hundred and eighty degrees with reference to the first position.

20. The printer of claim **19** further comprising:

a wiper that extends across the track; and

the controller is further configured to operate the motive force to move the platen on the track past the wiper after the platen has been rotated the one hundred and eighty degrees to enable the wiper to remove debris from the platen.

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