CLAIMS

1. A method for fabricating a semi-conductor body, the method comprising the steps of:

a. providing a molten semi-conductor material, having a surface;

b. providing a porous mold, comprising a forming surface;

c. providing a free-standing porous ceramic sheet between the forming surface and the molten material;

d. contacting the forming surface to the ceramic sheet and the ceramic sheet to the surface of the molten material for a contact duration, such that heat is extracted from the molten material so that a body of semi-conductor material, solidifies upon the ceramic sheet; and

e. removing the solidified body from contact with the molten semi-conductor material while still contacting the ceramic sheet.

2. The method of claim 1, the semiconductor material comprising silicon.

3. The method of claim 2, the silicon body comprising a solar cell element.

4. The method of claim 1, further comprising:
providing a differential pressure regime such that pressure at at least a portion of the forming surface is less than pressure at the molten material surface, such that, for at least a portion of the contact duration, the differential pressure regime exists.

a. a porous mold, comprising a forming surface;

b. a holding mechanism configured to hold a free-standing porous ceramic sheet facing the forming surface, such that the ceramic sheet hangs away from the forming surface such that the ceramic sheet can contact a surface of molten material at a contact location and such that the forming surface can be brought to contact the ceramic sheet obverse of the contact location; and

c. a structure configured to provide a differential pressure regime such that pressure at the contact location is less than pressure at the surface of molten material.