CLAIMS

WHAT IS CLAIMED IS:

1. A resin molding apparatus comprising:

a) an upper mold having a holding surface configured to hold a molding object on a lower side thereof,

b) a lower mold disposed to face the upper mold and having a cavity,

c) a first molding object suctioning mechanism provided in the holding surface and configured to cause the molding object to be suctioned onto the holding surface by suctioning a gas using a vacuum pump driven by electric power, and

d) a second molding object suctioning mechanism provided in the holding surface and configured to cause the molding object to be suctioned onto the holding surface by suctioning a gas using a vacuum ejector driven by compressed air, wherein

a falling of the molding object is prevented by the second molding object suctioning mechanism in case the electric power is cut off.

2. The resin molding apparatus according to claim 1, further comprising a compressed air tank, wherein the compressed air supplied to the vacuum ejector is stored in the compressed air tank.

3. A method for manufacturing a resin molded product using the resin molding apparatus according to claim 1 or 2, the method comprising:

causing the molding object to be suctioned onto the holding surface by the first molding object suctioning mechanism and the second molding object suctioning mechanism,

supplying a resin material into the cavity,

clamping the upper mold and the lower mold, and

heating the resin material at a temperature at which the resin material in the cavity is softened or melted and then curing the resin material.

4. A method for manufacturing a resin molded product using the resin molding apparatus according to claim 1 or 2, the method comprising:

causing the molding object to be suctioned onto the holding surface by the first molding object suctioning mechanism and the second molding object suctioning mechanism,

clamping the upper mold and the lower mold,

supplying a softened or melted resin material into the cavity, and

curing the resin material supplied into the cavity.