

ABSTRACT

An apparatus and method for melting and forming metal in a vacuum environment. Metal is formed by melting the metal within a metal-forming apparatus and filling the molten metal into a mold cavity. The metal is melted and formed in a high-level vacuum environment that is created in the apparatus by drawing air from the apparatus in the state in which atmospheric air is prevented from entering the apparatus. It is therefore possible to prevent the properties of the molten metal from changing through contact with the air, thereby forming a high-quality precision metal product.