

ABSTRACT

An apparatus for producing a three-dimensional multilayer object produces a three-dimensional multilayer object by partially applying energy to a conductive powder and thereby melting or sintering and curing the conductive powder. The apparatus for producing a three-dimensional multilayer object includes: a holding unit holding the conductive powder, and holding the cured three-dimensional multilayer object; an energy application unit applying energy to the conductive powder held by the holding unit; a probe disposed spaced apart from a surface layer portion of the cured three-dimensional multilayer object and detecting a flaw in the surface layer portion; and a probe moving mechanism relatively moving the probe with respect to the surface layer portion. The probe contains an excitation coil generating an eddy current in the surface layer portion, and a detection coil detecting a change in a magnetic field of the surface layer portion.

Figure 2