Abstract

Additive manufacturing device with release mechanism

An additive manufacturing device, comprising a vessel for containing a material which is polymerisable at one or more curing wavelengths, the vessel having a flexible wall which is at least partially transparent to radiation at the one or more curing wavelengths, a build platform having a build surface, the build platform being movable relative to the vessel to position the build surface such that the build surface faces the flexible wall, and a curing unit comprising a rigid component having a planar contact surface, the rigid component being at least partially transparent to radiation at the one or more curing wavelengths, and a radiation module positioned or positionable relative to the rigid component to emit radiation therethrough, wherein the rigid component and the vessel are movable relative to each other, such that in a first position, the planar contact surface of the rigid component is in contact with the flexible wall, and in a second position, the rigid component is separated from the flexible wall.

FIG. 1