

Abstract

Control Systems And Methods For Biological Applications

A thermal cycler (100) is provided. The thermal cycler (100) comprises a tray assembly (110). The tray assembly (110) comprises a main body (120) made of a first material having a first thermal conductivity. The tray assembly (110) further comprises an adaptor (125) made of a second material having a thermal conductivity that is greater than the thermal conductivity of the first material. The thermal cycler (100) also includes a control block (135) configured to control the temperature of the one or more nucleotide samples. The thermal cycler (100) further includes a thermal cover (130) sized and positioned to at least partially cover the plurality of vessels. The thermal cycler (100) further includes a sample block (132) including one or more depressions configured to receive a plurality of vessels containing one or more nucleotide samples.

Fig. 1